

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019
OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____
Commission file number: 000-32259

ALIGN TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-3267295
(I.R.S. Employer
Identification Number)

2820 Orchard Parkway
San Jose, California 95134
(Address of principal executive offices)

(408) 470-1000
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of each class
Common Stock, \$0.0001 par value

Trading Symbol
ALGN

Name of each exchange on which registered
The NASDAQ Stock Market LLC
(NASDAQ Global Market)

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$15.9 billion as of June 28, 2019 based on the closing sale price of the registrant's common stock on the NASDAQ Global Market on such date. Shares held by persons who may be deemed affiliates have been excluded. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

On February 21, 2020, 78,753,161 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2020 Annual Stockholders' Meeting to be filed pursuant to Regulation 14A within 120 days after the registrant's fiscal year end of December 31, 2019 are incorporated by reference into Part III of this Annual Report on Form 10-K.

ALIGN TECHNOLOGY, INC.
FORM 10-K
For the Year Ended December 31, 2019
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Invisalign, Align, the Invisalign logo, ClinCheck, Made to Move, Invisalign Assist, Invisalign Teen, Invisalign Go, Vivera, SmartForce, SmartTrack, SmartStage, SmileView, iTero, iTero Element, Orthocad, iCast and iRecord, among others, are trademarks and/or service marks of Align Technology, Inc. or one of its subsidiaries or affiliated companies and may be registered in the United States and/or other countries.

In addition to historical information, this annual report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements include, among other things, our estimates concerning the number of people who can benefit from our products, expectations regarding the anticipated impact of our new products and product enhancements will have on the future of dentistry, doctor utilization and our market share, our beliefs regarding our technology development and the advantages of our intellectual property portfolio, our beliefs concerning our compliance with domestic and foreign laws and regulations, including data protection and security, our expectations regarding geographic and product mix and product adoption, our expectations for domestic and international growth, our expectations regarding the existence and impact of seasonality, our expectations regarding the sales growth of our iTero scanners, their utilization and the potential growth opportunities iTero scanners represent to our overall business, our beliefs concerning the manufacturing capabilities and expectations regarding the financial and strategic benefits of establishing regional order acquisition, treatment planning and manufacturing facilities, our expectations for competition, our expectations concerning the impact of the Novel Coronavirus on our sales and operating results, our intention to hire more sales representatives and their expected impact on our sales, our expectations regarding the continued expansion of our domestic and international markets including related infrastructure and staffing, our expectations related to our corporate structure reorganization, the level of our operating expenses, capital expenditures and gross margins, our intentions regarding earnings from international operations, our beliefs concerning our investment portfolio and the funding of our operations and other factors beyond our control, as well as other statements regarding our future operations, financial condition and prospects and business strategies. These statements may contain words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “estimates,” or other words indicating future results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those reflected in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and in particular, the risks discussed below in Part I, Item 1A “Risk Factors.” We undertake no obligation to revise or update these forward-looking statements. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

PART I

ITEM 1. BUSINESS

Our Company

Align Technology, Inc. (“We”, “Our”, “Align”) is a global medical device company engaged in the design, manufacture and marketing of Invisalign® clear aligners and iTero® intraoral scanners and services for orthodontics, and restorative and aesthetic dentistry. Align’s products are intended primarily for the treatment of malocclusion or the misalignment of teeth and are designed to help dental professionals achieve the clinical outcomes that they expect. Align Technology was founded in March 1997 and incorporated in Delaware in April 1997. Our corporate headquarters is located at 2820 Orchard Parkway, San Jose, California, U.S.A., 95134, and our telephone number is 408-470-1000. Our internet address is www.aligntech.com. Our Americas regional headquarters is located in Raleigh, North Carolina, U.S.A.; our European, Middle East and Africa (“EMEA”) regional headquarters is located in Rotkreuz, Switzerland, which moved from Amsterdam, the Netherlands in January 2020; and our Asia Pacific (“APAC”) regional headquarters is located in Singapore.

We have two operating segments: (1) Clear Aligner and (2) Scanners and Services (“Scanner”). For the year ended December 31, 2019, Clear Aligner net revenues represented approximately 84% of worldwide net revenues, while Scanner net revenues represented the remaining 16% of worldwide net revenues. We sell the majority of our products directly to our customers: orthodontists and general practitioner dentists (“GPs”), as well as to restorative and aesthetic dentists, including prosthodontists, periodontists, and oral surgeons. We also sell through sales agents and distributors in certain countries. In addition, we sell directly to Dental Support Organizations (“DSOs”) who contract with dental practices to provide critical business management and support including non-clinical operations, and we sell directly to dental laboratories who manufacture or customize a variety of products used by licensed dentists to provide oral health care.

We received 510(k) clearance from the United States Food and Drug Administration (“FDA”) to market the Invisalign System in 1998. The Invisalign System is regulated by the FDA as a Class II medical device. In order to provide Invisalign treatment to their patients, orthodontists and GPs must initially complete an Invisalign training course. The Invisalign System is sold primarily through a direct sales force in North America, APAC, Europe, EMEA and Latin America (“LATAM”). To date, over 8 million people worldwide have been treated with our Invisalign System.

Our iTero scanner is used by dental professionals and/or labs and service providers for restorative and orthodontic digital procedures as well as Invisalign case submission. We received 510(k) clearance from the FDA to market iTero software for expanded indications in 2013. Scanners and computer-aided design/computer-aided manufacturing (“CAD/CAM”) services are primarily

sold through our direct sales force and through sales agents and distributors in certain countries. In addition, we sell iTero scanners and CAD/CAM services directly to DSOs.

Clear Aligner Segment

Malocclusion and Traditional Orthodontic Treatment

Malocclusion, or the misalignment of teeth, is one of the most prevalent clinical dental conditions, affecting billions of people, or approximately 60% to 75% of the global population. Annually, approximately 12 million people in major developed countries elect treatment by orthodontists worldwide. Most orthodontic patients are treated with the use of traditional methods such as metal arch wires and brackets, referred to as braces, and may be augmented with elastics, metal expanders, headgear or functional appliances, and other ancillary devices as needed. Upon completion of the treatment, the dental professional may, at his or her discretion, have the patient use a retainer appliance. Of the 12 million annual orthodontic cases started, we estimate that approximately 75% or 8.4 million could be treated using our Invisalign clear aligners. In addition, approximately 300 million people with malocclusion could benefit from straightening their teeth. This represents an incremental opportunity for us as we expand the market for orthodontics by educating more consumers about the benefits of straighter teeth using Invisalign clear aligners and connecting them with an Invisalign doctor of their choice.

The Invisalign System

The Invisalign System is a proprietary method for treating malocclusion based on a proprietary computer-simulated virtual treatment plan and a series of doctor-prescribed, custom manufactured, clear plastic removable aligners. The Invisalign System offers a range of treatment options, specialized services, and access to proprietary software for treatment visualization and is comprised of the following phases:

Orthodontic diagnosis and transmission of treatment data to us. The Invisalign-trained dental professional prepares an online prescription form on our Invisalign Doctor Site and submits the patient's records, which include a digital intraoral scan or a polyvinyl-siloxane ("PVS") impression of the relevant dental arches, photographs of the patient and, at the dental professional's election, x-rays of the patient's dentition. Intraoral digital scans may be submitted through either Align's iTero scanner or certain third-party scanners capable of accurately interfacing with our systems and processes. See "Third Party Scanners and Digital scans for Invisalign treatment submission." More than 73% of Invisalign case submissions are now submitted via digital scan, increasing the accuracy of treatments, reducing the time from prescription submission to patient receipt, and decreasing the carbon footprint resulting from the shipment of the materials used to form the physical PVS impressions and shipping those PVS impressions to us.

Preparation of computer-simulated treatment plan. Using the information and digital data provided, we generate a proposed custom, three-dimensional treatment plan, called a ClinCheck treatment plan using our proprietary software, which is not for sale or license. A patient's ClinCheck treatment plan simulates expected tooth movement in stages and details the timing and placement of any features or attachments to be used during treatment. Attachments are tooth-colored "buttons" that are sometimes used to increase the biomechanical force on a specific tooth or teeth in order to effect the desired movement(s).

Review and approval of the treatment plan by an Invisalign-trained doctor. The patient's ClinCheck treatment plan is then made available to the prescribing dental professional via the Invisalign Doctor Site which enables the dental professional to project tooth movement from initial position to final position and compare multiple treatment plan options. By reviewing, modifying as needed and approving the treatment plan, the dental professional retains control of the patient's treatment.

Manufacture of custom aligners. Upon the dental professional's approval of the ClinCheck treatment plan, we use the data underlying the simulation, in conjunction with stereolithography technology (a form of 3D printing technology), to construct a series of molds depicting the future position of the patient's teeth. Each mold is a replica of the patient's teeth at each stage of the simulated course of treatment. From these molds, aligners are fabricated by pressure-forming polymeric sheets over each mold. Aligners are thin, clear plastic, removable dental appliances that are custom manufactured in a series to correspond to each stage of the patient's ClinCheck treatment plan.

Shipment to the dental professional and patient aligner wear. In most countries, all the aligners for a patient's treatment plan are shipped directly to the dental professional, who then dispenses them to the patient at regular check-up intervals throughout the treatment. Aligners are generally worn for a period of time typically one to two weeks, corresponding to the stages of the patient's approved ClinCheck treatment plan. The patient replaces the aligners with the next pair in the series when prescribed, advancing tooth movement through each stage. At various points in each patient's treatment, their doctor may place attachments or use other auxiliaries to achieve desired tooth movements, per the doctor's original prescription and the approved ClinCheck treatment plan.



At the treating doctor's discretion, weekly aligner changes are recommended for all Invisalign treatments except for Invisalign Lite and Express packages and may provide up to 50% shorter treatment time compared with two-week aligner wear.

Feature Enhancements

We continue to introduce enhanced features across the Invisalign System to improve treatment outcomes or address broader clinical indications. For example, in 2018, we extended the Invisalign product family with Invisalign First clear aligners, designed with features specifically for younger patients with early mixed dentition (with a mixture of primary/baby and permanent teeth). Invisalign First clear aligners are designed specifically to address a broad range of younger patients' malocclusions, including shorter clinical crowns, management of erupting dentition, and predictable dental arch expansion.

In 2018, we also introduced enhancements designed to improve dental professional and patient experiences and clinical outcomes including: wing overlap and engagement in deep bite cases with anterior intrusion, new options for mandibular advancement and symmetrical advancement of the left and right side, a new default protocol for incremental advancement, and improvements to support leveling the curve of Spee in deep bite cases.

Clear Aligner Products

Malocclusion	Very Mild		Moderate		Severe
Product	Invisalign Express Package	Invisalign Lite Package	Invisalign Go Limited Movement (GP)	Invisalign Moderate Package	Invisalign Comprehensive Package
Stages	7	14	20	20-26	As many as required
Clinical Scope	Relapse and minor movement, anterior esthetic alignment	Class I, mild crowding/spacing, non-extraction, pre-restorative	Class I, no anterior / posterior correction, mild to moderate crowding, spacing, non-extraction, pre-restorative Tooth movement from 2nd premolar to 2nd premolar (5x5)	Class I, mild Class II, mild to moderate crowding/spacing, mild anterior / posterior and vertical discrepancies, pre-restorative	Class I, II, III, moderate to severe crowding/spacing, anterior / posterior and vertical discrepancies, extractions, complex pre-restorative

Most of our Invisalign Treatment Plans described above provide dental professionals with the option to order additional aligners if the patient's treatment is not tracking against the original treatment plan. The number of additional aligner orders and timing are subject to certain requirements noted in our terms and conditions.

Comprehensive Products - Invisalign Treatment Options:

Invisalign Comprehensive. The Invisalign Comprehensive Package is used to treat adults and teens for a full spectrum of mild to severe malocclusion and contains a wide variety of Invisalign features to address the doctor's treatment goals. It also addresses the orthodontic needs of teenage patients, such as Mandibular Advancement, compliance indicators and compensation for tooth eruption.

Invisalign First Phase 1 and Invisalign First Comprehensive Phase 2 Package. Invisalign First Phase 1 is designed specifically for younger patients generally between the ages of seven and ten years, which is a mixture of primary/baby and permanent teeth. Invisalign First Phase 1 treatment provides early interceptive orthodontic treatment, traditionally done through arch expanders, or partial metal braces, before all permanent teeth have erupted. Invisalign First clear aligners are designed specifically to address a broad range of younger patients' malocclusions, including shorter clinical crowns, management of erupting dentition and predictable dental arch expansion. Our Invisalign First Comprehensive Phase 2 Package is a continuation of the First Phase 1 and is generally consistent with our Invisalign Comprehensive Package. After a patient completes Invisalign First Phase 1, doctors have the option to purchase a discounted Comprehensive Phase 2 Package for that same patient.

Non-Comprehensive Products - Invisalign Treatment Options:

Invisalign Non-comprehensive Products. We offer a variety of lower priced treatment packages for less complex orthodontic cases, non-comprehensive relapse cases, or straightening prior to restorative or cosmetic treatments, such as veneers. These packages may be offered in select countries and/or may differ from region to region.

Invisalign Go. We also offer Invisalign Go, a streamlined Non-Comprehensive package designed for GPs to more easily identify and treat patients with mild malocclusion. The Invisalign Go package includes case assessment support, a simplified ClinCheck treatment plan and a progress assessment feature for case monitoring.

Non-Case Products:

Clear Aligner non-case products include retention products, Invisalign training fees and sales of ancillary products, such as cleaning material and adjusting tools used by dental professionals during the course of treatment.

Retention. We offer up to four sets of custom clear aligners called Vivera Retainers made with proprietary material strong enough to maintain tooth position and correct minor relapse, if necessary. Vivera Retainers are available to both Invisalign and non-Invisalign patients. In select markets, we also offer single arch retainers.

SmartTrack Aligner Material

SmartTrack is a patented, custom-engineered Invisalign clear aligner material that delivers gentle, more constant force considered ideal for orthodontic tooth movements. Conventional aligner materials relax and lose a substantial percent of energy in the initial days of aligner wear, but SmartTrack maintains more constant force over the period of time the patient wears the aligners. The flexible SmartTrack material also more precisely conforms to tooth morphology, attachments and interproximal spaces to improve control of tooth movement throughout treatment.

Scanner Segment

Intraoral scanning continues to be an evolving technology that we believe will have a substantial impact on the future of dentistry. By enabling the dental practitioner to create a 3D image of a patient's teeth (digital scan) using a handheld intraoral scanner, digital scanning is faster, more efficient, precise and comfortable for patients, compared to the discomfort and subjective nature of taking physical impressions. The accuracy of digitally scanned models substantially reduces the rate of restoration "remakes," meaning patients are recalled less often and the appointment time for the restoration is shorter because of fewer adjustments, increasing overall patient satisfaction. Digital models also reduce the carbon footprint associated with the shipping of the materials used to create PVS impressions, the shipping of those impressions, and their disposal. Moreover, the digital model file can be used for various procedures and services including fabrication of physical dental models for use by labs to create restorative units such as veneers, inlays, onlays, crowns, bridges and implant abutments; digital records storage; orthodontic diagnosis; orthodontic retainers and appliances; and Invisalign digital impression submission.

iTero Scanner. The iTero Element scanner is available as a single hardware platform with software options for restorative or orthodontic procedures. The expanded portfolio includes the iTero Element 2 and the iTero Element Flex scanners which are each available in select regions and countries. These products build on the existing high precision, full-color imaging and fast scan times of the iTero Element portfolio while streamlining orthodontic and restorative workflows. We also continue to offer the existing iTero Element scanner in existing markets. The iTero scanner is interoperable with our Invisalign treatment such that a full arch digital scan can be submitted as part of the Invisalign case submission process.

In February 2019, we launched the iTero Element 5D Imaging system which provides a new comprehensive approach to clinical applications, workflows and user experience that expands the suite of existing high-precision, full-color imaging and fast scan times of the iTero Element portfolio. In addition to offering all of the features and functionality that doctors have come to expect and rely on with the iTero Element 2 scanner, the iTero Element 5D scanner is the first integrated dental imaging system that simultaneously records 3D, intra-oral color and near-infrared ("NIRI") imaging and enables comparison over time using iTero TimeLapse. NIRI technology of the iTero Element 5D Imaging System aids in detection and monitoring of interproximal caries lesions above the gingiva without using harmful radiation. The iTero Element 5D Imaging System is available in the majority of EMEA and select APAC countries; however, it is pending regulatory approval in the U.S. and LATAM countries.

In June 2019, we announced the launch of iTero Element Foundation intraoral scanner with restorative software. The iTero Element Foundation extends our portfolio of intraoral scanners with powerful 3D visualization to better meet the needs of doctors, labs and patients. The iTero Element Foundation is available in North America and Japan and will be available in other select APAC and EMEA countries in 2020.

Restorative software for iTero. Our Restorative software is designed for GPs, prosthodontists, periodontists, and oral surgeons which includes restorative workflows providing them with the ability to send digital impressions to the lab of choice and communicate seamlessly with external treatment planning, custom implant abutment, chairside milling, and laboratory CAD/CAM systems.

Orthodontic software for iTero. Software designed for orthodontists for digital records storage, orthodontic diagnosis, and for the fabrication of printed models and retainers.

CAD/CAM Services and Ancillary Products

Ancillary Products. We sell disposable sleeves for the wand and other ancillary products for the iTero scanner.

iTero Models and Dies. An accurate physical model and dies are manufactured based on the digital scan and sent to the laboratory of the dentist's choice for completion of the needed restoration. The laboratory also has the option to export the digital file for immediate production of coping and full-contour restorations on their laboratory CAD/CAM systems. The laboratory conducts then completes the ceramic buildup or staining and glazing and delivers the end result - a precisely fitting restoration. iTero prosthetics have a near-zero remake rate.

Third Party Scanners and Digital scans for Invisalign treatment submission. We accept case submissions for our clear aligner products in two ways: (1) physical impressions of the patient's teeth or (2) intraoral scan of the patient's teeth. With respect to intraoral scans, we accept scans from iTero scanners and certain third-party scanners that have interoperability relationship with our systems and processes.

iTero Applications and Tools

Invisalign Outcome Simulator. The Invisalign Outcome Simulator is an exclusive chair-side and cloud-based application for the iTero scanner that allows doctors to help patients visualize how their teeth may look at the end of Invisalign treatment. This is achieved through a dual view layout that shows a prospective patient an image of his/her own current dentition next to his/her simulated final position after Invisalign treatment.

Invisalign 3D Assessment tool. The Invisalign Progress Assessment tool provides the ability to compare a patient's new scan with a specific stage of their ClinCheck treatment plan. This allows doctors to visually assess and communicate Invisalign treatment progress with an easy to read, color-coded tooth movement report.

TimeLapse. TimeLapse technology allows doctors or practitioners to compare a patient's historic 3D scans to the present-day scan, enabling clinicians to identify and measure orthodontic movement, tooth wear, and gingival recession. This highlights areas of diagnostic interest to dental professionals and helps foster a proactive conversation with the patient regarding potential restorative or orthodontic solutions.

Our iTero Element, iTero Element 2, iTero Element Flex and iTero Element 5D scanners include the Invisalign Outcome Simulator, Invisalign 3D Assessment tool and TimeLapse as well as the orthodontic software and/or restorative software. The orthodontic or restorative software may also be purchased subsequently for an upgrade fee. Additional applications such as the Invisalign Outcome Simulator are not available for sale separately.

Other proprietary software mentioned in this Annual Report on Form 10-K such as ClinCheck and ClinCheck Pro software, the Invisalign Doctor Site, and feature enhancements are included as part of the Invisalign System and are not sold separately nor do they contribute as individual items to revenues.

Business Strategy

Our goal is to establish the Invisalign System as the standard method for treating malocclusion and our intraoral scanning platform as the preferred scanning protocol for digital scans. Our technology and innovations are designed to meet the demands of today's patients with treatment options that are convenient, comfortable, affordable, while helping to improve overall oral health. We strive to help our doctors move their practices forward by connecting them with new patients, providing digital solutions to help increase practice efficiency and helping them deliver the best possible treatment outcomes and experiences to millions of people around the world. We achieve this by continued focus and execution of our strategic growth drivers as follows:

1. *International Expansion.* In order to provide the millions of consumers access to a better smile, we continue increasing our presence globally by making our products available in more countries. We expect to continue expanding our business by investing in resources, infrastructure, and initiatives that will drive Invisalign treatment growth in our current and new international markets. As our core international countries continue to grow in both number of new Invisalign trained doctors and customer utilization, we strive to make sure we can support that growth through investments such as headcount, clinical support, product improvements, education and advertising. We have transitioned most of our smaller country markets from an indirect to a direct sales model, and, while we do not expect a material impact from these countries for

some time, in the near term we will leverage our existing infrastructure in adjacent country markets as we build local sales and support organizations to drive long-term market penetration. In addition, we are scaling and expanding our operations and facilities to better support our customers across the globe. In 2019, we opened a new order acquisition and treatment facility in Wroclaw, Poland and a new treatment planning facility in Yokohama, Japan to support customers within these regions.

2. **GP Adoption.** We want to enable GPs, who have access to a large patient base, to more easily identify Invisalign cases they can treat, monitor patient progress or, if needed, help refer cases to an orthodontist while providing high-quality restorative, orthodontic, and dental hygiene care. In 2019, we continued to commercialize Invisalign Go, a simplified and streamlined solution designed for GPs and trained over 3,700 new Invisalign Go doctors primarily in EMEA. In the EMEA region, we segmented sales and marketing for certain country markets into two separate organizations to serve each customer segment, orthodontists and GP dentists separately, thereby increasing our focus and effectiveness on GP dentists. The iTero scanner is an important component to that customer experience and is central to a digital approach as well as overall customer utilization of Invisalign treatment. The iTero scanner is optimized for Invisalign treatment with the Invisalign Outcome Simulator, Invisalign Progress Assessment tool, and TimeLapse technology. This highlights areas of diagnostic interest to dental professionals and helps foster a proactive conversation with the patient regarding potential restorative or orthodontic solutions. In March 2019, we began a collaboration with Digital Smile Design to deliver dedicated education programs, enable simplified, streamlined integration of digital end-to-end workflows into GPs' practices and offer doctors more opportunities to learn about digital tools and treatment planning support. In September 2019, we formed a collaboration with Zimmer Biomet Dental to leverage their extensive direct global salesforce and network of dental clinicians and laboratories to help drive further penetration of iTero scanners and services in the growing digital restorative market. The collaboration also offers Zimmer Biomet Dental customers access to Invisalign clear aligners through the iTero platform to facilitate a comprehensive interdisciplinary treatment approach.
3. **Patient Demand & Conversion.** Our goal is to make Invisalign a highly recognized name brand worldwide by creating awareness for Invisalign treatment among consumers and motivating potential patients to seek Invisalign treatment. We accomplish this objective through an integrated consumer marketing strategy that includes television, media, social networking and event marketing and strategic alliances with professional sports teams as well as educating patients on treatment options and directing them to high volume Invisalign doctors. In January 2019, we expanded our Smile Concierge program which educates consumers on the benefits of Invisalign treatment, answers their questions and helps them schedule an appointment with an Invisalign doctor. The program simultaneously helps doctors better engage with prospective customers through more detailed customer insights. Additionally, in August 2019, we significantly increased our investment in consumer marketing in the U.S. The U.S. campaign was launched across all key media channels to over 140 million consumers, combining a robust paid media strategy across prime broadcast, cable and connected TV channels with paid search and social media.
4. **Orthodontist Utilization.** We continue to innovate and increase product applicability and predictability to address a wide range of cases, from simple to complex, thereby enabling doctors to confidently treat teenagers and adults with the Invisalign System. Over the last several years, we launched Invisalign Comprehensive with Mandibular Advancement and Invisalign First. We also continue to make improvements to our Invisalign treatment software, ClinCheck Pro, designed to deliver an exceptional user experience and increase treatment control to help our doctors achieve their treatment goals.

Manufacturing and Suppliers

We have manufacturing facilities located in Juarez, Mexico, where we conduct our aligner fabrication, distribution, repair of our iTero scanners and perform our CAD/CAM services. In the fourth quarter of 2018, we also began fabricating our aligners in Ziyang, China, our first aligner fabrication facility outside of Juarez, Mexico. In addition, we produce our handheld intraoral scanner wand, perform final scanner assembly and repair our scanners at our facilities in Or Yehuda, Israel and Ziyang, China. Our Invisalign digital treatment planning and interpretation for iTero restorative cases are conducted at our facilities located in San Jose, Costa Rica, Chengdu, China, Cologne, Germany, Madrid, Spain, Wroclaw, Poland and Yokohama, Japan. Information regarding risks associated with our manufacturing process and foreign operations may be found in *Item 1A* of this Annual Report on Form 10-K under the heading "Risk Factors."

Our quality system is required to be in compliance with the Quality System regulations enforced by the FDA, and similar regulations enforced by other worldwide regulatory authorities. We are certified to EN ISO 13485:2003, an internationally recognized standard for medical device manufacturing. We have a formal, documented quality system by which quality objectives are defined, understood and achieved. Systems, processes and procedures are implemented to ensure high levels of product and service quality. We monitor the effectiveness of the quality system based on internal data and direct customer feedback and strive to continually improve our systems and processes, taking corrective action, as needed.

Since the manufacturing process of our products requires substantial and varied technical expertise, we believe that our manufacturing capabilities are important to our success. In order to produce our highly customized, highly precise, medical quality products in volume, we have developed a number of proprietary processes and technologies. These technologies include complex software algorithms and solutions, CT scanning, stereolithography and automated aligner fabrication. To increase the efficiency of our manufacturing processes, we continue to focus our efforts on software development and the improvement of rate-limiting processes or bottlenecks. We continuously upgrade our proprietary, three-dimensional treatment planning software to enhance computer analysis of treatment data and to reduce time spent on manual and judgmental tasks for each case, thereby increasing the efficiency of our technicians. In addition, to improve efficiency and increase the scale of our operations, we continue to invest in the development of automated systems for the fabrication and packaging of aligners.

We are highly dependent on manufacturers of specialized scanning equipment, rapid prototyping machines, resin and other advanced materials for our aligners, as well as the optics, electronic and other mechanical components of our intraoral scanners. We maintain single supply relationships for many of these machines and materials technologies. In particular, our CT scanning and stereolithography equipment used in our aligner manufacturing and many of the critical components for the optics of our intraoral scanners are provided by single suppliers. We are also committed to purchasing all of our resin and polymer, the primary raw materials used in our manufacturing process for clear aligners, from a single source. The need to replace one of our single source suppliers could cause a disruption in our ability to timely deliver certain of our products or increase costs. For a discussion of the risks of our supply and manufacturing operations, see *Item 1A Risk Factors*.

Sales and Marketing

Our sales efforts are focused on increasing adoption and utilization of the Invisalign System by orthodontists and GPs worldwide and integrating the iTero scanner into the doctors practice. The scanner is an important component to the customer experience and is central to a digital approach as well as overall customer utilization of Invisalign treatments. In each region, we have direct sales and support organizations, which include quota carrying sales representatives, sales management and sales administration. We also have distribution partners in certain markets. In the EMEA region, we segmented sales and marketing for certain country markets into two separate organizations to serve each customer segment, orthodontists and GP dentists separately, thereby increasing our focus and effectiveness on GP dentists. We continue to expand in existing markets through targeted investments in sales resources, professional marketing and education programs, along with consumer marketing in select countries.

We provide training, marketing and clinical support to orthodontists and GPs. As of December 31, 2019, we had approximately 96,000 active Invisalign trained doctors, which we define as having submitted at least one case in the prior 12 month period.

Research and Development

We are committed to investing in world-class technology development, which we believe is critical to achieving our goal of establishing the Invisalign System as the standard method for treating malocclusion and our intraoral scanning platform as the preferred scanning protocol for digital scans.

Our research and development activities are directed toward developing the technology innovations that we believe will deliver our next generation of products and platforms. These activities range from accelerating product and clinical innovation to developing manufacturing process improvements to researching future technologies and products.

In an effort to demonstrate the broad treatment capabilities of the Invisalign System, various clinical case studies and articles have been published that highlight the clinical applicability of Invisalign to malocclusion cases, including those of severe complexity. We undertake pre-commercialization trials and testing of our technological improvements to the product and manufacturing process.

Intellectual Property

We believe our intellectual property portfolio represents a substantial business advantage. As of December 31, 2019, we had 489 active U.S. patents, 462 active foreign patents, and 559 pending global patent applications. Our active U.S. patents expire between 2020 and 2039. When patents expire, we lose the protection and competitive advantages they provided to us, which could negatively impact our operating results; however, we continue to pursue further intellectual property protection through U.S. and foreign patent applications and non-disclosure agreements. We also seek to protect our software, documentation and other written materials under trade secret and copyright laws. We cannot be certain that patents will be issued as a result of any patent application or that patents that have been issued to us or that may be issued in the future will remain valid and enforceable or sufficient to protect our technology or products. Our intellectual property rights may not be successfully asserted in the future or may be invalidated, circumvented or challenged. In addition, the laws of various foreign countries do not protect our intellectual property rights to the same extent as U.S. laws. Our inability to protect our proprietary information could harm our business. Information

regarding risks associated with our proprietary technology and our intellectual property rights may be found in *Item 1A* of this Annual Report on Form 10-K under the heading “*Risk Factors*.”

Seasonal Fluctuations

General economic conditions impact our business and financial results, and we experience seasonal trends within our two operating segments, customer channels and the geographic locations that we serve. Sales of Invisalign treatments are often weaker in Europe during the summer months due to our customers and their patients being on holiday and seasonally higher in China during the third quarter, particularly related to increased teen cases. Similarly, other international holidays like Chinese New Year can also negatively impact our sales in APAC. In North America, summer is typically the busiest season for orthodontists with practices that have a high percentage of adolescent and teenage patients as many parents want to get their teenagers started in treatment before the start of the school year; however, many GPs are on vacation during this time and therefore tend to start fewer cases. For our Scanner segment, capital equipment sales are often stronger in the fourth calendar quarter. Consequently, these seasonal trends have caused and may continue to cause fluctuations in our quarterly results, including fluctuations in sequential revenue growth rates.

Backlog

All Invisalign treatments are individually unique and prescribed by a doctor so, no two cases are alike. The period from which a treatment data package (or a “case”) is received until the acceptance of the digital ClinCheck treatment plan is dependent on the dental professional’s discretion to modify, accept or cancel the treatment plan. Therefore, we consider the case a firm order to manufacture aligners once the dental professional has approved the ClinCheck treatment plan. Our Invisalign backlog consists of ClinCheck treatment plans that have been accepted but not yet shipped. Because aligners are shipped shortly after the ClinCheck treatment plan has been accepted, we believe that backlog is not a good indicator of future clear aligner revenues. Our quarterly clear aligner revenues can be impacted by the timing of the ClinCheck treatment plan acceptances and our ability to ship those cases in the same quarter. We define our iTero scanner backlog as orders where credit and financing are generally approved and payment is reasonably assured but the scanner has not yet shipped. Our Invisalign and iTero scanner backlogs as of December 31, 2019 were immaterial.

Competition

Currently, our products compete directly against traditional metal brackets and wires and increasingly against products manufactured and distributed by various companies, both within and outside the U.S. Although the number of competitors varies by segment, geography and customer, we encounter a wide variety of competitors, including new and well-established regional competitors in certain foreign markets, as well as larger companies or divisions of larger companies with substantial sales, marketing, research and financial capabilities. Due in part to the expiration of certain of our key patents beginning in 2017, we are facing increased competition in the clear aligner market. In addition, corresponding foreign patents began expiring in 2018 which has increased competition in markets outside the U.S. These competitors include existing larger companies in certain markets who have the ability to leverage their existing channels in the dental market to compete directly with us, direct-to-consumer (“DTC”) companies that provide clear aligners using a remote teledentistry model requiring little or no in-office care from trained and licensed physicians, and doctors themselves who can manufacture custom aligners in their offices using modern 3D printing technology. Unlike our DTC competitors, we are committed to a doctor as the core of everything we do, and Invisalign Treatment requires a doctor’s prescription and an in-person physical examination of the patient’s dentition before treatment can begin. Information regarding risks associated with increased competition may be found in *Item 1A* of this Annual Report on Form 10-K under the heading “*Risk Factors*.”

Key competitive factors include:

- Our SmartTrack aligner materials;
- effectiveness of treatment;
- price;
- software features;
- aesthetic appeal of the treatment method;
- customer support;
- customer online interface;
- brand awareness;
- innovation;
- distribution network;
- comfort associated with the treatment method;
- oral hygiene;
- ease of use; and

- dental professionals' chair time.

We believe that our products compare favorably with our competitors' products with respect to each of these factors.

Government Regulation

Many countries throughout the world have established regulatory framework for commercialization of medical devices. As a designer, manufacturer, and marketer of medical devices, we are obligated to comply with the respective framework of these countries to obtain and maintain access to these global markets. The framework often defines requirements for premarket authorizations which vary from country to country. Failure to obtain appropriate premarket authorization and to meet all local requirements including specific safety standards in any country in which we currently market our products could cause commercial disruption and/or subject us to sanctions and fines. Delays in receipt of, or a failure to receive, such premarket authorizations, or the loss of any previously received premarket authorizations, could have a material adverse effect on our business, financial condition, and results of operations.

With regards to premarket authorization in the U.S., our products are classified as medical devices under the U.S. Food, Drug, and Cosmetic Act ("FD&C Act"). The FD&C Act requires these products, when sold in the U.S., to be safe and effective for their intended use and to comply with medical device regulations defined by the FDA. This regulatory framework is comparable to the framework established in the European Union ("EU"). Within the EU, our products are subject to the requirements defined by the Medical Device Directive which is generally consistent with FDA regulations.

We believe we are in compliance with all state, federal, and international regulatory requirements that are applicable to our products.

We are also subject to various laws inside and outside the U.S. concerning our relationships with healthcare professionals and government officials, price reporting and regulation, the promotion, sales and marketing of our products and services, the importation and exportation of our products, the operation of our facilities and distribution of our products. As a global company, we are subject to varying degrees of government regulation in the various countries in which we do business, and the general trend is toward increasingly stringent oversight and enforcement. Initiatives sponsored by government agencies, legislative bodies, and the private sector to limit the growth of healthcare expenses generally are ongoing in markets where we do business. It is not possible to predict at this time the long-term impact of such cost containment measures on our future business.

Our customers are healthcare providers that may be reimbursed by federal funded programs such as Medicaid or a foreign national healthcare program, each of which may offer some degree of oversight. Many government agencies, both domestic and foreign, have increased their enforcement activities with respect to healthcare providers and companies in recent years. Enforcement actions and associated defense can be expensive, and any resulting findings carry the risk of significant civil and criminal penalties.

In addition, we must comply with numerous data protection requirements that span from individual state and national laws in the U.S. to multinational requirements in the EU. In the U.S., final regulations implementing amendments to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") became effective in the latter part of 2013 with the HIPAA Omnibus Rule. We are also required to be in compliance with the California Consumer Privacy Act ("CCPA"), which went into effect in January 2020. In the EU, we must comply with the General Data Protection Regulation ("GDPR"), which serves as a harmonization of European data-privacy laws. Further expansion into LATAM markets will require us to prepare for Brazil's Lei Geral de Proteção de Dados ("LGPD") scheduled to take effect in August 2020. Meanwhile, the APAC and EMEA regions have also seen rapid development of privacy laws including India, Russia, China, South Korea, Singapore, Hong Kong, and Australia.

We believe we have designed our product and service offerings to be compliant with the requirements of applicable data protection laws and regulations. Maintaining systems that are compliant with these laws and regulations is costly and could require complex changes in the way we do business or provide services to our customers and their patients. Additionally, our success may be dependent on the success of healthcare providers in managing data protection requirements. Information regarding risks associated with data security and privacy may be found in *Item 1A* of this Annual Report on Form 10-K under the heading "Risk Factors."

Employees

As of December 31, 2019, we had approximately 14,530 employees, including 9,470 in manufacturing and operations, 2,880 in sales and marketing which includes customer care, 800 in research and development and 1,380 in general and administrative functions.

Available Information

Our website is www.aligntech.com, and our investor relations website is <http://investor.aligntech.com>. The information on or accessible through our websites is not part of this Annual Report on Form 10-K. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, our proxy statement on Schedule 14A for our annual stockholders' meeting and amendments to such reports are available, free of charge, on our investor relations website as soon as reasonably practicable after we electronically file or furnish such material with the SEC. Further, the SEC maintains an internet site that contains reports, proxy and information statements and other information regarding our filings at <http://www.sec.gov>.

Information about our Executive Officers

The following table sets forth certain information regarding our executive officers as of February 28, 2020:

Name	Age	Position
Joseph M. Hogan	62	President and Chief Executive Officer
John F. Morici	53	Chief Financial Officer and Senior Vice President, Global Finance
Simon Beard	53	Senior Vice President and Managing Director, Americas
Julie Coletti	52	Senior Vice President, Chief Legal and Regulatory Officer
Stuart Hockridge	48	Senior Vice President, Global Human Resources
Sreelakshmi Kolli	45	Senior Vice President, Global Information Technology
Jennifer Olson	42	Senior Vice President and Managing Director, Customer Success
Raj Pudipeddi	47	Senior Vice President and Chief Marketing Officer
Zelko Relic	55	Chief Technology Officer and Senior Vice President, Global Research & Development
Markus Sebastian	54	Senior Vice President and Managing Director, EMEA
Yuval Shaked	46	Senior Vice President and Managing Director, iTero Scanner and Services Business
Julie Tay	53	Senior Vice President and Managing Director, APAC
Emory M. Wright	50	Senior Vice President, Global Operations

Joseph M. Hogan has served as our President and Chief Executive Officer and as a member of our Board of Directors since June 2015. Prior to joining us, Mr. Hogan was Chief Executive Officer of ABB Ltd., a global power and automation technologies company based in Zurich, Switzerland from 2008 to 2013. Prior to working in ABB, Mr. Hogan worked at General Electric Company (GE) in a variety of executive and management roles from 1985 to 2008, including eight years as Chief Executive Officer of GE Healthcare from 2000 to 2008.

John F. Morici has served as our Chief Financial Officer since November 2016, whose title was changed to Chief Financial Officer and Senior Vice President, Global Finance in February 2018. Prior to joining us, Mr. Morici was at NBC Universal from 2007 to 2016 where he held several senior management positions in their Universal Pictures Home Entertainment U.S. and Canadian business, including Chief Financial Officer, Chief Operating Officer, and most recently, Executive Vice President and Managing Director from 2014 to 2016. Prior to NBC Universal, Mr. Morici was in various senior financial management positions at GE Healthcare from 1999 to 2007, including Chief Financial Officer for its Diagnostic Imaging and Global Products units from 2002 to 2003.

Simon Beard has served as our Senior Vice President and Managing Director, Americas since June 2019. Mr. Beard also served as our Vice President and Managing Director, EMEA from October 2015 to February 2018, when his title was changed to Senior Vice President and Managing Director, EMEA, a title he held until June 2019. Prior to joining us, from 2012 to 2014, Mr. Beard was Regional Director for the South East Asia business of Smith & Nephew, a multinational medical equipment manufacturing company. From 2006 to 2012, Mr. Beard was Director & General Manager for UK and Ireland for Smith & Nephew's Advanced Woundcare business. Prior to Smith & Nephew, Mr. Beard held multiple commercial, strategic, and general management positions in companies such as DePuy International (Johnson & Johnson), Sankyo Pharmaceutical and Sanofi Aventis.

Julie Coletti has served as our Senior Vice President, Chief Legal and Regulatory Officer since May 2019. Ms. Coletti joined Align in May 2018 serving as Vice President and Associate General Counsel, Strategic Commercial Affairs until her promotion in 2019. Prior to Align, Ms. Coletti was Vice President, Global General Counsel and Chief Compliance Officer for Danaher Corporation, a healthcare, environmental and industrial equipment manufacturer, in its dental platform business.

Stuart Hockridge has served as our Vice President, Global Human Resources since May 2016, whose title was changed to Senior Vice President, Global Human Resources in February 2018. Prior to joining us, Mr. Hockridge was Senior Vice President of Talent at Visa Inc. from 2013 to 2016. Prior to Visa, Mr. Hockridge held a number of human resource management positions at GE Healthcare from 2002 to 2012 leading HR processes both globally and for various divisions.

Sreelakshmi Kolli has served as our Vice President, Information Technology since December 2012, whose title was changed to Senior Vice President, Global Information Technology in February 2018. Ms. Kolli joined us in June 2003 and has held positions leading business operations and engineering for customer-facing applications. Before joining us, she held technical lead positions with Sword CT Space and Accenture.

Jennifer Olson has served as our Senior Vice President and Managing Director, Customer Success since May 2019. Ms. Olson also served as our Vice President and Managing Director, Doctor-Directed Consumer Channel from August 2016 to February 2018, when her title was changed to Senior Vice President and Managing Director, Doctor-Directed Consumer Channel, a title she held until May 2019. Ms. Olson joined us in 2002 and has held multiple roles in sales, marketing, and business development. Most recently, she was Area Sales Director for the North America region where she led all sales activities in Western Canada and the Western region of the U.S. Prior to joining Align, Ms. Olson was with technology companies including Extreme Networks and PWI Technologies.

Raj Pudipeddi joined Align in February 2019 as our Senior Vice President and Chief Marketing Officer. Prior to joining us, Mr. Pudipeddi was the Director, Consumer Business and Chief Marketing Officer at Bharti Airtel, an Indian telecom leader from February 2017 to May 2018. Prior to Bharti Airtel, Mr. Pudipeddi spent 14 years at Procter & Gamble serving in a number of leadership roles across businesses in North America, Asia and Latin America, most recently as Vice President, North America, Oral Care.

Zelko Relic joined Align in 2013 as Vice President, Research & Development. In December 2017, he became Chief Technology Officer, Vice President, Research & Development, whose title was changed to Chief Technology Officer, Senior Vice President, Global Research & Development in February 2018. Prior to joining us, Mr. Relic was Vice President, Engineering for Datalogic Automation, a global leader in automatic data capture and industrial automation markets, from 2012. Mr. Relic was previously Vice President, Engineering at Danaher Corporation, Accu-Sort Systems business from 2010 to 2012 before it was acquired by Datalogic Automation. From 2005 to 2010, he was at Siemens Medical Solutions USA, most recently as Vice President, and from 2002 to 2004, he held senior management positions in engineering at Kulicke & Soffa Industries, designers and manufactures of semiconductor products. He also held management positions at KLA-Tencor from 1994 to 2000.

Markus Sebastian has served as our Senior Vice President and Managing Director, EMEA since June 2019. Mr. Sebastian also served as our Vice President Orthodontic Channel Core EU and as interim GM of the DACH and France country markets from September 2018 to June 2019. Prior to Align, Mr. Sebastian spent more than 25 years in the healthcare and medical device industries, including as Chief Commercial Officer for Lohmann & Rauscher, and in multiple commercial, strategic and general management positions for Smith & Nephew, and Coloplast.

Yuval Shaked joined Align in June 2017 as our Vice President, iTero Scanner and Services Business. In August 2018, Mr. Shaked was promoted to Senior Vice President, iTero Scanner and Services. Prior to joining Align, Mr. Shaked spent more than 15 years at GE Healthcare in the U.S. and Israel in a variety of roles at multiple business units. Most recently, he served as General Manager, Diagnostic Cardiology, leading on- and off-shore R&D and marketing teams in the U.S., Germany, India and China. Prior to that, he was General Manager for GE's VersaMed business unit, with responsibility for R&D, innovation, manufacturing, quality and commercial activity. Mr. Shaked was the former CEO of SHL Telemedicine Ltd., an Israel-based advanced personal telemedicine company.

Julie Tay has served as our Vice President and Managing Director, Asia Pacific since March 2013, whose title changed to Senior Vice President and Managing Director, Asia Pacific in February 2018. Prior to joining us, Ms. Tay was regional head of Bayer Healthcare (Diabetes Care) overseeing operations across Asia from 2010 to 2013. From 2006 to 2010, Ms. Tay served as director of marketing and corporate accounts at Sealed Air Corporation (formerly Johnson Diversey), a global provider of food safety and security, facility hygiene and product protection. Prior to that, Ms. Tay spent 15 years with Johnson & Johnson Medical.

Emory M. Wright has served as our Vice President, Operations since December 2007, whose title changed to Senior Vice President, Global Operations in February 2018. He has been with us since March 2000 predominantly in manufacturing and operations roles including Vice President, Manufacturing and was General Manager of New Product Development. Prior to joining Align, from 1999 to 2000, Mr. Wright was Senior Manufacturing Manager at Metrika, Inc. a medical device manufacturer. Mr. Wright served as Manager of Manufacturing and Process Development for Metra Biosystems Inc.

ITEM 1A. **RISK FACTORS**

The following discussion is divided into two sections. The first, entitled "Risks Relating to our Business," discusses some of the risks that may affect our business, results of operations and financial condition. The second, captioned "Risks Related to our Common Stock," discusses some of the risks relating to owning our common stock. You should carefully review both sections, as well as our consolidated financial statements and notes thereto and other information appearing in this Annual Report on Form 10-K, for important information regarding these and other risks that may affect us. The fact we have chosen to list one section before the other or that we have identified risks in either section earlier than others should not be interpreted to mean we deem any risks to be more or less important or more likely to occur than others or, if any do occur, that their impact may be any less significant than others. These risk factors should be considered in connection with evaluating the forward-looking statements contained in this report because they could cause our actual results and conditions to differ materially from those statements. Before you invest in Align, you should know that investing involves risks, including those described below. The risks below are not the only ones we face. If any of the risks actually occur, our business, financial condition and results of operations could be negatively affected, the trading price of our common stock could decline, and you may lose all or part of your investment.

Risks Relating to our Business

Our net revenues are dependent primarily on our Invisalign System and iTero Scanners and any decline in sales or average selling price of these products for any reason, would adversely affect net revenues, gross margin and net income.

Our net revenues are largely dependent on the sales of our Invisalign System of clear aligners and iTero intraoral scanners. Of the two, we expect net revenues from the sale of the Invisalign System, primarily our comprehensive products, will continue to account for the vast majority of our net revenues for the foreseeable future. Continued and widespread acceptance of the Invisalign System by orthodontists, GPs and consumers is critical to our future success. Our iTero scanners are used by dental professionals for restorative and orthodontic procedures as well as Invisalign System case submissions. Sales of our iTero scanners are continuing to grow, becoming a larger percentage of our overall revenues and as a means to further adoption of digital dentistry and the Invisalign System. If orthodontists and GPs experience a reduction in consumer demand for orthodontic services, if consumers prove unwilling to adopt Invisalign System treatment as rapidly or in the volumes we anticipate and at the prices offered, if orthodontists or GPs choose to use wires and brackets or competitive products rather than Invisalign, if sales of our iTero scanners decline or fail to grow sufficiently or as expected, or if the average selling price of our products decline for any reason, particularly in the case of our Invisalign System as a result of a shift in product mix towards lower priced products or as a result of promotions, or competition, our operating results would be harmed.

Competition in the markets for our products is increasing and we expect aggressive competition from existing competitors and other companies that may introduce new technologies in the future.

The dental industry is in a period of immense and rapid transformation involving products, technologies, distribution channels and business models, much of which is based on digital transformation involving information technology, data, artificial intelligence, scanning, 3D printing, software and algorithms. While our clear aligner and iTero scanners facilitate this transition, there remains significant uncertainty concerning the technologies that will achieve market acceptance and, if adopted, whether and when they may become obsolete as new offerings become available.

Currently, our clear aligner products compete directly against traditional metal brackets and wires and increasingly against clear aligner products manufactured and distributed by new market entrants as well as traditional manufacturers of wires and brackets, both within and outside the U.S., and from traditional medical device companies, laboratories, startups and, in some cases, from doctors themselves. Although the number and type of competitors varies by segment, geography and customer, we encounter a wide variety of competitors, including new and well-established regional competitors in certain foreign markets, as well as larger companies or divisions of larger companies with substantial sales, marketing, research and financial capabilities. Due in part to the expiration of certain of our key patents beginning in 2017, we have faced increased competition in the clear aligner market. These competitors include existing larger companies in certain markets who have the ability to leverage their existing channels in the dental market to compete directly with us, direct-to-consumer ("DTC") companies that provide clear aligners using a remote teledentistry model that requires little or no in-office care from trained and licensed physicians, and doctors themselves who can manufacture custom aligners in their offices using modern 3D printing technology. In addition, corresponding foreign patents began expiring in 2018 which has resulted in increased competition in markets outside the U.S. Large consumer product companies may also enter the orthodontic supply market.

The manipulation and movement of teeth and bone is a delicate process with potentially painful and debilitating results if not appropriately performed and monitored. Accordingly, we remain committed to delivering our solutions primarily through trained and skilled doctors. Invisalign Treatment requires a doctor's prescription and an in person physical examination of the patient's dentition before beginning treatment. However, with the advent of DTC providers accompanied by significant advertising

campaigns, there has been some shifting away from traditional practices that may impact our primary selling channels. We also believe doctors are sampling alternative products and/or taking advantage of wires and brackets bundles that essentially give clear aligners away for free or at reduced prices. In addition, we may also face competition in the future from new companies that may introduce new technologies. We may be unable to compete with these competitors or one or more of these competitors may render our technology obsolete or economically unattractive. If we are unable to compete effectively with existing products or respond effectively to any new technologies, our business could be harmed. Increased competition has resulted in the past and may in the future result in volume discounting and price reductions, reduced gross margins and profitability, loss of market share, and result in the reduction of dental professionals' efforts and commitment to use our products, any of which could materially adversely affect our net revenues, volume growth, net income and stock price. We cannot assure that we will be able to compete successfully against our current or future competitors or that competitive pressures will not have a material adverse effect on our business, results of operations and financial condition.

We are dependent on our international operations, which exposes us to foreign operational, political and other risks that may harm our business.

Our key production steps are performed in operations located outside of the U.S. Technicians use a sophisticated, internally developed computer-modeling program to prepare digital clinical treatment plans ("ClinCheck"), which are then transmitted electronically to our aligner fabrication facilities. These digital files form the basis of the ClinCheck treatment plan and are used to manufacture aligner molds and aligners. Our digital treatment planning and aligner fabrication are performed in multiple international locations and we are continuing to establish these functions closer to our international customers to improve doctor and patient experiences and our operational efficiency. Also, in addition to research and development efforts conducted in the U.S., Russia and Israel, we have operations in Israel and China where we assemble wands, and our intraoral scanner is manufactured. Our reliance on international operations exposes us to risks and uncertainties that may affect our business or results of operation, including:

- difficulties in hiring and retaining employees generally, as well as difficulties in hiring and retaining employees with the necessary skills to perform the more technical aspects of our operations;
- difficulties in managing international operations, including any travel restrictions on us or our customers such as those recently imposed in China in response to the Novel Coronavirus epidemic;
- fluctuations in currency exchange rates;
- import and export controls, license requirements and restrictions;
- controlling production volume and quality of the manufacturing process;
- political, social and economic instability, including increased levels of violence in Juarez, Mexico, Hong Kong or the Middle East. We cannot predict the effect on us of any future armed conflict, political instability or violence in these regions. In addition, some of our employees in Israel are obligated to perform annual reserve duty in the Israeli military and may be called for additional active duty under emergency circumstances. We cannot predict the full impact of these conditions on us, particularly if emergency circumstances or an escalation in political situations occur. If many of our employees are called for active duty, our operations in Israel and our business may not be able to function at full capacity;
- acts of terrorism and acts of war;
- general geopolitical instability and the responses to it, such as the possibility of sanctions, trade restrictions and changes in tariffs, including recent sanctions against China and Russia and tariffs imposed by the U.S. and China and the possibility of additional tariffs or other trade restrictions between the U.S. and Mexico;
- interruptions and limitations in telecommunication services;
- product or material transportation delays or disruption, including as a result of customs clearance, violence, protests, police and military actions, or as a result of natural disasters, such as earthquakes or volcanic eruptions;
- burdens of complying with a wide variety of regional and local laws, including competition and anti-bribery laws;
- the impact of government-led initiatives to encourage the purchase or support of domestic vendors, which can affect the willingness of customers to purchase products from, or collaborate to promote interoperability of products with, companies whose headquarters or primarily operations are not domestic;
- unexpected issues and expenses related to our corporate structure reorganization;
- reduced intellectual property rights protections as compared to the U.S.;
- longer payment cycles and greater difficulty in accounts receivable collection; and
- potential adverse tax consequences.

The United Kingdom's ("U.K.") withdrawal from the EU on January 31, 2020, commonly known as "Brexit," has exacerbated and may further exacerbate many of the risks and uncertainties described above. The withdrawal of the U.K. from the EU could, among other potential outcomes, adversely affect the tax, tax treaty, currency, operational, legal and regulatory regimes to which our businesses in the region are subject. The withdrawal could also, among other potential outcomes, disrupt the free movement of goods, services and people between the U.K. and the EU and significantly disrupt trade between the U.K. and the EU and other parties. Further, uncertainty around these and related issues could lead to adverse effects on the economy of the U.K., EU and the

other economies in which we operate. As the withdrawal continues to unfold, the actual implications of Brexit in their entirety are unlikely to be known for years.

If any of the risks outlined above materialize in the future, we could experience production delays and lost or delayed revenues.

We earn an increasingly larger portion of our total revenues from international sales and face risks attendant to those operations.

We earn an increasingly larger portion of our total revenues from international sales generated through our foreign direct and indirect operations. Since our growth strategy depends in part on our ability to penetrate international markets and increase the localization of our products and services, we expect to continue to increase our sales and presence outside the U.S., particularly in markets we believe to have high-growth potential. Our international operations are subject to risks that are customarily encountered in non-U.S. operations, including:

- local political and economic instability;
- the engagement of activities by our employees, contractors, partners and agents, especially in countries with developing economies, that are prohibited by international and local trade and labor laws and other laws prohibiting corrupt payments to government officials, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act of 2010 and export control laws, in spite of our policies and procedures designed to ensure compliance with these laws;
- fluctuations in currency exchange rates;
- increased expense of developing, testing and making localized versions of our products; and
- health pandemics such as the new coronavirus in China and natural disasters including weather and fires such as those common in California and recently in Australia.

Any of these factors, either individually or in combination, could materially impact our international operations and adversely affect our business as a whole.

Demand for our products may not increase as rapidly as we anticipate due to a variety of factors including a weakness in general economic conditions and resistance to non-traditional treatment methods.

Consumer spending habits are affected by, among other things, prevailing economic conditions, levels of employment, salaries and wage rates, consumer confidence and consumer perception of economic conditions. A general slowdown in the U.S. economy and certain international economies or an uncertain economic outlook would adversely affect consumer spending habits which may, among other things, result in a decrease in the number of overall orthodontic case starts, reduced patient traffic in dentists' offices, reduction in consumer spending on elective, non-urgent, or higher value procedures or a reduction in the demand for dental services generally, each of which would have a material adverse effect on our sales and operating results. Weakness in the global economy results in a challenging environment for selling dental technologies and dentists may postpone investments in capital equipment, such as intraoral scanners. In addition, Invisalign treatment, which currently accounts for the vast majority of our net revenues, represents a significant change from traditional orthodontic treatment involving metal brackets and wires, and customers and consumers may be reluctant to accept it, or may not find it cost-effective or preferable to traditional treatment. We have generally received positive feedback from orthodontists, GPs and consumers regarding Invisalign treatment as both an alternative to braces and as a clinical method for the treatment of malocclusion, but a number of dental professionals believe that the Invisalign treatment is appropriate for only a limited percentage of their patients. Increased market acceptance of all of our products will depend in part upon the recommendations of dental professionals, as well as other factors including effectiveness, safety, ease of use, reliability, aesthetics, and price compared to competing products and treatment methods.

Our success may depend on our ability to develop, successfully introduce and achieve market acceptance of new products or product offerings.

Our success depends on our ability to profitably develop, manufacture, market and obtain regulatory approval or clearance of new products and improvements to existing products. There is no assurance we can successfully develop, sell and achieve market acceptance of new or improved products and services. The extent of, and rate at which, market acceptance and penetration are achieved by new or future products or offerings is a function of many variables, which include, among other things, our ability to:

- correctly predict, timely develop and cost effectively manufacture or bring to market solutions that meet future customer needs and preferences with the features and functionality they desire or expect;
- allocate our research and development funding to products with higher growth prospects;
- ensure compatibility of our computer operating systems and hardware configurations with those of our customers;
- anticipate and rapidly respond to new competitive products, product offerings and technological innovations;

- differentiate our products and product offerings from our competitors as well as other products in our own portfolio and successfully articulate the benefits of those differences to our customers;
- innovate and develop new technologies and applications;
- the availability of third-party reimbursement of procedures using our products;
- obtain and protect adequate intellectual property rights; and
- encourage customers to adopt new technologies.

If we fail to accurately predict customer needs and preferences or fail to produce viable technologies, we may invest heavily in research and development of products that do not lead to significant revenues. Even if we successfully innovate and develop new products and product enhancements, we may incur substantial costs in doing so and our profitability may suffer. In addition, even if our new products are successfully introduced, it may be difficult to gain market share and acceptance, particularly if doctors require education to understand the benefits of the new products or measure their success only after extended periods of time required to treat patients. For instance, it can take up to 24 months or longer to treat patients using our Invisalign System. Similarly, we recently introduced our mandibular advancement treatment and expect it will require significant time and effort on our part to educate doctors to the benefits of this treatment method. Consequently, doctors may be unwilling to rapidly adopt our new products until they successfully complete at least one case or until more historical clinical results are available.

Our ability to market and sell new products may also be subject to government regulation, including approval or clearance by the FDA and foreign government agencies. Any failure in our ability to successfully develop and introduce or achieve market acceptance of our new products or enhanced versions of existing products could have a material adverse effect on our operating results and could cause our net revenues to decline.

We may experience declines in average selling prices of our products which may decrease our net revenues.

We provide volume-based discount programs to our customers. In addition, we sell a number of products at different list prices which also differ based on regions and or country. If we change volume-based discount programs affecting our average selling prices; if we introduce any price reductions or consumer rebate programs; if we expand our discount programs or participation in these programs increases; if our critical accounting estimates materially differ from actual behavior or results; or if our geographic, channel, or product mix shifts to lower priced products or to products that have a higher percentage of deferred revenue, our average selling prices would be adversely affected. Moreover, we may find that some programs are unsuccessful or, even if successful may drive demand in unexpected ways. Were any of the foregoing to occur, our net revenues, gross profit, gross margin and net income may be reduced.

We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial condition and results of operations.

Although the U.S. dollar is our reporting currency, a growing portion of our net revenues and net income are generated in foreign currencies. Net revenues and net income generated by subsidiaries operating outside of the U.S. are translated into U.S. dollars using constantly fluctuating, often substantially, exchange rates during the respective period. As a result, negative movements in exchange rates against the U.S. dollar have and may increasingly adversely affect our net revenues and net income in our consolidated financial statements. We enter into currency forward contract transactions in an effort to cover some of our exposure to currency fluctuations but there is no assurance these transactions will fully or effectively hedge our exposure to currency fluctuations, and, under certain circumstances, these transactions could have an adverse effect on our financial condition.

As we continue to grow, we are subject to growth related risks, including risks related to excess or constrained capacity and operational inefficiencies at our manufacturing and treat facilities.

We are subject to growth related risks, including excess or constrained capacity and pressure on our internal systems and personnel. In order to manage current operations and future growth effectively, we will need to continue to implement and improve our operational, financial and management information systems and to hire, train, motivate, manage and retain employees. We may be unable to manage such growth effectively. Any such failure could have a material adverse impact on our business, operations and prospects. We continue to establish additional order acquisition, treatment planning and manufacturing facilities closer to our international customers in order to provide doctors with a better experience, improve their confidence in using Invisalign to treat more patients, more often and provide redundancy should other facilities be temporarily or permanently unavailable. Our ability to plan, construct and equip additional order acquisition, treatment planning and manufacturing facilities is subject to significant risk and uncertainty, including risks inherent in the establishment of a facility, such as hiring and retaining employees and delays and cost overruns as a result of a number of factors, any of which may be out of our control and may negatively impact our gross margin. In addition, these facilities may be located in higher cost regions compared to Mexico and Costa Rica, which may negatively impact our gross margin. If the transition into additional facilities is significantly delayed or demand for our products exceeds our current expectations, we may be unable to fulfill orders timely, which may negatively impact our financial results, reputation and

overall business. In addition, because we cannot immediately adapt our production capacity and related cost structures to changing market conditions, our facility capacity may at times exceed or fall short of our production requirements. If product demand decreases or we fail to forecast demand accurately, we could be required to write off inventory or record excess capacity charges, which would lower our gross margin. Production of our intraoral scanners may also be limited by capacity constraints due to a variety of factors, including our dependency on third party vendors for key components in addition to limited production yields. Any or all of these problems could result in the loss of customers, provide an opportunity for competing products to gain market acceptance and otherwise harm our business and financial results.

If we fail to sustain or increase profitability or revenue growth in future periods, our profitability may decline.

If we are to sustain or increase profitability in future periods, we need to continue increasing our net revenues, while controlling expenses. Because our business is evolving, it is difficult to predict our future operating results or levels of growth, and we have not in the past and may be unable in the future to sustain our historical growth rates which may cause our profitability to decline.

Our operating results have fluctuated in the past and may fluctuate in the future, making it difficult to predict the timing and amount of revenues, costs and expenditures.

Our operating results have fluctuated in the past and we expect our future quarterly and annual operating results to fluctuate for a variety of reasons, particularly as we focus on increasing doctor and consumer demand for our products. Some of the factors that could cause our operating results to fluctuate include:

- limited visibility into and difficulty predicting from quarter to quarter, the level of activity in our customers' practices;
- changes in geographic, channel, or product mix;
- weakness in consumer spending as a result of a slowdown in the global, U.S. or other economies;
- higher manufacturing costs;
- competition in general and competitive developments in the market;
- changes in relationships with our dental support organizations and distributors, including timing of orders;
- changes in the timing of when revenues are recognized, including as a result of the timing of receipt of product orders and shipments, the introduction of new products and software releases, product offerings or promotions, modifications to our terms and conditions or as a result of new accounting pronouncements or changes to critical accounting estimates including, without limitation, those estimates based on such matters as our predicted usage of additional aligners;
- fluctuations in currency exchange rates against the U.S. dollar;
- our inability to scale, suspend or reduce production based on variations in product demand;
- increased participation in our customer rebate or discount programs could adversely affect our average selling prices;
- seasonal fluctuations, including those related to patient demographics such as teen buying habits in China and Europe as well as the number of doctors in their offices and their availability to take appointments;
- success of or changes to our marketing programs from quarter to quarter;
- our reliance on our contract manufacturers for the production of sub-assemblies for our intraoral scanners;
- increased advertising or marketing efforts or aggressive price competition from competitors;
- changes to our effective tax rate;
- unanticipated delays and disruptions in the manufacturing process caused by insufficient capacity or availability of raw materials, turnover in the labor force or the introduction of new production processes, power outages or natural or other disasters beyond our control;
- underutilization of manufacturing and treat facilities;
- major changes in available technology or the preferences of customers may cause our current product offerings to become less competitive or obsolete;
- costs and expenditures in connection with litigation;
- costs and expenditures in connection with the establishment of treatment planning and fabrication facilities in international locations;
- costs and expenditures in connection with hiring and deployment of direct sales force personnel;
- unanticipated delays in our receipt of patient records made through intraoral scanners for any reason;
- disruptions to our business due to political, economic or other social instability or any governmental regulatory or similar actions, including the impact of an epidemic such as recent developments beginning in China in connection with the Novel Coronavirus, any of which results in changes in consumer spending habits, consumers unable or unwilling to visit the orthodontist or general practitioners office, as well as any impact on workforce absenteeism;
- inaccurate forecasting of net revenues, production and other operating costs;
- investments in research and development to develop new products and enhancements;
- material impairments in the value of our privately held companies; and
- timing of industry tradeshows.

To respond to these and other factors, we may make business decisions that adversely affect our operating results such as modifications to our pricing policy, promotions, development efforts, product releases, business structure or operations. Most of our expenses, such as employee compensation and lease payment obligations, are relatively fixed in the short term. Moreover, our expense levels are based, in part, on our expectations regarding future revenue levels. As a result, if our net revenues for a particular period fall below expectations, we may be unable to adjust spending quickly enough to offset any shortfall in net revenues. Due to these and other factors, we believe that quarter-to-quarter comparisons of our operating results may not be meaningful. You should not rely on our results for any one quarter as an indication of our future performance.

A disruption in the operations of our primary freight carrier or higher shipping costs could cause a decline in our net revenues or a reduction in our earnings.

We are dependent on commercial freight carriers, primarily UPS, to deliver our products. If the operations of these carriers are disrupted for any reason, we may be unable to timely deliver our products to our customers. If we cannot deliver our products on time and cost effectively, our customers may choose competitive offerings or create their own aligners causing our net revenues and gross margins to decline, possibly materially. In a rising fuel cost environment, our freight costs will increase. In addition, we earn an increasingly larger portion of our total revenues from international sales. International sales carry higher shipping costs which could negatively impact our gross margin and results of operations. If freight costs materially increase and we are unable to pass that increase along to our customers for any reason or otherwise offset such increases in our cost of net revenues, our gross margin and financial results could be adversely affected.

If we are unable to accurately predict our volume growth and fail to hire a sufficient number of technicians in advance of such demand, or hire technicians faster than our actual growth projections, the delivery time of our products could be delayed or our costs may exceed our revenues, each of which could adversely affect our results of operations.

Treatment planning is a key step leading to our manufacturing process which relies on sophisticated computer software. This requires new technicians to undergo a relatively long training process, often up to 120 days or longer. As a result, if we are unable to accurately predict our volume growth, we may have an insufficient number of trained technicians to deliver our products within the time frame our customers expect. Such a delay could cause us to lose existing customers or fail to attract new customers. This could cause a decline in our net revenues and net income and could adversely affect our results of operations. Conversely, if we hire and train technicians in anticipation of volume growth that does not materialize or materializes at a rate we do not anticipate, our costs and expenditures may outpace our revenue growth, harming our gross margins, operating expenses and financial results.

Our information technology systems are critical to our business. System integration and implementation issues and system security risks could disrupt our operations, which could have a material adverse impact on our business and operating results.

We rely on the efficient and uninterrupted operation of complex information technology systems. All information technology systems are vulnerable to damage or interruption from a variety of sources. As our business has grown in size and complexity, the growth has placed, and will continue to place significant demands on such systems. To effectively manage this growth, our information systems and applications require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information processing technology, evolving industry and regulatory standards and changing customer preferences. We are continuing to transform certain business processes, extend established processes to new subsidiaries and/or implement additional functionality in our enterprise resource planning ("ERP") software system which entails certain risks, including difficulties with changes in business processes that could disrupt our operations, such as our ability to track orders and timely ship products, manage our supply chain and aggregate financial and operational data.

System upgrades and enhancements require significant expenditures and allocation of valuable employee resources. Delays in integration or disruptions to our business from implementation of these new or upgraded systems could have a material adverse impact on our financial condition and operating results.

Additionally, we continuously upgrade our customer facing software applications, specifically the ClinCheck software, MyAligntech and the Invisalign Doctor Site. Software applications frequently contain errors or defects, especially when they are first introduced or when new versions are released. The discovery of a defect or error in our software applications or information systems, or incompatibility with customers' computer operating systems and hardware configurations with a new release or upgraded version or the failure of our primary information systems may result in the following consequences, among others: delay or loss of revenues or delay in market acceptance, damage to our reputation, loss of market share to competition or increased service costs, any of which could have a material adverse effect on our business, financial condition or results of operations.

If the information we rely on to run our businesses were to be found to be inaccurate or unreliable, if we fail to properly maintain our information systems and data integrity, or if we fail to develop new capabilities to meet our business needs in a timely

manner, we could suffer operational disruptions, have customer disputes, fail to produce timely and accurate reports, have regulatory or other legal problems, experience increases in operating and administrative expenses, lose existing customers, have difficulty in attracting new customers or in implementing our growth strategies, or suffer other adverse consequences. In addition, experienced computer programmers and hackers may be able to penetrate our network security or our cloud-based software servers hosted by third parties and misappropriate our confidential information or that of third parties, create system disruptions or cause shutdowns. Furthermore, sophisticated hardware and operating system software and applications that we either internally develop or procure from third parties may contain defects in design and manufacture, including “bugs” and other problems that can unexpectedly interfere with the operation of the system. The costs to eliminate or alleviate security problems, viruses and bugs could be significant, and the efforts to address these problems could result in interruptions that may have a material adverse impact on our operations, net revenues and operating results.

Furthermore, our business requires the secure transmission of confidential patient health information over public networks. Because we store and transmit sensitive information including protected patient health information, security breaches could expose us to a risk of regulatory action, litigation, possible liability and loss. We have experienced breaches in the past and our security measures may be inadequate to prevent future security breaches, and our business operations and profitability would be adversely affected by, among other things, loss of customers and potential criminal and civil sanctions if they are not prevented.

There can be no assurance that our process of improving existing systems, developing new systems to support our expanding operations, integrating new systems, protecting confidential patient health information, and improving service levels will not be delayed or that additional systems issues will not arise in the future. Failure to adequately protect and maintain the integrity of our information systems and data may result in a material adverse effect on our financial position, results of operations and cash flows.

If the security of our customer and patient information is compromised or we are unable to comply with data protection laws, patient care could suffer, and we could be liable for related damages, and our reputation could be impaired.

We retain confidential customer financial as well as patient health information in our processing centers. Therefore, it is critical that our facilities and infrastructure remain secure and are also perceived by the marketplace and our customers to be secure. Despite the implementation of security measures, we have experienced breaches in the past and our infrastructure may be vulnerable to physical break-ins, computer viruses, programming errors or other technical malfunctions, hacking or phishing attacks by third parties, employee error or malfeasance or similar disruptive problems. If we fail to meet our customer and patients’ expectations regarding the security of customer and patient information, we could be liable for damages and our reputation and competitive position could be impaired. Affected parties could initiate legal or regulatory action against us, which could cause us to incur significant expense and liability or result in orders forcing us to modify our business practices. Concerns over our privacy practices could adversely affect others’ perception of us and deter customers, advertisers and partners from using our products. In addition, patient care could suffer, and we could be liable if our systems fail to deliver correct information in a timely manner. We have cybersecurity insurance related to a breach event covering expenses for notification, credit monitoring, investigation, crisis management, public relations and legal advice. The policy also provides coverage for regulatory action defense including fines and penalties, potential payment card industry fines and penalties and costs related to cyber extortion; however, damage and claims arising from such incidents may not be covered or may exceed the amount of any coverage.

We are also subject to federal, state and foreign laws and regulations, including ones relating to privacy, data protection, content regulation, and consumer protection. We may be or become subject to data localization or data residency laws which generally require that certain types of data collected within a country be stored and processed only within that country or approved countries. Some countries, including Russia and China, have enacted, and others are considering enacting, data localization or data residency laws. If countries in which we have customers adopt data localization or data residency laws, we could be required to implement new or expand existing data storage protocols, build new storage facilities, and/or devote additional resources to comply with the requirements of such laws, any of which could have significant cost implications. We may also be subject to data export restrictions, or international transfer laws which prohibit or impose conditions upon the transfer of such data from one country to another. These laws and regulations are constantly evolving and may be interpreted, applied, created or amended in a manner that could adversely affect our business.

In addition, we must comply with numerous data protection requirements that span from individual state and national laws in the U.S. to multinational requirements in the EU. In the EU, we must comply with the General Data Protection Regulation (“GDPR”) which serves as a harmonization of European data-privacy laws. We believe we have designed our product and service offerings to be compliant with the requirements of applicable data protection laws and regulations. Maintaining systems that are compliant with these laws and regulations is costly and could require complex changes in the way we do business or provide services to our customers and their patients. Additionally, our success may be dependent on the success of healthcare providers in managing data protection requirements.

In order to deepen our market penetration and raise awareness of our brand and products, we have increased the amount we spend on marketing activities, which may not ultimately prove successful or an effective use of our resources.

To increase awareness of our products and services domestically and internationally, we have increased the amount we spend, and anticipate spending in the future on marketing activities. Our marketing efforts and costs are significant and include national and regional campaigns involving television, print media, social media and, more recently, alliances with professional sports teams and other strategic partners. We attempt to structure our advertising campaigns in ways we believe most likely to increase brand awareness and adoption; however, there is no assurance our campaigns will achieve the returns on advertising spend desired or successfully increase brand or product awareness sufficiently to sustain or increase our growth goals, which could have an adverse effect on our gross margin and business overall.

Our success depends in part on our proprietary technology, and if we are unable to successfully enforce our intellectual property rights, our competitive position may be harmed. Litigating claims of this type is costly and could distract our management and cause a decline in our results of operations and stock price.

Our success depends in part on our ability to maintain existing intellectual property rights and to obtain and maintain further intellectual property protection for our products, both in the U.S. and in other countries. Our inability to do so could harm our competitive position. *For further details concerning our patents and other intellectual property, please see "Intellectual Property" in Part I, Item 1. Business" of this annual report on Form 10-K.*

We intend to rely on our portfolio of issued and pending patent applications in the U.S. and in other countries to protect a large part of our intellectual property and our competitive position; however, our currently pending or future patent filings may not result in the issuance of patents. Additionally, any patents issued to us may be challenged, invalidated, held unenforceable, circumvented, or may not be sufficiently broad to prevent third parties from producing competing products similar in design to our products. In addition, any protection afforded by foreign patents may be more limited than that provided under U.S. patents and intellectual property laws. Certain of our key patents began to expire in 2017, which have resulted in increased competition and less expensive competitive products. We also rely on protection of our copyrights, trade secrets, know-how and proprietary information. We generally enter into confidentiality agreements with our employees, consultants and our collaborative partners upon commencement of a relationship with us; however, these agreements may not provide meaningful protection against the unauthorized use or disclosure of our trade secrets or other confidential information, and adequate remedies may not exist if unauthorized use or disclosure were to occur. Our inability to maintain the proprietary nature of our technology through patents, copyrights or trade secrets would impair our competitive advantages and could have a material adverse effect on our operating results, financial condition and future growth prospects. In particular, a failure to protect our proprietary rights might allow competitors to copy our technology, which could adversely affect our pricing and market share. In addition, in an effort to protect our intellectual property we are currently, have in the past been, and may in the future be involved in litigation. The potential effects on our business operations resulting from litigation that we may participate in the future, whether or not ultimately determined in our favor or settled by us, are costly and divert the efforts and attention of our management and technical personnel from normal business operations.

Litigation, interferences, oppositions, re-exams, inter partes reviews, post grant reviews or other proceedings are, have been and may in the future be necessary in some instances to determine the validity and scope of certain of our proprietary rights, and in other instances to determine the validity, scope or non-infringement of certain patent rights claimed by third parties to be pertinent to the manufacture, use or sale of our products. Litigation, interference, oppositions, re-exams, inter partes reviews, post grant reviews, administrative challenges or other similar types of proceedings are unpredictable and may be protracted, expensive and distracting to management. The outcome of such proceedings could adversely affect the validity and scope of our patent or other proprietary rights, hinder our ability to manufacture and market our products, require us to seek a license for the infringed product or technology or result in the assessment of significant monetary damages. An unfavorable ruling could include monetary damages or, in cases where injunctive relief is sought, an injunction prohibiting us from selling our products. Any of these results from our litigation could adversely affect our results of operations and stock price.

Obtaining approvals and complying with regulations enforced by the FDA and foreign regulatory authorities is an expensive and time-consuming process, and any failure to obtain or maintain approvals for our products or services or failure to comply with regulations could materially harm our sales, result in substantial penalties and cause harm to our reputation.

Our products are considered medical devices and are subject to extensive and widely varying regulations in the U.S. and internationally. Before we can sell a new medical device in the U.S., or market a new use of or claim for an existing product, we must obtain FDA clearance or approval unless an exemption applies. Internationally, similar requirements apply on a country by country basis. In the U.S., FDA regulations are wide ranging and govern, among other things:

- product design, development, manufacturing and testing;

- product labeling;
- product storage;
- pre-market clearance or approval;
- complaint handling and corrective actions;
- advertising and promotion; and
- product sales and distribution.

It takes significant time, effort and expense to obtain and maintain FDA approvals of our products and services. In other countries, the requirements to obtain and maintain similar approvals may differ materially from those of the FDA. Moreover, there is no guarantee we will successfully obtain or maintain approvals in all or any of the countries in which we do business now or in the future. Even if we are successful, the time and effort may take significantly longer, and costs may be significantly greater. If approvals to market our products or services are delayed, whether in the U.S. or other countries, we may be unable to market our products or services in markets we deem important to our business. Were any of these risks to occur, our domestic or international operations may be materially harmed, and our business as a whole adversely impacted.

In addition, our failure to comply with applicable regulatory requirements could result in enforcement actions in the U.S. and other countries. For example, enforcement actions by the FDA may include any of the following sanctions:

- warning letters, fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recall or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- refusing our requests for 510(k) clearance or pre-market approval of new products, new intended uses, or modifications to existing products;
- withdrawing clearance or pre-market approvals that have already been granted; and
- criminal prosecution.

We must also comply with facility registration and product listing requirements of the FDA and adhere to applicable Quality System regulations. The FDA enforces its Quality System regulations through periodic unannounced inspections. Our failure to take satisfactory corrective action in response to an adverse inspection or the failure to comply with applicable manufacturing regulations could result in enforcement action, and we may be required to find alternative manufacturers, which could be a long and costly process. Any enforcement action by the FDA or foreign governments could have a material adverse effect on us.

The sourcing and availability of metals used in the manufacture of a limited number of parts (if any) contained in our products may be affected by laws and regulations in the U.S. or internationally regarding the use of minerals obtained from certain regions of the world like the Democratic Republic of Congo and adjoining countries. These laws and regulations may decrease the number of suppliers capable of supplying our needs for certain metals, thereby negatively affecting our ability to obtain products in sufficient quantities or at competitive prices. We may furthermore suffer financial and reputational harm if customers require, and we are unable to deliver, certification that our products are conflict free. Regardless, we will incur additional costs associated with compliance with these laws and regulations, including time-consuming and costly efforts to determine the source of any conflict minerals used in our products.

We are required to annually assess our internal control over financial reporting and any future adverse results from such assessment could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

We have implemented and routinely assess, update and refine our internal control over financial reporting for its effectiveness. Pursuant to the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated by the SEC, we are required to furnish in our Form 10-K a report by our management regarding the effectiveness of our internal control over financial reporting. The report includes, among other things, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year, including a statement as to whether or not our internal control over financial reporting is effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. Our internal controls may become inadequate because of changes in conditions including changes in personnel, updates and upgrades to existing software including our ERP software system, changes in accounting standards or interpretations of existing standards, and, as a result, the degree of compliance of our internal control over financial reporting with the existing policies or procedures may become ineffective. Establishing, testing and maintaining an effective system of internal control over financial reporting requires significant resources and time commitments on the part of our management and our finance staff, may require additional staffing and infrastructure investments and increases our costs of doing business. If we are unable to assert that our internal control over financial reporting is effective in any future period (or if our auditors are unable to express an opinion on the effectiveness of our internal controls or conclude that our internal controls are ineffective), the timely filing of our financial reports could be delayed or we could be required to restate past reports, and cause us to lose investor confidence in the accuracy and completeness

of our financial reports in the future, which could have an adverse effect on our stock price.

If we lose our key personnel or are unable to attract and retain key personnel, we may be unable to pursue business opportunities or develop our products.

We are highly dependent on the key employees in our clinical engineering, technology development, sales, training and marketing personnel and management teams. The loss of the services provided by those individuals may significantly delay or prevent the achievement of our product development and other business objectives and could harm our business. Our future success will also depend on our ability to identify, recruit, train and retain additional qualified personnel, including orthodontists and production technicians in our treatment planning facilities. Few orthodontists are accustomed to working in a manufacturing environment since they are generally trained to work in private practices, universities and other research institutions. Thus, we may be unable to attract and retain personnel with the advanced qualifications necessary for the further development of our business. Furthermore, we may not be successful in retaining our key personnel or their services. If we are unable to attract and retain key personnel, our business could be materially harmed.

If we infringe the patents or proprietary rights of other parties or are subject to a patent infringement claim, our ability to grow our business may be severely limited.

Extensive litigation over patents and other intellectual property rights is common in the medical device industry. We have been sued for infringement of third party's patents in the past and we may be the subject of patent or other litigation in the future. We periodically receive and may in the future receive letters from third parties drawing our attention to their patent rights. While we do not believe we infringe upon any valid and enforceable rights that have been brought to our attention, there may be other more pertinent rights of which we are presently unaware. The defense and prosecution of intellectual property suits, interference proceedings and related legal and administrative proceedings could result in substantial expense to us and significant diversion of effort by our technical and management personnel. An adverse determination of any litigation or interference proceeding to which we may become a party could subject us to significant liabilities. An adverse determination of this nature could also put our patents at risk of being invalidated or interpreted narrowly or require us to seek licenses from third parties. Licenses may not be available on commercially reasonable terms or at all, in which event, our business would be materially adversely affected.

We maintain single supply relationships for certain key machines and materials, and our business and operating results could be harmed if supply is restricted or ends or the price of raw materials used in our manufacturing process increases.

We are highly dependent on manufacturers of specialized scanning equipment, rapid prototyping machines, resin and other advanced materials, as well as the optics, electronic and other mechanical components of our intraoral scanners. We maintain single supply relationships for many of these machines and materials technologies. In particular, our CT scanning and stereolithography equipment used in our aligner manufacturing and many of the critical components for the optics of our scanners are provided by single suppliers. We are also committed to purchasing the vast majority of our resin and polymer, the primary raw materials used in our manufacturing process for clear aligners, from a single source. If these or other suppliers encounter financial, operating or other difficulties or if our relationship with them changes, we may be unable to quickly establish or qualify replacement sources of supply and could face production interruptions, delays and inefficiencies. In addition, technology changes by our vendors could disrupt access to required manufacturing capacity or require expensive, time consuming development efforts to adapt and integrate new equipment or processes. Our growth may exceed the capacity of one or more of these manufacturers to produce the needed equipment and materials in sufficient quantities to support our growth. Conversely, in order to secure supplies for production of products, we sometimes enter into non-cancelable minimum purchase commitments with vendors, which could impact our ability to adjust our inventory to reflect declining market demands. If demand for our products is less than we expect, we may experience additional excess and obsolete inventories and be forced to incur additional charges and our profitability may suffer. In the event of technology changes, delivery delays, or shortages of or increases in price for these items, our business and growth prospects may be harmed.

We depend on a single contract manufacturer and supplier of parts used in our iTero scanner and any disruption in this relationship may cause us to fail to meet the demands of our customers and damage our customer relationships.

We rely on a third-party manufacturer to supply key sub-assemblies for our iTero Element scanner. As a result, if this manufacturer fails to deliver its components, if we lose its services or if we fail to negotiate or maintain acceptable terms, we may be unable to deliver our products in a timely manner and our business may be harmed. Furthermore, any difficulties encountered by this manufacturer with respect to hiring personnel and maintaining acceptable manufacturing standards, controls, procedures and policies could disrupt our ability to timely deliver our products. Finding a substitute manufacturer may be expensive, time-consuming or impossible and could result in a significant interruption in the supply of our intraoral scanning products. Any failure by our contract manufacturer that results in delays in our fulfillment of customer orders may cause us to lose revenues and suffer damage to our customer relationships.

We primarily rely on our direct sales force to sell our products, and any failure to train and maintain our direct sales force could harm our business.

Our ability to sell our products and generate revenues primarily depends upon our direct sales force within our Americas and International markets. We do not have any long-term employment contracts with our direct sales force and the loss of the services provided by these key personnel may harm our business. In order to provide more comprehensive sales and service coverage, we continue to increase the size of our sales force to pursue growth opportunities within and outside of our existing geographic markets. Moreover, as we focus on market penetration, we have begun to segregate sales personnel to focus on specific markets such as orthodontists and GPs. To adequately train new representatives to successfully market and sell our products and for them to establish strong customer relationships can take up to twelve months or more. As a result, if we are unable to retain our direct sales personnel or quickly replace them with individuals of equivalent technical expertise and qualifications, if we are unable to successfully instill technical expertise in new and existing sales representatives, if we fail to establish and maintain strong relationships with our customers, or if our efforts at specializing our selling techniques do not prove successful and cost-effective, our net revenues and our ability to maintain market share could be materially harmed. In addition, due to our large and fragmented customer base, we may not be able to provide all of our customers with product support immediately upon the launch of a new product. As a result, adoption of new products by our customers may be slower than anticipated and our ability to grow market share and increase our net revenues may be harmed.

As compliance with healthcare regulations becomes more costly and difficult for us or our customers, we may be unable to grow our business.

Participants in the healthcare industry are subject to extensive and frequently changing regulations under numerous laws administered by governmental entities at the federal, state and local levels, some of which are, and others of which may be, applicable to our business.

Furthermore, our healthcare provider customers are also subject to a wide variety of laws and regulations that could affect the nature and scope of their relationships with us. The healthcare market itself is highly regulated and subject to changing political, economic and regulatory influences. Regulations implemented pursuant to the Health Insurance Portability and Accountability Act ("HIPAA"), including regulations affecting the security and privacy of patient healthcare information held by healthcare providers and their business associates may require us to make significant and unplanned enhancements of software applications or services, result in delays or cancellations of orders, or result in the revocation of endorsement of our products and services by healthcare participants. The effect of HIPAA and newly enforced regulations on our business is difficult to predict, and there can be no assurance that we will adequately address the business risks created by HIPAA and its implementation or that we will be able to take advantage of any resulting business opportunities.

Extensive and changing government regulation of the healthcare industry may be expensive to comply with and exposes us to the risk of substantial government penalties.

In addition to medical device laws and regulations, numerous state and federal healthcare-related laws regulate our business, covering areas such as:

- storage, transmission and disclosure of medical information and healthcare records;
- prohibitions against the offer, payment or receipt of remuneration to induce referrals to entities providing healthcare services or goods or to induce the order, purchase or recommendation of our products; and
- the marketing and advertising of our products.

Complying with these laws and regulations could be expensive and time-consuming and could increase our operating costs or reduce or eliminate certain of our sales and marketing activities or our revenues.

Our business exposes us to potential product liability claims, and we may incur substantial expenses if we are subject to product liability claims or litigation.

Medical devices involve an inherent risk of product liability claims and associated adverse publicity. We may be held liable if any product we develop or any product that uses or incorporates any of our technologies causes injury or is otherwise found unhealthy or unsuitable. Although we intend to continue to maintain product liability insurance, adequate insurance may not be available on acceptable terms, if at all, and may not provide adequate coverage against potential liabilities. A product liability claim, regardless of its merit or eventual outcome, could result in significant legal defense costs and damage our reputation. These costs would have the effect of increasing our expenses and diverting management's attention away from the operation of our business and could harm our business.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our global operations may be disrupted by natural or human induced disasters including, earthquakes, tsunamis, floods, drought, hurricanes, typhoons, wildfires, extreme weather conditions, power shortages, telecommunications failures, materials scarcity and price volatility, and medical epidemics or health pandemics. Climate change may increase both the frequency and severity of natural disasters and, consequently, risks to our operations and growth. The occurrence of business disruptions could harm our growth and expansion, result in significant losses, seriously harm our revenue, profitability and financial condition, adversely affect our competitive position, increase our costs and expenses, and require substantial expenditures and recovery time in order to fully resume operations. Our digital dental modeling is primarily processed in our facility located in San Jose, Costa Rica. The operations team in Costa Rica creates ClinCheck treatment plans using sophisticated computer software. In addition, our customer facing operations are located in Costa Rica. Our aligner molds and finished aligners are fabricated in Juarez, Mexico and, we have and are building additional facilities in China. Both locations in Costa Rica and Mexico are in earthquake zones and may be subject to other natural disasters. If there is a major earthquake or any other natural disaster in a region where one of these facilities is located, our ability to create ClinCheck treatment plans, respond to customer inquiries or manufacture and ship our aligners could be compromised which could result in our customers experiencing significant delays receiving their aligners and a decrease in service levels for a period of time. Additionally, our sales and operations in China have been impacted and are likely to continue to be disrupted as a result of the Novel Coronavirus outbreak. Moreover, our corporate headquarters and a portion of our research and development activities are located in California, which suffers from earthquakes, periodic droughts, and wildfires affecting the health and safety of our employees. Any such business interruptions could materially and adversely affect our business, financial condition and results of operations.

Changes in, or interpretations of, accounting rules and regulations, could result in unfavorable accounting charges.

We prepare our consolidated financial statements in conformity with Generally Accepted Accounting Principles in the U.S. ("GAAP"). These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting policies. A change in these policies or in the way these policies are interpreted by us or regulators can have a significant effect on our reported results and may even retroactively affect previously reported transactions.

If we fail to manage our exposure to global financial and securities market risk successfully, our operating results and financial statements could be materially impacted.

The primary objective of our investment activities is to preserve principal. To achieve this objective, a majority of our marketable investments are investment grade, liquid, fixed-income securities and money market instruments denominated in U.S. dollars. If the carrying value of our investments exceeds the fair value, and the decline in fair value is deemed to be other-than-temporary, we will be required to write down the value of our investments, which could materially harm our results of operations and financial condition. Moreover, the performance of certain securities in our investment portfolio correlates with the credit condition of the U.S. financial sector. In an unstable credit environment, we might incur significant realized, unrealized or impairment losses associated with these investments.

If our goodwill or long-lived assets become impaired, we may be required to record a significant charge to earnings.

Under GAAP, we review our goodwill and long-lived asset group for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Additionally, goodwill is required to be tested for impairment at least annually. The qualitative and quantitative analysis used to test goodwill are dependent upon various assumptions and reflect management's best estimates. Changes in certain assumptions including revenue growth rates, discount rates, earnings multiples and future cash flows may cause a change in circumstances indicating that the carrying value of goodwill or the asset group may be impaired. We may be required to record a significant charge to earnings in the financial statements during the period in which any impairment of goodwill or asset group are determined.

We may experience unexpected issues and expenses associated with our corporate structure reorganization, including the relocation of our EMEA regional headquarters to Switzerland.

We reorganized our corporate structure and intercompany relationships in January 2020 in an effort to more closely align our international business activities and to achieve financial and operational efficiencies. The implementation of this reorganization plan included the move of our EMEA regional headquarters from the Netherlands to Switzerland, has been time-consuming and costly, may be disruptive to our business, and, following completion of the reorganization plan, may not be more efficient or effective. This relocation is accompanied by a number of risks and uncertainties that may affect our results of operations and statement of cash flows, including:

- failure to retain key employees who possess specific knowledge or expertise and upon whom we are depending upon for the timely and successful transition;
- difficulties in hiring employees in Switzerland with the necessary skills and expertise; and
- increased costs as we transition the operations to Switzerland along with higher costs of doing business in Switzerland.

If any of these risks materialize in the future, our operating results, statement of operations and cash flows may be adversely affected.

Our effective tax rate may vary significantly from period to period.

Various internal and external factors may have favorable or unfavorable effects on our future effective tax rate. These factors include, but are not limited to, changes in legal entity structure and/or activities performed within our entities, changes in tax laws, regulations and/or rates, new or changes to accounting pronouncements, changing interpretations of existing tax laws or regulations, changes in the relative proportions of revenues and income before taxes in the various jurisdictions in which we operate that have differing statutory tax rates, changes in overall levels of pretax earnings, the future levels of tax benefits of stock-based compensation, settlement of income tax audits and non-deductible goodwill impairments. For example, our effective tax rate will vary significantly in our first quarter of fiscal 2020 due to the relocation of our EMEA regional headquarters from the Netherlands to Switzerland effective January 1, 2020. Also, we may continue to experience significant variation in our effective tax rate related to excess tax benefits on stock-based compensation, particularly in the first quarter of each year when the majority of our equity awards vest.

Changes in tax laws or tax rulings could negatively impact our income tax provision and net income.

As a U.S. multinational corporation, we are subject to changing tax laws both within and outside of the U.S. Changes in tax laws or tax rulings, or changes in interpretations of existing tax laws, could affect our income tax provision and net income or require us to change the manner in which we operate our business. In addition, governmental tax authorities are increasingly scrutinizing the tax positions of companies. Many countries in Europe, as well as a number of other countries and organizations, have recently proposed or recommended changes to existing tax laws or have enacted new laws. For example, the Organization for Economic Cooperation and Development (“OECD”) has been working on a “Base Erosion and Profit Shifting Project,” which is focused on a number of issues, including the shifting of profits between affiliated entities in different tax jurisdictions. The OECD has issued and is expected to continue to issue, guidelines and proposals that may change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business.

We are subject to risks associated with our strategic investments. Impairments in the value of our investments and unsecured promissory note could negatively impact our financial results.

We have invested in privately held companies for strategic reasons and to support key business initiatives, and we may not realize a return on our strategic investments. Many of such companies generate net losses and the market for their products, services or technologies may be slow to develop. Further, valuations of privately held companies are inherently complex due to the lack of readily available market data. If we determine that our investments have experienced a decline in value or are determined to be uncollectible, we may be required to record impairments which could be material and could have an adverse impact on our financial results.

Risks Related to our Common Stock

Historically, the market price for our common stock has been volatile.

The market price of our common stock could be subject to wide price fluctuations in response to various factors, many of which are beyond our control. The factors include:

- quarterly variations in our results of operations and liquidity or changes in our forecasts and guidance;
- changes in recommendations by the investment community or in their estimates of our net revenues or operating results;
- speculation in the press or investment community concerning our business and results of operations;
- announcements by competitors or new market entrants;
- strategic actions by us or our competitors, such as management changes, material transactions or acquisitions;
- announcements regarding stock repurchases, sales of our common stock, credit agreements and debt issuances;
- announcements of technological innovations or new products or product offerings by us, our customers or competitors;
- key decisions in pending litigation
- sales of stock by us, our officers or directors; and
- general economic market conditions.

In addition, the stock market, in general, and the market for technology and medical device companies, in particular, have experienced extreme price and volume fluctuations that have often been unrelated to or disproportionate to the operating performance of those companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. Historically, class action litigation is often brought against an issuing company following periods of volatility in the market price of a company's securities and we have not been excepted from such litigation.

We cannot guarantee we will continue to repurchase our common stock, and any repurchases may not achieve our objectives.

We have a history of recurring stock repurchase programs intended to return capital to our investors. Any authorization or continuance of our share repurchase programs is contingent on a variety of factors, including our financial condition, results of operations, business requirements, and our board of directors' continuing determination that share repurchases are in the best interests of our stockholders and in compliance with all applicable laws and agreements. There is no assurance that we will continue to repurchase stock consistent with historical levels or at all, or that our stock repurchase programs will have a beneficial impact on our stock price.

Future sales of significant amounts of our common stock may depress our stock price.

A large percentage of our outstanding common stock is currently owned by a small number of significant stockholders. These stockholders have sold in the past, and may sell in the future, large amounts of common stock over relatively short periods of time. Sales of substantial amounts of our common stock in the public market by our existing stockholders may adversely affect the market price of our common stock. Such sales could create public perception of difficulties or problems with our business and may depress our stock price.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We occupy several leased and owned facilities. At December 31, 2019, the significant facilities occupied were as follows:

Location	Lease/Own	Primary Use	Expiration of Lease
San Jose, California, U.S.A.	Own	Office for corporate headquarters, research & development and administrative personnel	N/A
Raleigh, North Carolina, U.S.A	Own	Office for Americas regional headquarters	N/A
San Jose, Costa Rica	Lease and Own	Office for administrative personnel, treatment personnel, and customer care	July 2023
Moscow, Russia	Lease	Office for research & development	March 2024
Or Yehuda, Israel	Lease and Own	Manufacturing and office for research & development and administrative personnel	February 2022
Rotkreuz, Switzerland	Lease	Office for EMEA regional headquarters, sales and marketing and administrative personnel	July 2024
Juarez, Mexico	Own	Manufacturing and office for administrative personnel	N/A
Ziyang, China	Lease and Own	Manufacturing and office for administrative personnel	May 2021

ITEM 3. LEGAL PROCEEDINGS

For a discussion of legal proceedings, refer to Note 9 "Legal Proceedings" of the Notes to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

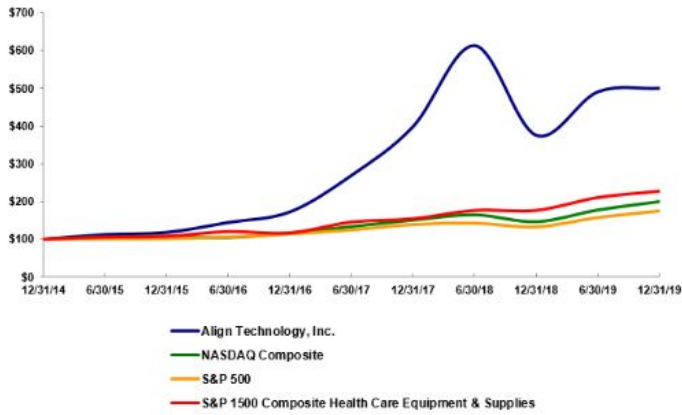
As of February 21, 2020, there were approximately 70 holders of record of our common stock. Because the majority of our shares of outstanding common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Performance Graph

Notwithstanding any statement to the contrary in any of our previous or future filings with the SEC, the following information relating to the price performance of our common stock shall not be deemed "filed" with the SEC or "Soliciting Material" under the Securities Exchange Act of 1934, as amended, or subject to Regulation 14A or 14C, or to liabilities of Section 18 of the Exchange Act except to the extent we specifically request that such information be treated as soliciting material or to the extent we specifically incorporate this information by reference.

The graph below matches our cumulative 5-year total stockholder return on common stock with the cumulative total returns of the NASDAQ Composite index, the S&P 500 and the S&P 1500 Composite Health Care Equipment & Supplies index. The graph tracks the performance of a \$100 investment in our common stock, in the peer group, and the index (with the reinvestment of all dividends) from December 31, 2014 to December 31, 2019.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
 Among Align Technology, Inc., the NASDAQ Composite Index, the S&P 500 Index,
 and S&P 1500 Composite Health Care Equipment & Supplies



*\$100 invested on 12/31/14 in stock or index, including reinvestment of dividends.
 Fiscal year ending December 31.

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UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Following is a summary of stock repurchases for the three months ended December 31, 2019:

Period	Total Number of Shares Repurchased	Average Price Paid per Share	Total Number of Shares Repurchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet Be Repurchased Under the Program ¹
October 1, 2019 through October 31, 2019	—	\$ —	—	\$ 200,500,000
November 1, 2019 through November 30, 2019	388,510	\$ 258.67	388,510	\$ 100,000,000
December 1, 2019 through December 31, 2019	—	\$ —	—	\$ 100,000,000

¹ In November 2019, we repurchased \$100.5 million of our common stock on the open market. As of December 31, 2019, we have \$100.0 million available for repurchase under the \$600.0 million repurchase program authorized by our Board of Directors in May 2018 (Refer to Note 12 "Common Stock Repurchase Programs" of the Notes to Consolidated Financial Statements).

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and accompanying notes and *Management's Discussion and Analysis of Financial Condition and Results of Operations*.

	Fiscal Year				
	2019	2018	2017 ²	2016 ²	2015
	(in thousands, except per share data)				
Statement of Operations Data:					
Net revenues	\$ 2,406,796	\$ 1,966,492	\$ 1,473,413	\$ 1,079,874	\$ 845,486
Gross profit	1,743,897	1,447,867	1,116,947	815,294	640,110
Income from operations	542,493	466,564	353,611	248,921	188,634
Interest income	12,482	8,576	6,948	4,213	2,938
Other income (expense), net	7,676	(8,489)	4,240	(10,568)	(5,471)
Net income before provision for income taxes and equity in losses of investee	562,651	466,651	364,799	242,566	186,101
Provision for income taxes	112,347	57,723	130,162	51,200	42,081
Equity in losses of investee, net of tax	7,528	8,693	3,219	1,684	—
Net income	\$ 442,776	\$ 400,235	\$ 231,418	\$ 189,682	\$ 144,020
Net income per share:					
Basic	\$ 5.57	\$ 5.00	\$ 2.89	\$ 2.38	\$ 1.80
Diluted	\$ 5.53	\$ 4.92	\$ 2.83	\$ 2.33	\$ 1.77
Shares used in computing net income per share:					
Basic	79,424	80,064	80,085	79,856	79,998
Diluted	80,100	81,357	81,832	81,484	81,521
Financial Position Data:					
Working capital ¹	\$ 662,449	\$ 610,406	\$ 658,316	\$ 597,772	\$ 460,338
Total assets	2,500,702	2,052,458	1,784,009	1,402,305	1,158,633
Total long-term liabilities	183,563	107,494	129,670	46,427	39,035
Stockholders' equity	\$ 1,346,169	\$ 1,252,891	\$ 1,154,288	\$ 999,307	\$ 847,926

¹ Working capital is calculated as the difference between total current assets and total current liabilities.

² Balances have been recast to reflect the adoption of ASC 606. We recognized a \$3.9 million cumulative effect upon adoption as an adjustment to our opening balance of retained earnings as of January 1, 2016 in our Consolidated Statements of Stockholders' Equity. Refer to Note 1 "Summary of Significant Accounting Policies" of the Notes to Consolidated Financial Statements for details.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

A discussion regarding our financial condition and results of operations for fiscal 2019 compared to fiscal 2018 is presented under Results of Operations of this Form 10-K. Discussions regarding our financial condition and results of operations for fiscal 2018 compared to 2017 have been omitted from this Annual Report on Form 10-K, but can be found in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on February 28, 2019, which is available without charge on the SEC's website at www.sec.gov and on our investor relations website at investor.aligntech.com.

Overview

Our goals are to establish Invisalign clear aligners as the standard method for treating malocclusion which, to date, over 8 million people worldwide have been treated with our Invisalign System, and to establish the iTero intraoral scanner as the preferred scanning device for 3D digital scans, ultimately driving increased clear aligner and other product adoption by dental professionals. We intend to achieve these goals by continued focus and execution of our strategic growth drivers set forth in the *Business Strategy* section of this Annual Report on Form 10-K.

The successful execution of our business strategy in 2020 and beyond may be affected by a number of factors including:

- *New Invisalign Products and Feature Enhancements.* We believe product innovation drives greater treatment predictability, clinical applicability and ease of use for the dental professionals we serve customers which supports adoption of Invisalign treatment in their practices. Our focus is to develop solutions and features to treat a wide range of cases from simple to complex.
 - We rolled out Invisalign treatment with Mandibular Advancement, the first clear aligner solution for Class II correction in growing tween and teen patients in multiple regions and countries throughout 2018. This offering combines the benefits of our clear aligner system with features for moving the lower jaw forward while simultaneously aligning the teeth without the need for elastics typically used to treat teen Class II patients.
 - In April 2018, we announced Invisalign Go product with more user-friendly iTero digital chairside experience and greater flexibility to treat a wider range of mild to moderate cases. Invisalign Go also incorporates new data-driven clinical protocols for predictable tooth movement and automated case assessments that leverages our Invisalign patients treated to date. These improvements make it easier for general practitioner ("GP") dentists to tailor their treatment plans to the individual needs of each patient.
 - In July 2018, we announced Invisalign First clear aligners which are a treatment option designed with features specifically for younger patients with early mixed dentition with a mixture of primary/baby and permanent teeth. Phase 1 treatment is an early interceptive orthodontic treatment for young patients, traditionally done through arch expanders, or partial metal braces, before all permanent teeth have erupted, typically at ages seven through ten years. Invisalign First clear aligners are designed specifically to address a broad range of younger patients' malocclusions, including shorter clinical crowns, management of erupting dentition and predictable dental arch expansion.
 - In October 2019, we launched the Invisalign Moderate Package for the treatment of mild to moderate malocclusion. The Invisalign Moderate treatment includes all the features of Invisalign treatment, plus additional features that address the orthodontic needs of teenage patients such as compliance indicators and compensation for tooth eruption.
- *New iTero Products and Technology Innovation.* The iTero scanner is an important component to our customer experience and is central to a digital approach as well as overall customer utilization of Invisalign.
 - In April 2018, we expanded the iTero Element portfolio with the launch of the iTero Element 2 and the iTero Element Flex scanners, building on the existing high precision, full-color imaging and fast scan times of the iTero Element portfolio while streamlining orthodontic and restorative workflows. The next-generation iTero Element 2 is designed for greater performance with 2X faster start-up and 25% faster scan processing time compared to the iTero Element. The new iTero Element Flex wand-only configuration is a portable scanner for easy transport from office to office.

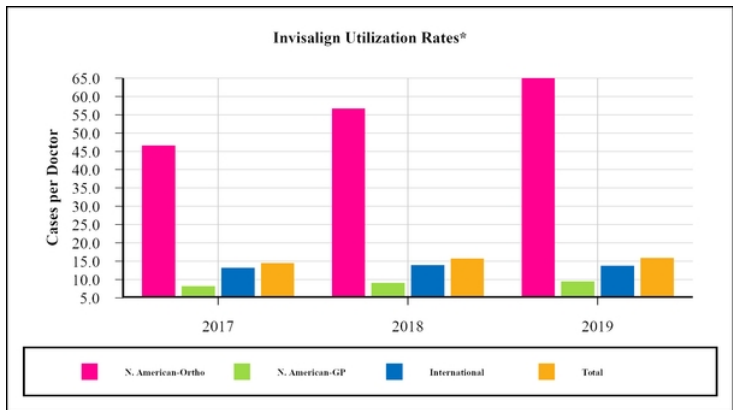
As we continue to expand our global presence, we expect to seek regulatory approvals to offer our iTero portfolio products in more countries, thereby tapping potential growth opportunities in underserved markets

- In February 2019, we announced the launch of iTero Element 5D Imaging System for comprehensive, preventative and restorative oral care. The iTero Element 5D Imaging System provides a new comprehensive approach to clinical applications, workflows and user experience that expands the suite of existing high-precision, full color imaging and fast scan times of the iTero Element portfolio. The iTero Element 5D Imaging System is available in the majority of EMEA and select APAC countries. The iTero Element 5D Imaging System is pending regulatory approval and is not yet available in the U.S. or LATAM countries.
- In June 2019, we announced the launch of iTero Element Foundation intraoral scanner with restorative software. The iTero Element Foundation extends Align’s portfolio of intraoral scanners with powerful 3D visualization to better meet the needs of doctors, labs and patients. The iTero Element Foundation is available in North America and will also be available in other select countries in 2020.

We believe that over the longterm, clinical solutions and treatment tools will increase adoption of Invisalign and increase sales of our intraoral scanners; however, it is difficult to predict the rate of adoption which may vary by region and channel.

The use of iTero and other digital scanners for Invisalign case submission in place of PVS impressions continues to grow and remains a positive catalyst for Invisalign utilization. For the fourth quarter of 2019, total Invisalign cases submitted with a digital scanner in the Americas increased to 79.5%, up slightly from 78.8% in the third quarter of 2019. International scans increased to 64.7%, up from 62.6% in the third quarter of 2019. We believe that over the longterm, technology innovation and added features and functionality of our iTero scanners will increase adoption of Invisalign and increase sales of our intraoral scanners; however, it is difficult to predict the rate of adoption which may vary by region and channel.

- **Invisalign Adoption.** Our goal is to establish Invisalign as the treatment of choice for treating malocclusion ultimately driving increased product adoption and frequency of use by dental professionals, also known as “utilization rates.” Our annual utilization rates for the last three fiscal years are as follows:



* Invisalign utilization rates are calculated by the # of cases shipped divided by the # of doctors to whom cases were shipped. Our International region includes EMEA and APAC. LATAM is excluded from the above chart as it is immaterial.

- Total utilization in 2019 increased to 15.9 cases per doctor compared to 15.7 cases in 2018.
- **North America:** Utilization for both our North American orthodontist and GP customers increased in 2019 to 65.0 and 9.5 cases per doctor compared to 56.7 cases and 9.1 cases per doctor in 2018, respectively. The increase in utilization in 2019 reflects improvements in product and technology which continues to strengthen

our doctors' clinical confidence such that they now utilize Invisalign more often and on more complex cases, including their teenage patients.

- *International:* International doctor utilization remained relatively flat at 13.8 cases per doctor in 2019 compared to 13.9 cases in 2018.

We expect our utilization rates to gradually improve as a result of advancements in product and technology, which continue to strengthen our doctors' clinical confidence in the use of Invisalign clear aligners. In addition, since the teenage and younger market makes up 75% of the approximately 12 million total orthodontic case starts each year, and as we continue to drive adoption of teenage and younger patients through sales and marketing programs, we expect our utilization rates to improve. Our utilization rates, however, may fluctuate from period to period due to a variety of factors, including seasonal trends in our business along with adoption rates of new products and features.

- *Number of New Invisalign Doctors Trained.* We continue to expand our Invisalign customer base through the training of new doctors. In 2019, we trained 22,270 new Invisalign doctors of which 9,765 were trained in the Americas region and 12,505 in the International region.
- *International Invisalign Growth.* We continue to focus our efforts towards increasing Invisalign clear aligner adoption by dental professionals in the EMEA and APAC markets. On a year-over-year basis, our International Invisalign volume increased 34.0% driven primarily by increased adoption as well as expansion of our customer base in both the EMEA and APAC regions. However, beginning in the second quarter of 2019, we experienced slower growth rates than prior periods in China primarily due to the US-China trade war and resulting economic uncertainty which caused headwind for consumer demand especially for consumption of luxury goods and considered purchases. We also believe there has been increased competitive activity from wires and bracket manufacturers and clear aligner suppliers. In addition, in the first quarter of 2020, the outbreak of the Novel Coronavirus (2019 NCov) in China has caused increased uncertainty and disruption to our employees, doctors' practices, their patients and consumers. We expect the impact of the Novel Coronavirus and related efforts by the Chinese government to contain its spread, including travel restrictions, extension of the Lunar New Year and discouraging non-essential medical and dental procedures to adversely impact sales and operations in China for a currently indeterminate period of time. Notwithstanding these current issues in China, we continue to see growth from our international orthodontists and GP customers and are seeing more positive traction in the GP channel as we continue to segment our sales and marketing resources and programs specifically around each customer channel. In 2019, we continued to expand in our existing markets through targeted investments in sales coverage and professional marketing and education programs, along with consumer marketing in select country markets. We expect International revenues to continue to grow at a faster rate than the Americas for the foreseeable future due to our continued investment in international market expansion, the size of the market opportunities and our relatively low market penetration of these regions. Our future growth is dependent upon the continued growth of Invisalign adoption and international market penetration.
- *Increasing Competition.* Starting in the second quarter of 2019, we began experiencing slower adult case growth from North American orthodontists, reflecting a more competitive environment especially for the young adult demographic. Given increased awareness for direct to consumer clear aligners and heavy advertising spend from direct to consumer companies, case starts may be shifting away from traditional practices. We also believe that doctors are sampling alternative products and/or taking advantage of wires and brackets bundles that essentially give clear aligners away for free or at low prices. In the third quarter of 2019, we increased investment in consumer demand with a new advertising campaign for North America and expanding marketing programs such as our Concierge Service, which connects potential patients with Invisalign doctors increasing conversion and loyalty. In addition, we launched new sales tools and professional marketing materials and we also expect to see increased productivity from the approximate 100 sales representatives we added in the first quarter of 2019. If, however, we are unable to compete effectively with existing products or respond effectively to any products developed by new or existing competitors, our business could be harmed.
- *Establish Regional Order Acquisition, Treatment Planning and Manufacturing Operations.* We expect to continue establishing and expanding additional order acquisition, treatment planning and manufacturing operations closer to our international customers in order to improve our operational efficiency and increase doctors' confidence in Invisalign clear aligners. In the fourth quarter of 2018, we began fabricating our aligners in our manufacturing facility in Ziyang, China, our first aligner fabrication facility outside of Juarez, Mexico. In the third quarter of 2019, we opened our new order acquisition and treatment facility in Wroclaw, Poland and new treatment facility in Yokohama, Japan.
- *Corporate Structure Reorganization.* In January 2020, we reorganized our corporate structure and intercompany relationships to more closely align with the international nature of our business activities with the goal of achieving financial and operational efficiencies. As part of this corporate structure reorganization, our EMEA regional headquarters

was moved from Amsterdam, the Netherlands to Rotkreuz, Switzerland. As a result, we will continue to incur expenses in the near term and expect to realize the related benefits in subsequent years. The implementation of this reorganization plan has been disruptive to our business, and may not ultimately be more efficient or effective. Moreover, our reorganization activities, including any related expenses and the impact from affected employees, could have a material adverse effect on our business, operating results, financial condition and effective tax rates.

- *Expenses.* We expect expenses to increase in 2020 due in part to:
 - Investments in manufacturing capacity and facilities to enhance our regional capabilities;
 - Investments in international expansion;
 - Investments in expansion of number of direct sales force personnel;
 - Increase in sales, marketing and customer support resources including our new advertising campaign; and
 - Product and technology innovation to enhance product efficiency and operational productivity.

We believe that these investments will position us to increase our revenues and continue to grow our market share, but will negatively impact results of operations, particularly in the near term.

- *Stock Repurchases.* During the year ended December 31, 2019, we repurchased \$200.0 million of our common stock on the open market at an average price of \$264.93 per share. We also entered into an accelerated stock repurchase agreement to repurchase \$200.0 million of our common stock and received a total of 1.1 million shares for an average share price of \$176.61. As of December 31, 2019, we have \$100.0 million available for repurchase under the \$600.0 million repurchase program authorized by our Board of Directors in May 2018 (Refer to Note 12 “Common Stock Repurchase Programs” of the Notes to Consolidated Financial Statements for details on our stock repurchase programs).

Results of Operations

Net Revenues by Reportable Segment

We group our operations into two reportable segments: Clear Aligner segment and Scanner segment.

- Our Clear Aligner segment consists of Comprehensive Products, Non-Comprehensive Products and Non-Case revenues as defined below:
 - Comprehensive Products include Invisalign Comprehensive and Invisalign First.
 - Non-Comprehensive Products include, but are not limited to, Invisalign Moderate, Lite and Express packages and Invisalign Go, in addition to revenues from the sale of aligners to SmileDirectClub (“SDC”) under our supply agreement that expired on December 31, 2019.
 - Non-Case includes, but is not limited to, Vivera retainers along with our training and ancillary products for treating malocclusion.
- Our Scanner segment consists of intraoral scanning systems, which includes a single hardware platform and restorative or orthodontic software options, additional services and ancillary products. This segment includes our iTero scanner and OrthoCAD services.

Net revenues for our Clear Aligner and Scanner segments by region for the year ended December 31, 2019, 2018 and 2017 are as follows (in millions):

Net Revenues	Year Ended December 31,			Year Ended December 31,				
	2019	2018	Change	2018	2017	Change		
Clear Aligner revenues:								
Americas	\$ 1,022.1	\$ 903.3	\$ 118.8	13.2%	\$ 903.3	\$ 754.1	\$ 149.2	19.8%
International	881.4	684.2	197.2	28.8%	684.2	473.5	210.7	44.5%
Non-Case	122.3	104.0	18.3	17.6%	104.0	81.7	22.3	27.3%
Total Clear Aligner net revenues	\$ 2,025.8	\$ 1,691.5	\$ 334.3	19.8%	\$ 1,691.5	\$ 1,309.3	\$ 382.2	29.2%
Scanner net revenues	381.0	275.0	106.0	38.5%	275.0	164.1	110.9	67.6%
Total net revenues	\$ 2,406.8	\$ 1,966.5	\$ 440.3	22.4%	\$ 1,966.5	\$ 1,473.4	\$ 493.1	33.5%

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Clear Aligner Case Volume by Region

Case volume data which represents Clear Aligner case shipments by region for the year ended December 31, 2019, 2018 and 2017 is as follows (in thousands):

Region	Year Ended December 31,			Year Ended December 31,				
	2019	2018	Change	2018	2017	Change		
Americas	867.3	780.7	86.6	11.1%	780.7	631.6	149.1	23.6%
International	669.8	499.9	169.9	34.0%	499.9	344.8	155.1	45.0%
Total case volume	1,537.1	1,280.6	256.5	20.0%	1,280.6	976.4	304.2	31.2%

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Total net revenues increased by \$440.3 million in 2019 as compared to 2018 primarily as a result of Invisalign case and scanner volume growth across all regions.

Clear Aligner - Americas

Americas net revenues increased by \$118.8 million in 2019 as compared to 2018 due to Invisalign case volume growth across all channels and products which contributed to the net revenue growth by \$100.2 million and higher average selling prices ("ASP") which increased net revenues by \$18.7 million. Higher ASP was mainly the result of price increases across most products which increased net revenues by \$35.1 million and \$23.4 million increase in net revenues driven by a product mix shift towards Comprehensive products and less SDC revenues, which carry a lower ASP. We no longer manufacture aligners for SDC as our supply agreement with SDC expired by its terms on December 31, 2019. These ASP increases were partially offset by a reduction in net revenues of \$23.1 million from higher promotional discounts and \$17.6 million reduction in net revenues as a result of higher net revenue deferrals and unfavorable foreign exchange rates.

Clear Aligner - International

International net revenues increased by \$197.2 million in 2019 as compared to 2018 primarily driven by case volume growth across all channels and products which increased net revenues by \$232.5 million. This increase was partially offset by lower ASP that reduced net revenues by \$35.3 million. The ASP decline was mainly the result of higher promotional discounts which reduced net revenues by \$45.0 million, unfavorable foreign exchange rates lowered net revenues by \$37.2 million, and a product mix shift towards Non-comprehensive products reduced net revenues by \$19.0 million. These ASP decreases were partially offset by a \$47.8 million improvement in net revenues related to price increases across most products along with a benefit from going direct in several additional countries, and lower net revenue deferrals and sales credits that increased net revenues by \$18.1 million.

Clear Aligner - Non-Case

Non-case net revenues, consisting of Vivera Retainers, training fees and other product revenues, increased by \$18.3 million in 2019 compared to 2018 due to increased Vivera volume across all regions.

Scanner

Scanner and services net revenues increased by \$106.0 million in 2019 as compared to 2018. This increase is primarily a result of scanner volume growth which increased net revenues by \$58.4 million, and higher CAD/CAM services that increased net revenues by \$37.7 million primarily due to a larger install base and increased scanner subscription services. Additionally, net revenues increased by \$10.0 million due to an improvement in the scanner ASP mainly attributable to price increases in several regions.

Cost of net revenues and gross profit (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Clear Aligner						
Cost of net revenues	\$ 526.0	\$ 411.0	\$ 115.0	\$ 411.0	\$ 289.7	\$ 121.3
% of net segment revenues	26.0%	24.3%		24.3%	22.1%	
Gross profit	\$ 1,499.7	\$ 1,280.5	\$ 219.2	\$ 1,280.5	\$ 1,019.6	\$ 260.9
Gross margin %	74.0%	75.7%		75.7%	77.9%	
Scanner						
Cost of net revenues	\$ 136.9	\$ 107.7	\$ 29.2	\$ 107.7	\$ 66.8	\$ 40.9
% of net segment revenues	35.9%	39.1%		39.1%	40.7%	
Gross profit	\$ 244.2	\$ 167.4	\$ 76.8	\$ 167.4	\$ 97.4	\$ 70.0
Gross margin %	64.1%	60.9%		60.9%	59.3%	
Total cost of net revenues	\$ 662.9	\$ 518.6	\$ 144.3	\$ 518.6	\$ 356.5	\$ 162.1
% of net revenues	27.5%	26.4%		26.4%	24.2%	
Gross profit	\$ 1,743.9	\$ 1,447.9	\$ 296.0	\$ 1,447.9	\$ 1,116.9	\$ 331.0
Gross margin %	72.5%	73.6%		73.6%	75.8%	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Cost of net revenues for our Clear Aligner and Scanner segments includes personnel-related costs including payroll and stock-based compensation for staff involved in the production process, the cost of materials, packaging, shipping costs, depreciation on capital equipment and facilities used in the production process, amortization of acquired intangible assets and training costs.

Clear Aligner

The gross margin percentage decreased in 2019 compared to 2018 primarily due to an increase in aligners per case driven by additional aligners.

Scanner

The gross margin percentage increased in 2019 compared to 2018 primarily driven by higher ASP and manufacturing efficiencies.

Selling, general and administrative (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Selling, general and administrative	\$ 1,072.1	\$ 852.4	\$ 219.7	\$ 852.4	\$ 665.8	\$ 186.6
% of net revenues	44.5%	43.3%		43.3%	45.2%	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Selling, general and administrative expense includes personnel-related costs including payroll, commissions and stock-based compensation for our sales force, marketing and administration in addition to media and advertising expenses, clinical education, trade shows and industry events, product marketing, equipment and maintenance costs, legal and outside service costs, depreciation and amortization expense and allocations of corporate overhead expenses including facilities and Information Technology ("IT").

Selling, general and administrative expense increased in 2019 compared to 2018 primarily due to higher compensation related costs of \$121.2 million mainly from increased headcount resulting in higher salaries expense, incentive bonuses, fringe benefits, and stock-based compensation partially due to investments in sales coverage and international expansion. We also incurred higher expenses from advertising and marketing costs of \$40.1 million, legal and outside service costs of \$31.7 million, equipment, software and maintenance costs of \$18.1 million and depreciation and amortization costs of \$12.4 million.

Research and development (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Research and development	\$ 157.4	\$ 128.9	\$ 28.5	\$ 128.9	\$ 97.6	\$ 31.3
% of net revenues	6.5%	6.6%		6.6%	6.6%	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Research and development expense includes the personnel-related costs including payroll and stock-based compensation and outside consulting expenses associated with the research and development of new products and enhancements to existing products and allocations of corporate overhead expenses including facilities and information technology.

Research and development expense increased in 2019 compared to 2018 primarily due to higher compensation costs mainly from increased headcount resulting in higher salaries expense, stock-based compensation, incentive bonuses and fringe benefits.

Impairments and other (gains) charges (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Impairments and other (gains) charges	\$ 23.0	\$ —	\$ 23.0	—%	—	—
% of net revenues	1.0%	—%		—%	—%	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

In 2019, we recorded impairments and other (gains) charges of \$23.0 million which are comprised of operating lease right-of-use assets impairments of \$14.2 million, store leasehold improvement and other fixed asset impairments of \$14.3 million, and employee severance and other expenses of \$1.3 million, partially offset by Invisalign store lease termination gains of \$6.8 million (Refer to Note 8 "Impairments and Other (Gains) Charges" and Note 9 "Legal Proceedings" of the Notes to Consolidated Financial Statements for more information).

Litigation settlement gain (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Litigation settlement gain	\$ (51.0)	\$ —	\$ (51.0)	—	—	—
% of net revenues	(2.1)%	—%		—%	—%	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

In 2019, we recorded a gain of \$51.0 million due to the litigation settlement with Straumann (Refer to Note 9 "Legal Proceedings" of the Notes to Consolidated Financial Statements for more information).

Income from operations (in millions):

	Year Ended December 31,			Year Ended December 31,			Change
	2019	2018	Change	2018	2017	Change	
Clear Aligner							
Income from operations	\$ 836.0	\$ 712.4	\$ 123.6	\$ 712.4	\$ 564.6	\$ 147.8	
Operating margin %	41.3%	42.1%		42.1%	43.2%		
Scanner							
Income from operations	\$ 137.7	\$ 99.0	\$ 38.7	\$ 99.0	\$ 49.6	\$ 49.4	
Operating margin %	36.1%	36.0%		\$ —	\$ —		
Total income from operations ¹	\$ 542.5	\$ 466.6	\$ 75.9	\$ 466.6	\$ 353.6	\$ 113.0	
Operating margin %	22.5%	23.7%		\$ —	\$ —		

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

¹ Refer to Note 17 "Segments and Geographical Information" of the Notes to Consolidated Financial Statements for details on unallocated corporate expenses and the reconciliation to Consolidated Income from Operations.

Clear Aligner

Operating margin percentage decreased in 2019 compared to 2018 primarily due to lower Clear Aligner gross margin percentage as a result of an increase in aligners per case combined with impairment charges on operating lease right-of-use assets, store leasehold improvement and other fixed assets. These decreases were partially offset by a gain recognized from the litigation settlement with Straumann.

Scanner

Operating margin percentage remained flat in 2019 compared to 2018 primarily due to manufacturing efficiencies and higher ASP partially offset by higher operating expenses.

Interest income (in millions):

	Year Ended December 31,			Year Ended December 31,			Change
	2019	2018	Change	2018	2017	Change	
Interest income	\$ 12.5	\$ 8.6	\$ 3.9	\$ 8.6	\$ 6.9	\$ 1.7	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Interest income includes interest earned on cash, cash equivalents and investment balances.

Interest income increased in 2019 compared to 2018 mainly due to a larger investment portfolio.

Other income (expense), net (in millions):

	Year Ended December 31,			Year Ended December 31,			Change
	2019	2018	Change	2018	2017	Change	
Other income (expense), net	\$ 7.7	\$ (8.5)	\$ 16.2	\$ (8.5)	\$ 4.2	\$ (12.7)	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Other income (expense), net, includes foreign exchange gains and losses, gains and losses on foreign currency forward contracts, interest expense, gains and losses on equity investments and other miscellaneous charges.

Other income (expense), net, increased in 2019 compared to 2018 primarily due to a \$15.8 million gain from the sale of our investment in SDC. This increase was partially offset by a \$4.0 million impairment of our equity investment in a privately held company along with foreign exchange losses (Refer to Note 9 "Legal Proceedings" of the Notes to Consolidated Financial Statements for details on SDC legal proceedings discussion).

Equity in losses of investee, net of tax (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Equity in losses of investee, net of tax	\$ 7.5	\$ 8.7	\$ (1.2)	\$ 8.7	\$ 3.2	\$ 5.5

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

Equity in losses of investee, net of tax decreased in 2019 compared to 2018 since we tendered our SDC equity interest on April 3, 2019, and thus, we no longer record our share of SDC's losses (Refer to Note 5 "Equity Method Investments" of the Notes to Consolidated Financial Statements for details on equity method investments).

Provision for income taxes (in millions):

	Year Ended December 31,			Year Ended December 31,		
	2019	2018	Change	2018	2017	Change
Provision for income taxes	\$ 112.3	\$ 57.7	\$ 54.6	\$ 57.7	\$ 130.2	\$ (72.5)
Effective tax rates	20.0%	12.4%		12.4%	35.7%	

Changes and percentages are based on actual values. Certain tables may not sum or recalculate due to rounding.

The increase in effective tax rate for the year ended December 31, 2019 compared to the same period in 2018 is primarily attributable to tax benefits recorded last year as a result of expiration of statute limitations that did not recur in 2019 and reduced excess tax benefits from stock-based compensation mainly due to non-deductible officers' compensation. For the year ended December 31, 2019 and December 31, 2018, we recognized tax benefits in our provision for income taxes of \$1.6 million and \$22.5 million, respectively, related to expiration of statute of limitations and \$13.4 million and \$26.5 million, respectively, related to stock-based compensation.

Effective January 1, 2020, as a result of the relocation of our EMEA regional headquarters from Amsterdam, the Netherlands to Rotkreuz, Switzerland, our tax rate for the first quarter of 2020 and for the rest of the year, will reflect a significant one-time tax benefit of up to \$1.6 billion associated with the recognition of a deferred tax asset related to the intra-entity transfer of certain intellectual property rights. We continue to assess the realizability of this deferred tax asset as we take into account new information, including the profitability of our Swiss headquarters and ongoing communication with the Swiss tax authorities.

Liquidity and Capital Resources

We fund our operations from product sales. As of December 31, 2019 and 2018, we had the following cash and cash equivalents, and short-term and long-term marketable securities (in thousands):

	Year Ended December 31,	
	2019	2018
Cash and cash equivalents	\$ 550,425	\$ 636,899
Marketable securities, short-term	318,202	98,460
Marketable securities, long-term	—	9,112
Total	\$ 868,627	\$ 744,471

As of December 31, 2019, we had \$868.6 million in cash, cash equivalents, and marketable securities. Cash equivalents and marketable securities are comprised of money market funds and highly liquid debt instruments which primarily include commercial paper, corporate bonds, U.S. government agency bonds, U.S. government treasury bonds, and certificates of deposit.

As of December 31, 2019, approximately \$278.5 million of cash, cash equivalents and marketable securities was held by our foreign subsidiaries. We repatriated \$350.0 million to the U.S. during the year ended December 31, 2019 under the Global Intangible Low-Taxed Income ("GILTI") provisions of the U.S. Tax Cuts and Jobs Act (the "TCJA") and substantially all of the earnings previously determined to be not indefinitely reinvested have been repatriated. Our intent is to permanently reinvest our earnings from our international operations going forward, and our current plans do not require us to repatriate them to fund our U.S. operations as we generate sufficient domestic operating cash flow and have access to external funding under our current revolving line of credit.

Cash flows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Net cash provided by (used in):			
Operating activities	\$ 747,270	\$ 554,681	\$ 438,539
Investing activities	(350,444)	6,927	(251,477)
Financing activities	(485,540)	(369,434)	(135,500)
Effects of foreign exchange rate changes on cash, cash equivalents, and restricted cash	2,282	(4,733)	5,544
Net increase in cash, cash equivalents, and restricted cash	\$ (86,432)	\$ 187,441	\$ 57,106

Operating Activities

For the year ended December 31, 2019, cash flows from operations of \$747.3 million was primarily comprised of our net income of approximately \$442.8 million as well as the following:

Significant non-cash activities

- Stock-based compensation of \$88.2 million related to equity awards granted to employees and directors;
- Depreciation and amortization of \$79.0 million related to our investments in property, plant and equipment and intangible assets;
- Impairment charges of \$28.5 million related to decreases in the fair value of certain assets related to the closure of our Invisalign stores;
- Non-cash operating lease costs of \$18.5 million; and
- Gain from the sale of equity method investment of \$15.8 million.

Significant changes in working capital

- Increase of \$189.1 million in deferred revenues corresponding to the increase in case volume;
- Increase of \$121.0 million in accounts receivable which is primarily a result of the increase in net revenues; and
- Increase of \$60.2 million in accrued and other long-term liabilities due to timing of payment and activities.

For the year ended December 31, 2018, cash flows from operations of \$554.7 million resulted primarily from our net income of approximately \$400.2 million as well as the following:

Significant non-cash activities

- Stock-based compensation of \$70.8 million related to equity awards granted to employees and directors;
- Depreciation and amortization of \$54.7 million related to our investments in property, plant and equipment and intangible assets; and
- Net change in deferred tax assets of \$15.7 million.

Significant changes in working capital

- Increase of \$136.4 million in deferred revenues corresponding to the increase in case volume;
- Increase of \$109.2 million in accounts receivable which is primarily a result of the increase in net revenues; and
- Decrease of \$36.5 million in long-term income tax payable due to timing of payments made to IRS.

Investing Activities

Net cash used in investing activities was \$350.4 million for the year ended December 31, 2019, which primarily consisted of purchases of marketable securities of \$693.3 million, purchases of property, plant and equipment of \$149.7 million and other investing activities of \$14.7 million. These outflows were partially offset by maturities and sales of marketable securities of \$485.4 million and payments of \$21.8 million received on an unsecured promissory note issued by SDC in exchange for tendering our shares to them.

For 2020, we expect to invest \$180 million to \$200 million in capital expenditures related to building purchases and improvements as well as additional manufacturing capacity to support our international expansion. Although we believe our current investment portfolio has little risk of impairment, we cannot predict future market conditions or market liquidity and can provide

no assurance that our investment portfolio will remain unimpaired (Refer to Note 10 "Commitments and Contingencies" of the Notes to Consolidated Financial Statements for details on the purchases of buildings in Petach Tivka, Israel and San Jose, California).

Net cash provided by investing activities was \$6.9 million for the year ended December 31, 2018, which primarily consisted of maturities and sales of our marketable securities of \$384.7 million and loan repayment from equity investee of \$30.0 million. These inflows were partially offset by purchases property, plant and equipment of \$223.3 million, purchases of marketable securities of \$180.2 million and purchases of investments in privately held companies of \$5.0 million.

Financing Activities

Net cash used in financing activities was \$485.5 million for the year ended December 31, 2019 primarily consisted of common stock repurchases of \$400.0 million, payroll taxes paid for equity awards through share withholdings of \$57.7 million and the purchase of a building that we previously leased under a finance lease of \$45.8 million. These outflows were offset in part by \$17.9 million proceeds from the issuance of common stock.

Net cash used in financing activities was \$369.4 million for the year ended December 31, 2018 primarily consisted of common stock repurchases of \$300.0 million and payroll taxes of \$86.1 million paid for vesting of RSUs through share withholdings. These outflows were offset in part by \$16.6 million from proceeds from the issuance of common stock.

Common Stock Repurchases

Refer to Note 12 "Common Stock Repurchase Programs" of the Notes to Consolidated Financial Statements for details.

- **April 2016 Repurchase Program.** In 2018, we repurchased approximately \$200.0 million of our common stock on the open market, completing the April 2016 Repurchase Program.
- **May 2018 Repurchase Program.** In May 2018, we announced that our Board of Directors had authorized a plan to repurchase up to \$600.0 million of our common stock. We repurchased \$100.0 million and \$400.0 million of our common stock in 2018 and 2019, respectively, and as of December 31, 2019, we have \$100.0 million remaining under this program.

We believe that our current cash, cash equivalents and marketable securities combined with our existing borrowing capacity will be sufficient to fund our operations for at least the next 12 months. If we are unable to generate adequate operating cash flows and need more funds beyond our available liquid investments and those available under our credit facility, we may need to suspend our stock repurchase programs or seek additional sources of capital through equity or debt financing, collaborative or other arrangements with other companies, bank financing and other sources in order to realize our objectives and to continue our operations. There can be no assurance that we will be able to obtain additional debt or equity financing on terms acceptable to us, or at all. If adequate funds are not available, we may need to make business decisions that could adversely affect our operating results such as modifications to our pricing policy, business structure or operations. Accordingly, the failure to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on our business, results of operations and financial condition.

Credit Facility

On February 27, 2018, we entered into a new credit facility for a \$200.0 million revolving line of credit, with a \$50.0 million letter of credit sublimit, and a maturity date of February 27, 2021. As of December 31, 2019, we had no outstanding borrowings under this credit facility (Refer to Note 7 "Credit Facility" of the Notes to Consolidated Financial Statements for details of the credit facility).

Contractual Obligations / Off Balance Sheet Arrangements

The impact that our contractual obligations as of December 31, 2019 are expected to have on our liquidity and cash flows in future periods is as follows (in thousands):

	Total	Payments Due by Period			
		Less than 1 Year	1-3 Years	4-5 Years	More than 5 Years
Operating leases obligations ¹	\$ 64,483	\$ 18,354	\$ 29,904	\$ 10,772	\$ 5,453
Unconditional purchase obligations	523,652	309,686	210,470	3,496	—
Total contractual cash obligations	\$ 588,135	\$ 328,040	\$ 240,374	\$ 14,268	\$ 5,453

¹ Sublease income is not material and excluded from the table above.

Our contractual obligations table above excludes approximately \$42.7 million of non-current uncertain tax benefits which are included in other long-term obligations and deferred tax assets on our balance sheet as of December 31, 2019. We have not included this amount because we cannot make a reasonably reliable estimate regarding the timing of settlements with taxing authorities, if any.

As of December 31, 2019, we had additional operating leases that have not yet commenced of \$7.9 million. These operating leases will commence between 2020 through 2021 with lease terms of 2 years to 4 years.

We had no material off-balance sheet arrangements as defined in Regulation S-K Item 303(a) (4) as of December 31, 2019 other than certain items disclosed in *Note 10 "Commitments and Contingencies" of the Notes to Consolidated Financial Statements*.

Indemnification Provisions

In the normal course of business to facilitate transactions in our services and products, we indemnify certain parties: customers, vendors, lessors, and other parties with respect to certain matters, including, but not limited to, services to be provided by us and intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with our directors and our executive officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. Several of these agreements limit the time within which an indemnification claim can be made and the amount of the claim.

It is not possible to make a reasonable estimate of the maximum potential amount under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Additionally, we have a limited history of prior indemnification claims and the payments we have made under such agreements have not had a material adverse effect on our results of operations, cash flows or financial position. However, to the extent that valid indemnification claims arise in the future, future payments by us could be significant and could have a material adverse effect on our results of operations or cash flows in a particular period. As of December 31, 2019, we did not have any material indemnification claims that were probable or reasonably possible.

Critical Accounting Policies and Estimates

Management's discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, revenues and expenses and disclosures at the date of the financial statements. We evaluate our estimates on an on-going basis, including those related to revenue recognition, stock-based compensation, goodwill and finite-lived assets and related impairment, and income taxes. We use authoritative pronouncements, historical experience and other assumptions as the basis for making estimates. Actual results could differ from those estimates.

We believe the following critical accounting policies and estimates affect our more significant judgments used in the preparation of our consolidated financial statements. For further information on all of our significant accounting policies, see *Note 1 "Summary of Significant Accounting Policies" of the Notes to Consolidated Financial Statements* under Item 8.

Revenue Recognition

Our revenues are derived primarily from the sale of aligners, scanners, and services from our Clear Aligner and Scanner segments. We enter into sales contracts that may consist of multiple distinct performance obligations where certain performance obligations of the sales contract are not delivered in one reporting period. We measure and allocate revenues according to ASC 606-10, "*Revenues from Contracts with Customers*."

We identify a performance obligation as distinct if both of the following criteria are met: the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. Determining the standalone selling price ("SSP"), allocation of consideration from the contract to the individual performance obligations and the appropriate timing of revenue recognition, is the result of significant qualitative and quantitative judgments. While changes in the allocation of the SSP between performance obligations will not affect the amount of total revenues recognized for a particular contract, any material changes could impact the timing of revenue recognition, which would have a material effect on our financial position and result of operations. This is because the contract consideration is allocated to each performance obligation, delivered or undelivered, at the inception of the contract based on the SSP of each distinct performance obligation.

Clear Aligner

We enter into contracts (“treatment plan(s)”) that involve multiple future performance obligations. Invisalign Comprehensive, Invisalign First, Invisalign Moderate, and Lite and Express Packages, include optional additional aligners at no charge for a certain period of time ranging from six months to five years after initial shipment, and Invisalign Go includes optional additional aligners at no charge for a period of up to two years after initial shipment.

Our treatment plans comprise the following performance obligations that also represent distinct deliverables: initial aligners, additional aligners, case refinement, and replacement aligners. We take the practical expedient to consider shipping and handling costs as activities to fulfill the performance obligation. We allocate revenues for each treatment plan based on each unit’s SSP. Management considers a variety of factors such as historical sales, costs, and gross margin, which may vary over time depending upon the unique facts and circumstances related to each performance obligation in making these estimates. We also consider usage rates, which is the number of times a customer is expected to order additional aligners. Our process for estimating usage rates requires significant judgment and evaluation of inputs, including historical usage data by region, country and channel. We recognize the revenues upon shipment, as the customers obtain physical possession and we have enforceable rights to payment. As we collect most consideration upfront, we consider whether a significant financing component exists; however, as the delivery of the performance obligations are at the customer’s discretion, we conclude that no significant financing component exists.

Scanner

We sell intraoral scanners and CAD/CAM services through both our direct sales force and distribution partners. The intraoral scanner sales price includes one year of warranty and unlimited scanning services. The customer may also select, for additional fees, extended warranty and unlimited scanning services for periods beyond the initial year. When intraoral scanners are sold with an unlimited scanning service agreement and/or extended warranty, we allocate revenues based on the respective SSPs of the scanner and the subscription service. We estimate the SSP of each element, taking into consideration historical prices as well as our discounting strategies. Revenues are then recognized over time as the monthly services are rendered and upon shipment of the scanner, as that is when we deem the customer to have obtained control. Most consideration is collected upfront and in cases where there are payment plans, consideration is collected by the one year mark and, therefore, there are no significant financing components.

Volume Discounts

In certain situations, we offer promotions in which the discount will increase depending upon the volume purchased over time. We concluded that in these situations, the promotions can represent either variable consideration or options, depending upon the specifics of the promotion. In the event the promotion contains an option, the option is considered a material right and, therefore, included in the accounting for the initial arrangement. We estimate the average anticipated discount over the lifetime of the promotion or contract, and apply that discount to each unit as it is sold. On a quarterly basis, we review our estimates and, if needed, updates are made and changes are applied prospectively.

Unfulfilled Performance Obligations for Clear Aligners and Scanners

Our unfulfilled performance obligations, including deferred revenues and backlog, as of December 31, 2019 and the estimated revenues expected to be recognized in the future related to these performance obligations are \$610.3 million. This includes performance obligations from the Clear Aligner segment, primarily the shipment of additional aligners, which are fulfilled over six months to five years. Also included are the performance obligations from the iTero scanner segment, primarily services and support, which are fulfilled over one to five years, and contracted deliveries of additional scanners. The estimate includes both product and service unfulfilled performance obligations and the time range reflects our best estimate of when we will transfer control to the customer and may change based on customer usage patterns, timing of shipments, readiness of customers’ facilities for installation, and manufacturing availability.

Contract Balances

The timing of revenue recognition results in deferred revenues being recognized on our Consolidated Balance Sheet. For both aligners and scanners, we usually collect the total consideration owed prior to all performance obligations being performed with payment terms generally varying from net 30 to net 180 days. Contract liabilities are recorded as deferred revenue balances, which are generated based upon timing of invoices and recognition patterns, not payments. If the revenue recognition exceeds the billing, the exceeded amount is considered unbilled receivable and a contract asset. Conversely, if the billing occurs prior to the revenue recognition, the amount is considered deferred revenue and a contract liability.

Goodwill and Finite-Lived Acquired Intangible Assets and Long-Lived Assets

Goodwill

Goodwill represents the excess of the purchase price paid over the fair value of tangible and identifiable intangible net assets acquired in business combinations and is allocated to the respective reporting units based on relative synergies generated.

We evaluate goodwill for impairment at least annually on November 30th or more frequently if indicators are present, an event occurs or changes in circumstances suggest an impairment may exist and that it would more likely than not reduce the fair value of a reporting unit below its carrying amount. The allocation of goodwill to the respective reporting unit is based on relative synergies generated as a result of an acquisition.

We perform an initial assessment of qualitative factors to determine whether the existence of events and circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. In performing the qualitative assessment, we identify and consider the significance of relevant key factors, events, and circumstances that affect the fair value of our reporting units. These factors include external factors such as macroeconomic, industry, and market conditions, as well as entity-specific factors, such as our actual and planned financial performance. We also give consideration to the difference between the reporting unit fair value and carrying value as of the most recent date a fair value measurement was performed. If, after assessing the totality of relevant events and circumstances, we determine that it is more likely than not that the fair value of the reporting unit exceeds its carrying value and there is no indication of impairment, no further testing is performed; however, if we conclude otherwise, the first step of the two-step impairment test is performed by estimating the fair value of the reporting unit and comparing it with its carrying value, including goodwill. Refer to Note 6 "Goodwill and Intangible Assets" of Notes to Consolidated Financial Statements for details on goodwill.

Finite-Lived Intangible Assets and Long-Lived Assets

Our intangible assets primarily consist of intangible assets acquired as part of acquisitions and are amortized using the straight-line method over their estimated useful lives, reflecting the period in which the economic benefits of the assets are expected to be realized.

We evaluate long-lived assets (including finite-lived intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. An asset or asset group is considered impaired if its carrying amount exceeds the future undiscounted net cash flows the asset or asset group is expected to generate. If an asset or asset group is considered to be impaired, the impairment to be recognized is calculated as the amount by which the carrying amount of the asset or asset group exceeds its fair market value. Our estimates of future cash flows attributable to our long-lived assets require significant judgment based on our historical and anticipated results and are subject to many factors. Factors we consider important which could trigger an impairment review include significant negative industry or economic trends, significant loss of customers and changes in the competitive environment. The estimation of fair value utilizing a discounted cash flow approach includes numerous uncertainties which require our significant judgment when making assumptions of expected growth rates and the selection of discount rates, as well as assumptions regarding general economic and business conditions, and the structure that would yield the highest economic value, among other factors. Refer to Note 6 "Goodwill and Intangible Assets" of Notes to Consolidated Financial Statements for details of the impairment analysis.

Accounting for Income Taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expense for tax and financial statement purposes.

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our current tax exposure under the applicable tax laws and assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities which are included in our Consolidated Balance Sheet.

We account for uncertainty in income taxes pursuant to authoritative guidance based on a two-step approach to recognize and measure uncertain tax positions taken or expected to be taken in a tax return. The first step is to determine if the weight of available evidence indicates that it is more likely than not that the tax position will be sustained on audit based on its technical merits, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. We adjust reserves for our uncertain tax positions due to changing facts and circumstances, such as the closing of a tax audit or refinement of estimates due to new

information. To the extent that the final outcome of these matters is different than the amounts recorded, such differences will impact our tax provision in our Consolidated Statement of Operation in the period in which such determination is made.

We assess the likelihood that we will be able to realize our deferred tax assets. Should there be a change in our ability to realize our deferred tax assets, our tax provision would increase in the period in which we determine that it is more likely than not that we cannot realize our deferred tax assets. We consider all available evidence, both positive and negative, including historical levels of income, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. If it is more likely than not that we will not realize our deferred tax assets, we will increase our provision for taxes by recording a valuation allowance against the deferred tax assets that we estimate will not ultimately be realized.

The U.S. Tax Cuts and Jobs Act includes provisions for certain foreign-sourced earnings referred to as Global Intangible Low-Taxed Income ("GILTI") which imposes a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. We have made the election to record GILTI tax using the period cost method.

Recent Accounting Pronouncements

See Note 1 "Summary of Significant Accounting Policies" of the Notes to Consolidated Financial Statements in Item 8 for a discussion of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business, we are exposed to foreign currency exchange rate and interest rate risks that could impact our financial position and results of operations.

Interest Rate Risk

Changes in interest rates could impact our anticipated interest income on our cash equivalents and investments in marketable securities. Our investments are fixed-rate short-term and long-term securities. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates, and, as a result, our future investment income may fall short of expectations due to changes in interest rates or we may suffer losses in principal if forced to sell securities which have declined in market value due to changes in interest rates. As of December 31, 2019, we had approximately \$318.2 million invested in available-for-sale marketable securities. An immediate 10% change in interest rates would not have a material adverse impact on our future operating results and cash flows.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. Based on interest bearing liabilities we have as of December 31, 2019, we are not subject to risks from immediate interest rate increases.

Currency Rate Risk

As a result of our international business activities, our financial results could be affected by factors such as changes in foreign currency exchange rates or economic conditions in foreign markets, and there is no assurance that exchange rate fluctuations will not harm our business in the future. We generally sell our products in the local currency of the respective countries. This provides some natural hedging because most of the subsidiaries' operating expenses are generally denominated in their local currencies. Regardless of this natural hedging, our results of operations may be adversely impacted by exchange rate fluctuations.

We enter into foreign currency forward contracts to minimize the short-term impact of foreign currency exchange rate fluctuations on cash and certain trade and intercompany receivables and payables. These forward contracts are not designated as hedging instruments and do not subject us to material balance sheet risk due to fluctuations in foreign currency exchange rates. The gains and losses on these forward contracts are intended to offset the gains and losses in the underlying foreign currency denominated monetary assets and liabilities being economically hedged. These instruments are marked to market through earnings every period and generally are one month in original maturity. We do not enter into foreign currency forward contracts for trading or speculative purposes. As our international operations grow, we will continue to reassess our approach to managing the risks relating to fluctuations in currency rates. It is difficult to predict the impact forward contracts could have on our results of operations. The fair value of foreign exchange forward contracts outstanding as of December 31, 2019 was not material.

Although we will continue to monitor our exposure to currency fluctuations, and, where appropriate, may use forward contracts to minimize the effect of these fluctuations, the impact of an aggregate change of 10% in foreign currency exchange rates relative to the U.S. dollar on our results of operations and financial position could be material.

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Quarterly Results of Operations

	Three Months Ended							
	2019				2018			
	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018
	(in thousands, except per share data) (unaudited)							
Net revenues	\$ 649,787	\$ 607,341	\$ 600,697	\$ 548,971	\$ 534,020	\$ 505,289	\$ 490,259	\$ 436,924
Gross profit	471,958	437,554	432,289	402,096	383,096	371,781	365,582	327,408
Income from operations	151,150	127,152	176,490	87,701	120,473	125,208	122,691	98,192
Net income	121,262	102,524	147,142	71,848	97,392	100,872	106,105	95,866
Net income per share:								
Basic	\$ 1.54	\$ 1.29	\$ 1.84	\$ 0.90	\$ 1.22	\$ 1.26	\$ 1.32	\$ 1.20
Diluted	\$ 1.53	\$ 1.28	\$ 1.83	\$ 0.89	\$ 1.20	\$ 1.24	\$ 1.30	\$ 1.17
Shares used in computing net income per share:								
Basic	78,578	79,332	79,943	79,860	79,891	80,111	80,216	80,036
Diluted	79,137	79,825	80,590	80,687	80,943	81,359	81,471	81,628

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REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of Align is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is designed by, or under supervision of, our CEO and CFO, and effected by the board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of Align;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of Align are being made only in accordance with authorizations of management and directors of Align; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Align's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Based on our assessment, management has concluded that, as of December 31, 2019, our internal control over financial reporting was effective based on criteria in *Internal Control - Integrated Framework (2013)* issued by the COSO.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ JOSEPH M. HOGAN

Joseph M. Hogan
President and Chief Executive Officer
February 28, 2020

/s/ JOHN F. MORICI

John F. Morici
Chief Financial Officer and Senior Vice President, Global Finance
February 28, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Align Technology, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Align Technology, Inc. and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019, including the related notes and financial statement schedule listed in the index appearing under item 15 (a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide

reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition - Determination of Standalone Selling Price of Distinct Performance Obligations in Clear Aligner Contracts

As described in Notes 1 and 17 to the consolidated financial statements, the Company recognized net revenues of \$2 billion from its Clear Aligner segment for the year ended December 31, 2019. The Company enters into contracts ("treatment plans") that involve multiple future performance obligations. Management identifies a performance obligation as distinct if both of the following criteria are met: the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. Determining the standalone selling price, allocation of consideration from the contract to the individual performance obligations and the appropriate timing of revenue recognition is the result of significant qualitative and quantitative judgments. Management considers a variety of factors such as historical sales, costs, and gross margin, which may vary over time depending upon the unique facts and circumstances related to each performance obligation in making these estimates. Management also considers usage rates, which is the number of times a customer is expected to order additional aligners. Management's process for estimating usage rates requires significant judgment and evaluation of inputs, including historical usage data by region, country and channel.

The principal considerations for our determination that performing procedures related to revenue recognition and the determination of standalone selling price of distinct performance obligations in Clear Aligner contracts is a critical audit matter are there was significant judgment by management in determining the standalone selling price, which includes significant assumptions related to usage rates for each distinct performance obligation. This in turn led to significant judgment, subjectivity, and effort in applying audit procedures to evaluate the judgments made by management in determining the estimates of standalone selling price and usage rates for each distinct performance obligation.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to revenue recognition, including controls over the determination of standalone selling price for each distinct performance obligation in the Company's Clear Aligner contracts. These procedures also included, among others, (i) testing management's process for determining the estimate of standalone selling price, which included testing the completeness and accuracy of inputs used and evaluating the reasonableness of factors considered by management, such as historical sales, usage rates, costs, and gross margin, and (ii) testing management's process for estimating usage rates, which included evaluating the reasonableness of inputs evaluated by management, including historical usage data by region, country and channel.

/s/ PricewaterhouseCoopers LLP
San Jose, California
February 28, 2020

We have served as the company's auditor since 1997.

ALIGN TECHNOLOGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended December 31,		
	2019	2018	2017
Net revenues	\$ 2,406,796	\$ 1,966,492	\$ 1,473,413
Cost of net revenues	662,899	518,625	356,466
Gross profit	1,743,897	1,447,867	1,116,947
Operating expenses:			
Selling, general and administrative	1,072,053	852,404	665,777
Research and development	157,361	128,899	97,559
Impairments and other (gains) charges	22,990	—	—
Litigation settlement gain	(51,000)	—	—
Total operating expenses	1,201,404	981,303	763,336
Income from operations	542,493	466,564	353,611
Interest income	12,482	8,576	6,948
Other income (expense), net	7,676	(8,489)	4,240
Net income before provision for income taxes and equity in losses of investee	562,651	466,651	364,799
Provision for income taxes	112,347	57,723	130,162
Equity in losses of investee, net of tax	7,528	8,693	3,219
Net income	\$ 442,776	\$ 400,235	\$ 231,418
Net income per share:			
Basic	\$ 5.57	\$ 5.00	\$ 2.89
Diluted	\$ 5.53	\$ 4.92	\$ 2.83
Shares used in computing net income per share:			
Basic	79,424	80,064	80,085
Diluted	80,100	81,357	81,832

The accompanying notes are an integral part of these consolidated financial statements.

ALIGN TECHNOLOGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Net income	\$ 442,776	\$ 400,235	\$ 231,418
Net change in foreign currency translation adjustment	1,787	(3,631)	1,741
Change in unrealized gains (losses) on investments, net of tax	299	286	(232)
Other comprehensive income (loss)	2,086	(3,345)	1,509
Comprehensive income	<u>\$ 444,862</u>	<u>\$ 396,890</u>	<u>\$ 232,927</u>

The accompanying notes are an integral part of these consolidated financial statements.

ALIGN TECHNOLOGY, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	December 31,	
	2019	2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 550,425	\$ 636,899
Marketable securities, short-term	318,202	98,460
Accounts receivable, net of allowance for doubtful accounts of \$6,756 and \$2,378, respectively	550,291	439,009
Inventories	112,051	55,641
Prepaid expenses and other current assets	102,450	72,470
Total current assets	1,633,419	1,302,479
Marketable securities, long-term	—	9,112
Property, plant and equipment, net	631,730	521,329
Operating lease right-of-use assets, net	56,244	—
Equity method investments	—	45,913
Goodwill and intangible assets, net	75,692	81,949
Deferred tax assets	64,007	64,689
Other assets	39,610	26,987
Total assets	\$ 2,500,702	\$ 2,052,458
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 87,250	\$ 64,256
Accrued liabilities	319,958	234,679
Deferred revenues	563,762	393,138
Total current liabilities	970,970	692,073
Income tax payable	102,794	78,008
Operating lease liabilities	43,463	—
Other long-term liabilities	37,306	29,486
Total liabilities	1,154,533	799,567
Commitments and contingencies (Notes 9 and 10)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value (5,000 shares authorized; none issued)	—	—
Common stock, \$0.0001 par value (200,000 shares authorized; 78,433 and 79,778 issued and outstanding, respectively)	8	8
Additional paid-in capital	906,937	877,514
Accumulated other comprehensive income (loss), net	(688)	(2,774)
Retained earnings	439,912	378,143
Total stockholders' equity	1,346,169	1,252,891
Total liabilities and stockholders' equity	\$ 2,500,702	\$ 2,052,458

The accompanying notes are an integral part of these consolidated financial statements.

ALIGN TECHNOLOGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss), Net	Retained Earnings	Total
	Shares	Amount				
Balances at December 31, 2016	79,553	\$ 8	\$ 864,871	\$ (938)	\$ 135,366	\$ 999,307
Cumulative effect adjustment from adoption of ASU 2016-16	—	—	—	—	(1,300)	(1,300)
Net income	—	—	—	—	231,418	231,418
Net change in unrealized gains (losses) from investments	—	—	—	(232)	—	(232)
Net change in foreign currency translation adjustment	—	—	—	1,741	—	1,741
Issuance of common stock relating to employee equity compensation plans	1,073	—	14,461	—	—	14,461
Tax withholdings related to net share settlements of equity awards	—	—	(46,168)	—	—	(46,168)
Common stock repurchased and retired	(586)	—	(5,583)	—	(98,210)	(103,793)
Stock-based compensation	—	—	58,854	—	—	58,854
Balances at December 31, 2017	80,040	8	886,435	571	267,274	1,154,288
Net income	—	—	—	—	400,235	400,235
Net change in unrealized gains (losses) from investments	—	—	—	286	—	286
Net change in foreign currency translation adjustment	—	—	—	(3,631)	—	(3,631)
Issuance of common stock relating to employee equity compensation plans	795	—	16,635	—	—	16,635
Tax withholdings related to net share settlements of equity awards	—	—	(86,067)	—	—	(86,067)
Common stock repurchased and retired	(1,057)	—	(10,252)	—	(289,750)	(300,002)
Stock-based compensation	—	—	70,763	—	—	70,763
Other	—	—	—	—	384	384
Balances at December 31, 2018	79,778	8	877,514	(2,774)	378,143	1,252,891
Net income	—	—	—	—	442,776	442,776
Net change in unrealized gains (losses) from investments	—	—	—	299	—	299
Net change in foreign currency translation adjustment	—	—	—	1,787	—	1,787
Issuance of common stock relating to employee equity compensation plans	542	—	17,907	—	—	17,907
Tax withholdings related to net share settlements of equity awards	—	—	(57,676)	—	—	(57,676)
Common stock repurchased and retired	(1,887)	—	(18,992)	—	(381,007)	(399,999)
Stock-based compensation	—	—	88,184	—	—	88,184
Balances at December 31, 2019	78,433	\$ 8	\$ 906,937	\$ (688)	\$ 439,912	\$ 1,346,169

The accompanying notes are an integral part of these consolidated financial statements.

ALIGN TECHNOLOGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	\$ 442,776	\$ 400,235	\$ 231,418
Adjustments to reconcile net income to net cash provided by operating activities:			
Deferred taxes	307	(15,680)	17,572
Depreciation and amortization	78,990	54,727	37,739
Stock-based compensation			
Non-cash operating lease cost	88,184	70,763	58,854
Impairments on long-lived assets	18,475	—	—
Gain on lease terminations	28,498	—	—
Gain from sale of equity method investment	(6,792)	—	—
Equity in losses of investee	(15,769)	—	—
Other non-cash operating activities	7,528	8,693	3,219
Other non-cash operating activities	29,860	17,252	13,847
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(121,014)	(109,224)	(90,990)
Inventories	(58,269)	(24,109)	(5,481)
Prepaid expenses and other assets	(31,529)	(9,122)	(8,669)
Accounts payable	22,099	25,045	8,175
Accrued and other long-term liabilities	60,240	36,250	24,235
Long-term income tax payable	14,611	(36,548)	68,958
Deferred revenues	189,075	136,399	79,662
Net cash provided by operating activities	747,270	554,681	438,539
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property, plant and equipment	(149,707)	(223,312)	(195,695)
Purchase of marketable securities	(693,284)	(180,191)	(390,244)
Proceeds from maturities of marketable securities	290,754	375,105	349,240
Proceeds from sales of marketable securities	194,677	9,560	39,536
Repayment on unsecured promissory note	21,820	—	—
Purchases of investments in privately held companies	—	(5,000)	(12,764)
Loan advances to equity investee	—	—	(36,000)
Loan repayment from equity investee	—	30,000	6,000
Acquisition, net of cash acquired	—	—	(8,953)
Other investing activities	(14,704)	765	(2,597)
Net cash provided by (used in) investing activities	(350,444)	6,927	(251,477)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock	17,907	16,635	14,461
Common stock repurchases	(399,999)	(300,002)	(103,793)
Payroll taxes paid upon the vesting of equity awards	(57,675)	(86,067)	(46,168)
Purchase of finance lease	(45,773)	—	—
Net cash used in financing activities	(485,540)	(369,434)	(135,500)
Effect of foreign exchange rate changes on cash, cash equivalents, and restricted cash	2,282	(4,733)	5,544
Net increase (decrease) in cash, cash equivalents, and restricted cash	(86,432)	187,441	57,106
Cash, cash equivalents, and restricted cash at beginning of year	637,566	450,125	393,019
Cash, cash equivalents, and restricted cash at end of year	\$ 551,134	\$ 637,566	\$ 450,125

The accompanying notes are an integral part of these consolidated financial statements.

ALIGN TECHNOLOGY, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Summary of Significant Accounting Policies

Business Description

Align Technology, Inc. ("We", "Our", or "Align") was incorporated in April 1997 in Delaware. Align is a global medical device company engaged in the design, manufacture and marketing of Invisalign® clear aligners and iTero® intraoral scanners and services for orthodontics and restorative and aesthetic dentistry. Align's products are intended primarily for the treatment of malocclusion or the misalignment of teeth and are designed to help dental professionals achieve the clinical outcomes that they expect. We are headquartered in San Jose, California with offices worldwide. Our Americas regional headquarters is located in Raleigh, North Carolina; our European, Middle East and Africa ("EMEA") regional headquarters is located in Rotkreuz, Switzerland, which moved from Amsterdam, the Netherlands in January 2020; and our Asia Pacific ("APAC") regional headquarters is located in Singapore. We have two operating segments: (1) Clear Aligner, known as the Invisalign System, and (2) Scanners and Services ("Scanner"), known as the iTero intraoral scanner and OrthoCAD services.

Basis of Presentation and Preparation

The consolidated financial statements include the accounts of Align and our wholly-owned subsidiaries after elimination of intercompany transactions and balances.

During fiscal year 2018, we adopted Accounting Standards Codification ("ASC") 606, "Revenues from Contracts with Customers," using the full retrospective method and ASU 2016-18, "Statement of Cash Flows - Restricted Cash," on a retrospective basis. The Consolidated Statement of Cash Flow for the year ended December 31, 2017 and Consolidated Statement of Stockholders' Equity for the year ended December 31, 2017 have been recast to comply with the adoption of these standards.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles ("GAAP") in the United States ("U.S.") requires our management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, useful lives of intangible assets and property and equipment, long-lived assets and goodwill, income taxes and contingent liabilities, the fair values of financial instruments, stock-based compensation, unsecured promissory note receivable, and valuation of investments in privately held companies among others. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Fair Value of Financial Instruments

We measure the fair value of financial assets as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We use the GAAP fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. This hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The three levels of inputs that may be used to measure fair value:

Level 1 - Quoted (unadjusted) prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability. We obtain fair values for our Level 2 investments. Our custody bank and asset managers independently use professional pricing services to gather pricing data which may include quoted market prices for identical or comparable financial instruments, or inputs other than quoted prices that are observable either directly or indirectly, and we are ultimately responsible for these underlying estimates.

Level 3 - Unobservable inputs to the valuation methodology that are supported by little or no market activity and that are significant to the measurement of the fair value of the assets or liabilities. Level 3 assets and liabilities include those whose fair value measurements are determined using pricing models, discounted cash flow methodologies or similar valuation techniques, as well as significant management judgment or estimation.

Cash and Cash Equivalents

We consider currency on hand, demand deposits, time deposits, and all highly liquid investments with an original or remaining maturity of three months or less at the date of purchase to be cash and cash equivalents. Cash and cash equivalents are held in various financial institutions in the U.S. and internationally.

Restricted Cash

The restricted cash primarily consists of funds reserved for legal requirements. Restricted cash balances are primarily included in other assets within our Consolidated Balance Sheet.

Marketable Securities

Our marketable securities consist of marketable debt securities which are classified as available-for-sale and are carried at fair value. Marketable securities classified as current assets have maturities within one year. Unrealized gains or losses on such securities are included in accumulated other comprehensive income (loss), net in stockholders' equity. Realized gains and losses from maturities of all such securities are reported in earnings and computed using the specific identification cost method. Realized gains or losses and charges for other-than-temporary declines in value, if any, on available-for-sale securities are reported in other income (expense), net, as incurred. We periodically evaluate these investments for other-than-temporary impairment.

Variable Interest Entities

We evaluate whether an entity in which we have made an investment is considered a variable interest entity ("VIE"). If we determine we are the primary beneficiary of a VIE, we would consolidate the VIE into our financial statements. In determining if we are the primary beneficiary, we evaluate whether we have the power to direct the activities that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. Our evaluation includes identification of significant activities and an assessment of our ability to direct those activities based on governance provisions and arrangements to provide or receive product and process technology, product supply, operations services, equity funding, financing, and other applicable agreements and circumstances. Our assessments of whether we are the primary beneficiary of a VIE require significant assumptions and judgments. We have concluded that we are not the primary beneficiary of our VIE investments; therefore, we do not consolidate their results into our consolidated financial statements.

Investments in Privately Held Companies

Investments in privately held companies in which we can exercise significant influence but do not own a majority equity interest or otherwise control are accounted for under ASC 323, "*Investments -Equity Method and Joint Ventures.*" Equity securities qualified as equity method investments are reported on our Consolidated Balance Sheet as a single amount, and we record our share of their operating results within equity in losses of investee, net of tax, in our Consolidated Statement of Operations. Investments in privately held companies in which we cannot exercise significant influence and do not own a majority equity interest or otherwise control are accounted for under ASC 321, "*Investments -Equity Securities.*" The equity securities without readily determinable fair values are recorded at cost and adjusted for impairments and observable price changes with a same or similar security from the same issuer ("Measurement Alternative"). Equity securities under ASC 321 are reported on our Consolidated Balance Sheet as other assets, and we record a change in carrying value of our equity securities, if any, in other income (expense), net in our Consolidated Statement of Operations.

Equity securities are evaluated for impairment as events or circumstances indicate that there is an other-than-temporary loss in value. The decrease in value is recognized in the period the impairment occurs and recorded in other income (expense), net in the Consolidated Statement of Operations.

Derivative Financial Instruments

We enter into foreign currency forward contracts to minimize the short-term impact of foreign currency exchange rate fluctuations associated with certain assets and liabilities. These forward contracts are not designated as hedging instruments and do not subject us to material balance sheet risk due to fluctuations in foreign currency exchange rates. The gains and losses on these forward contracts are intended to offset the gains and losses in the underlying foreign currency denominated monetary assets and liabilities being economically hedged. We do not enter into foreign currency forward contracts for trading or speculative purposes. The net gain or loss from the settlement of these foreign currency forward contracts is recorded in other income (expense), net in the Consolidated Statement of Operations.

Foreign Currency

For our international subsidiaries, we analyze on an annual basis or more often if necessary, if a significant change in facts and circumstances indicate that the functional currency has changed. For international subsidiaries where the local currency is the functional currency, adjustments from translating financial statements from the local currency to the U.S. dollar reporting currency are recorded as a separate component of accumulated other comprehensive income (loss), net in the stockholders' equity section of the Consolidated Balance Sheet. This foreign currency translation adjustment reflects the translation of the balance sheet at period end exchange rates, and the income statement at an average exchange rate in effect during the period. The foreign currency revaluation that are derived from monetary assets and liabilities stated in a currency other than functional currency are included in other income (expense), net. For the year ended December 31, 2019, 2018 and 2017, we had foreign currency net gains (losses) of \$(2.0) million, \$(5.6) million and \$9.0 million, respectively.

Certain Risks and Uncertainties

Our operating results depend to a significant extent on our ability to market and develop our products. The life cycles of our products are difficult to estimate due, in part, to the effect of future product enhancements and competition. Our inability to successfully develop and market our products as a result of competition or other factors would have a material adverse effect on our business, financial condition and results of operations.

Our cash and investments are held primarily by three financial institutions. Financial instruments which potentially expose us to concentrations of credit risk consist primarily of cash equivalents and marketable securities. We invest excess cash primarily in money market funds, commercial paper, corporate bonds, U.S. government agency bonds, U.S. government treasury bonds and certificates of deposits. If the carrying value of our investments exceeds the fair value, and the decline in fair value is deemed to be other-than-temporary, we will be required to write down the value of our investments, which could adversely affect our results of operations and financial condition. Moreover, the performance of certain securities in our investment portfolio correlates with the credit condition of the U.S. economy.

We provide credit to customers in the normal course of business. Collateral is not required for accounts receivable, but ongoing evaluations of customers' credit worthiness are performed. We maintain reserves for potential credit losses and such losses have been within management's expectations. No individual customer accounted for 10% or more of our accounts receivable at December 31, 2019 or 2018, or net revenues for the year ended December 31, 2019, 2018 or 2017.

The U.S. Food and Drug Administration ("FDA") and similar international agencies regulate the design, manufacture, distribution, pre-clinical and clinical study, clearance and approval of medical devices. Products developed by us may require approvals or clearances from the FDA or other international regulatory agencies prior to commercialized sales. There can be no assurance that our products will receive any of the required approvals or clearances. If we were denied approval or clearance or such approval was delayed, it may have a material adverse impact on us.

We have manufacturing facilities located in Juarez, Mexico, where we conduct our aligner fabrication, distribution, repair of our iTero scanners and perform our CAD/CAM services. In the fourth quarter of 2018, we also began fabricating our aligners in our manufacturing facility in Ziyang, China, our first aligner fabrication facility outside of Juarez, Mexico. In addition, we produce our handheld intraoral scanner wand, perform final scanner assembly and repair our scanners at our facilities in Or Yehuda, Israel and Ziyang, China. Our digital treatment plans using a sophisticated, internally developed computer-modeling program are located in multiple international locations to support our customers within the regions. Our reliance on international operations exposes us to related risks and uncertainties, including difficulties in staffing and managing international operations such as hiring and retaining qualified personnel; controlling production volume and quality of manufacture; political, social and economic instability; interruptions and limitations in telecommunication services; product and material transportation delays or disruption; trade restrictions and changes in tariffs; import and export license requirements and restrictions; fluctuations in foreign currency exchange rates; and potential adverse tax consequences. If any of these risks materialize, our international manufacturing operations, as well as our operating results, may be harmed.

We purchase certain inventory from sole suppliers. Additionally, we rely on a limited number of hardware manufacturers. The inability of any supplier or manufacturer to fulfill our supply requirements could materially and adversely impact our future operating results.

Inventories

Inventories are valued at the lower of cost or net realizable value, with cost computed using standard cost which approximates actual cost on a first-in-first-out basis. Excess and obsolete inventories are determined primarily based on future demand forecasts, and write-downs of excess and obsolete inventories are recorded as a component of cost of net revenues.

Property, Plant and Equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets. Construction in progress ("CIP") is related to the construction or development of property (including land) and equipment that have not yet been placed in service for their intended use. Upon sale or retirement, the asset's cost and related accumulated depreciation are removed from the balance sheet and any related gains or losses are reflected in income from operations. Maintenance and repairs are expensed as incurred. Refer to Note 3 "Balance Sheet Components" of the Notes of Consolidated Financial Statements for details on estimated useful lives.

Leases

We lease office and retail spaces, vehicles and office equipment with original lease periods of up to 10 years. We determine if an arrangement is a lease at inception under ASC 842. Operating lease right-of-use ("ROU") assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. If a lease arrangement does not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable. Our lease terms may include options to extend or terminate the lease which we include in our lease term when it is reasonably certain that we will exercise that option. We have lease agreements with lease and non-lease components which are accounted for as a single lease component. Leases with an initial term of 12 months or less are not recorded on the balance sheet.

Goodwill and Finite-Lived Acquired Intangible Assets

Goodwill represents the excess of the purchase price paid over the fair value of tangible and identifiable intangible net assets acquired in business combinations and is allocated to the respective reporting units based on relative synergies generated.

Our intangible assets primarily consist of intangible assets acquired as part of our acquisitions. These assets are amortized using the straight-line method over their estimated useful lives ranging from one to fifteen years, reflecting the period in which the economic benefits of the assets are expected to be realized.

Impairment of Goodwill and Long-Lived Assets

Goodwill

We evaluate goodwill for impairment at least annually on November 30th or more frequently if indicators are present, an event occurs or changes in circumstances suggest an impairment may exist and that it would more likely than not reduce the fair value of a reporting unit below its carrying amount. The allocation of goodwill to the respective reporting units is based on relative synergies generated as a result of an acquisition.

We perform an initial assessment of qualitative factors to determine whether the existence of events and circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. In performing the qualitative assessment, we identify and consider the significance of relevant key factors, events, and circumstances that affect the fair value of our reporting units. These factors include external factors such as macroeconomic, industry, and market conditions, as well as entity-specific factors, such as our actual and planned financial performance. We also give consideration to the difference between the reporting unit fair value and carrying value as of the most recent date a fair value measurement was performed. If, after assessing the totality of relevant events and circumstances, we determine that it is more likely than not that the fair value of the reporting unit exceeds its carrying value and there is no indication of impairment, no further testing is performed; however, we conclude otherwise, the first step of the two-step impairment test is performed by estimating the fair value of the reporting unit and comparing it with its carrying value, including goodwill.

Step one of the goodwill impairment test consists of a comparison of the fair value of a reporting unit against its carrying amount, including the goodwill allocated to each reporting unit. If the carrying amount of the reporting unit is in excess of its fair value, step two requires the comparison of the implied fair value of the reporting unit's goodwill against the carrying amount of the reporting unit's goodwill. Any excess of the carrying value of the reporting unit's goodwill over the implied fair value of the reporting unit's goodwill is recorded as an impairment loss in the Consolidated Statement of Operations.

Finite-Lived Intangible Assets and Long-Lived Assets

We evaluate long-lived assets (including finite-lived intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. An asset or asset group is considered impaired if its carrying amount exceeds the future undiscounted net cash flows that the asset or asset group is expected to

generate. Factors we consider important which could trigger an impairment review include significant negative industry or economic trends, significant loss of customers and changes in the competitive environment. If an asset or asset group is considered to be impaired, the impairment to be recognized is calculated as the amount by which the carrying amount of the asset or asset group exceeds its fair market value. Our estimates of future cash flows attributable to our long-lived assets require significant judgment based on our historical and anticipated results and are subject to many assumptions. The estimation of fair value utilizing a discounted cash flow approach includes numerous uncertainties which require our significant judgment when making assumptions of expected growth rates and the selection of discount rates, as well as assumptions regarding general economic and business conditions, and the structure that would yield the highest economic value, among other factors. Refer to Note 6 "Goodwill and Intangible Assets" of the Notes of Consolidated Financial Statements for details on intangible long-lived assets.

Development Costs for Internal Use Software

Internally developed software includes enterprise-level business software that we customize to meet our specific operational needs. Such capitalized costs include external direct costs utilized in developing or obtaining the applications and payroll and payroll-related costs for employees, who are directly associated with the development of the applications. There were no significant internally developed software costs capitalized in 2019 or 2018.

The costs to develop software that is marketed externally have not been capitalized as we believe our current software development process is essentially completed concurrent with the establishment of technological feasibility. As such, all related software development costs are expensed as incurred and included in research and development expense in our Consolidated Statement of Operations.

Product Warranty

We offer assurance warranties on our products which provide the customer assurance that the product will function as the parties intended because it complies with agreed-upon specifications; therefore, warranties are not treated as a separate revenue performance obligation and are accounted for as guarantees under GAAP.

Clear Aligner

We warrant our Invisalign products against material defects until the treatment plan is complete except in the case of retainers, which are warranted up to three months from expected first use. We accrue for warranty costs in cost of net revenues upon shipment of products which is primarily based on historical experience as to product failures as well as current information on replacement costs.

Scanners and Services

We warrant our intraoral scanners for a period of one year, which include materials and labor. We accrue for these warranty costs based on average historical repair costs. An extended warranty may be purchased for additional fees.

Actual warranty costs could differ materially from the estimated amounts. We regularly review our warranty liability and update these balances based on historical warranty cost trends.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for customers that are not able to make payments. We periodically review these balances, including an analysis of the customers' payment history and information regarding the customers' creditworthiness. Actual write-offs have not materially differed from the estimated allowances.

Revenue Recognition

Our revenues are derived primarily from the sale of aligners, scanners, and services from our Clear Aligner and Scanner segments. We enter into sales contracts that may consist of multiple distinct performance obligations where certain performance obligations of the sales contract are not delivered in one reporting period. We measure and allocate revenues according to ASC 606-10, "Revenues from Contracts with Customers."

We identify a performance obligation as distinct if both of the following criteria are met: the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. Determining the standalone selling price ("SSP"), allocation of consideration from the contract to the individual performance obligations and the appropriate timing of revenue recognition is the result of significant qualitative and quantitative judgments. While changes in the

allocation of the SSP between performance obligations will not affect the amount of total revenues recognized for a particular contract, any material changes could impact the timing of revenue recognition, which would have a material effect on our financial position and result of operations. This is because the contract consideration is allocated to each performance obligation, delivered or undelivered, at the inception of the contract based on the SSP of each distinct performance obligation.

Clear Aligner

We enter into contracts (“treatment plan(s)”) that involve multiple future performance obligations. Invisalign Comprehensive, Invisalign First, Invisalign Moderate, and Lite and Express Packages include optional additional aligners at no charge for a certain period of time ranging from six months to five years after initial shipment, and Invisalign Go includes optional additional aligners at no charge for a period of up to two years after initial shipment.

Our treatment plans comprise the following performance obligations that also represent distinct deliverables: initial aligners, additional aligners, case refinement, and replacement aligners. We take the practical expedient to consider shipping and handling costs as activities to fulfill the performance obligation. We allocate revenues for each treatment plan based on each unit’s SSP. Management considers a variety of factors such as historical sales, costs, and gross margin, which may vary over time depending upon the unique facts and circumstances related to each performance obligation in making these estimates. We also consider usage rates, which is the number of times a customer is expected to order additional aligners. Our process for estimating usage rates requires significant judgment and evaluation of inputs, including historical usage data by region, country and channel. We recognize the revenues upon shipment, as the customers obtain physical possession and we have enforceable rights to payment. As we collect most consideration upfront, we consider whether a significant financing component exists; however, as the delivery of the performance obligations are at the customer’s discretion, we conclude that no significant financing component exists.

Scanner

We sell intraoral scanners and CAD/CAM services through both our direct sales force and distribution partners. The intraoral scanner sales price includes one year of warranty and unlimited scanning services. The customer may also select, for additional fees, extended warranty and unlimited scanning services for periods beyond the initial year. When intraoral scanners are sold with an unlimited scanning service agreement and/or extended warranty, we allocate revenues based on the respective SSPs of the scanner and the subscription service. We estimate the SSP of each element, taking into consideration historical prices as well as our discounting strategies. Revenues are then recognized over time as the monthly services are rendered and upon shipment of the scanner, as that is when we deem the customer to have obtained control. Most consideration is collected upfront and in cases where there are payment plans, consideration is collected by the one year mark and, therefore, there are no significant financing components.

Volume Discounts

In certain situations, we offer promotions in which the discount will increase depending upon the volume purchased over time. We concluded that in these situations, the promotions can represent either variable consideration or options, depending upon the specifics of the promotion. In the event the promotion contains an option, the option is considered a material right and, therefore, included in the accounting for the initial arrangement. We estimate the average anticipated discount over the lifetime of the promotion or contract, and apply that discount to each unit as it is sold. On a quarterly basis, we review our estimates and, if needed, updates are made and changes are applied prospectively.

Accrued Sales Return Reserve

We accrue for sales return reserve based on historical sales returns as a percentage of revenues.

Costs to Obtain a Contract

We offer a variety of commission plans to our salesforce; each plan has multiple components. To match the costs to obtain a contract to the associated revenues, we evaluate the individual components and capitalize the eligible components, recognizing the costs over the treatment period.

Unfulfilled Performance Obligations for Clear Aligners and Scanners

Our unfulfilled performance obligations, including deferred revenues and backlog, as of December 31, 2019 and the estimated revenues expected to be recognized in the future related to these performance obligations are \$610.3 million. This includes performance obligations from the Clear Aligner segment, primarily the shipment of additional aligners, which are fulfilled over six months to five years. Also included are the performance obligations from the iTero scanner segment, primarily services and

support, which are fulfilled over one to five years, and contracted deliveries of additional scanners. The estimate includes both product and service unfulfilled performance obligations and the time range reflects our best estimate of when we will transfer control to the customer and may change based on customer usage patterns, timing of shipments, readiness of customers' facilities for installation, and manufacturing availability.

Contract Balances

The timing of revenue recognition results in deferred revenues being recognized on our Consolidated Balance Sheet. For both aligners and scanners, we usually collect the total consideration owed prior to all performance obligations being performed with payment terms generally varying from net 30 to net 180 days. Contract liabilities are recorded as deferred revenue balances, which are generated based upon timing of invoices and recognition patterns, not payments. If the revenue recognition exceeds the billing, the exceeded amount is considered unbilled receivable and a contract asset. Conversely, if the billing occurs prior to the revenue recognition, the amount is considered deferred revenue and a contract liability.

Shipping and Handling Costs

Shipping and handling charges to customers are included in net revenues, and the associated costs incurred are recorded in cost of net revenues.

Legal Proceedings and Litigations

We are involved in legal proceedings on an ongoing basis. If we believe that a loss arising from such matters is probable and can be reasonably estimated, we accrue the estimated loss in our consolidated financial statements. If only a range of estimated losses can be determined, we accrue an amount within the range that, in our judgment, reflects the most likely outcome; if none of the estimates within that range is a better estimate than any other amount, we accrue the low end of the range.

Research and Development

Research and development costs are expensed as incurred and includes the costs associated with the research and development of new products and enhancements to existing products. These costs primarily include personnel-related costs, including payroll and stock-based compensation, outside consulting expenses and allocations of corporate overhead expenses including facilities and information technology ("IT").

Advertising Costs

The cost of advertising and media is expensed as incurred. For the year ended December 31, 2019, 2018 and 2017, we incurred advertising costs of \$119.1 million, \$88.4 million and \$70.1 million, respectively.

Common Stock Repurchase

We repurchase our own common stock from time to time under stock repurchase programs approved by our Board of Directors. We account for these repurchases under the accounting guidance for equity where we allocate the total repurchase value that is in excess over par value between additional paid-in capital and retained earnings. All shares repurchased are retired.

Income Taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenues and expenses for tax and financial statement purposes.

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our current tax exposure under the applicable tax laws and assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities which are included in our Consolidated Balance Sheet.

We account for uncertainty in income taxes pursuant to authoritative guidance based on a two-step approach to recognize and measure uncertain tax positions taken or expected to be taken in a tax return. The first step is to determine if the weight of available evidence indicates that it is more likely than not that the tax position will be sustained on audit based on its technical merits, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. We adjust reserves for our uncertain tax

positions due to changing facts and circumstances, such as the closing of a tax audit or refinement of estimates due to new information. To the extent that the final outcome of these matters is different than the amounts recorded, such differences will impact our tax provision in our Consolidated Statement of Operation in the period in which such determination is made.

We assess the likelihood that we will be able to realize our deferred tax assets. Should there be a change in our ability to realize our deferred tax assets, our tax provision would increase in the period in which we determine that it is more likely than not that we cannot realize our deferred tax assets. We consider all available evidence, both positive and negative, including historical levels of income, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. If it is more likely than not that we will not realize our deferred tax assets, we will increase our provision for taxes by recording a valuation allowance against the deferred tax assets that we estimate will not ultimately be realizable.

The U.S. Tax Cuts and Jobs Act includes provisions for certain foreign-sourced earnings referred to as Global Intangible Low-Taxed Income (“GILTI”) which imposes a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. We have made the election to record GILTI tax using the period cost method.

Stock-Based Compensation

We recognize stock-based compensation cost for shares expected to vest on a straight-line basis over the requisite service period of the award, net of estimated forfeitures. We use the Black-Scholes option pricing model to determine the fair value of stock awards and employee stock purchase plan shares. We estimate the fair value of market-performance based restricted stock units using a Monte Carlo simulation model which requires the input of assumptions, including expected term, stock price volatility and the risk-free rate of return. In addition, judgment is also required in estimating the number of stock-based awards that are expected to be forfeited. Forfeitures are estimated based on historical experience at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The assumptions used in calculating the fair value of share-based payment awards represent management’s best estimates, but these estimates involve inherent uncertainties and the application of management’s judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

Comprehensive Income

Comprehensive income includes all changes in equity during a period from non-owner sources including unrealized gains and losses on investments and foreign currency translation adjustments, net of their related tax effect.

Recent Accounting Pronouncements

(i) New Accounting Updates Recently Adopted

In May 2014, FASB released ASU 2014-09, “*Revenue from Contracts with Customers*,” (Topic 606) to supersede nearly all existing revenue recognition guidance under GAAP. The core principle of the standard is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for the goods or services. We adopted the guidance in the first quarter of fiscal year 2018 by applying the full retrospective method. The impact of adoption was primarily related to the Clear Aligner segment. Our disaggregation of revenues can be found in Note 16 “Segments and Geographical Information.” We elected to take the practical expedient to exclude from the transaction price all taxes assessed by a governmental authority. Prior period presentation for fiscal year 2017 has been retrospectively adjusted. The adoption of ASU 2014-09 did not have a material impact on our Consolidated Statement of Operations, Consolidated Statement of Comprehensive Income or Consolidated Statement of Cash Flows.

In February 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-02, “*Leases*” (Topic 842) to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The updated guidance is effective for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. In July 2018, the FASB issued ASU 2018-11, “*Leases-Targeted Improvements*,” which provides an additional transition method by allowing entities to initially apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings. We adopted the guidance in the first quarter of fiscal year 2019 by electing the transition method issued in ASU 2018-11 and the package of practical expedients available in the standard. The standard had a material impact on our Consolidated Balance Sheet as we recognized assets and liabilities related to our leases. The adoption did not have an impact to prior periods.

In February 2018, the FASB issued ASU 2018-02, “*Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*,” which gives entities the option to

reclassify to retained earnings the tax effects resulting from the U.S. Tax Cuts and Jobs Act (the "TCJA") related to items in accumulated other comprehensive income. The amendments are effective for fiscal years and interim periods within those years beginning after December 15, 2018 on a retrospective basis and early adoption is permitted. We adopted the standard in the first quarter of fiscal year 2019 which did not have a material impact on our consolidated financial statements and related disclosures. The TCJA did not affect our accumulated other comprehensive income (loss), net, and therefore we did not reclassify any income tax effects from accumulated other comprehensive income (loss), net to our retained earnings.

(ii) Recent Accounting Updates Not Yet Effective

In June 2016, the FASB issued ASU 2016-13, "*Financial Instruments - Credit Losses*" (Topic 326) to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. The amendments in this update replace the existing guidance of incurred loss impairment methodology with an approach that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. In November 2018, the FASB issued ASU 2018-19, "*Codification Improvements to Topic 326, Financial Instruments - Credit Losses*" which clarifies the scope of guidance in the ASU 2016-13. The updated guidance is effective for annual periods beginning after December 15, 2019, including interim periods within those fiscal years. We will adopt this standard in the first quarter of fiscal 2020 and do not expect the adoption of this standard to have a material impact on our consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU 2017-04, "*Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*," to simplify the subsequent measurement of goodwill by eliminating step two from the goodwill impairment test. Under the amendments in this update, an entity will recognize an impairment charge for the amount by which the carrying value exceeds the fair value. The updated guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2019 on a prospective basis. We will adopt this standard in the first quarter of fiscal 2020 and do not expect the adoption of this standard to have any impact on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, "*Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement*," to modify the disclosure requirements on fair value measurements in Topic 820, *Fair Value Measurement*. The updated guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2019 on a prospective basis. We will adopt this standard in the first quarter of fiscal 2020 and do not expect the adoption of this standard to have any impact on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, "*Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40) Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*," to clarify the guidance on the costs of implementing a cloud computing hosting arrangement that is a service contract. Under the amendments in this update, the entity is required to follow the guidance in Subtopic 350-40, *Internal-Use Software*, to determine which implementation costs under the service contract to be capitalized as an asset and which costs to expense. The amendments are effective for fiscal years and interim periods within those years beginning after December 15, 2019 either on a retrospective or prospective basis early adoption is permitted. We will adopt this standard in the first quarter of fiscal 2020 on a prospective basis beginning and do not expect the adoption of this standard to have any impact on our consolidated financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, "*Income Taxes (Topic 740) Simplifying the Accounting for Income Taxes*," to enhance and simplify various aspects of the income tax accounting guidance. The amendment removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. The amendments are effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2020. We are currently evaluating the impact of this guidance on our consolidated financial statements and related disclosures; however, we anticipate the adoption of the guidance will not have a material impact to our consolidated financial statements and related disclosures.

Note 2. Investments and Fair Value Measurements

As of December 31, 2019 and 2018, the estimated fair value of our short-term and long-term marketable securities, classified as available for sale, are as follows (in thousands):

Short-term

December 31, 2019	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate bonds	\$ 210,891	\$ 142	\$ (27)	\$ 211,006
U.S. government treasury bonds	70,587	65	(2)	70,650
U.S. government agency bonds	22,085	17	(1)	22,101
Commercial paper	14,426	—	—	14,426
Certificates of deposit	19	—	—	19
Total marketable securities, short-term	<u>\$ 318,008</u>	<u>\$ 224</u>	<u>\$ (30)</u>	<u>\$ 318,202</u>

December 31, 2018	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate bonds	\$ 45,100	\$ —	\$ (48)	\$ 45,052
U.S. government agency bonds	19,981	—	(77)	19,904
Commercial paper	17,793	—	—	17,793
U.S. government treasury bonds	15,292	—	(1)	15,291
Certificates of deposit	420	1	(1)	420
Total marketable securities, short-term	<u>\$ 98,586</u>	<u>\$ 1</u>	<u>\$ (127)</u>	<u>\$ 98,460</u>

Long-term

December 31, 2018	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate bonds	\$ 4,957	\$ 5	\$ (2)	\$ 4,960
U.S. government agency bonds	1,399	8	—	1,407
U.S. government treasury bonds	2,235	9	—	2,244
Certificates of deposit	500	1	—	501
Total marketable securities, long-term	<u>\$ 9,091</u>	<u>\$ 23</u>	<u>\$ (2)</u>	<u>\$ 9,112</u>

We have no long-term marketable securities as of December 31, 2019.

Cash equivalents are not included in the tables above as the gross unrealized gains and losses are not material. We have no short-term or long-term marketable securities that have been in a continuous material unrealized loss position for greater than twelve months as of December 31, 2019 and 2018. Amounts reclassified to earnings from accumulated other comprehensive income (loss), net related to unrealized gains or losses were not material in 2019 and 2018. For the year ended December 31, 2019, 2018 and 2017, realized gains or losses were not material.

Our fixed-income securities investment portfolio consists of investments that can have a maximum effective maturity of up to 40 months on any individual security. The securities that we invest in are generally deemed to be low risk based on their credit ratings from the major rating agencies. The longer the duration of these securities, the more susceptible they are to changes in market interest rates and bond yields. As interest rates increase, those securities purchased at a lower yield show a mark-to-market unrealized loss. The unrealized losses are primarily due to changes in interest rates and credit spreads. We expect to realize the full value of all these investments upon maturity or sale. The weighted average remaining duration of these securities was approximately seven months and four months as of December 31, 2019 and 2018, respectively.

As the carrying value approximates the fair value for our short-term and long-term marketable securities shown in the tables above, the following table summarizes the fair value of our short-term and long-term marketable securities classified by contractual maturity as of December 31, 2019 and 2018 (in thousands):

	December 31,	
	2019	2018
Maturities within one year	\$ 318,202	\$ 98,460
Due in greater than one year	—	9,112
Total available for sale short-term and long-term marketable securities	\$ 318,202	\$ 107,572

Investments in Privately Held Companies

Our investments in privately held companies as of December 31, 2019 and 2018 are as follows (in thousands):

	December 31,	
	2019	2018
Equity securities under the equity method investment ¹	\$ —	\$ 45,913
Equity securities without readily determinable fair values ²	\$ 5,887	\$ 9,862

¹ Refer to Note 5 "Equity Method Investments" of the Notes to Consolidated Financial Statements for more information

² The equity securities are reported within other assets in our Consolidated Balance Sheet and valued on a nonrecurring basis. During the year ended December 31, 2019, we recorded a \$4.0 million of impairment loss resulting from an observable price change.

Fair Value Measurements

The following tables summarize our financial assets measured at fair value on a recurring basis as of December 31, 2019 and 2018 (in thousands):

Description	Balance as of December 31, 2019	Level 1	Level 2	Level 3
Cash equivalents:				
Money market funds	\$ 236,923	\$ 236,923	\$ —	\$ —
Short-term investments:				
Corporate bonds	211,006	—	211,006	—
Commercial paper	14,426	—	14,426	—
U.S. government agency bonds	22,101	—	22,101	—
U.S. government treasury bonds	70,650	70,650	—	—
Certificates of deposit	19	—	19	—
Prepaid expenses and other current assets:				
Israeli funds	3,226	—	3,226	—
Current unsecured promissory note	25,005	—	—	25,005
Other Assets:				
Long term unsecured promissory note	7,328	—	—	7,328
	\$ 590,684	\$ 307,573	\$ 250,778	\$ 32,333

Description	Balance as of December 31, 2018		Level 1		Level 2	
Cash equivalents:						
Money market funds	\$	431,081	\$	431,081	\$	—
Commercial paper		4,681		—		4,681
Corporate bonds		3,880		—		3,880
U.S. government treasury bonds		2,195		2,195		—
Short-term investments:						
Corporate bonds		45,052		—		17,793
Commercial paper		17,793		—		45,052
U.S. government agency bonds		19,904		—		19,904
U.S. government treasury bonds		15,291		15,291		—
Certificates of deposit		420		—		420
Long-term investments:						
Corporate bonds		4,960		—		4,960
U.S. government agency bonds		1,407		—		1,407
U.S. government treasury bonds		2,244		2,244		—
Certificates of deposit		501		—		501
Prepaid expenses and other current assets:						
Israeli funds		3,047		—		3,047
	\$	552,456	\$	450,811	\$	101,645

Our investments in equity securities is considered Level 3 in the fair value hierarchy since the investments are in private companies without quoted market prices and we adjust the carrying value based on observable price changes.

The unsecured promissory note that was entered into in 2019 is classified as Level 3 in our fair value hierarchy as financial information of third parties may not be timely available and consequently we estimate the fair value based on the best available information at the measurement date. The original amount of the note was \$54.2 million which decreased over 2019 due to payments received. Refer to Note 5 "Equity Method Investments" of the Notes to Consolidated Financial Statements for more information.

Derivative Financial Instruments

We enter into foreign currency forward contracts to minimize the short-term impact of foreign currency exchange rate fluctuations on certain trade and intercompany receivables and payables. These forward contracts are classified within Level 2 of the fair value hierarchy. The net gain from the settlement of foreign currency forward contracts during the year ended December 31, 2019 and 2018 was \$3.2 million and \$9.9 million, respectively. As of December 31, 2019 and 2018, the fair value of foreign exchange forward contracts outstanding was not material.

The following table presents the gross notional value of all our foreign exchange forward contracts outstanding as of December 31, 2019 and 2018 (in thousands):

	December 31, 2019	
	Local Currency Amount	Notional Contract Amount (USD)
Euro	€97,000	\$ 108,870
Chinese Yuan	¥431,000	60,702
Canadian Dollar	C\$52,000	39,802
Israeli Shekel	IL\$63,700	18,439
British Pound	£28,000	36,770
Japanese Yen	¥3,000,000	27,604
Brazilian Real	R\$130,000	32,185
Mexican Peso	M\$140,000	7,398
Australian Dollar	A\$3,000	2,101
	\$	333,871

	December 31, 2018	
	Local Currency Amount	Notional Contract Amount (USD)
Euro	€62,000	\$ 71,095
Chinese Yuan	¥375,000	54,515
Brazilian Real	R\$81,000	20,858
Canadian Dollar	C\$27,000	19,808
British Pound	£13,000	16,635
Japanese Yen	¥1,700,000	15,357
Australian Dollar	A\$3,000	2,114
		\$ 200,382

Note 3. Balance Sheet Components

Inventories

Inventories consist of the following (in thousands):

	December 31,	
	2019	2018
Raw materials	\$ 54,947	\$ 26,119
Work in process	30,974	13,784
Finished goods	26,130	15,738
Total inventories	\$ 112,051	\$ 55,641

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	December 31,	
	2019	2018
Tax related receivables	\$ 41,252	\$ 36,794
Current promissory note ¹	25,005	—
Other prepaid expenses and current assets	24,637	23,227
Prepaid software and maintenance	7,128	5,938
Other current receivables	4,428	6,511
Total prepaid expenses and other current assets	\$ 102,450	\$ 72,470

¹ Refer to Note 5 "Equity Method Investments" of the Notes to Consolidated Financial Statements for more information.

Property, Plant and Equipment, Net

Property, plant and equipment consist of the following (in thousands):

	Generally Used Estimated Useful Life	December 31,	
		2019	2018
Clinical and manufacturing equipment	Up to 10 years	\$ 309,809	\$ 236,179
Building	20 years	209,643	139,315
Computer software	3 years	61,722	59,617
Leasehold improvements	Lease term ¹	53,327	77,168
Furniture and fixtures	5 years	44,373	33,436
Computer hardware	3 years	39,199	34,297
Land	—	26,422	17,630
CIP	—	116,751	95,414
Total		861,246	693,056
Less: Accumulated depreciation and amortization and impairment charges		(229,516)	(171,727)
Total property, plant and equipment, net		\$ 631,730	\$ 521,329

¹ Shorter of the remaining lease term or the estimated useful lives of the assets.

Depreciation and amortization was \$79.0 million, \$54.7 million and \$37.7 million for the year ended December 31, 2019, 2018 and 2017, respectively. In the first quarter of 2019, we recorded impairment losses of \$14.3 million related to leasehold improvements and other fixed assets. Refer to Note 8 "Impairments and Other (Gains) Charges" of the Notes to Consolidated Financial Statements for more information.

On September 26, 2019, we entered into a Purchase and Sale Agreement to purchase a building located in San Jose, California for \$21.3 million. The remaining and substantial portion of the purchase price will be paid on or before the closing date, which is expected to occur in the first quarter of 2020.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2019	2018
Accrued payroll and benefits	\$ 162,486	\$ 127,109
Accrued expenses	55,529	39,323
Current operating lease liabilities	15,737	—
Accrued income taxes	14,130	5,752
Accrued sales rebate	11,393	5,668
Others	60,683	56,827
Total accrued liabilities	\$ 319,958	\$ 234,679

Warranty

We regularly review the balance for accrued warranty and update based on historical warranty trends. Actual warranty costs incurred have not materially differed from those accrued; however, future actual warranty costs could differ from the estimated amounts.

Warranty accrual as of December 31, 2019 and 2018 consists of the following activity (in thousands):

Accrued warranty as of December 31, 2017	\$	5,929
Charged to cost of net revenues		15,059
Actual warranty expenditures		(12,437)
Accrued warranty as of December 31, 2018		8,551
Charged to cost of net revenues		12,421
Actual warranty expenditures		(9,767)
Accrued warranty as of December 31, 2019	\$	11,205

Deferred Revenues

Deferred revenues consist of the following (in thousands):

	December 31,	
	2019	2018
Deferred revenues - current	\$ 563,762	\$ 393,138
Deferred revenues - long-term ¹	35,503	17,051

¹ Included in other long-term liabilities within our Consolidated Balance Sheet

During the year ended December 31, 2019 and 2018, we recognized \$2.4 billion and \$2.0 billion of net revenues, respectively, of which \$262.7 million and \$180.6 million was included in the deferred revenues balance at December 31, 2018 and December 31, 2017, respectively.

Note 4. Leases

Lessee

We have operating leases for office and retail spaces, vehicles and office equipment.

The supplemental balance sheet information for our operating leases consist of following (in thousands):

Balance Sheet Caption	December 31, 2019	
Operating lease right-of-use assets, net	\$	56,244
Accrued liabilities	\$	15,737
Operating lease liabilities		43,463
Total operating lease liabilities	\$	59,200

The components of lease expenses consist of following (in thousands):

Lease Cost	Year Ended December 31, 2019	
Operating lease cost ¹	\$	22,778
Variable lease cost		1,899
Total lease cost	\$	24,677

¹ Includes short-term lease expense which is not material.

The following table provides a summary of our operating lease terms and discount rates:

Remaining Lease Term and Discount Rate	December 31, 2019
Weighted average remaining lease term (in years)	5.7
Weighted average discount rate	4.1%

Maturities of operating lease liabilities as of December 31, 2019 are as follows (in thousands):

Fiscal Year Ending December 31,	Operating Leases	
2020	\$	18,354
2021		18,057
2022		11,847
2023		8,177
2024		2,595
Thereafter		5,453
Total lease payments	\$	64,483
Less: Interest		(5,283)
Total lease liabilities	\$	59,200

As of December 31, 2019, we had additional operating leases that have not yet commenced of \$7.9 million. These operating leases will commence between 2020 through 2021 with lease terms of 2 years to 4 years.

Minimum future lease payments previously disclosed under ASC 840 in our Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2018 are as follows (in thousands):

Fiscal Year Ending December 31,	Operating Leases	
2019	\$	21,429
2020		20,483
2021		18,897
2022		15,096
2023		12,400
Thereafter		18,371
Total minimum lease payments	\$	106,676

Lessor

In April 2019, as part of the \$56.0 million purchase of a building located in Raleigh, North Carolina, we assumed an existing lease with a third-party for one floor of the building which is classified as an operating lease. The lease has annual escalating payments and expires in August 2029 in accordance with the terms and conditions of the existing agreement.

Lease payments due to Align as of December 31, 2019 are as follows (in thousands):

Fiscal Year Ending December 31,	Operating Lease	
2020	\$	858
2021		1,145
2022		1,199
2023		1,229
2024		1,259
Thereafter		6,182
Total minimum lease payments	\$	11,872

For the year ended December 31, 2019, operating lease income was not material.

Note 5. Equity Method Investments

On July 25, 2016, we acquired a 17% equity interest, on a fully diluted basis, in SDC for \$46.7 million. Concurrently with the investment, we also entered into a supply agreement to manufacture clear aligners for SDC, which expired on December 31, 2019. The sale of aligners to SDC and the income from the supply agreement are reported in our Clear Aligner business segment. On July 24, 2017, we purchased an additional 2% equity interest in SDC for \$12.8 million. The investment was accounted for as an equity method investment and recorded in our Consolidated Balance Sheet. We recorded our proportional share of SDC's losses within equity in losses of investee, net of tax, in our Consolidated Statement of Operations.

As a result of the arbitrator's decision regarding SDC announced on March 5, 2019, we were ordered to tender our SDC equity interest by April 3, 2019 for a purchase price equal to the "capital account" balance as of October 31, 2017 under the terms of the investment. In April 2019, based on the "capital account" value provided by SDC, we entered into an unsecured promissory note with SDC to receive \$54.2 million through February 1, 2021 in exchange for the tender of our membership interests. As a result, we derecognized the equity method investment balance of \$38.4 million in exchange for an unsecured promissory note of \$54.2 million and we recorded the difference of \$15.8 million as a gain in the second quarter of 2019 in other income in our Consolidated Statement of Operations. Although we tendered our membership interests pursuant to the arbitrator's decision, the parties did not agree on the amount of the "capital account" balance as of October 31, 2017 or the appropriate repurchase price for the membership units. On July 3, 2019, we filed a demand for arbitration regarding SDC's calculation of the "capital account" balance. The arbitration proceeding remains pending and currently is scheduled to be heard (Refer to Note 10 "Legal Proceedings" of the Notes to Consolidated Financial Statements for SDC legal proceedings discussion).

Note 6. Goodwill and Intangible Assets

Goodwill

The change in the carrying value of goodwill for the year ended December 31, 2019 and 2018, all attributable to our Clear Aligner reporting unit, is as follows (in thousands):

	Total
Balance as of December 31, 2017	\$ 64,614
Adjustments ¹	(585)
Balance as of December 31, 2018	64,029
Adjustments ¹	(105)
Balance as of December 31, 2019	\$ 63,924

¹ Adjustments were related to foreign currency translation within the measurement period.

Based on the qualitative assessments performed, there were no impairments to goodwill in 2019 or 2018.

Intangible Long-Lived Assets

We amortize our intangible assets over their estimated useful lives. We evaluate long-lived assets, which includes property, plant and equipment and intangible assets, for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. The carrying value is not recoverable if it exceeds the undiscounted cash flows resulting from the use of the asset and its eventual disposition. Our estimates of future cash flows attributable to our long-lived assets require significant judgment based on our historical and anticipated results and are subject to many factors. Factors we consider important which could trigger an impairment review include significant negative industry or economic trends, significant loss of customers and changes in the competitive environment of our intraoral scanning business.

There were no triggering events in 2019 or 2018 that would cause impairments of our intangible long-lived assets.

Acquired intangible long-lived assets are being amortized as follows (in thousands):

	Weighted Average Amortization Period (in years)	Gross Carrying Amount as of December 31, 2019	Accumulated Amortization	Accumulated Impairment Loss	Net Carrying Value as of December 31, 2019
Trademarks	15	\$ 7,100	\$ (2,045)	\$ (4,179)	\$ 876
Existing technology	13	12,600	(5,831)	(4,328)	2,441
Customer relationships	11	33,500	(18,405)	(10,751)	4,344
Reacquired rights	3	7,500	(7,059)	—	441
Patents	8	6,796	(3,165)	—	3,631
Other	2	618	(583)	—	35
Total intangible assets		\$ 68,114	\$ (37,088)	\$ (19,258)	\$ 11,768

	Weighted Average Amortization Period (in years)	Gross Carrying Amount as of December 31, 2018	Accumulated Amortization	Accumulated Impairment Loss	Net Carrying Value as of December 31, 2018
Trademarks	15	\$ 7,100	\$ (1,907)	\$ (4,179)	\$ 1,014
Existing technology	13	12,600	(5,268)	(4,328)	3,004
Customer relationships	11	33,500	(16,542)	(10,751)	6,207
Reacquired rights	3	7,500	(4,341)	—	3,159
Patents	8	6,796	(2,334)	—	4,462
Other	2	618	(544)	—	74
Total intangible assets		\$ 68,114	\$ (30,936)	\$ (19,258)	\$ 17,920

The total estimated annual future amortization expense for these acquired intangible assets as of December 31, 2019 is as follows (in thousands):

Fiscal Year	Amortization
2020	\$ 3,845
2021	3,372
2022	2,116
2023	1,495
2024	555
Thereafter	385
Total	\$ 11,768

Amortization expense was \$5.9 million, \$6.0 million and \$6.2 million for the year ended December 31, 2019, 2018 and 2017, respectively.

Note 7. Credit Facility

On February 27, 2018, we entered into a credit facility for a \$200.0 million revolving line of credit, with a \$50.0 million letter of credit sublimit, and a maturity date of February 27, 2021. The credit facility requires us to comply with specific financial conditions and performance requirements. The loans bear interest, at our option, at either a rate based on the reserve adjusted LIBOR for the applicable interest period or a base rate, in each case plus a margin. The base rate is the highest of the credit facility's publicly announced prime rate, the federal funds rate plus 0.50% and one month LIBOR plus 1.0%. The margin ranges from 1.25% to 1.75% for LIBOR loans and 0.25% to 0.75% for base rate loans. Interest on the loans is payable quarterly in arrears with respect to base rate loans and at the end of an interest period (and at three month intervals if the interest period exceeds three months) in the case of LIBOR loans. Principal, together with accrued and unpaid interest, is due on the maturity date. As of December 31, 2019, we had no outstanding borrowings under this credit facility and were in compliance with the conditions and performance requirements.

Note 8. Impairments and Other (Gains) Charges

On March 5, 2019, we announced the outcome of the arbitration regarding SDC (Refer to Note 9 "Legal Proceedings" of the Notes to Consolidated Financial Statements for SDC legal proceedings discussion) which required Align to close its Invisalign stores and tender Align's equity interest in SDC by April 3, 2019. Accordingly, Align evaluated the ongoing value of the Invisalign stores' operating lease right-of-use assets and related leasehold improvements and other fixed assets in accordance with ASC 360, *Property, Plant and Equipment*. Based on the evaluation, Align determined that the carrying value of these assets were not recoverable. Align evaluated the fair value of these assets in accordance with ASC 820, *Fair Value Measurement*, and we considered the market participant's ability to generate economic benefits by using these assets in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use. As a result, in the first quarter of 2019, we recorded impairment losses of \$14.2 million for operating lease right-of-use assets and \$14.3 million of leasehold improvements and other fixed assets. In addition, we also recorded \$1.3 million of employee severance costs and other charges. During the third quarter of 2019, we negotiated early termination of our Invisalign store leases and recorded lease termination gains of \$6.8 million.

Note 9. Legal Proceedings

Securities Class Action Lawsuit

On November 5, 2018, a class action lawsuit against Align and three of our executive officers was filed in the U.S. District Court for the Northern District of California on behalf of a purported class of purchasers of our common stock between July 25, 2018 and October 24, 2018. The complaint generally alleges claims under the federal securities laws and seeks monetary damages in an unspecified amount and costs and expenses incurred in the litigation. On December 12, 2018, a similar lawsuit was filed in the same court on behalf of a purported class of purchasers of our common stock between April 25, 2018 and October 24, 2018 (together with the first lawsuit, the "Securities Actions"). On May 10, 2019, the lead plaintiff filed a consolidated complaint against Align and four of our executive officers alleging similar claims as the initial complaints on behalf of a purported class of purchasers of our common stock between April 25, 2018 and October 24, 2018. On June 24, 2019, defendants filed a motion to dismiss the consolidated complaint. On October 29, 2019, that motion to dismiss was granted with leave to amend. On November 29, 2019, the lead plaintiff filed an amended consolidated complaint against Align and two of our executive officers alleging similar claims as the initial complaints on behalf of a purported class of purchasers of our common stock from May 23, 2018 and October 24, 2018. Defendants' motion to dismiss the amended consolidated complaint was filed on January 17, 2020. Align believes these claims are without merit and intends to vigorously defend itself. Align is currently unable to predict the outcome of these lawsuits and therefore cannot determine the likelihood of loss nor estimate a range of possible loss.

Shareholder Derivative Lawsuit

In January 2019, three derivative lawsuits were filed in the U.S. District Court for the Northern District of California, purportedly on behalf of Align, naming as defendants the members of our Board of Directors along with certain of our executive officers. The allegations in the complaints are similar to those presented in the Securities Actions, but the complaints assert various state law causes of action including for breaches of fiduciary duty, insider trading, and unjust enrichment, among others. The complaints seek unspecified monetary damages on behalf of Align, which is named solely as a nominal defendant against whom no recovery is sought, as well as disgorgement and the costs and expenses associated with the litigation, including attorneys' fees. On February 26, 2019, the three lawsuits were consolidated. On April 10, 2019, the court stayed the consolidated action pending final disposition of the Securities Actions.

On April 12, 2019, a derivative lawsuit was also filed in California Superior Court for Santa Clara County, purportedly on behalf of Align, naming as defendants the members of our Board of Directors along with certain of our executive officers. The allegations in this complaint are similar to those in the derivative suits described above. On May 16, 2019, the court stayed this action pending final disposition of the Securities Actions.

On February 22, 2019, a purported stockholder sent a letter to Align pursuant to 8 Del. C. § 220 demanding certain books and records for the stated purpose of investigating potential breaches of duty, corporate mismanagement, and alleged wrongdoing by fiduciaries of the Company. On April 16, 2019, Align responded and refused the demand on several legal grounds. On June 10, 2019, the purported stockholder petitioned the Superior Court of the State of California, County of Santa Clara, to issue a writ of mandate commanding Align to provide the books and records requested. On August 23, 2019, Align filed a demurrer seeking to dismiss the petition, and on October 28, 2019, the Court issued an order sustaining Align's demurrer and dismissing the petition without an opportunity to amend. On December 19, 2019, the same purported stockholder filed a complaint in the Superior Court of California, County of Santa Clara, seeking an order from the Court compelling Align to permit the inspection of the same books and records that were previously requested, as well as requesting attorneys' fees. Align expects to respond to this new complaint by March 12, 2020.

Align is currently unable to predict the outcome of this demand or of these lawsuits and therefore cannot determine the likelihood of loss nor estimate a range of possible loss.

3Shape Litigation

On November 14, 2017, Align filed six patent infringement lawsuits asserting 26 patents against 3Shape, a Danish corporation, and a related U.S. corporate entity, asserting that 3Shape's Trios intraoral scanning system and Dental System software infringe Align patents. Align filed two Section 337 complaints with the U.S. International Trade Commission ("ITC") alleging that 3Shape violates U.S. trade laws by selling for importation and importing its infringing Trios intraoral scanning system and Dental System software. Align's ITC complaints sought cease and desist orders and exclusion orders prohibiting the importation of 3Shape's Trios scanning system and Dental System software products into the U.S. Align also filed four separate complaints in the U.S. District Court for the District of Delaware alleging patent infringement by 3Shape's Trios intraoral scanning system and Dental System software. Two of those cases were stayed pending the ITC determinations, and the other two cases have been active in discovery and pretrial proceedings. Trials in the latter two cases have been rescheduled to begin on August 5, 2020 in one case.

and November 30, 2020 in the other. Certain of Align's asserted patents in the Delaware actions were found invalid by the District Court Judge. The ITC conducted hearings in the Section 337 investigations in September and November 2018. On March 1, 2019, the Administrative Law Judge issued an Initial Determination in one of the Section 337 investigations, finding no violation of Section 337 by 3Shape. On April 26, 2019, the Administrative Law Judge issued an Initial Determination in the second Section 337 investigation, finding no violation of Section 337 by 3Shape. On August 20, 2019, the Commission vacated one Initial Determination and terminated the investigation. In the corresponding Delaware case, the District Court lifted the stay and scheduled trial to begin on November 8, 2021. On November 22, 2019, the Commission affirmed a finding of no violation on modified grounds in the other investigation.

On May 9, 2018, 3Shape filed a complaint in the U.S. District Court for the District of Delaware alleging patent infringement by Align's iTero Element scanner of a single 3Shape patent. On June 14, 2018, 3Shape filed another complaint in the U.S. District Court for the District of Delaware alleging patent infringement by Align's iTero Element scanner of another 3Shape patent. On August 19, 2019, the Court consolidated the two actions, and 3Shape filed an amended complaint alleging infringement of an additional patent on August 30, 2019. Align has asserted counterclaims for patent infringement of three additional Align patents. The case is active and in the early discovery phase, with trial scheduled to begin on April 12, 2021.

On December 10, 2018, Align filed three additional patent infringement lawsuits asserting 10 additional patents against 3Shape. Align filed one Section 337 complaint with the ITC alleging that 3Shape violates U.S. trade laws through unfair competition by selling for importation and importing the infringing TRIOS intraoral scanning system, Trios Lab Scanners and TRIOS software, TRIOS Module software, Dental System software, and Ortho System Software. On December 11, 2018, Align filed two separate complaints in the U.S. District Court for the District of Delaware alleging patent infringement by 3Shape's Trios intraoral scanning system, Lab Scanners and Dental and Ortho System Software. The ITC instituted the investigation, and one of the District Court cases was stayed pending the ITC determination. The remaining District Court case is in the very early stages of discovery and pretrial proceedings, and trial has been scheduled for February 7, 2022. The ITC evidentiary hearing was held at the end of October 2019. The deadline for the Administrative Law Judge's initial determination is March 6, 2020.

On November 5, 2019, Align filed a complaint for patent infringement asserting an additional patent against 3Shape. On January 7, 2020, Align voluntarily dismissed the suit without prejudice, and Align has instead asserted the patent as a counterclaim in the patent infringement suit brought by 3Shape.

3Shape has sought to invalidate certain of Align's patents through petitions for inter partes review proceedings. Align disputes 3Shape's positions and intends to vigorously defend the validity of its patent rights.

Each of the District Court patent infringement complaints seek monetary damages and injunctive relief against further infringement.

On August 28, 2018, 3Shape filed a complaint against Align in the U.S. District Court for the District of Delaware alleging antitrust violations and seeking monetary damages and injunctive relief relating to Align's alleged market activities, including Align's assertion of its patent portfolio, in alleged clear aligner and intraoral scanning markets, and the Court scheduled trial to begin on May 10, 2021. Align filed a motion to dismiss 3Shape's complaint on October 17, 2018. Align also moved to stay the litigation pending the outcome of its motion to dismiss. The court granted Align's motion to stay. On August 15, 2019, the Magistrate Judge recommended that Align's motion to dismiss be granted, and, on September 26, 2019, the District Court Judge adopted the Magistrate Judge's Report and Recommendation, granted Align's motion to dismiss, and dismissed 3Shape's complaint with leave to amend within thirty days of the order. On October 28, 2019, 3Shape filed an amended complaint, and Align again moved to dismiss the complaint. A hearing on Align's motion to dismiss was held on February 13, 2020 before the magistrate judge. A written report and recommendation from the magistrate judge will be forthcoming.

Align is currently unable to predict the outcome of these lawsuits and therefore cannot determine the likelihood of loss, if any, nor estimate a range of possible loss.

Simon & Simon

On March 14, 2019, a dental practice named Simon and Simon, PC d/b/a City Smiles brought an antitrust action in the United States District Court for the District of Delaware on behalf of itself and a putative class of similarly situated practices seeking monetary damages and injunctive relief relating to Align's alleged market activities in alleged clear aligner and intraoral scanning markets. Align filed a motion to dismiss the complaint on April 5, 2019, and the court held a hearing on Align's motion. On October 15, 2019, the Magistrate Judge issued a Report and Recommendation on Align's motion to dismiss which recommends that Align's motion be granted and that the plaintiffs' complaint be dismissed without prejudice. On October 29, 2019, Simon and Simon filed objections to the Magistrate Judge's Report and Recommendation, and Align responded on November 12, 2019. Align believes

the plaintiffs' claims are without merit and intends to vigorously defend itself. Align is currently unable to predict the outcome of this lawsuits and therefore cannot determine the likelihood of loss, if any, nor estimate a range of possible loss.

SDC Dispute

In February 2018, Align received a communication on behalf of SDC Financial LLC, SmileDirectClub LLC, and the Members of SDC Financial LLC other than the Company (collectively, the "SDC Entities") alleging that the launch and operation of the Invisalign store pilot program constituted a breach of non-compete provisions applicable to the members of SDC Financial LLC, including Align. As a result of this alleged breach, SDC Financial LLC notified us that its members (other than Align) sought to exercise a right to repurchase all of Align's SDC Financial LLC membership interests for a purchase price equal to the current "capital account" balance of Align. The SDC Entities' communication also alleged that Align breached confidentiality provisions applicable to the SDC Financial LLC members and demanded that Align cease all activities related to the Invisalign store pilot project, close existing Invisalign stores and cease using SDC's confidential information. In April 2018, the SDC Entities instigated confidential arbitration proceedings and filed a complaint in the Chancery Court of Davidson County, State of Tennessee that sought, among other forms of relief, to preliminarily and permanently enjoin all activities related to the Invisalign store pilot project, require Align to close existing Invisalign stores, prohibit Align from opening any additional stores, and allow the SDC Entities to exercise a right to repurchase all of Align's SDC Financial LLC membership interests for a purchase price equal to Align's current "capital account" balance.

On June 29, 2018, the Chancery Court of Davidson County, State of Tennessee denied the SDC Entities' request for a temporary injunction to prevent Align from opening additional Invisalign stores. During December 2018, the parties participated in binding arbitration proceedings and presented closing arguments on January 23, 2019. The arbitrator issued his decision on March 4, 2019. The arbitrator found that Align breached the non-compete provision applicable to the members of SDC Financial LLC and that Align misused the SDC Entities' confidential information and violated fiduciary duties to SDC Financial LLC. The arbitrator ordered Align to close its Invisalign stores by April 3, 2019, and enjoined Align from opening new Invisalign stores or providing certain services in physical retail establishments in connection with the marketing and sale of clear aligners, and enjoined Align from using the SDC Entities' confidential information. The arbitrator extended the expiration date of specified aspects of the non-compete provision to August 18, 2022. The arbitrator also ordered Align to tender its SDC Financial LLC membership interests to the SDC Entities for a purchase price equal to the "capital account" balance as of October 31, 2017, to be determined in accordance with the applicable provisions of the SDC Operating Agreements. No financial damages were awarded to the SDC Entities. The SDC Entities filed a motion to confirm the Award, which Align did not oppose, in the Circuit Court for Cook County, Illinois. The motion to confirm the Award was granted on April 29, 2019.

As required by the Award, on April 3, 2019, Align had closed its Invisalign stores, returned SDC's alleged confidential information, and tendered its membership interests for a purchase price that SDC claims to be Align's "capital account" balance as of October 31, 2017. Align disputes that the SDC Entities properly determined the value of Align's "capital account" balance as of October 31, 2017 as required by the SDC Operating Agreements and the Award. Consequently, on July 3, 2019, Align filed a confidential demand for arbitration challenging the propriety of the SDC Entities' determination of Align's "capital account" balance as of October 31, 2017. That arbitration proceeding remains pending and currently is scheduled to be heard June 23-26, 2020. Although Align expects the proper amount of its Capital Account balance as of October 31, 2017 to be determined in the course of the pending arbitration, that amount is not capped at \$97.0 million as SDC has claimed in its public filings. Relatedly, the SDC Entities filed a contempt petition with the Illinois court which confirmed the Award, asserting that Align had no right to contest the "capital account" determination as made by the SDC Entities. On September 4, 2019, the Illinois court denied in its entirety the contempt petition filed by the SDC Entities. The SDC Entities have appealed the denial of the contempt petition, and that appeal remains pending.

On August 19, 2019, the SDC Entities filed a separate confidential arbitration proceeding alleging that Align has violated the non-compete provisions applicable to the members of the SDC Entities by virtue of Align's alleged dealings with a third-party claimed to be a competitor of the SDC Entities. Align has denied the claim and intends to vigorously defend itself against the newly asserted allegations. The SDC Entities have yet to identify the range of damages they may seek to recover in the course of this arbitration and no hearing date has yet been set.

Align is currently unable to predict the outcome of these disputes and therefore cannot determine the likelihood of loss nor estimate a range of possible loss.

Straumann Group Litigation Settlement

In March 2019, Align entered into an agreement with Straumann Group to settle all outstanding patent disputes in the U.S., the U.K., and Brazil, including those involving ClearCorrect, a subsidiary of Straumann Group. Under the terms of the settlement, Straumann Group paid Align \$35.0 million on March 29, 2019. In addition, Align also signed a non-binding letter of

intent with Straumann Group for a 5-year global development and distribution agreement whereby Straumann would distribute 5,000 iTero Element scanners that would be fully integrated into the Straumann/Dental Wings CARES®/DWOS® workflow. The agreement provided that if for any reason the companies chose not to enter into the development and distribution agreement by July 2, 2019 or by a mutually agreed extended date, Straumann Group would pay Align an additional \$16.0 million in lieu of the development and distribution agreement. In June 2019, the parties terminated the discussions regarding a possible development and distribution agreement and as a result, Straumann paid us the additional \$16.0 million in July 2019. In 2019, we recognized a litigation settlement gain of \$51.0 million.

In addition to the above, in the course of Align's operations, Align is involved in a variety of claims, suits, investigations, and proceedings, including actions with respect to intellectual property claims, patent infringement claims, government investigations, labor and employment claims, breach of contract claims, tax, and other matters. Regardless of the outcome, these proceedings can have an adverse impact on us because of defense costs, diversion of management resources, and other factors. Although the results of complex legal proceedings are difficult to predict and Align's view of these matters may change in the future as litigation and events related thereto unfold; Align currently does not believe that these matters, individually or in the aggregate, will materially affect Align's financial position, results of operations or cash flows.

Note 10. Commitments and Contingencies

On November 27, 2017, we entered into a Purchase Agreement with one of our existing single source suppliers. Under the terms of the original agreement, we are required to purchase a minimum of approximately \$305.2 million of aligner materials over the next four years. On May 29, 2018, we entered into an amendment to the Purchase Agreement with the existing single source supplier to increase the original term of the agreement to five years and total minimum purchase amount to approximately \$425.9 million.

On January 15, 2019, we entered into a Purchase Agreement to purchase five floors of a building under construction in Petach Tivka, Israel for a purchase price of approximately \$27.0 million with an option to purchase additional three floors with progress payments due through 2020. During the fourth quarter of 2019, we exercised the option to purchase three additional floors and purchased one additional floor in the building for a purchase price of approximately \$24.4 million. As of December 31, 2019, we have a remaining commitment of \$31.2 million which is expected to be paid in 2020.

On September 26, 2019, we entered into a Purchase and Sale Agreement to purchase a building located in San Jose, California for \$21.3 million. The remaining and substantial portion of the purchase price will be paid on or before the closing date, which is expected to occur in the first quarter of 2020.

On October 3, 2019, we entered into a Promotional Rights Agreement (the "Agreement") for \$36.0 million with a third-party which includes certain advertising and media coverage. The expense related to the Agreement will be incurred over the period of April 1, 2020 through March 31, 2023.

Off-Balance Sheet Arrangements

As of December 31, 2019, we had no material off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources other than certain items disclosed in the Commitments and Contingencies section above.

Indemnification Provisions

In the normal course of business to facilitate transactions in our services and products, we indemnify certain parties: customers, vendors, lessors, and other parties with respect to certain matters, including, but not limited to, services to be provided by us and intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with our directors and our executive officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. Several of these agreements limit the time within which an indemnification claim can be made and the amount of the claim.

It is not possible to make a reasonable estimate of the maximum potential amount under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Additionally, we have a limited history of prior indemnification claims and the payments we have made under such agreements have not had a material adverse effect on our results of operations, cash flows or financial position. However, to the extent that valid indemnification claims arise in the future, future payments by us could be significant and could have a material adverse effect on our results of operations or cash flows in a particular period. As of December 31, 2019, we did not have any material indemnification claims that were probable or reasonably possible.

Note 11. Stockholders' Equity**Common Stock**

The holders of common stock are entitled to receive dividends whenever funds are legally available and when and if declared by the Board of Directors. We have never declared or paid dividends on our common stock.

Stock-Based Compensation Plans

Our 2005 Incentive Plan, as amended, provides for the granting of incentive stock options, non-statutory stock options, restricted stock units ("RSUs"), market-performance based restricted stock units ("MSUs"), stock appreciation rights, performance units and performance shares to employees, non-employee directors and consultants. Shares granted on or after May 16, 2013 as an award of restricted stock, restricted stock unit, market-performance based restricted stock units, performance share or performance unit ("full value awards") are counted against the authorized share reserve as one and nine-tenths (1 9/10) shares for every one (1) share subject to the award, and any shares canceled that were counted as one and nine-tenths against the plan reserve will be returned at the same ratio.

As of December 31, 2019, the 2005 Incentive Plan (as amended) has a total reserve of 27,783,379 shares for issuance of which 5,450,162 shares are available for issuance. We issue new shares from our pool of authorized but unissued shares to satisfy the exercise and vesting obligations of our stock-based compensation plans.

Stock-Based Compensation

Stock-based compensation is based on the estimated fair value of awards, net of estimated forfeitures, and recognized over the requisite service period. Estimated forfeitures are based on historical experience at the time of grant and may be revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The stock-based compensation related to all of our stock-based awards and employee stock purchase plan for the year ended December 31, 2019, 2018 and 2017 is as follows (in thousands):

	For the Year Ended December 31,		
	2019	2018	2017
Cost of net revenues	\$ 5,154	\$ 3,695	\$ 3,330
Selling, general and administrative	69,817	56,422	46,550
Research and development	13,213	10,646	8,974
Total stock-based compensation	\$ 88,184	\$ 70,763	\$ 58,854

Stock Options

We have not granted options since 2011 and all outstanding options were fully vested and associated stock-based compensation expense was recognized as of December 31, 2015. During the year ended December 31, 2019, 8,187 stock options were exercised at a weighted average exercise price of \$8.07 per share. As of December 31, 2019, there were no options outstanding and exercisable.

The aggregate intrinsic value represents the total pre-tax intrinsic value (the difference between our closing stock price on the last trading day in 2019 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on the last trading day of 2019. This amount will fluctuate based on the fair market value of our stock. The total intrinsic value of stock options exercised for the year ended December 31, 2019, 2018 and 2017 was \$2.0 million, \$17.6 million and \$18.1 million respectively.

Restricted Stock Units

The fair value of RSUs is based on our closing stock price on the date of grant. A summary for the year ended December 31, 2019, is as follows:

	Number of Shares Underlying RSUs (in thousands)	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Unvested as of December 31, 2018	931	\$ 129.42		
Granted	292	255.42		
Vested and released	(443)	105.83		
Forfeited	(84)	184.04		
Unvested as of December 31, 2019	696	\$ 190.60	1.1	\$ 194,114

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value (calculated by multiplying our closing stock price on the last trading day of 2019 by the number of unvested RSUs) that would have been received by the unit holders had all RSUs been vested and released as of the last trading day of 2019. This amount will fluctuate based on the fair market value of our stock. During 2019, of the 442,524 shares vested and released, 141,543 shares vested were withheld for employee statutory tax obligations, resulting in a net issuance of 300,981 shares.

The total intrinsic value of RSUs vested and released during 2019, 2018 and 2017 was \$112.4 million, \$146.7 million and \$99.5 million, respectively. The total fair value of RSUs vested during the year ended December 31, 2019, 2018 and 2017 was \$46.8 million, \$42.2 million and \$46.2 million, respectively. The weighted average grant date fair value of RSUs granted during 2019, 2018 and 2017 was \$255.42, \$262.58 and \$118.77 respectively. As of December 31, 2019, there was \$88.7 million of total unamortized compensation costs, net of estimated forfeitures, related to RSUs and these costs are expected to be recognized over a weighted average period of 2.0 years.

Market-Performance Based Restricted Stock Units ("MSUs")

We grant MSUs to our executive officers. Each MSU represents the right to one share of Align's common stock. The actual number of MSUs which will be eligible to vest will be based on the performance of Align's stock price relative to the performance of a stock market index over the vesting period, and certain MSU grants are also based on Align's stock price at the end of the performance period. Generally, the vesting period of MSUs is three years. For MSUs granted during the year ended December 31, 2019, the maximum number of MSUs which will be eligible to vest are 250% of the MSUs initially granted.

The following table summarizes the MSU performance for the year ended December 31, 2019:

	Number of Shares Underlying MSUs (in thousands)	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Unvested as of December 31, 2018	324	\$ 215.07		
Granted	138	240.73		
Vested and released	(191)	77.17		
Forfeited	(27)	271.96		
Unvested as of December 31, 2019	244	\$ 331.35	1.1	\$ 68,055

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value (calculated by multiplying our closing stock price on the last trading day of 2019 by the number of unvested MSUs) that would have been received by the unit holders had all MSUs been vested and released as of the last trading day of 2019. This amount will fluctuate based on the fair market value of our stock. During 2019, of the 191,176 shares vested and released, 88,292 shares were withheld for tax payments, resulting in a net issuance of 102,884 shares.

The total intrinsic value of MSUs vested and released during 2019, 2018 and 2017 was \$47.7 million, \$92.7 million and \$28.8 million, respectively. The total fair value of MSUs vested during the year ended December 31, 2019, 2018 and 2017 was \$14.8 million, \$19.5 million and \$15.0 million, respectively. As of December 31, 2019, we expect to recognize \$36.2 million of total unamortized compensation cost, net of estimated forfeitures, related to MSUs over a weighted average period of 1.1 years.

The fair value of MSUs is estimated at the grant date using a Monte Carlo simulation that includes factors for market conditions. The following weighted-average assumptions used in the Monte Carlo simulation were as follows:

	Year Ended December 31,		
	2019	2018	2017
Expected term (in years)	3.0	3.0	3.0
Expected volatility	37.3%	31.9%	28.9%
Risk-free interest rate	2.5%	2.5%	1.5%
Expected dividends	—	—	—
Weighted average fair value per share at grant date	\$ 392.03	\$ 470.75	\$ 120.39

Total payments to tax authorities for payroll taxes related to RSUs, including MSUs, that vested during the period were \$57.7 million, \$86.1 million and \$46.2 million during the year ended December 31, 2019, 2018 and 2017, respectively, and are reflected as a financing activity in the Consolidated Statement of Cash Flows.

Employee Stock Purchase Plan ("ESPP")

In May 2010, our stockholders approved the 2010 Employee Stock Purchase Plan (the "2010 Purchase Plan"), which consists of consecutive overlapping twenty-four month offering periods with four six-month purchase periods in each offering period. Employees purchase shares at 85% of the lower of the fair market value of the common stock at either the beginning of the offering period or the end of the purchase period. The 2010 Purchase Plan will continue until terminated by either the Board of Directors or its administrator. The maximum number of shares available for purchase under the 2010 Purchase Plan is 2.4 million shares. In June 2019, the 2010 Purchase Plan was amended to include a non-Code Section 423 component to grant purchase rights to employees outside the U.S. and Canada with six-month offering periods and purchase periods.

The following table summarizes the ESPP shares issued:

	Year Ended December 31,		
	2019	2018	2017
Number of shares issued (in thousands)	130	164	202
Weighted average price	\$ 136.73	\$ 96.95	\$ 59.93

As of December 31, 2019, 416,293 shares remain available for future issuance.

The fair value of the option component of the 2010 Purchase Plan shares was estimated at the grant date using the Black-Scholes option pricing model with the following weighted average assumptions:

	Year Ended December 31,		
	2019	2018	2017
Expected term (in years)	1.4	1.3	1.2
Expected volatility	50.0%	35.2%	26.8%
Risk-free interest rate	2.2%	2.2%	1.0%
Expected dividends	—	—	—
Weighted average fair value at grant date	\$ 86.02	\$ 94.71	\$ 31.36

We recognized stock-based compensation related to our employee stock purchase plan of \$12.1 million, \$5.6 million and \$5.4 million for the year ended December 31, 2019, 2018 and 2017, respectively. As of December 31, 2019, there was \$9.9 million of total unamortized compensation costs related to future employee stock purchases which we expect to be recognized over a weighted average period of 0.9 year.

Note 12. Common Stock Repurchase Programs

April 2014 Repurchase Program

In April 2014, we announced that our Board of Directors had authorized a plan to repurchase up to \$300.0 million of our common stock ("April 2014 Repurchase Program").

Prior to 2017, we entered into accelerated share purchase agreements to repurchase \$190.0 million of our common stock and received a total of approximately 3.2 million shares. In addition, we repurchased on the open market approximately 1.6 million shares of our common stock for an aggregate purchase price of approximately \$106.2 million.

In 2017, we repurchased on the open market approximately 0.04 million shares of our common stock at an average price of \$96.37 per share, including commissions, for an aggregate purchase price of approximately \$3.8 million, completing the April 2014 Repurchase Program.

April 2016 Repurchase Program

In April 2016, we announced that our Board of Directors had authorized a plan to repurchase up to \$300.0 million of our common stock ("April 2016 Repurchase Program").

In 2017, we entered into an accelerated share repurchase agreement ("2017 ASR") to repurchase \$50.0 million of our common stock which was completed in August 2017. We received a total of approximately 0.4 million shares for an average share price of \$146.48. During 2017, we repurchased on the open market approximately 0.2 million shares of our common stock at an average price of \$243.40 per share, including commissions, for an aggregate purchase price of approximately \$50.0 million.

In 2018, we repurchased on the open market approximately 0.7 million shares of our common stock at an average price of \$293.21 per share, including commissions, for an aggregate purchase price of approximately \$200.0 million, completing the April 2016 Repurchase Program.

May 2018 Repurchase Program

In May 2018, we announced that our Board of Directors had authorized a plan to repurchase up to \$600.0 million of our common stock ("May 2018 Repurchase Program").

In 2018, we repurchased on the open market approximately 0.1 million shares of our common stock at an average price of \$356.54 per share, including commissions, for an aggregate purchase price of approximately \$50.0 million. In 2018, we entered into an accelerated stock repurchase agreement ("ASR") to repurchase \$50.0 million of our common stock which was completed in December 2018. We received a total of approximately 0.2 million shares for an average share price of \$213.18.

In 2019, we repurchased on the open market approximately 0.8 million shares of our common stock at an average price of \$264.93 per share, including commissions, for an aggregate purchase price of \$200.0 million. We also entered into an ASR to repurchase \$200.0 million of our common stock which was completed in September 2019. We received a total of 1.1 million shares for an average share price of \$176.61. As of December 31, 2019, we have \$100.0 million available for repurchase under the May 2018 Repurchase Program.

Note 13. Employee Benefit Plans

We have defined contribution retirement plan under Section 401(k) of the Internal Revenue Code for our U.S. employees which covers substantially all U.S. employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. We match 50% of our employee's salary deferral contributions up to a 6% of the employee's eligible compensation. We contributed approximately \$6.2 million, \$5.2 million and \$4.3 million to the 401(k) plan during the year ended December 31, 2019, 2018 and 2017, respectively.

Note 14. Income Taxes

Net income before provision for income taxes and equity in losses of investee consists of the following (in thousands):

	Year ended December 31,		
	2019	2018	2017
Domestic	\$ 184,956	\$ 171,658	\$ 123,696
Foreign	377,695	294,993	241,103
Net income before provision for income taxes and equity in losses of investee	\$ 562,651	\$ 466,651	\$ 364,799

The provision for (benefit from) income taxes consists of the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Federal			
Current	\$ 76,528	\$ 35,788	\$ 91,214
Deferred	1,235	(5,989)	15,724
	77,763	29,799	106,938
State			
Current	9,169	9,568	2,580
Deferred	209	(3,274)	2,677
	9,378	6,294	5,257
Foreign			
Current	28,364	22,753	15,285
Deferred	(3,158)	(1,123)	2,682
	25,206	21,630	17,967
Provision for income taxes	\$ 112,347	\$ 57,723	\$ 130,162

The differences between income taxes using the federal statutory income tax rate for 2019, 2018 and 2017 and our effective tax rates are as follows:

	Year Ended December 31,		
	2019	2018	2017
U.S. federal statutory income tax rate	21.0 %	21.0 %	35.0 %
State income taxes, net of federal tax benefit	1.7	1.3	1.4
U.S. tax on foreign earnings	1.9	4.1	1.5
Impact of U.S. Tax Cuts and Jobs Act ("TCJA")	—	2.1	23.1
Impact of differences in foreign tax rates	(5.1)	(6.7)	(18.0)
Impact of expiration of statute of limitations	—	(6.2)	—
Stock-based compensation	(1.2)	(3.4)	(6.3)
Other items not individually material	1.7	0.2	(1.0)
Effective tax rate	20.0 %	12.4 %	35.7 %

The TCJA was enacted into law on December 22, 2017 and made significant changes to the Internal Revenue Code, including, but not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the TCJA. As of December 31, 2017, we recorded a provisional tax charge for the estimated impact of the TCJA of \$84.3 million, of which \$73.9 million was related to a provisional transition tax liability on the mandatory deemed repatriation of foreign earnings and \$10.4 million was related to the remeasurement of certain deferred tax assets and liabilities. We finalized our assessment of the impact of the TCJA on our 2017 financial statements and recorded additional charges of \$3.0 million in 2018, all of which relate to the transition tax on the mandatory deemed repatriation of foreign earnings.

As of December 31, 2019, undistributed earnings of our foreign subsidiaries totaled \$452.6 million and substantially all of the earnings previously determined to be not indefinitely reinvested have been repatriated. Under the GILTI provisions of the TCJA, U.S. income taxes have already been provided on the \$452.6 million undistributed earnings that is indefinitely reinvested in our international operations, therefore, the tax impact upon distribution is limited to mainly state income and withholding taxes and is not significant.

As of December 31, 2019 and 2018, the significant components of our deferred tax assets and liabilities are (in thousands):

	Year Ended December 31,	
	2019	2018
Deferred tax assets:		
Net operating loss and capital loss carryforwards	\$ 18,182	\$ 25,410
Reserves and accruals	39,264	24,769
Stock-based compensation	8,416	8,571
Deferred revenue	20,909	14,285
Net translation losses	1,589	1,158
Credit carryforwards	1,801	115
	<u>90,161</u>	<u>74,308</u>
Deferred tax liabilities:		
Depreciation and amortization	23,817	8,320
Prepaid expenses	1,341	902
Unremitted foreign earnings	—	612
	<u>25,158</u>	<u>9,834</u>
Net deferred tax assets before valuation allowance	65,003	64,474
Valuation allowance	(1,086)	(251)
Net deferred tax assets	<u>\$ 63,917</u>	<u>\$ 64,223</u>

The available positive evidence at December 31, 2019 included historical operating profits and a projection of future income sufficient to realize most of our remaining deferred tax assets. As of December 31, 2019, it was considered more likely than not that our deferred tax assets would be realized with the exception of certain capital loss carryovers as we are unable to forecast sufficient future profits to realize the deferred tax assets.

The total valuation allowance as of December 31, 2019 as well as the increase for the year 2019 was not material to our financial statements.

As of December 31, 2019, we have foreign net operating loss carryforwards of approximately \$82.1 million, the majority of which can be carried forward indefinitely, and a minor portion of which, if not utilized, will expire beginning after 2024.

In the event of a change in ownership, as defined under federal and state tax laws, our tax credit carryforwards may be subject to annual limitations. The annual limitations may result in the expiration of the tax credit carryforwards before utilization.

The changes in the balance of gross unrecognized tax benefits, which exclude interest and penalties, for the year ended December 31, 2019, 2018 and 2017, are as follows (in thousands):

Unrecognized tax benefits as of December 31, 2016	\$	46,384
Tax positions related to current year:		
Additions for uncertain tax positions		1,819
Tax positions related to prior year:		
Additions for uncertain tax positions		1,809
Decreases for uncertain tax positions		(826)
Settlements with tax authorities		(1,527)
Reductions due to lapse of applicable statute of limitations		(3)
Unrecognized tax benefits as of December 31, 2017		47,656
Tax positions related to current year:		
Additions for uncertain tax positions		14,519
Tax positions related to prior year:		
Additions for uncertain tax positions		80
Reductions due to lapse of applicable statute of limitations		(28,993)
Unrecognized tax benefits as of December 31, 2018		33,262
Tax positions related to current year:		
Additions for uncertain tax positions		19,012
Tax positions related to prior year:		
Additions for uncertain tax positions		143
Decreases for uncertain tax positions		(3,783)
Reductions due to lapse of applicable statute of limitations		(1,984)
Unrecognized tax benefits as of December 31, 2019	\$	46,650

The total amount of gross unrecognized tax benefits as of December 31, 2019 was \$46.7 million, of which \$43.9 million would impact our effective tax rate if recognized.

We file U.S. federal, U.S. state, and non-U.S. income tax returns. Our major tax jurisdictions include U.S. federal, the State of California and the Netherlands. For U.S. federal and state tax returns, we are no longer subject to tax examinations for years before 2015. We are currently under examination by the Internal Revenue Service for tax years 2015 and 2016. With few exceptions, we are no longer subject to examination by foreign tax authorities for years before 2012.

We have elected to recognize interest and penalties related to unrecognized tax benefits as a component of income taxes. Interest and penalties included in tax expense for the year ended December 31, 2019 and 2018 as well as accrued as of December 31, 2019 and 2018 was not material to our financials. The timing and resolution of income tax examinations is uncertain, and the amounts ultimately paid, if any, upon resolution of issues raised by the taxing authorities may differ materially from the amounts accrued for each year. Although it is possible that our balance of gross unrecognized tax benefits could materially change in the next 12 months, given the uncertainty in the development of ongoing income tax examinations, we are unable to estimate the full range of possible adjustments to this balance.

Subsequent to the year ended December 31, 2019, we completed an intra-entity transfer of certain intellectual property rights and fixed assets to our new Swiss subsidiary, where our EMEA regional headquarters is now located beginning January 1, 2020. The transfer of intellectual property rights did not result in a taxable gain; however, it did result in a step-up of the Swiss tax deductible basis in the transferred assets, and accordingly, created a temporary difference between the book basis and the tax basis of such intellectual property rights. Consequently, this transaction will result in the recognition of a deferred tax asset and related one-time tax benefit of up to \$1.6 billion, in our consolidated financial statements during the three months ending March 31, 2020. We continue to assess the realizability of this deferred tax asset as we take into account new information, including the profitability of our Swiss headquarters and ongoing communication with the Swiss tax authorities. Effective January 1, 2020, Switzerland will become a major tax jurisdiction owing to the relocation of our EMEA regional headquarters from the Netherlands.

Note 15. Net Income per Share

Basic net income per share is computed using the weighted average number of shares of common stock outstanding during the period. Diluted net income per share is computed using the weighted average number of shares of common stock, adjusted for any dilutive effect of potential common stock. Potential common stock, computed using the treasury stock method, includes RSUs, MSUs and our ESPP.

The following table sets forth the computation of basic and diluted net income per share attributable to common stock (in thousands, except per share amounts):

	Year Ended December 31,		
	2019	2018	2017
Numerator:			
Net income	\$ 442,776	\$ 400,235	\$ 231,418
Denominator:			
Weighted average common shares outstanding, basic	79,424	80,064	80,085
Dilutive effect of potential common stock	676	1,293	1,747
Total shares, diluted	80,100	81,357	81,832
Net income per share, basic	\$ 5.57	\$ 5.00	\$ 2.89
Net income per share, diluted	\$ 5.53	\$ 4.92	\$ 2.83

For the year ended December 31, 2019, 2018 and 2017, potentially anti-dilutive shares excluded from diluted net income per share related to RSUs, MSUs and ESPP were not material.

Note 16. Supplemental Cash Flow Information

The supplemental cash flow information consists of the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Taxes paid	\$ 71,746	\$ 114,601	\$ 51,231
Non-cash investing and financing activities:			
Fixed assets acquired with accounts payable or accrued liabilities	\$ 16,488	\$ 15,069	\$ 15,105
Conversion of convertible notes receivable into equity securities	\$ —	\$ 4,862	\$ —
Fair value of option to purchase property	\$ —	\$ —	\$ 3,936
Issuance of promissory note in exchange for sale of equity method investment	\$ 54,154	\$ —	\$ —
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	\$ 26,337	\$ —	\$ —
Investing cash flows from finance leases ⁽¹⁾	\$ 10,896	\$ —	\$ —
Financing cash flows from finance leases	\$ 45,773	\$ —	\$ —
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	\$ 32,723	\$ —	\$ —
Finance leases	\$ 51,064	\$ —	\$ —

¹ A portion of finance lease purchase payment relates to leasing a part of the building to a third party as a lessor. This amount is included in Other investing activities in our Consolidated Statements of Cash Flows.

Note 17. Segments and Geographical Information**Segment Information**

Operating segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the Chief Operating Decision Maker ("CODM"), or decision-making group, in deciding how to allocate

resources and in assessing performance. Our CODM is our Chief Executive Officer. We report segment information based on the management approach. The management approach designates the internal reporting used by CODM for decision making and performance assessment as the basis for determining our reportable segments. The performance measures of our reportable segments include net revenues, gross profit and income from operations. Income from operations for each segment includes all geographic revenues, related cost of net revenues and operating expenses directly attributable to the segment. Certain operating expenses are attributable to operating segments and each allocation is measured differently based on the specific facts and circumstances of the costs being allocated. Costs not specifically allocated to segment income from operations include various corporate expenses such as stock-based compensation and costs related to IT, facilities, human resources, accounting and finance, legal and regulatory, and other separately managed general and administrative costs outside the operating segments.

We group our operations into two reportable segments: Clear Aligner segment and Scanner segment.

- Our Clear Aligner segment consists of Comprehensive Products, Non-Comprehensive Products and Non-Case revenues as defined below:
 - Comprehensive Products include Invisalign Comprehensive and Invisalign First.
 - Non-Comprehensive Products include, but are not limited to, Invisalign Moderate, Lite and Express packages and Invisalign Go, in addition to revenues from the sale of aligners to SmileDirectClub (“SDC”) under our supply agreement that expired on December 31, 2019.
 - Non-Case includes, but not limited to, Vivera retainers along with our training and ancillary products for treating malocclusion.
- Our Scanner segment consists of intraoral scanning systems, which includes a single hardware platform and restorative or orthodontic software options, additional services and ancillary products. This segment includes our iTero scanner and OrthoCAD services.

These reportable operating segments are based on how our CODM views and evaluates our operations as well as allocation of resources. The following information relates to these segments (in thousands):

	For the Year Ended December 31,		
	2019	2018	2017
Net revenues			
Clear Aligner	\$ 2,025,750	\$ 1,691,467	\$ 1,309,262
Scanner	381,046	275,025	164,151
Total net revenues	\$ 2,406,796	\$ 1,966,492	\$ 1,473,413
Gross profit			
Clear Aligner	\$ 1,499,713	\$ 1,280,495	\$ 1,019,563
Scanner	244,184	167,372	97,384
Total gross profit	\$ 1,743,897	\$ 1,447,867	\$ 1,116,947
Income from operations			
Clear Aligner	\$ 835,957	\$ 712,439	\$ 564,648
Scanner	137,720	98,998	49,613
Unallocated corporate expenses	(431,184)	(344,873)	(260,650)
Total income from operations	\$ 542,493	\$ 466,564	\$ 353,611
Depreciation and amortization			
Clear Aligner	\$ 38,979	\$ 29,001	\$ 21,581
Scanner	7,441	4,965	4,385
Unallocated corporate depreciation and amortization	32,570	20,761	11,773
Total depreciation and amortization	\$ 78,990	\$ 54,727	\$ 37,739
Impairments and other (gains) charges			
Clear Aligner	\$ (22,990)	\$ —	\$ —
Total impairments and other (gains) charges	\$ (22,990)	\$ —	\$ —

The following table reconciles total segment income from operations in the table above to net income before provision for income taxes and equity in losses of investee (in thousands):

	For the Year Ended December 31,		
	2019	2018	2017
Total segment income from operations	\$ 973,677	\$ 811,437	\$ 614,261
Unallocated corporate expenses	(431,184)	(344,873)	(260,650)
Total income from operations	542,493	466,564	353,611
Interest income	12,482	8,576	6,948
Other income (expense), net	7,676	(8,489)	4,240
Net income before provision for income taxes and equity in losses of investee	\$ 562,651	\$ 466,651	\$ 364,799

Geographical Information

Net revenues are presented below by geographic area (in thousands):

	For the Year Ended December 31,		
	2019	2018	2017
Net revenues ¹ :			
United States	\$ 1,161,959	\$ 1,023,559	\$ 836,200
The Netherlands	760,444	610,039	456,108
China	196,733	155,790	81,661
Other International	287,660	177,104	99,444
Total net revenues	\$ 2,406,796	\$ 1,966,492	\$ 1,473,413

¹ Net revenues are attributed to countries based on the location of where revenues are recognized by our legal entities.

Tangible long-lived assets, which includes Property, plant and equipment, net, and Operating lease right-of-use assets, net are presented below by geographic area (in thousands):

	As of December 31,	
	2019	2018
Long-lived assets ² :		
The Netherlands	\$ 226,286	\$ 206,679
United States	164,451	139,239
Costa Rica	82,083	80,218
China	73,174	36,249
Other International	141,980	58,944
Total long-lived assets	\$ 687,974	\$ 521,329

² Long-lived assets are attributed to countries based on the location of our entity that owns or leases the assets.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures.

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective as of December 31, 2019 to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure, and that such information is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms.

Management's annual report on internal control over financial reporting.

See "Report of Management on Internal Control over Financial Reporting" of this Annual Report on Form 10-K.

Changes in internal control over financial reporting.

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Certain information required by Part III is omitted from this Form 10-K because we intend to file a definitive Proxy Statement for our 2020 Annual Meeting of Stockholders (the "Proxy Statement") not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and certain information to be included therein is incorporated herein by reference.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 401 of Regulation S-K concerning our directors is incorporated by reference to the Proxy Statement under the section captioned "Election of Directors." The information required by Item 401 of Regulation S-K concerning our executive officers is set forth in *Item 1— "Business" of this Annual Report on Form 10-K*. The information required by Item 405 of Regulation S-K is incorporated by reference to the section entitled "Section 16(a) Beneficial Ownership Reporting Compliance" contained in the Proxy Statement. The information required by Item 407(c)(3), 407(d)(4) and 407(d)(5) of Regulation S-K is incorporated by reference to the Proxy Statement under the section entitled "Corporate Governance".

Code of Ethics

We have a code of ethics that applies to all of our employees, including our principal executive officer, principal financial officer and principal accounting officer. This code of ethics is posted on our Internet website. The Internet address for our website is www.aligentech.com, and the code of ethics may be found on the "Corporate Governance" section of our "Investor Relations" webpage.

We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of this code of ethics by posting such information on our website, at the address and location specified above, or as otherwise required by the NASDAQ Global Market.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 402 of Regulation S-K is incorporated by reference to the Proxy Statement under the section captioned "Executive Compensation." The information required by Items 407(e)(4) and (e)(5) is incorporated by reference to the Proxy Statement under the section captioned "Corporate Governance—Compensation Committee Interlocks and Insider Participation" and "Compensation Committee of the Board Report," respectively.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Item 403 of Regulation S-K is incorporated by reference to the Proxy Statement under the section captioned "Principal Stockholders".

Equity Compensation Plan Information

The following table provides information as of December 31, 2019 about our common stock that may be issued upon the exercise of options and awards granted to employees, consultants or members of our Board of Directors under all existing equity compensation plans, including the 2005 Incentive Plan and the Employee Stock Purchase Plan ("ESPP"), each as amended, and certain individual arrangements (Refer to Note 11 "Stockholders' Equity" of the Notes to Consolidated Financial Statements for a description of our equity compensation plans).

Plan Category	Number of securities to be issued upon exercise of outstanding options and restricted stock units (a)	Weighted average exercise price of outstanding options (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a))
Equity compensation plans approved by security holders	939,539 ¹	\$ —	5,450,153 ^{2,3}
Equity compensation plans not approved by security holders	—	—	—
Total	939,539	\$ —	5,450,153

¹ Includes 695,650 restricted stock units and 243,889 market-performance based restricted stock units at target, which have an exercise price of zero.

² Includes 441,293 shares available for issuance under our ESPP. We are unable to ascertain with specificity the number of securities to be issued upon exercise of outstanding rights or the weighted average exercise price of outstanding rights under the ESPP.

³ Includes 653,854 of potentially issuable MSUs if performance targets are achieved at maximum payout.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 404 and Item 407 of Regulation S-K is incorporated by reference to the Proxy Statement under the sections captioned "Certain Relationships and Related Party Transactions" and "Corporate Governance—Director Independence," respectively.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 9(e) of Schedule 14A of the Securities Act of 1934, as amended, is incorporated by reference to the Proxy Statement under the section captioned "Ratification of Appointment of Independent Registered Public Accountants."

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements

1. Consolidated financial statements

The following documents are filed as part of this Annual Report on Form 10-K:

Report of Independent Registered Public Accounting Firm	48
Consolidated Statements of Operations for the year ended December 31, 2019, 2018 and 2017	50
Consolidated Statements of Comprehensive Income for the year ended December 31, 2019, 2018 and 2017	51
Consolidated Balance Sheets as of December 31, 2019 and 2018	52
Consolidated Statements of Stockholders' Equity for the year ended December 31, 2019, 2018 and 2017	53
Consolidated Statements of Cash Flows for the year ended December 31, 2019, 2018 and 2017	54
Notes to Consolidated Financial Statements	55

2. The following financial statement schedule is filed as part of this Annual Report on Form 10-K:

Schedule II—Valuation and Qualifying Accounts and Reserves for the year ended December 31, 2019, 2018 and 2017

All other schedules have been omitted as they are not required, not applicable, or the required information is otherwise included.

SCHEDULE II: VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

	Balance at Beginning of Period	Additions (Reductions) to Costs and Expenses	Write Offs	Balance at End of Period
(in thousands)				
Allowance for doubtful accounts:				
Year Ended December 31, 2017 ¹	\$ 2,946	\$ 9,948	\$ (7,080)	\$ 5,814
Year Ended December 31, 2018	\$ 5,814	\$ 12,321	\$ (15,757)	\$ 2,378
Year Ended December 31, 2019	\$ 2,378	\$ 15,126	\$ (10,748)	\$ 6,756
Valuation allowance for deferred tax assets:				
Year Ended December 31, 2017 ¹	\$ 256	\$ 22	\$ —	\$ 278
Year Ended December 31, 2018	\$ 278	\$ (27)	\$ —	\$ 251
Year Ended December 31, 2019	\$ 251	\$ 835	\$ —	\$ 1,086

¹ Balances have been recast to reflect the adoption of new revenue accounting standard (Refer to Note 1 "Summary of Significant Accounting Policies" of the Notes to Consolidated Financial Statements for details).

(b) The following Exhibits are included in this Annual Report on Form 10-K:

Exhibit Number	Description	Form	Date	Exhibit Number Incorporated by Reference herein	Filed herewith
3.1	Amended and Restated Certificate of Incorporation of registrant	Form S-1, as amended (File No. 333-49932)	12/28/2000	3.1	
3.1A	Certificate of Amendment to the Amended and Restated Certificate of Incorporation	Form 8-K	5/20/2016	3.01	
3.2	Amended and Restated Bylaws of registrant	Form 8-K	2/29/2012	3.2	
4.1	Form of Specimen Common Stock Certificate	Form S-1, as amended (File No. 333-49932)	1/17/2001	4.1	
4.2	Description of the Capital Stock of registrant				*
10.1†	Registrant's 2010 Employee Stock Purchase Plan	Form 8-K	5/25/2010	10.02	
10.2†	Registrant's 2005 Incentive Plan (as amended May 2016)	Form 10-K	2/28/2017	10.1	
10.3†	Form of RSU agreement under Registrant's 2005 Incentive Plan (Officer Form for officers appointed after September 2016)				*
10.3A†	Form of RSU agreement under Registrant's 2005 Incentive Plan (Officer Form for officers appointed prior to September 2016)				*
10.4†	Form of RSU agreement (CEO)				*
10.5†	Form of RSU agreement under Registrant's 2005 Incentive Plan (Non-employee Director Form)				*
10.6†	Align 2019 Global RSU Agreement	Form 10-K	2/28/2019	10.6	
10.7†	Form of option award agreement under registrant's 2005 Incentive Plan	Form 10-Q	8/4/2005	10.4	
10.8†	Form of Market Stock Unit Agreement under Registrant's 2005 Incentive Plan (Officer Form for officers appointed after September 2016)				*
10.8A†	Form of Market Stock Unit Agreement under Registrant's 2005 Incentive Plan (Officer Form for officers appointed prior to September 2016)				*
10.9†	Form of Market Stock Unit Agreement for CEO (Focal grants)				*
10.10†	Form of Market Stock Unit Agreement for CEO Special MSU Award June 2018	Form 8-K	6/25/2018	10.1	
10.11†	Form of Employment Agreement entered into by and between registrant and each executive officer (other than CEO for executives appointed prior to September 2016)	Form 10-Q	5/8/2008	10.3	
10.12†	Form of Employment Agreement entered into by and between registrant and each executive officer (other than CEO for executives appointed after September 2016)	Form 10-K	2/28/2017	10.8	
10.13†	Amended and Restated Chief Executive Officer Employment Agreement between Align Technology, Inc. and Joseph Hoan	Form 10-Q	5/1/2015	10.3	
10.14†	Employment Agreement between registrant and John F. Morici (Chief Financial Officer)	Form 10-Q	11/8/2016	10.2	
10.15	Letter of Assignment - Long Term International Agreement between Align Technology, Inc. and Zelko Relic dated December 9, 2019				*
10.16†	Form of Indemnification Agreement by and between registrant and its Board of Directors and its executive officers	Form S-1 as amended (File No. 333-49932)	1/17/2001	10.15	
10.17†	Summary of 2019 Incentive Awards and Base Salary for NEOs	Form 8-K	1/31/2020		
10.18	Class C Non-Incentive Unit Purchase Agreement dated July 25, 2016	Form 8-K	7/28/2016	10.1	
10.19	Membership Interest Purchase Agreement dated July 24, 2017 between Align Technology, Inc. and SmileDirectClub, LLC	Form 8-K	7/27/2017	10.2	
10.20	Credit Agreement between Align Technology, Inc. and Wells Fargo Bank, National Association dated February 27, 2018	Form 8-K	2/27/2018	10.1	

Exhibit Number	Description	Form	Date	Exhibit Number Incorporated by Reference herein	Filed herewith
10.21	Purchase and Sale Agreement between Align Technology, Inc. and Slater Road 1, LLC dated January 29, 2019	Form 10-K	2/28/2019	10.4	
10.22	Purchase and Sale Agreement between Align Technology, Ltd., a subsidiary of Align Technology, Inc. and Ganei Ben Zvi Ltd and Ramat HaChayal Equities LLC dated January 15, 2019.	Form 8-K	1/23/2019	10.1	
21.1	Subsidiaries of Align Technology, Inc.				*
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm				*
31.1	Certifications of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2003				*
31.2	Certifications of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2003				*
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2003				*
101.INS	XBRL Instance Document				*
101.SCH	XBRL Taxonomy Extension Schema Document				*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				*
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				*
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				*

† Management contract or compensatory plan or arrangement filed as an Exhibit to this form pursuant to Items 14(a) and 14(c) of Form 10-K.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 28, 2020.

ALIGN TECHNOLOGY, INC.

By: _____ /s/ JOSEPH M. HOGAN

Joseph M. Hogan
President and Chief Executive Officer

Each person whose signature appears below constitutes and appoints Joseph M. Hogan or John F. Morici, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ JOSEPH M. HOGAN _____ Joseph M. Hogan	President and Chief Executive Officer (Principal Executive Officer)	February 28, 2020
/s/ JOHN F. MORICI _____ John F. Morici	Chief Financial Officer and Senior Vice President, Global Finance (Principal Financial Officer and Principal Accounting Officer)	February 28, 2020
/s/ KEVIN J. DALLAS _____ Kevin J. Dallas	Director	February 28, 2020
/s/ JOSEPH LACOB _____ Joseph Lacob	Director	February 28, 2020
/s/ C. RAYMOND LARKIN, JR. _____ C. Raymond Larkin, Jr.	Director	February 28, 2020
/s/ GEORGE J. MORROW _____ George J. Morrow	Director	February 28, 2020
/s/ ANNE M. MYONG _____ Anne Myong	Director	February 28, 2020
/s/ THOMAS M. PRESCOTT _____ Thomas M. Prescott	Director	February 28, 2020
/s/ ANDREA L. SAIA _____ Andrea L. Saia	Director	February 28, 2020
/s/ GREG J. SANTORA _____ Greg J. Santora	Director	February 28, 2020
/s/ SUSAN E. SIEGEL _____ Susan E. Siegel	Director	February 28, 2020
/s/ WARREN S. THALER _____ Warren S. Thaler	Director	February 28, 2020

DESCRIPTION OF THE CAPITAL STOCK OF ALIGN TECHNOLOGY, INC.

The following description of the material provisions of the capital stock and other material terms of the amended and restated certificate of incorporation ("Certificate") and bylaws of Align Technology, Inc. (the "Company") and certain provisions of Delaware law, are summaries only. These summaries do not purport to be complete and are qualified in their entirety by reference to the Company's Certificate, bylaws, and by the provisions of applicable law.

Authorized Capital

The Company's authorized capital stock consists of 200,000,000 shares of common stock, \$.0001 par value per share ("Common Stock") and 5,000,000 shares of undesignated Preferred Stock, \$.0001 par value per share ("Preferred Stock").

Common Stock

Voting. Except as otherwise required by Delaware law, as specifically set forth in the provisions of the Company's Certificate, including any express terms of the Preferred Stock and any series thereof or the bylaws, at every annual or special meeting of stockholders, every holder of Common Stock is entitled to one vote per share. When a quorum is present, the affirmative vote of the holders of the shares representing a majority of the voting power at the meeting and entitled to vote on the subject matter shall be the act of the stockholders, unless the question is one upon which by express provisions of an applicable law or of the Company's Certificate or bylaws a different vote is required, in which case such express provision shall govern and control.

Dividends Rights. Subject to the rights of holders of any then outstanding shares of the Company's Preferred Stock (discussed below), holders of Common Stock are entitled to receive ratably any dividends that may be declared by the Company's Board of Directors (the "Board") out of funds legally available therefor.

Liquidation Rights. In the event of the Company's liquidation, dissolution or winding up, holders of Common Stock are entitled to share ratably in all assets available for distribution to stockholders after the payment of or provision for all of the Company's debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Other Rights. Holders of Common Stock do not have preemption, conversion or redemption rights. The rights, preferences and privileges of holders of Common Stock will be subject to those of the holders of any shares of the Company's preferred stock the Company may issue in the future.

Listing. The Common Stock is listed on NASDAQ under the ticker symbol "ALGN."

Transfer Agent and Registrar. The transfer agent and registrar for the Common Stock is Computershare, Inc.

Preferred Stock

There are currently no shares of Preferred Stock outstanding, and the Company has no present plans to issue any. However, under the terms of the Certificate, the Board has the authority, without further action by the Company's stockholders, to issue the following classes of Preferred Stock:

Undesignated Preferred Stock. The Board may issue not more than an aggregate of 5,000,000 shares of undesignated Preferred Stock in one or more series, without stockholder approval, and to establish, from time to time, the number of shares to be included in each series of Preferred Stock, to fix the designation, powers, preferences, and rights of the shares of each series of Preferred Stock, and to specify any qualifications, limitations or restrictions.

Subject to the rights of holders of any outstanding shares of Preferred Stock holding prior or superior rights and except as otherwise required by Delaware law, or as specifically set forth in the provisions of the Certificate or bylaws, the Board may grant holders of Preferred Stock or any series thereof:

Dividend Rights. Rights to dividends as declared by the Board out of funds legally available different from and/or in addition to those of the holders of Common Stock, including the amounts payable on, preferences in respect of any series of Preferred Stock, whether any dividends are or are not cumulative and the dates on which dividends may be payable;

Voting Rights. Voting rights at every annual or special meeting of stockholders different from or consistent with those of the holders of Common Stock or any other series of Preferred Stock;

Liquidation Rights. Preferential liquidation rights in the event of the Company's liquidation, dissolution or winding up different from or consistent with those of the holders of Common Stock or any other series of Preferred Stock;

Conversion or Exchange. Rights in regard to the conversion or exchange of Preferred Stock into shares of any other class or series or other security, including the price(s), date(s) and other terms and condition of conversion;

Redemption. Rights of redemption different from or consistent with those of the holders of Common Stock or any series of Preferred Stock; and

Other Rights. Other rights restricting the issuance of additional shares of the same series or of any other class or series.

The purpose of authorizing the Board to issue Preferred Stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of Preferred Stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could make it more difficult for a third party to acquire control of the Company, or could adversely affect the rights of the Company's common stockholders.

Board of Directors

The Board is not classified and there is no cumulative voting in the election of directors. The number of directors serving on the Board may be changed by a resolution adopted by the affirmative vote of a majority of the directors then in office.

Anti-Takeover Effects of Certain Provisions of Delaware Law, the Certificate of Incorporation and the Bylaws

The Certificate and bylaws contain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the Board and that could make it more difficult to acquire control of the Company by means of a tender offer, open market purchases, a proxy contest or otherwise. The Company expects that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of the Company to first negotiate with the Board, which the Company believes may result in an improvement of the terms of any such acquisition in favor of the Company's stockholders. However, they also give the Board the power to discourage acquisitions that some stockholders may favor. A description of these provisions is set forth below.

No Cumulative Voting. Under Delaware law, the right to vote cumulatively does not exist unless the certificate of incorporation specifically authorizes cumulative voting. The Certificate does not grant stockholders the right to vote cumulatively; therefore stockholders holding a majority of the shares of Common Stock outstanding will be able to elect all of the Company's directors.

Stockholder Action by Written Consent and Special Meetings of Stockholders. The Certificate and bylaws provide that all stockholder action must be affected at a duly called meeting of stockholders and not by written consent, and that only the Chairperson of the Board, the chief executive officer or the president may call a special meeting of stockholders.

Requirements for Advance Notification of Stockholder Meetings, Nominations and Proposals. The Company's bylaws include an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to the Board. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the Board, or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely written notice in proper form to the Company's secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying stockholder actions until the next stockholder meeting that are favored by the holders of a majority of the Company's outstanding voting securities or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of the Company.

Super-Majority Voting. The Certificate requires a 66-2/3% stockholder vote to amend, repeal or modify certain of its provisions and bylaws relating to the size, nomination, election and appointment of members to Board, the requirement that stockholder actions be effected at a duly called meeting and the designated parties entitled to call a special meeting of the stockholders. In addition, the authorization of blank check Preferred Stock makes it possible for the Board to issue Preferred Stock with voting or other rights or preferences that could impede the success of any attempt to change control of the Company.

Delaware Takeover Statute

The Company is subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware. Subject to certain exceptions, Section 203 of the Delaware General Corporation Law prohibits a Delaware corporation from engaging in any "business combination" with any "interested stockholder" for a period of three years after the date of the transaction in which the person or entity became an interested stockholder. A "business combination" includes certain mergers, asset sales or other transactions resulting in a financial benefit to the interested stockholder. Subject to various exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns, or within the past three years has owned, 15% or more of our outstanding voting stock. This provision could discourage mergers or other takeover or change in control attempts, including attempts that might result in the payment of a premium over the market price for shares of the Common Stock.

ALIGN TECHNOLOGY, INC.
 AMENDED AND RESTATED 2005 INCENTIVE PLAN
EXHIBIT A
OFFICER APPOINTED AFTER SEPTEMBER 2016
 RESTRICTED STOCK UNIT AGREEMENT

1. **Grant.** The Company hereby grants to Participant under the Plan an Award of Restricted Stock Units, subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.
2. **Company's Obligation to Pay.** Each Restricted Stock Unit represents a value equal to the Fair Market Value of a Share on the date it becomes vested. Unless and until the Restricted Stock Units will have vested in the manner set forth in Sections 3 and 4, Participant will have no right to payment of any such Restricted Stock Units. Prior to actual payment of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. **Vesting Schedule.** Subject to Section 4, the Restricted Stock Units awarded by this Agreement will vest in Participant according to the vesting schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through each such date; *provided, however*, that the paragraph (c) of the Notice of Grant shall apply in the event Participant ceases to be a Service Provider within 18 months of a Change of Control (as defined in the employment agreement between the Company and Participant (the "Employment Agreement")) as a result of termination by the Company without Cause (as defined in the Employment Agreement) or if Participant resigns for Good Reason (as defined in the Employment Agreement).
4. **Forfeiture upon Termination of Status as a Service Provider.** Subject to paragraphs (c) of the Notice of Grant, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Restricted Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.
5. **Payment after Vesting.** Any Restricted Stock Units that vest in accordance with Section 3 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 7.
6. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
7. **Taxes.**
 - (a) **Generally.** The Participant is ultimately liable and responsible for all taxes owed in connection with the Restricted Stock Units, regardless of any action the Company or any of its Subsidiaries takes with respect to any tax withholding obligations that arise in connection with the Restricted Stock Units. Neither the Company nor any of its Subsidiaries makes any representation or undertaking regarding the treatment of any tax withholding in connection with the grant or vesting of the Restricted Stock Units or the subsequent sale of Shares issuable pursuant to the Restricted Stock Units. The Company and its Subsidiaries do not commit and are under no obligation to structure the Restricted Stock Units to reduce or eliminate the Participant's tax liability.
 - (b) **Payment of Withholding Taxes.** Notwithstanding any contrary provision of this Agreement, no Shares will be issued to the Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by the Participant with respect to the payment of any taxes which the Company determines must be withheld with respect to the Restricted Stock Units. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld. In addition and to the maximum extent permitted by law, the Company has the right to retain without notice from salary or other amounts payable to the Participant, cash having a value sufficient to satisfy any tax withholding obligations that cannot be satisfied by the withholding of otherwise deliverable Shares.
8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant.
9. **No Effect on Service.** Participant acknowledges and agrees that the vesting of the Restricted Stock Units pursuant to Section 3 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder) (subject, however, to paragraphs (c) and (d) of the Notice of Grant). Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all, and will not interfere with the Participant's right or the right of the Company (or the Affiliate employing or retaining Participant) to terminate Participant as a Service Provider at any time, with or without cause.
10. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2560 Orchard Parkway, San Jose, CA 95131, or at such other address as the Company may hereafter designate in writing.
11. **Grant is Not Transferable.** Except to the limited extent provided in Section 6, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.
12. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.
13. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.
14. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.
15. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.
16. **Electronic Delivery.** The Company may, in its sole discretion, decide to deliver any documents related to Restricted Stock Units awarded under the Plan or future Restricted Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
17. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.
18. **Agreement Severable.** In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.
19. **Governing Law.** This Award Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Restricted Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed.

By Participant's acceptance of this Agreement, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Restricted Stock Units.

PARTICIPANT:

Signature _____

Print Name _____

Align Technology, Inc.
 ID: 94-3267295
 2820 Orchard Parkway
 San Jose, CA. 95131

AMENDED AND RESTATED 2005 INCENTIVE PLAN
 NOTICE OF GRANT OF RESTRICTED STOCK UNITS

Unless otherwise defined herein, the terms defined in the Amended and Restated 2005 Incentive Plan (the "Plan") will have the same defined meanings in this Notice of Grant of Restricted Stock Units (the "Notice of Grant").

Award Number:

[Name] Plan:

[] ID:

You have been granted the right to receive Restricted Stock Units, subject to the terms and conditions of the Plan, this Notice of Grant and the Restricted Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") as follows:

- Award Number:
- Date of Grant:
- Vesting Commencement Date:
- Total Number of Restricted Stock Units:
- the Award shall terminate and expire on

Vesting Schedule:

Shares Full Vest Date Vest Type

(a) Subject to the paragraph (c) and (d) below, in the event Participant ceases to be a Service Provider for any or no reason before Participant vests in the right to acquire the Shares to be issued pursuant to the Restricted Stock Unit, the Restricted Stock Unit and Participant's right to acquire any Shares hereunder will immediately terminate.

(b) **General Release.** Any other provision of this Notice of Grant, the Plan or the Agreement notwithstanding, Subsections (c) or (d) below shall not apply unless the Participant (i) has executed a general release in a form prescribed by the Company of all known and unknown claims that he may then have against the Company or persons affiliated with the Company, and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims.

(c) **Termination due to Death or Disability.** Notwithstanding the paragraph (a) above, if, during Participant's employment by the Company, the Participant's employment with the Company terminates due death or Disability (as defined in the employment agreement between the Company and Participant (the "Employment Agreement")), before or after a Change of Control (as defined in the Employment Agreement), then Participant will be entitled to 100% accelerated vesting of all outstanding and unvested Restricted Stock Units subject to this Notice of Grant.

(d) **Upon a Change of Control.** Notwithstanding paragraph (a) above, in the event of the occurrence of a Change in Control (as defined in the Employment Agreement) while Participant is employed by the Company, then:

(i) Participant shall immediately vest in an additional number of shares under the Restricted Stock Units awarded pursuant to this Notice of Grant as if he had performed twelve (12) additional months of service; and

(ii) if within eighteen (18) months following the occurrence of the Change of Control, one of the following events occurs:

the Company terminates Participant's employment with the Company other than for Cause, death or Disability; or

Participant resigns for Good Reason

then Participant shall be entitled to 100% accelerated vesting of all outstanding and unvested Restricted Stock Units subject to this Notice of Grant.

By accepting this agreement, you and the Company agree that this award is granted under and governed by the terms and conditions of the Plan and the Agreement, each of which are made a part of this document. You further agree to accept, acknowledge and execute this Agreement as a condition to receiving any Restricted Stock Units under this Award.

Nothing in this Notice or in the attached Agreement or in the Plan shall confer upon Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining Participant) or of Participant, which rights are hereby expressly reserved by each, to terminate Participant's Service at any time for any reason, with or without cause.

EXHIBIT A

RESTRICTED STOCK UNIT AGREEMENT

1. **Grant.** The Company hereby grants to Participant under the Plan an Award of Restricted Stock Units (referred to in the Plan as Restricted Stock Units), subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.

2. **Company's Obligation to Pay.** Each Restricted Stock Unit represents a value equal to the Fair Market Value of a Share on the date it becomes vested. Unless and until the Restricted Stock Units will have vested in the manner set forth in Sections 3 and 4, Participant will have no right to payment of any such Restricted Stock Units. Prior to actual payment of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

3. **Vesting Schedule.** Subject to Section 4, the Restricted Stock Units awarded by this Agreement will vest in, and the underlying award shares will be issued to, Participant according to the vesting/issuance schedule set forth in paragraph (a) of the attached Notice of Grant, subject to paragraphs (b)-(d) of such Notice of Grant.

4. **Forfeiture upon Termination of Status as a Service Provider.** Subject to paragraphs (a) through (d) of the attached Notice of Grant, if Participant ceases to be a Service Provider for any or no reason, any then-unvested Restricted Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder, in each case unless otherwise determined by the Board or the Compensation Committee acting as the Plan Administrator.

5. **Payment after Vesting.** Any Restricted Stock Units that vest in accordance with Section 3 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 7. Subject to the provisions of Section 19, any Shares will be issued to Participant as soon as practicable on or after the relevant vesting date, but in any event, within the period ending on the later to occur of the date that is two-and-one-half months from the end of (a) Participant's tax year that includes the vesting date, or (b) the Company's tax year that includes the vesting date.

6. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

7. **Taxes.**

(a) **Generally.** The Participant is ultimately liable and responsible for all taxes owed in connection with the Restricted Stock Units, regardless of any action the Company or any of its Subsidiaries takes with respect to any tax withholding obligations that arise in connection with the Restricted Stock Units. Neither the Company nor any of its Subsidiaries makes any representation or undertaking regarding the treatment of any tax withholding in connection with the grant or vesting of the Restricted Stock Units or the subsequent sale of Shares issuable pursuant to the Restricted Stock Units. The Company and its Subsidiaries do not commit and are under no obligation to structure the Restricted Stock Units to reduce or eliminate the Participant's tax liability.

(b) **Payment of Withholding Taxes.** Notwithstanding any contrary provision of this Agreement, no Shares will be issued to the Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by the Participant with respect to the payment of any taxes which the Company determines must be withheld with respect to the Restricted Stock Units. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld. In addition and to the maximum extent permitted by law, the Company has the right to retain without notice from salary or other amounts payable to the Participant, cash having a value sufficient to satisfy any tax withholding obligations that cannot be satisfied by the withholding of otherwise deliverable Shares.

8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant, provided that the Participant shall be entitled to any award

adjustments provided pursuant to Section 18(a) of the Plan.

9. **No Effect on Service.** Participant acknowledges and agrees that the vesting of the Restricted Stock Units pursuant to Section 3 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder) (subject, however, to paragraphs (a) through (d) of the Notice of Grant). Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all, and will not interfere with the Participant's right or the right of the Company (or the Affiliate employing or retaining Participant) to terminate Participant as a Service Provider at any time, with or without cause.

10. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 881 Martin Avenue, Santa Clara, CA 95050, or at such other address as the Company may hereafter designate in writing. Any notice to be given to the Participant regarding his Restricted Stock Unit award shall comply with the notice provisions in the Participant's CEO Employment Agreement.

11. **Grant is Not Transferable.** Except to the limited extent provided in Section 6, or, in the event of Participant's death, by his will or the laws of descent or distribution (pursuant to Section 15 of the Plan) or as otherwise determined by the Plan Administrator (pursuant to Section 15 of the Plan), this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void. Notwithstanding the above, the rights relating to Participant's Restricted Stock Unit grant can be exercised on the Participant's behalf by his legal representative in the event of his legal incapacity, or, in the event of his death, by his designated beneficiary (if any) or, if no beneficiary is designated with respect to his Restricted Stock Units, by his estate.

12. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

13. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority. The Company represents and acknowledges that, as of the Date of Grant, there are currently no delivery restrictions in effect of the type referred to in this Section 13.

14. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.

15. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

16. **Electronic Delivery.** The Company may, in its sole discretion, decide to deliver any documents related to Restricted Stock Units awarded under the Plan or future Restricted Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

17. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

18. **Agreement Severable.** In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

19. **Section 409A.** Notwithstanding anything in the Plan or this Agreement to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Restricted Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to death, and if (x) Participant is a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Restricted Stock Units would result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the payment of such accelerated Restricted Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless the Participant dies following his or her termination as a Service Provider, in which case, the Restricted Stock Units will be paid in Shares to the Participant's estate as soon as practicable following his or her death. It is the intent of this Agreement to comply with the requirements of Section 409A so that none of the Restricted Stock Units provided under this Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and any proposed, temporary or final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

20. **Governing Law.** This Award Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Restricted Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed.

[Remainder of Page Intentionally Left Blank]

21. **By Participant's acceptance of this Agreement online, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement, but does not waive any rights he has under his CEO Employment Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Restricted Stock Units if and to the extent that the Company is not otherwise notified of any such change.**

2.

Signature

ALIGN TECHNOLOGY, INC.
AMENDED AND RESTATED 2005 INCENTIVE PLAN
NOTICE OF GRANT OF RESTRICTED STOCK UNITS

Unless otherwise defined herein, the terms defined in the Amended and Restated 2005 Incentive Plan (the "Plan") will have the same defined meanings in this Notice of Grant of Restricted Stock Units (the "Notice of Grant").

Participant:**Address:**

You have been granted the right to receive Restricted Stock Units (referred to in Section 9 of the Plan as "Performance Units"), subject to the terms and conditions of the Plan, this Notice of Grant and the Restricted Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") as follows:

Date of Grant

Total Number of Restricted Stock
Units

One hundred percent (100%) of the Restricted Stock Unit will vest and be issued to Participant on the earlier of (1) the one-year anniversary of the Grant Date and (2) the date of the next annual meeting of stockholders following the Grant Date, subject to Participant continuing to be a Service Provider through such dates (the "Performance Period"). In the event Participant ceases to be a Service Provider for any or no reason before Participant vests in the right to acquire the Shares to be issued pursuant to the Restricted Stock Unit, the Restricted Stock Unit and Participant's right to acquire any Shares hereunder will immediately terminate.

Your signature on the attached Agreement, evidences your acceptance and you and the Company agree that this award is granted under and governed by the terms and conditions of the Plan and the Agreement, each of which are made a part of this document. You further agree to accept, acknowledge and execute the Agreement as a condition to receiving any Restricted Stock Units under this Award.

EXHIBIT A**RESTRICTED STOCK UNIT AGREEMENT**

1. **Grant.** The Company hereby grants to Participant under the Plan an Award of Restricted Stock Units (referred to in the Plan as Performance Units), subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.
2. **Company's Obligation to Pay.** Each Restricted Stock Unit represents a value equal to the Fair Market Value of a Share on the date it becomes vested. Unless and until the Restricted Stock Units will have vested in the manner set forth in Sections 3 and 4, Participant will have no right to payment of any such Restricted Stock Units. Prior to actual payment of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. **Vesting Schedule.** Subject to Section 4, the Restricted Stock Units awarded by this Agreement will vest in Participant according to the vesting schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through each such date.
4. **Forfeiture upon Termination of Status as a Service Provider.** Notwithstanding any contrary provision of this Agreement, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Restricted Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.
5. **Payment after Vesting.** Any Restricted Stock Units that vest in accordance with Section 3 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 7.
6. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
7. **Withholding of Taxes.** Participants is ultimately liable and responsible for all taxes owed in connection with the Restricted Stock Units, regardless of any action the Company takes with respect to any tax withholding obligations that arise in connection with the Restricted Stock Units awarded under this Agreement. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld.
8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant.
9. **No Effect on Service.** Participant acknowledges and agrees that the vesting of the Restricted Stock Units pursuant to Section 3 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder). Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all.
10. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2820 Orchard Parkway, San Jose, CA 95131, or at such other address as the Company may hereafter designate in writing.
11. **Grant is Not Transferable.** Except to the limited extent provided in Section 6, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.
12. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.
13. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.
14. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.
15. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions

taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

16. Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to Restricted Stock Units awarded under the Plan or future Restricted Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

17. Captions. Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

18. Agreement Severable. In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

19. Governing Law. This Award Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Restricted Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed.

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By Participant's acceptance of this Agreement, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Restricted Stock Units.

PARTICIPANT:

Signature

Print Name

ALIGN TECHNOLOGY, INC.

2005 INCENTIVE PLAN
(amended May 16, 2016)

RESTRICTED STOCK UNIT AGREEMENT

1. **Grant.** The Company hereby grants to Participant under the Align Technology, Inc. 2005 Incentive Plan (the "Plan") an Award of Restricted Stock Units, subject to all of the terms and conditions in the Notice of Grant, this Agreement, including any country-specific terms and conditions contained in an appendix hereto (collectively, the "Agreement") and the Plan. Capitalized terms not specifically defined herein shall have the same meanings ascribed to them in the Plan.
2. **Company's Obligation to Pay.** Each Restricted Stock Unit represents a value equal to the Fair Market Value of a Share on the date it becomes vested. Unless and until the Restricted Stock Units will have vested in the manner set forth in Sections 3 and 4 below, Participant will have no right to payment of any such Restricted Stock Units. Prior to actual payment of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. **Vesting Schedule.** Subject to Section 4 below, the Restricted Stock Units awarded under this Agreement will vest according to the vesting schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through each such date.
4. **Forfeiture upon Termination of Status as a Service Provider.** Notwithstanding any contrary provision of this Agreement, if Participant ceases to be a Service Provider for any reason (as further described in Section 10(j) below), the then-unvested Restricted Stock Units awarded under this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.
5. **Payment after Vesting.** Any Restricted Stock Units that vest in accordance with Section 3 will be paid to Participant (or in the event of Participant's death, as set forth in Section 6 below) in whole Shares, subject to Participant satisfying any applicable Tax-Related Items as set forth in Section 7. Subject to the provisions of Section 9, the vested Restricted Stock Units shall be paid as soon as practicable after vesting, but in each such case within the period sixty (60) days following the vesting date. In no event will Participant be permitted, directly or indirectly, to specify the taxable year of the payment of any Restricted Stock Units payable under this Agreement.
6. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made pursuant to applicable laws of descent and distribution in Participant's country. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
7. **Responsibility for Taxes.** Participant acknowledges that, regardless of any action taken by the Company or, if different, Participant's employer (the "Employer"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant ("Tax-Related Items"), is and remains Participant's responsibility and may exceed the amount actually withheld by the Company or the Employer. Participant further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Restricted Stock Unit, including, but not limited to, the grant, vesting or settlement of the Restricted Stock Units, the subsequent sale of Shares acquired pursuant to such settlement, and the receipt of any dividends or dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Restricted Stock Unit to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax withholding event, as applicable, Participant agrees to make adequate arrangements satisfactory to the Company and/or the Employer to satisfy any applicable withholding obligations for Tax-Related Items. In this regard, Participant authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy their withholding obligations with regard to all Tax-Related Items by one or a combination of the following:

- (a) withholding from Participant's wages or other cash compensation paid to Participant by the Company and/or the Employer; or
- (b) withholding from proceeds of the sale of Shares acquired upon settlement of the Restricted Stock Units either through a voluntary sale or through a mandatory sale arranged by the Company (on Participant's behalf pursuant to this authorization without further consent); or
- (c) withholding in Shares to be issued upon settlement of the Restricted Stock Units.

Notwithstanding the above, in the event that Participant is a Section 16 officer of the Company under the Exchange Act, then the Company will withhold Shares to be issued upon vesting of the Restricted Stock Units, unless otherwise determined by the Administrator, or in the event that withholding in Shares is problematic under applicable tax or securities law or has materially adverse tax consequences.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates, in which case Participant may receive a refund of any over-withheld amount in cash and will have no entitlement to the Share equivalent. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant is deemed to have been issued the full number of Shares subject to the vested Restricted Stock Units, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

Finally, Participant agrees to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares, if Participant fails to comply with Participant's obligations in connection with the Tax-Related Items. If Participant does not accept the terms of this Agreement including this Section 7, then at the time any applicable Restricted Stock Units otherwise are scheduled to vest pursuant to Section 3, Participant will permanently forfeit such Restricted Stock Units to the Company at no cost to the Company and Participant will have no rights whatsoever to receive any Shares hereunder.

8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates or other evidence of ownership representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant.

9. **Section 409A.** Notwithstanding anything in the Plan or this Agreement to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Restricted Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to death, and if (a) Participant is a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (b) the payment of such accelerated Restricted Stock Units will result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the payment of such accelerated Restricted Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless the Participant dies following his or her termination as a Service Provider, in which case, the Restricted Stock Units will be paid in Shares to the Participant's estate as soon as practicable following his or her death. It is the intent of this Agreement that it and all payments and benefits hereunder be exempt from, or comply with, the requirements of Section 409A so that none of the Restricted Stock Units provided under this Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to be so exempt or so comply. Each payment payable under this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and any final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

10. **Nature of Grant.** In accepting the grant, Participant acknowledges, understands and agrees that:

- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
- (b) the grant of the Restricted Stock Units is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted in the past;
- (c) all decisions with respect to future Restricted Stock Unit or other grants, if any, will be at the sole discretion of the Company;
- (d) the Restricted Stock Unit grant and Participant's participation in the Plan shall not create a right to employment or service, or be interpreted as forming or amending an employment or service contract with the Company, the Employer, or any Affiliate and shall not interfere with the ability of the Company, the Employer, or any Affiliate to terminate Participant's employment or status as a Service Provider (if any);
- (e) Participant is voluntarily participating in the Plan;
- (f) the Restricted Stock Units and the Shares subject to the Restricted Stock Units and the income from and value of same, are not intended to replace any pension rights or compensation;

(g) the Restricted Stock Units and the Shares subject to the Restricted Stock Units and the income from and value of same, are not part of normal or expected compensation or salary for any purpose, including, without limitation, the calculating of any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement or welfare benefits or any other similar payments, and in no event should be considered as compensation for, or relating in any way to, past services for the Company, the Employer, or any Affiliate;

(h) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;

(i) unless otherwise agreed with the Company, the Restricted Stock Units and the Shares subject to the Restricted Stock Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of an Affiliate;

(j) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from Participant's ceasing to provide employment or other services to the Company or the Employer (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any) and in consideration of the grant of the Restricted Stock Units, Participant agrees not to institute any claim against the Company, any of its Affiliates, or the Employer;

(k) for purposes of this Agreement, Participant's relationship as a Service Provider will be considered terminated as of the date Participant is no longer actively providing services to the Company or one of its Affiliates or the Employer (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any), and unless otherwise expressly provided in this Agreement or determined by the Company Participant's right to vest in the Restricted Stock Units under the Plan, if any, will terminate effective as of such date and will not be extended by any notice period (e.g., active services would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any); the Administrator shall have the exclusive discretion to determine when Participant is no longer actively providing services for purposes of the Restricted Stock Unit grant (including whether Participant may still be considered to be providing services while on an approved leave of absence);

(l) unless otherwise provided in the Plan or by the Company in its discretion, the Restricted Stock Units and the benefits evidenced by this Agreement do not create any entitlement to have the Restricted Stock Units or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Shares; and

(m) neither the Company, the Employer nor any Affiliate shall be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the Restricted Stock Units or the subsequent sale of any Shares acquired upon settlement.

11. **No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant understands and agrees that he or she should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

12. **Data Privacy.**

(a) **Data Collection and Usage.** The Company and the Employer will collect, process and use certain personal information about Participant, specifically, Participant's name, home address, email address and telephone number, date of birth, social security or insurance number, passport number or other identification number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan. The legal basis, where required, for the processing of Data is Participant's consent. In addition to the above-identified recipients and where required under applicable law, Data also may be disclosed to certain securities or other regulatory authorities where the Company's securities are listed or traded or regulatory filings are made. The legal basis, where required, for such disclosure is compliance with applicable law.

(b) **Stock Plan Administration Service Providers.** The Company and the Employer transfer Data to ETRADE, the designated broker assisting in the implementation, administration and management of the Plan. Upon transfer of Participant's Data to ETRADE, Participant may be asked to agree to separate terms and data processing practices with ETRADE with such agreement being a condition of the ability to participate in the Plan.

(c) **Other Service Provider Data Recipients.** The Company also may transfer Data to other third party service providers, if necessary to ensure compliance with applicable tax, exchange control, securities and labor law. Such third party service providers may include the Company's legal counsel as well as its auditor/accountant/third party vendor (currently PwC). Wherever possible, the Company will anonymize data, but Participant understands that his or her Data may need to be transferred to such providers to ensure compliance with applicable law and/or tax requirements.

(d) **International Data Transfers.** The Company, ETRADE and its other service providers described above under (c) are located in the United States. The United States may have different data privacy laws and protections than Participant's country of residence (or country of employment, if different). The Company's legal basis, where required, for the transfer of Data is Participant's consent.

(e) **Data Retention.** Participant understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan. When the Company no longer needs the Data, the Company will remove it from its systems.

(f) **Data Subject Rights.** Participant understands that Participant may have the right under applicable law to (i) access or copy Data that the Company possesses, (ii) rectify incorrect Data, (iii) delete Data, (iv) restrict processing of Data, (v) lodge complaints with the competent supervisory authorities in Participant's jurisdiction. To receive clarification regarding these rights or to exercise these rights, Participant understands that Participant can contact his or her local human resources representative.

(g) **Voluntariness and Consequences of Consent, Denial or Withdrawal.** Participation in the Plan is voluntary and Participant understands that Participant is providing the consent herein on a purely voluntary basis. If Participant does not consent, or later seeks to revoke his or her consent, Participant's employment status or service and career with the Employer will not be adversely affected. The only consequence of refusing or withdrawing consent is that the Company would not be able to grant Restricted Stock Units or other equity awards to Participant or administer or maintain such awards. Therefore, Participant understands that refusing or withdrawing his or her consent may affect Participant's ability to participate in the Plan. For more information on the consequences of Participant's refusal to consent or withdrawal of consent, Participant understands that Participant may contact his or her human resources representative.

(h) **Declaration of Consent.** Participant hereby explicitly and unambiguously consents to the collection, processing and use, in electronic or other form, of Participant's Data by the Company and the transfer of Data to the recipients mentioned above, including recipients located in countries which do not adduce an adequate level of protection from a European (or other non-U.S.) data protection law perspective, for the purposes described above.

13. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2560 Orchard Parkway, San Jose, CA 95131, U.S.A., or at such other address as the Company may hereafter designate in writing.

14. **Grant is Not Transferable.** Except to the limited extent provided in Section 6, this Award and the rights and privileges conferred hereby may not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this Award, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this Award and the rights and privileges conferred hereby immediately will become null and void.

15. **Binding Agreement.** Subject to the limitation on the transferability of this Award contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

16. **Additional Conditions to Issuance of Shares: Compliance with Law.** Notwithstanding any other provision of the Plan or this Agreement, unless there is an available exemption from any registration, qualification or other legal requirement applicable to the Shares, the Company shall not be required to deliver any Shares issuable upon settlement of the Restricted Stock Units prior to the completion of any registration or qualification of the Shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the U.S. Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion deem necessary or advisable. Participant understands that the Company is under no obligation to register or qualify the Shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of Shares. Further, Participant agrees that the Company shall have the unilateral authority to amend the Plan and this Agreement without Participant's consent to the extent necessary to comply with securities or other laws applicable to the issuance of Shares.

17. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.

18. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

19. **Electronic Delivery and Acceptance.** The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

20. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

21. **Agreement Severable.** In the event that any provision in this Agreement will be held invalid or unenforceable, in whole or in part, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

22. **Governing Law and Venue.** The grant of the Restricted Stock Units and this Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of any action, lawsuit or other proceedings brought to enforce this Agreement, relating to it, or arising from it, the parties hereby submit to and consent to the sole and exclusive jurisdiction of the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed.

23. **Language.** Participant acknowledges that he or she is sufficiently proficient in English to understand the terms and conditions of this Agreement. Furthermore, if Participant has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

24. **Appendix.** Notwithstanding any provisions in this Agreement, the Restricted Stock Unit grant shall be subject to any special terms and conditions set forth in any Appendix to this Agreement for Participant's country. Moreover, if Participant relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to Participant, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

25. **Imposition of Other Requirements.** The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Restricted Stock Units and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

26. **Insider Trading/Market Abuse Laws.** Participant acknowledges that, depending on Participant's country of residence, the broker's country, or the country in which the Shares are listed, he or she may be subject to insider trading and/or market abuse laws in applicable jurisdictions, which may affect Participant's ability to, directly or indirectly, accept, acquire, sell or attempt to sell or otherwise dispose of Shares, or rights to Shares (e.g., Restricted Stock Units), or rights linked to the value of Shares, during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in the applicable jurisdiction or Participant's country). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before possessing the inside information. Furthermore, Participant may be prohibited from (i) disclosing the inside information to any third party, including fellow employees (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them to otherwise buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant acknowledges that it is his or her responsibility to be informed of and compliant with any such laws, and Participant should speak to his or her personal advisor on this matter.

27. **Exchange Control Tax and Foreign Asset/Account Reporting Requirements.** Participant acknowledges that there may be exchange control, tax, foreign asset and/or account reporting requirements which may affect Participant's ability to acquire or hold Shares acquired under the Plan or cash received from participating in the Plan (including from any dividends paid on Shares acquired under the Plan) in a brokerage, bank account or legal entity outside Participant's country. Participant may be required to report such accounts, balances, assets and/or the related transactions to the tax or other authorities in his or her country. Participant also may be required to repatriate sale proceeds or other funds received as a result of Participant's participation in the Plan to his or her country through a designated bank or broker within a certain time after receipt. Participant acknowledges that it is Participant's responsibility to be compliant with such regulations, and Participant should consult his or her personal legal advisor for any details.

28. **Waiver.** Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by Participant or any other Participant.

By clicking on the "I accept" button, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to accepting this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Restricted Stock Units.

APPENDIX

Align Technology, Inc.

2005 Incentive Plan

Restricted Stock Unit Agreement

This Appendix to the Restricted Stock Unit Agreement (the "Agreement") includes additional terms and conditions that govern the grant of Restricted Stock Units in Participant's country. Capitalized terms not explicitly defined in this Appendix have the definitions ascribed to them in the Align Technology, Inc. 2005 Incentive Plan (the "Plan") and/or the Agreement.

This Appendix also includes information regarding exchange controls and certain other issues of which Participant should be aware with respect to Participant's participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of January 2019. Such laws are often complex and change frequently. As a result, the Company strongly recommends that Participant not rely on the information noted herein as the only source of information relating to the consequences of Participant's participation in the Plan because the information may be out of date at vesting of the Restricted Stock Units or the subsequent sale of the Shares or the receipt of any dividends or dividend equivalents.

In addition, the information is general in nature and may not apply to Participant's particular situation, and the Company is not in a position to assure Participant of any particular result. Accordingly, Participant is advised to seek appropriate professional advice as to how the relevant laws in Participant's country may apply to Participant's situation.

Finally, if Participant is a citizen or resident of a country other than the one in which Participant is currently working, transfers employment to another country after the Restricted Stock Units are granted, or is considered a resident of another country for local law purposes, the information contained herein may not be applicable to Participant.

AUSTRALIA

Terms and Conditions

Australian Offer Document. The grant of the Restricted Stock Units is intended to comply with the provisions of the Corporations Act 2001, ASIC Regulatory Guide 49 and ASIC Class Order 14/1000. Additional details are set forth in the Offer Document for the Offer of Restricted Stock Units to Australian Resident Employees, the Plan and the Agreement. By accepting the Restricted Stock Unit grant, Participant acknowledges and confirms that he or she has received these documents.

Notifications

Securities Law Information. If Participant acquires Shares under the Plan and Participant offers such Shares for sale to a person or entity resident in Australia, the offer may be subject to disclosure requirements under Australian law. Participant should obtain legal advice as to Participant's disclosure obligations prior to making any such offer.

Exchange Control Information. Exchange control reporting is required for cash transactions exceeding AUD 10,000 and for international fund transfers. The Australian bank assisting with the transaction will file the report for Participant. If there is no Australian bank involved in the transfer, Participant must file the report himself or herself.

Tax Information. The Plan is a plan to which subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies (subject to conditions in the Act).

AUSTRIA

Notifications

Exchange Control Information. If Participant holds securities (including Shares acquired under the Plan) or cash (including proceeds from the sale of Shares) outside Austria, Participant will be required to file a report with the Austrian National Bank if certain thresholds are exceeded. Specifically, if Participant holds securities outside Austria, reporting requirements will apply if the value of such securities meets or exceeds (i) EUR 30,000,000 as of the end of any calendar quarter, or (ii) EUR 5,000,000 as of December 31. Further, if Participant holds cash in accounts outside Austria, monthly reporting requirements will apply if the aggregate transaction volume of such cash accounts meets or exceeds EUR 10,000,000.

BELGIUM

Notifications

Foreign Asset/Account Reporting Information. If Participant is a Belgian resident, Participant is required to report any bank accounts opened and maintained outside of Belgium (e.g., brokerage accounts opened in connection with the Plan) on his or her annual tax return. In a separate report, Participant is required to provide the National Bank of Belgium with certain details regarding such foreign accounts (including the account number, bank name and country in which any such account was opened). This report, as well as additional information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under *Kredietcentrales / Centrales des crédits* caption. Participant should consult with his or her personal tax advisor to determine his or her personal reporting obligations.

BRAZIL

Terms and Conditions

Compliance with Law. By accepting the Restricted Stock Units, Participant acknowledges that he or she agrees to comply with applicable Brazilian laws and pay any and all applicable Tax-Related Items associated with the vesting of the Restricted Stock Units, the receipt of any dividends and the sale of any Shares acquired under the Plan.

Labor Law Acknowledgment. Participant agrees, for all legal purposes, (i) the benefits provided under the Agreement and the Plan are the result of commercial transactions unrelated to Participant's employment; (ii) the Agreement and the Plan are not a part of the terms and conditions of Participant's employment; and (iii) the income from the Shares associated with the Restricted Stock Units, if any, is not part of Participant's remuneration from employment.

Notifications

Exchange Control Information. Employees resident or domiciled in Brazil are required to submit a declaration of assets and rights held outside of Brazil to the Central Bank on an annual basis if the value of such assets or rights exceeds USD 100,000. If such amount exceeds USD 100,000,000, the declaration must be submitted quarterly. The assets and rights that must be reported include cash and Shares acquired under the Plan.

CANADA

Terms and Conditions

Award Payable Only in Shares. The grant of the Restricted Stock Units does not provide any right for Participant to receive a cash payment, and settlement of the Restricted Stock Units is payable only in Shares.

Termination of Service Relationship. The following replaces Section 10(k) of the Agreement:

For purposes of the Agreement and except as expressly required by applicable legislation, Participant's relationship as a Service Provider will be considered terminated as of the date that is the earlier of: (1) the date Participant's service is terminated, (2) the date Participant receives notice of termination of service from the Employer, or (3) the date Participant ceases to actively provide services; regardless of any notice period or period of pay in lieu of such notice required under local law (including, but not limited to, statutory law, regulatory law and/or common law). The Administrator shall have the exclusive discretion to determine when Participant is no longer actively providing services for purposes of the Restricted Stock Unit grant (including whether Participant may still be considered to be providing services while on an approved leave of absence);

The following provisions will apply to Participants who are residents of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices and legal proceeds entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Consentement relatif à la langue utilisée: Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents exécutés, avis donnés et procédures judiciaires intentées, directement ou indirectement, relativement à ou suite à la présente convention.

Data Privacy Notice and Consent. This provision supplements Section 12 of the Agreement:

Participant hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. Participant further authorizes the Employer, the Company, and any other Affiliate to disclose and discuss the Plan with their respective advisors. Participant further authorizes the Employer, Company, and any other Affiliate to record such information and to keep such information in Participant's employee file.

Notifications

Securities Law Notification. Canadian residents are permitted to sell Shares acquired under the Plan through the designated broker appointed under the Plan, if any, provided the sale of the Shares acquired under the Plan takes place outside of Canada through the Nasdaq stock exchange on which the Shares are listed.

Foreign Asset/Account Reporting Information. Canadian taxpayers are required to report any foreign assets (including Shares acquired under the Plan and, likely, unvested RSUs) with a cost exceeding CAD 100,000 on Form T1135 (Foreign Income Verification Statement) on an annual basis. For Shares acquired under the Plan, cost generally is the adjusted cost basis ("ACB"), which would ordinarily be equal the fair market value of the Shares at the time of acquisition. If, however, a Canadian taxpayer owns other shares in the Company, the ACB of the Shares acquired under the Plan will need to be leveraged with the ACB of the other Shares. The statement is due at the same time as the taxpayer's annual tax return. Taxpayers are advised to check with their personal advisor regarding the reporting obligations.

CHINA

Terms and Conditions

The following terms and conditions will apply to Participants who are subject to exchange control restrictions and regulations in the People's Republic of China (the "PRC"), including requirements imposed by the State Administration of Foreign Exchange ("SAFE"), as determined by the Company in its sole discretion.

Termination of Service Relationship. Due to exchange control laws in the PRC, Participant agrees that the Company reserves the right to require the sale of any Shares acquired at vesting of the Restricted Stock Units upon the termination of Participant's relationship as a Service Provider for any reason. If the Company, in its discretion, does not exercise its right to require the automatic sale of Shares issuable upon vesting of the Restricted Stock Units, as described in the preceding sentence, Participant understands and agrees that any Shares acquired by Participant under the Plan must be sold no later than three (3) months after termination of Participant's relationship as a Service Provider, or within any other such time frame as permitted by the Company or required for legal or administrative reasons. Participant understands that any Shares acquired under the Plan that have not been sold within three (3) months of termination of Participant's relationship as a Service Provider will be automatically sold by a designated broker at the Company's discretion, pursuant to this authorization by Participant.

Participant agrees that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such Shares (on Participant's behalf, pursuant to this authorization) and Participant expressly authorizes the Company's designated broker to complete the sale of such Shares. Participant also agrees to sign any agreements, forms, and/or consents that may be reasonably requested by the Company (or the designated broker) to effectuate the sale of the Shares (including, without limitation, as to the transfers of the proceeds and other exchange control matters noted below) and shall otherwise cooperate with the Company with respect to such matters, provided that Participant shall not be permitted to exercise any influence over how, when or whether the sales occur. Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Due to fluctuations in the Share price and/or applicable exchange rates between vesting and (if later) the date on which the Shares are sold, the amount of proceeds ultimately distributed to Participant may be more or less than the market value of the Shares upon vesting (which is the amount relevant to determining Participant's liability for Tax-Related Items). Participant understands and agrees that the Company is not responsible for the amount of any loss Participant may incur and the Company assumes no liability for any fluctuations in the Share price and/or any applicable exchange rate.

Upon the sale of the Shares, the Company agrees to pay the cash proceeds from the sale (less any Tax-Related Items, brokerage fees and commissions) to Participant in accordance with the applicable exchange control laws and regulations including but not limited to the restrictions set forth in this Appendix for China below under “Exchange Control Restrictions.”

Exchange Control Restrictions. Participant understands and agrees that, pursuant to local exchange control requirements, Participant will be required to immediately repatriate any cash payments or proceeds obtained with respect to participation in the Plan to the PRC. Participant further understands that such repatriation of any cash payments or proceeds may need to be effectuated through a special exchange control account established by the Company or any Affiliate, and Participant hereby consents and agrees that any payment or proceeds may be transferred to such special account prior to being delivered to Participant. Any payment or proceeds may be paid to Participant in U.S. dollars or local currency at the Company’s discretion. If the payments or proceeds are paid to Participant in U.S. dollars, Participant will be required to set up a U.S. dollar bank account in the PRC (if Participant does not already have one) so that the payments or proceeds may be deposited into this account. If the payments or proceeds are paid to Participant in local currency, the Company is under no obligation to secure any particular currency exchange rate and the Company may face delays in converting the payments or proceeds to local currency due to exchange control restrictions. Participant agrees to bear any currency exchange rate fluctuation risk between the time the cash proceeds are received and the time the cash proceeds are distributed to Participant through the special account described above. Participant further agrees to comply with any other requirements that may be imposed by the Company in the future to facilitate compliance with exchange control requirements in the PRC.

Notifications

Exchange Control Information. PRC residents may be required to report to SAFE all details of their foreign financial assets and liabilities, as well as details of any economic transactions conducted with non-PRC residents.

COSTA RICA

There are no country-specific provisions.

CROATIA

Notifications

Foreign Asset/Account Reporting Information. Croatian residents may need to report foreign investments (including Shares acquired under the Plan) to the Croatian National Bank for statistical purposes. Prior approval from the Croatian National Bank for bank accounts opened abroad no longer is required. However, because exchange control regulations may change without notice, Participant should consult with his or her legal advisor to ensure compliance with current regulations. It is Participant’s responsibility to comply with Croatian exchange control laws.

CZECH REPUBLIC

Notifications

Exchange Control Information. The Czech National Bank (“CNB”) may require Participant to fulfill certain notification duties in relation to the acquisition of Shares and the opening and maintenance of a foreign account. In addition, Participant may need to report the following in the absence of a request from the CNB: foreign direct investments (i.e., participation of 10% or more on the capital of a foreign entity) with a value of CZK 2,500,000 or more in the aggregate or other foreign financial assets with a value of CZK 200,000,000 or more. Because exchange control regulations change frequently and without notice, Participant should consult with his or her personal legal advisor prior to the vesting of the Restricted Stock Units and the sale of Shares to ensure compliance with current regulations. It is Participant’s responsibility to comply with any applicable Czech exchange control laws.

FRANCE

Terms and Conditions

Consent to Receive Information in English. By accepting the grant of the Restricted Stock Units, Participant confirms having read and understood the Plan and the Agreement, which were provided in English language. Participant accepts the terms of those documents accordingly.

En acceptant cette attribution gratuite d’actions, Participant confirme avoir lu et compris le Plan et ce Contrat, incluant tous leurs termes et conditions, qui ont été transmis en langue anglaise. Participant accepte les dispositions de ces documents en connaissance de cause.

Notifications

Tax Information. The Restricted Stock Units are not intended to be French tax-qualified Awards.

Foreign Asset/Account Reporting Information. If Participant retains Shares acquired under the Plan outside of France or maintains a foreign bank account (whether open, current or closed), Participant is required to report such to the French tax authorities when filing his or her annual tax return. Failure to comply could trigger significant penalties.

GERMANY

Notifications

Exchange Control Information. Cross-border payments in excess of EUR 12,500 must be reported monthly to the German Federal Bank. In case of payments in connection with securities (including proceeds realized upon the sale of Shares or the receipt of any dividends), the report must be made by the 5th day of the month following the month in which the payment was received. The report must be filed electronically. The form of report (“*Allgemeine Meldeportal Statistik*”) can be accessed via the *Bundesbank’s* website (www.bundesbank.de) and is available in both German and English. Participant is responsible for satisfying the reporting obligation.

Foreign Asset/Account Reporting Information. German residents holding Shares exceeding 1% of the Company’s total Shares, may be required to notify their local tax office of the acquisition of Shares if the acquisition costs for all Shares held exceeds €150,000 or if the resident holds 10% or more in the Company’s total Shares.

HONG KONG

Terms and Conditions

Restricted Stock Units Payable Only in Shares. Notwithstanding any discretion in the Plan or anything to the contrary in the Agreement, the grant of Restricted Stock Units does not provide any right for Participant to receive a cash payment, and the Restricted Stock Units are payable in Shares only.

Sale of Shares. By accepting the Restricted Stock Units, Participant agrees that in the event that the Restricted Stock Units vest and Shares are issued to Participant within six months of the date of grant, Participant agrees that Participant will not dispose of any Shares acquired prior to the six-month anniversary of the date of grant.

Notifications

Securities Law Information. *Warning: The grant of Restricted Stock Units under the terms of the Agreement and the Plan have not been reviewed by any regulatory authority in Hong Kong. Participant is advised to exercise caution in relation to the right to acquire Shares at vesting of the Restricted Stock Units, or otherwise, under the Plan. The Restricted Stock Units and any Shares issued upon vesting do not constitute a public offering of securities under Hong Kong law and are available only to selected Employees, Directors and Consultants of the Company or its Affiliates. The Agreement, including this Appendix, the Plan and other grant documents have not been prepared in accordance with and are not intended to constitute a “prospectus” for a public offering of securities under the applicable securities legislation in Hong Kong, nor have the documents been reviewed by any regulatory authority in Hong Kong. If Participant is in any doubt about any of the contents of the Agreement, including this Appendix, or the Plan, Participant should obtain independent professional advice.*

INDIA

Notifications

Exchange Control Information. Indian residents are required to repatriate to India all proceeds received from the sale of Shares within 90 days of receipt and any dividends or dividend equivalent payments within 180 days of receipt, or within such other period of time as may be required under applicable regulations, as may be amended from time to time. Participant must maintain the foreign inward remittance certificate received from the bank where the foreign currency is deposited in the event that the Reserve Bank of India or the Company requests proof of repatriation. It is Participant’s responsibility to comply with applicable exchange control laws in India.

Foreign Asset/Account Reporting Information. Participant is required to declare any foreign bank accounts and any foreign financial assets (including Shares held outside India) in Participant's annual tax return. Participant is responsible for complying with this reporting obligation and should confer with his or her personal tax advisor in this regard.

ISRAEL

Terms and Conditions

Trust Arrangement. Participant understands and agrees that the Restricted Stock Units awarded under the Agreement are awarded subject to and in accordance with the terms and conditions of the Plan, the Sub-Plan for Israeli Taxpayers - Align Technology, Inc. 2005 Stock Incentive Plan, as amended in May 2013 (the "Sub-Plan"), the Trust Agreement (the "Trust Agreement"), between the Company and the Company's trustee appointed by the Company or its Affiliate (as such term is defined in the Israeli Sub-Plan) in Israel, ESOP Management & Trust Services, Ltd. (the "Trustee") and the Agreement, or any successor trustee. In the event of any inconsistencies between the Sub-Plan, the Agreement and/or the Plan, the Sub-Plan will govern.

Nature of Grant. The following provisions supplement Section 10 of the Agreement:

The Restricted Stock Units are intended to qualify for favorable tax treatment in Israel as a "102 Capital Gains Track Grant" (as defined in the Sub-Plan) subject to the terms and conditions of Section 102(b)(2) of the Income Tax Ordinance (New Version) – 1961 ("Section 102") and the rules promulgated thereunder. Notwithstanding the foregoing, by accepting the Restricted Stock Units, Participant acknowledges that the Company cannot guarantee or represent that the favorable tax treatment under the 102 Capital Gains Track will apply to the Restricted Stock Units.

By accepting the Restricted Stock Units, Participant: (a) acknowledges receipt of and represents that Participant has read and is familiar with the terms and provisions of Section 102, the Plan, the Sub-Plan, and the Agreement; (b) accepts the Restricted Stock Units subject to all of the terms and conditions of the Agreement, the Plan, the Sub-Plan and Section 102 and the rules promulgated thereunder; and (c) agrees that the Restricted Stock Units and/or any Shares issued in connection therewith, will be registered for the benefit of Participant in the name of the Trustee as required to qualify under Section 102.

Participant hereby undertakes to release the Trustee from any liability in respect of any action or decision duly taken and *bona fide* executed in relation to the Plan, or any Restricted Stock Unit or Share granted thereunder. Participant agrees to execute any and all documents which the Company or the Trustee may reasonably determine to be necessary in order to comply with Section 102 and the Income Tax Ordinance (New Version) – 1961 ("ITO").

Payment after Vesting.

Notwithstanding Section 5 of the Agreement, if the vesting of the Restricted Stock Units occurs during the "Required Holding Period" (as defined in the Sub-Plan), the Shares issued upon the vesting of the Restricted Stock Unit shall be issued to and deposited with the Trustee for the benefit of Participant and shall be held in trust for the Required Holding Period. After termination of the Required Holding Period, the Trustee may release the Restricted Stock Units and any Shares issued with respect thereto under the terms set forth in the Sub-Plan, and in accordance with the terms and conditions of the 102 Capital Gains Track, the ITO and any approval by the Israeli Tax Authority ("ITA").

In the event that such vesting occurs after the end of the Required Holding Period, the Shares issued upon the vesting of the Restricted Stock Units shall either (i) be issued to and deposited with the Trustee, or (ii) be transferred to Participant directly, provided that Participant first complies with his or her obligations for Tax-Related Items.

In the event that Participant elects to have the Shares transferred to Participant without selling such Shares, Participant shall become liable to pay Tax-Related Items immediately in accordance with the provisions of the ITO.

Responsibility for Taxes. Section 6 of the Sub-Plan supplements Section 7 of the Agreement.

Data Privacy. The following provision supplements Section 12 of the Agreement:

Without derogating from the scope of Section 12 of the Agreement, Participant hereby explicitly consents to the transfer of Data between the Company, the Trustee, and/or a designated Plan broker, including any requisite transfer of such Data outside of Participant's country and further transfers thereafter as may be required to a broker or other third party.

Electronic Delivery and Acceptance. The following provision supplements Section 19 of the Agreement.

To the extent required pursuant to Israeli tax law and/or by the Trustee, Participant consents and agrees to deliver hard-copy written notices and/or actual copies of any notices or confirmations provided by Participant related to his or her participation in the Plan.

Written Acceptance. If Participant resides in Israel and has not already executed a Confirmation Letter – Trustee 102 Awards in connection with grants made under the Plan, Participant must print, sign & deliver the signed copy of the Confirmation Letter – Trustee 102 Awards within 60 days to: Marta Woods, Align Technology, Inc. 2820 Orchard Parkway, San Jose, CA. 95134 If the Company does not receive the signed Confirmation Letter – Trustee 102 Awards within 60 days, the Restricted Stock Units may not qualify for preferential tax treatment.

Notifications

Securities Law Information. The Restricted Stock Units are offered in accordance with an exemption from the requirement to publish a prospectus which the Company received from the Israel Securities Authority on June 30, 2011, under Section 15D of the Israeli Securities Law, 1968.

The Shares available under the Plan are registered in the U.S. pursuant to the Form S-8 registration statements which were filed with the U.S. Securities and Exchange Commission on June 7, 2005, May 25, 2006, May 29, 2007, August 5, 2009, August 5, 2010, August 8, 2011, July 24, 2012, August 2, 2013 and November 8, 2016.

Participant may obtain a copy of the Plan and the Form S-8s, including the documents referenced therein, from the Company's intranet site located at:

<http://aligncentral/Departments/Legal/Lists/Equity%20Plan%20Information/AllItems.aspx>.

These documents are also available at Participant's local office.

ITALY

Terms and Conditions

Plan Document Acknowledgment. In accepting the Restricted Stock Units, Participant acknowledges that Participant has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix. Participant further acknowledges that Participant has read and specifically and expressly approves the following sections of the Agreement: Section 3: Vesting Schedule, Section 4: Forfeiture upon Termination of Status as a Service Provider, Section 5: Payment after Vesting, Section 6: Payments after Death, Section 7: Responsibility for Taxes, Section 10: Nature of Grant, Section 11: No Advice regarding Grant; Section 16: Additional Conditions to Issuance of Shares; Compliance with Law and the Authorization to Release and Transfer Necessary Personal Information above.

Notifications

Foreign Asset/Account Reporting Information. Italian residents who, at any time during the fiscal year, hold foreign financial assets (including cash and Shares) which may generate income taxable in Italy are required to report these assets on their annual tax returns (UNICO Form, RW Schedule) for the year during which the assets are held, or on a special form if no tax return is due. These reporting obligations will also apply to Italian residents who are the beneficial owners of foreign financial assets under Italian money laundering provisions.

JAPAN

Notifications

Foreign Asset/Account Reporting Information. Participant will be required to report details of any assets held outside of Japan as of December 31 (including any Shares acquired under the Plan) to the extent such assets have a total net fair market value exceeding JPY 50,000,000. Such report will be due by March 15th each year. Participant should consult with his or her personal tax advisor as to whether the reporting obligation applies to Participant and whether Participant will be required to report details of any outstanding Restricted Stock Units or Shares held by Participant in the report.

LATVIA

There are no country-specific provisions.

LITHUANIA

There are no country-specific provisions.

MEXICO

Terms and Conditions

Labor Law Policy and Acknowledgment. By accepting the Restricted Stock Units, Participant expressly recognizes that Align Technology, Inc., with registered offices at 2560 Orchard Parkway, San Jose, CA 95131, U.S.A., is solely responsible for the administration of the Plan and that Participant's participation in the Plan and acquisition of Shares do not constitute an employment relationship between Participant and the Company since Participant is participating in the Plan on a wholly commercial basis and Participant's sole Employer is Aligntech de Mexico ("Align-Mexico"). Based on the foregoing, Participant expressly recognizes that the Plan and the benefits that Participant may derive from his or her participation in the Plan do not establish any rights between Participant and Align-Mexico, and do not form part of the employment conditions and/or benefits provided by Align-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of Participant's employment.

Participant further understands that his or her participation in the Plan is a result of a unilateral and discretionary decision of the Company; therefore, the Company reserves the absolute right to amend and/or discontinue Participant's participation at any time without any liability to Participant.

Finally, Participant hereby declares that he or she does not reserve any action or right to bring any claim against the Company for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and Participant therefore grants a full and broad release to the Company, its Affiliates, branches, representation offices, its shareholders, officers, agents or legal representatives with respect to any claim that may arise.

Plan Document Acknowledgment. By accepting the Restricted Stock Units, Participant acknowledges that he or she has received a copy of the Plan, has reviewed the Plan and the Agreement in their entirety and fully understands and accepts all provisions of the Plan and the Agreement. In addition, by accepting the Restricted Stock Units, Participant acknowledges that he or she has read and specifically and expressly approves the terms and conditions in Section 10 of the Agreement ("Nature of the Grant."), in which the following is clearly described and established: (i) participation in the Plan does not constitute an acquired right; (ii) the Plan and participation in the Plan is offered by the Company on a wholly discretionary basis; (iii) participation in the Plan is voluntary; and (iv) neither the Company, the Employer nor any Affiliate is responsible for any decrease in the value of the Shares underlying the Restricted Stock Units.

Política de la Ley Laboral y Reconocimiento. Al aceptar las Unidades de Acciones Restringidas, Participante reconoce expresamente que Align Technology, Inc., with registered offices at 2560 Orchard Parkway, San Jose, CA 95131, U.S.A., es el único responsable de la administración del Plan y que participación de Participante en el mismo y la adquisición de Acciones no constituye de ninguna manera una relación laboral entre Participante y la Compañía, debido a que la participación de esa persona en el Plan deriva únicamente de una relación comercial y el único Patrón de participante es Aligntech de Mexico ("Align-México"). Derivado de lo anterior, Participante reconoce expresamente que el Plan y los beneficios que pudieran derivar para Participante por su participación en el mismo, no establecen ningún derecho entre Participante e Align-México, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por Align-México, y cualquier modificación al Plan o la terminación del mismo de ninguna manera podrá ser interpretada como una modificación o desmejora de los términos y condiciones de trabajo de Participante.

Asimismo, Participante reconoce que su participación en el Plan es resultado de la decisión unilateral y discrecional de la Compañía, por lo tanto, la Compañía se reserva el derecho absoluto para modificar y/o discontinuar la participación de Participante en cualquier momento, sin ninguna responsabilidad hacia Participante.

Finalmente Participante manifiesta que no se reserva ninguna acción o derecho que ejercitar en contra de la Compañía, por cualquier compensación o daños o perjuicios en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia exime amplia y completamente a la Compañía, sus Afiliadas, sucursales, oficinas de representación, sus accionistas, administradores, agentes y representantes legales con respecto a cualquier reclamo que pudiera surgir.

Reconocimiento de Documentos del Plan. Al aceptar las Unidades de Acciones Restringidas, Participante reconoce que ha recibido una copia del Plan, que ha revisado el Plan y el Acuerdo en su totalidad y entiende y acepta los términos del Plan y del Acuerdo. Adicionalmente, al aceptar las Unidades de Acciones Restringidas, Participante reconoce que ha leído y especifica y expresamente aprueba los términos y condiciones del Sección 9 del Acuerdo (denominado "Naturaleza de la Concesión"), donde claramente se establece que (i) la participación en el Plan no constituye un derecho adquirido, (ii) el Plan y la participación en el Plan es ofrecido por la Compañía en forma totalmente discrecional; (iii) la participación en el Plan es voluntaria; y (iv) ni la Compañía ni el Patrón ni su Afiliada es responsable por el decremento en el valor de las acciones de las Unidades de Acciones Restringidas.

NETHERLANDS

There are no country-specific provisions.

NEW ZEALAND

Notifications

Securities Law Notification. Warning: This is an offer of rights to receive Shares underlying the Restricted Stock Units. Restricted Stock Units give Participant a potential stake in the ownership of the Company. Participant may receive a return if dividends are paid on the Shares issued pursuant to the vesting of the Restricted Stock Units.

If the Company runs into financial difficulties and is wound up, Participant will be paid only after all creditors and holders of preferred shares have been paid. Participant may lose some or all of his or her investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share scheme. As a result, Participant may not be given all the information usually required. Participant will also have fewer legal protections for this investment.

Participant should ask questions, read all documents carefully, and seek independent financial advice before committing himself or herself.

In addition, Participant is hereby notified that the documents listed below are available for review on the Company's "Investors" website at <http://investor.aligntech.com/>:

- (i) a copy of the Company's most recent annual report (i.e., Form 10-K);
- (ii) a copy of the Company's most recent quarterly report (i.e., Form 10-Q); and
- (iii) a copy of the Company's most recent published financial statements.

A copy of the above documents will be sent to Participant free of charge on written request to Stock Administration, Align Technology, Inc. 2820 Orchard Parkway, San Jose, CA. 95134

As noted above, Participant is advised to carefully read the materials provided before making a decision whether to participate in the Plan. Participant is also encouraged to contact his or her tax advisor for specific information concerning Participant's personal tax situation with regard to Plan participation.

POLAND

Notifications

Foreign Asset/Account Reporting Information. Polish residents holding foreign securities (including Shares) and maintaining accounts abroad must report information to the National Bank of Poland on transactions and balances of the securities and cash deposited in such accounts if the value of such transactions or balances exceeds PLN 7,000,000. If required, the reports must be filed on a quarterly basis on special forms available on the website of the National Bank of Poland.

Exchange Control Information. If Participant transfers funds in excess of EUR 15,000 into Poland, the funds must be transferred via a Polish bank account or financial institution. Participant is required to retain the documents connected with a foreign exchange transaction for a period of five (5) years, as measured from the end of the year in which such transaction occurred.

PORTUGAL

Terms and Conditions

Consent to Receive Information in English. Participant hereby declares that Participant has full knowledge of the English language and has read, understood and fully accepted and agreed with the terms and conditions established in the Plan and the Agreement.

Conhecimento da Língua. Por meio do presente, eu declaro expressamente que tem pleno conhecimento da língua inglesa e que li, compreendi e livremente aceitei e concordei com os termos e condições estabelecidas no Plano e no Acordo.

Notifications

Exchange Control Information. If Participant receives Shares, the acquisition of Shares should be reported to the Banco de Portugal for statistical purposes. If the Shares are deposited with a commercial bank or financial intermediary in Poland, such bank or financial intermediary will submit the report on Participant's behalf. If the Shares are not deposited with a commercial bank or financial intermediary in Portugal, Participant is responsible for submitting the report to the Banco de Portugal.

RUSSIA

Terms and Conditions

U.S. Transaction. Acceptance of the grant of the Restricted Stock Units results in a contract between Participant and the Company completed in the United States and the Agreement is governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. Upon vesting of the Restricted Stock Units, any Shares to be issued to Participant shall be delivered to Participant through a brokerage account in the United States and in no event will such Shares be delivered to Participant in Russia. Participant acknowledges that he or she is not permitted to sell or otherwise transfer Shares directly to other individuals in Russia, nor is Participant permitted to bring any certificates representing the Shares into Russia (if such certificates are issued). Participant is permitted to sell Shares only on the Nasdaq stock exchange, on which the Shares are listed, and only through a U.S. broker.

Settlement of Restricted Stock Units and Sale of Shares. Depending on the development of local regulatory requirements, the Company reserves the right to force the immediate sale of any Shares to be issued upon vesting and settlement of the Restricted Stock Units. If applicable, Participant agrees that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such Shares (on Participant's behalf pursuant to this authorization) and Participant expressly authorizes the Company's designated broker to complete the sale of such Shares. Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Upon any such sale of the Shares, the proceeds, less any Tax-Related Items and broker's fees or commissions, will be remitted to Participant in accordance with any applicable exchange control laws and regulations.

Data Privacy

The following provision supplements Section 12 of the Agreement:

Participant understands and agrees that he or she must complete and return a Consent to Processing of Personal Data (the "Consent") form to the Company. Further, Participant understands and agrees that if Participant does not complete and return a Consent form to the Company, the Company will not be able to grant Restricted Stock Units to Participant or other awards or administer or maintain such awards. Therefore, Participant understands that refusing to complete a Consent form or withdrawing his or her consent may affect Participant's ability to participate in the Plan.

Notifications

Exchange Control Information. Participant is responsible for complying with any and all Russian foreign exchange requirements in connection with the Restricted Stock Units, any Shares acquired and funds remitted into Russia in connection with the Plan. This may include, in certain circumstances, reporting and repatriation requirements. Participant should contact his or her personal advisor regarding any such requirements resulting from participation in the Plan.

Securities Law Information. The grant of the Restricted Stock Units and the distribution of the Plan and all other materials Participant may receive regarding participation in the Plan do not constitute an offering or the advertising of securities in Russia. The issuance of Shares pursuant to the Plan has not and will not be registered in Russia and, therefore, the Shares may not be used for an offering or public circulation in Russia. In no event will Shares be delivered to Participant in Russia; all Shares acquired under the Plan will be maintained on Participant's behalf in the United States.

Foreign Asset/Account Reporting Notification. Russian residents are also required to file reports of transactions in their foreign bank accounts on an annual basis with the Russian tax authorities. The tax authorities can require any supporting documents related to the transaction in a Russian resident's foreign bank account. Participant should consult with his or her personal tax advisor for additional information about these reporting obligations.

Labor Law Information. If Participant continues to hold Shares acquired at vesting of Restricted Stock Units after an involuntary termination of employment, Participant will not be eligible to receive unemployment benefits in Russia.

Anti-Corruption Legislation Information. Individuals holding public office in Russia, as well as their spouses and dependent children, may be prohibited from opening or maintaining a foreign brokerage or bank account and holding any securities, whether acquired directly or indirectly, in a foreign company (including Shares acquired under the Plan). Participant is strongly advised to consult with his or her personal legal advisor to determine whether the restriction applies to Participant.

SINGAPORE

Notifications

Securities Law Information. The grant of the Restricted Stock Units under the Plan is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA"). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. The Restricted Stock Units are subject to section 257 of the SFA and individuals should not sell, or offer for sale, Shares acquired at vesting, unless such sale or offer is made (a) after 6 months of the grant of the Restricted Stock Units; or (b) pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than Section 280) of the SFA, or pursuant to, and in accordance with the conditions of any other applicable provision(s) of the SFA.

Chief Executive Officer and Director Notification Obligation. The Chief Executive Officer and any director, associate director and shadow director of a Singaporean Affiliate are subject to certain notification requirements under the Singapore Companies Act. These individuals must notify the Singaporean Affiliate in writing of an interest (e.g., the Restricted Stock Units, Shares, etc.) in the Company or any Affiliate within two (2) business days of (i) its acquisition or disposal, (ii) any change in previously disclosed interest (e.g., when Shares acquired at vesting are sold), or (iii) becoming the Chief Executive Officer or a director, associate director or shadow director.

SLOVAKIA

There are no country-specific provisions.

SOUTH KOREA

Foreign Asset/Account Reporting Information. South Korean residents must declare all foreign accounts (i.e., non-South Korean bank accounts, brokerage accounts, etc.) to the South Korean tax authorities and file a report if the aggregate balance of such accounts exceeds a certain limit (currently KRW 1 billion or an equivalent amount in foreign currency) on any month-end date during the year. Participant should consult with his or her personal tax advisor to determine how to value Participant's foreign accounts for purposes of this reporting requirement and whether Participant is required to file a report with respect to such accounts.

SPAIN

Terms and Conditions

No Entitlement for Claims or Compensation. The following provision supplements Section 10 of the Agreement:

By accepting the Restricted Stock Units, Participant consents to participation in the Plan and acknowledges that he or she has received a copy of the Plan document.

Participant understands that the Company has unilaterally, gratuitously and in its sole discretion decided to grant Restricted Stock Units under the Plan to individuals who may be Service Providers throughout the world. The decision is limited and entered into based upon the express assumption and condition that any Restricted Stock Units will not economically or otherwise bind the Company or any Parent or Affiliate, including the Employer, on an ongoing basis, other than as expressly set forth in the Agreement. Consequently, Participant understands that the Restricted Stock Units are granted on the assumption and condition that the Restricted Stock Units shall not become part of any employment or service contract (whether with the Company or any Parent or Affiliate, including the Employer) and shall not be considered a mandatory benefit, salary for any purpose (including severance compensation) or any other right whatsoever. Furthermore, Participant understands and freely accepts that there is no guarantee that any benefit whatsoever shall arise from the grant of Restricted Stock Units, which are gratuitous and discretionary, since the future value of the Restricted Stock Units and the underlying Shares is unknown and unpredictable.

In addition, Participant understands that this grant of Restricted Stock Units would not be made but for the assumptions and conditions set forth hereinabove; thus, Participant understands, acknowledges and freely accepts that, should any or all of the assumptions be mistaken or any of the conditions not be met for any reason, the Restricted Stock Units and any right to the underlying Shares shall be null and void.

Further, the vesting of the Restricted Stock Units is expressly conditioned on Participant's continued and active rendering of service, such that if Participant's status as a Service Provider is terminated for any reason whatsoever, the Restricted Stock Units may cease vesting immediately, in whole or in part, effective on the date of Participant's termination as a Service Provider. This will be the case, for example, even if (1) Participant is considered to be unfairly dismissed without good cause; (2) Participant is dismissed for disciplinary or objective reasons or due to a collective dismissal; (3) Participant terminates his or her relationship as a Service Provider due to a change of work location, duties or any other employment or contractual condition; (4) Participant terminates his or her relationship as a Service Provider due to a unilateral breach of contract by the Company or an Affiliate; or (5) Participant's status as a Service Provider is terminated for any other reason whatsoever. Consequently, upon termination of Participant's status as a Service Provider for any of the above reasons, Participant may automatically lose any rights to Restricted Stock Units that were not vested on the date of Participant's termination as a Service Provider, as described in the Plan and the Agreement.

Notifications

Securities Law Information. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory in connection with the grant of the Restricted Stock Units. The Agreement (including this Appendix) has not been, nor will it be, registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

Exchange Control Information. The acquisition, ownership and sale of Shares under the Plan must be declared for statistical purposes to the Spanish Dirección General de Comercio e Inversiones (the "DGCI"), the Bureau for Commerce and Investments, which is a department of the Ministry of Economy and Competitiveness. Generally, the declaration must be made in January for Shares owned as of December 31 of the prior year and/or Shares acquired or disposed of during the prior year. However, if the value of Shares acquired or disposed of or the amount of the sale proceeds exceeds EUR 1,502,530 (or if Participant holds 10% or more of the share capital of the Company), the declaration must be filed within one month of the acquisition or disposition, as applicable.

In addition, Participant will be required to declare to the Bank of Spain any securities accounts (including brokerage accounts held abroad), any foreign instruments (including any Shares acquired under the Plan) and any transactions with non-Spanish residents (including any payments of Shares made to Participant by the Company) depending on the amount of the transactions during the relevant year or the balances in such accounts as of December 31 of the relevant year.

Foreign Asset/Account Reporting Information. If Participant holds rights or assets (e.g., Shares or cash held in a bank or brokerage account) outside of Spain with a value in excess of EUR 50,000 per type of right or asset (e.g., Shares, cash, etc.) as of December 31 each year, Participant is required to report certain information regarding such rights and assets on tax form 720. After such rights and/or assets are initially reported, the reporting obligation will only apply for subsequent years if the value of any previously-reported rights or assets increases by more than EUR 20,000. The reporting must be completed by the following March 31.

SWITZERLAND

Notifications

Securities Law Information. The grant of the Restricted Stock Units under the Plan is considered a private offering in Switzerland and is, therefore, not subject to registration in Switzerland. Neither this document nor any other material related to the Restricted Stock Units constitutes a prospectus as such term is understood pursuant to Article 652a of the Swiss Code of Obligations, and neither this document nor any other materials related to the Restricted Stock Units may be publicly distributed or otherwise made publicly available in Switzerland. Neither this document nor any other offering or marketing materials relating to the Restricted Stock Units have been or will be filed with, approved or supervised by any Swiss regulatory authority (in particular, the Swiss Financial Market Supervisory Authority (FINMA)).

TAIWAN

Notifications

Securities Law Information. The offer of participation in the Plan is available only for employees of the Company and its Affiliates and/or Subsidiaries. The offer of participation in the Plan is not a public offer of securities by a Taiwanese company.

Exchange Control Information. Participant may acquire and remit foreign currency (including proceeds from the sale of Shares or the receipt of dividends) into and out of Taiwan up to USD 5,000,000 per year. If the transaction amount is TWD 500,000 or more in a single transaction, Participant must submit a foreign exchange transaction form and also provide supporting documentation to the satisfaction of the remitting bank.

If the transaction amount is USD 500,000 or more in a single transaction, Participant may be required to provide additional supporting documentation to the satisfaction of the remitting bank. Participant should consult his or her personal advisor to ensure compliance with applicable exchange control laws in Taiwan.

THAILAND

Notifications

Exchange Control Information. If the proceeds from the sale of Shares or the receipt of dividends paid on such Shares are equal to or greater than USD 50,000 in a single transaction, Thai residents must repatriate all cash proceeds to Thailand immediately following the receipt of the cash proceeds and then either convert such proceeds to Thai Baht or deposit the proceeds into a foreign currency account opened with a commercial bank in Thailand within 360 days of repatriation. In addition, Thai residents must specifically report the inward remittance to the Bank of Thailand on a foreign exchange transaction form. If Participant fails to comply with these obligations, Participant may be subject to penalties assessed by the Bank of Thailand. Participant should consult his or her personal advisor prior to taking any action with respect to remittance of cash proceeds into Thailand. Participant is responsible for ensuring compliance with all exchange control laws in Thailand.

TURKEY

Notifications

Securities Law Information. The sale of Shares acquired under the Plan is not permitted within Turkey. The sale of Shares acquired under the Plan must take place outside of Turkey.

UNITED ARAB EMIRATES

Notifications

Securities Law Information. The Plan is only being offered to qualified employees and is in the nature of providing equity incentives to employees of the Company's Affiliate in the United Arab Emirates. The Plan and the Agreement are intended for distribution only to such employees and must not be delivered to, or relied on by, any other person. Participant should conduct his or her own due diligence on the Restricted Stock Units offered pursuant to the Agreement. If Participant does not understand the contents of the Plan or the Agreement, he or she should consult an authorized financial adviser. The Emirates Securities and Commodities Authority and the Dubai Financial Services Authority have no responsibility for reviewing or verifying any documents in connection with the Plan. Further, the Ministry of the Economy and the Dubai Department of Economic Development have not approved the Plan or the Agreement nor taken steps to verify the information set out therein, and have no responsibility for such documents.

UNITED KINGDOM

For Service Providers who are Employees, the following additional terms and conditions apply to the Agreement. These terms and conditions do not apply if Participant is a Consultant who is self-employed.

Tax Acknowledgment. The following provisions supplement Section 7 in the Agreement:

Without limitation to the information regarding Tax-Related Items in the Agreement, Participant agrees that he or she is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items, as and when requested by the Company, or if different, the Employer or by Her Majesty's Revenue & Customs ("HMRC") (or any other tax authority or any other relevant authority). Participant also agrees to indemnify and keep indemnified the Company and/or the Employer for all Tax-Related Items that they are required to pay, or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on Participant's behalf and authorizes the Company and/or the Employer to recover such amounts by any means referred to in the Agreement.

Notwithstanding the foregoing, if Participant is a director or executive officer (as within the meaning of Section 13(k) of the Exchange Act), Participant understands that he or she may not be able to indemnify the Company for the amount of Tax-Related Items not collected from or paid by Participant, if the indemnification could be considered to be a loan. In this case, Tax-Related Items not collected or paid may constitute a benefit to Participant on which additional income tax and National Insurance Contributions ("NICs") may be payable. Participant acknowledges that he or she ultimately will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying to the Company or the Employer (as appropriate) the amount of any NICs due on this additional benefit which the Company and/or the Employer may also recover from Participant at anytime thereafter by any of the means referred to in this Agreement.

Exhibit 10.8

ALIGN TECHNOLOGY, INC. AMENDED AND RESTATED 2005 INCENTIVE PLAN NOTICE OF GRANT OF MARKET STOCK UNITS

Unless otherwise defined herein, the terms defined in the Amended and Restated 2005 Incentive Plan (the "Plan") will have the same defined meanings in this Notice of Grant of Market Stock Units (the "Notice of Grant").

Participant:
Address:

You (the "Participant") have been granted an award ("Award") of market-performance based Restricted Stock Units ("Market Stock Units"), subject to the terms and conditions of the Plan, this Notice of Grant and the Market Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") as follows:

Date of Grant: February 20, ____
Target Number of Market Stock Units: xxx (the "Target Number of Market Stock Units")
Maximum Number of Market Stock Units: xxx (the "Maximum Number of Market Stock Units")

Performance Period: Means the three year period commencing on February 15 of the year of grant ending on the third year anniversary of such date (subject to Sections 4 of Exhibit A (the "Performance Period")).
Performance Matrix: The number of Market Stock Units in which Participant may vest in accordance with the Vesting Schedule will depend upon the Company's Stock Price Performance (as defined below) as compared to the NASDAQ Composite Stock Price Performance (as defined below) for the Performance Period and will be determined in accordance with Section 1 of Exhibit A.
Vesting Schedule: Subject to Section 4 of Exhibit A and the terms of the Plan, the Participant will vest in his or her Calculated Market Stock Units (as defined below) on the three year anniversary of the date of grant (the "Vesting Date").

By accepting this agreement, you and the Company agree that this Award is granted under and governed by the terms and conditions of the Plan and the Agreement, each of which are made a part of this document. You further agree to accept, acknowledge and execute this Agreement as a condition to receiving any Market Stock Units under this Award.

Nothing in this Notice of Grant or in the attached Agreement or in the Plan shall confer upon Participant any right to continue in service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining Participant) or of Participant, which rights are hereby expressly reserved by each, to terminate Participant's service at any time for any reason, with or without cause.

EXHIBIT A

MARKET STOCK UNIT AGREEMENT

1. Grant.

(a) The Company hereby grants to Participant under the Plan an Award of Market Stock Units, subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.

(b) The number of Market Stock Units in which the Participant may vest in accordance with the Vesting Schedule set forth in the Notice of Grant will depend upon the Company's Stock Price Performance as compared to the NASDAQ Composite Index Performance calculated on February 15, 2022 (the "Measurement Date") with 100% of the Market Stock Units eligible to vest on the Vesting Date. The actual number of Market Stock Units that will vest on the Vesting Date will be determined as follows:

(i) Performance Calculation.

1. The "Company's Stock Price Performance" means the percentage increase or decrease in (i) the average adjusted closing price per share of the Company's common stock during the 30 trading-day period ending on February 15 of the year of grant over (ii) the average adjusted closing price of the Company's common stock during the 30 trading-day period ending on the Measurement Date. Notwithstanding the foregoing, in the event of a Change of Control of the Company, the "Company's Stock Price Performance" means the percentage increase or decrease in (i) the average adjusted closing price per share of the Company's common stock during the 30 trading-day period ending on February 15 of the year of grant over (ii) the per share value of the Company's common stock paid to its stockholders in connection with the Change of Control.

2. The "NASDAQ Composite Index Performance" means the percentage increase or decrease in (i) the adjusted index value of the NASDAQ Composite Index during the 30 trading-day period ending February 15 of the year of grant over (ii) the adjusted index value of the NASDAQ Composite Index for during the 30 trading-day period ending on the Measurement Date.

3. The Company's Stock Price Performance will be compared against the NASDAQ Composite Index Performance (each expressed as a growth rate percentage) to result in a growth rate (the "Growth Rate Delta") equal to the Company's Stock Price Performance minus the NASDAQ Composite Index Performance. The Growth Rate Delta will be calculated on the Measurement Date.

(ii) Market Stock Unit Calculation.

1. If the Growth Rate Delta is equal to 0%, the number of Market Stock Units that will be eligible to vest (the "Calculated Market Stock Units") on the Vesting Date will equal 100% of the Target Number of Market Stock Units.

2. If the Growth Rate Delta is greater or less than 0%, the number of Market Stock Units that will be Calculated Market Stock Units on the Vesting Date will equal: (i) the Target Number of Market Stock Units, multiplied by (ii) the sum of (A) 100% plus (B) three times the Growth Rate Delta; provided, however, that in no event will more than the Maximum Number of Market Stock Units become Calculated Market Stock Units on the Vesting Date. If the Growth Rate Delta is equal to negative-33.3%, then the number of Target Market Stock Units that will become Calculated Market Stock Units on the Vesting Date will equal 0.

(iii) Examples (for illustration purposes only).

1. If the Growth Rate Delta on the Measurement Date equaled 20%, then 160% (equal to 100% plus (3 times 20%)) of the Target Number of Market Stock Units would be Calculated Market Stock Units and would vest on the Vesting Date.

2. If the Growth Rate Delta on the Measurement Date equaled negative-20%, then 40% (equal to 100% plus (3 times negative-20%)) of the Target Number of Market Stock Units would be Calculated Market Stock Units and would vest on the Vesting Date.

2. Company's Obligation to Pay. Each Market Stock Unit represents a value equal to the Fair Market Value of a Share on the date it is granted. Unless and until the Market Stock Units will have vested in the manner set forth in Sections 3, 4 and 5, Participant will have no right to payment of any such Market Stock Units. Prior to actual payment of any vested Market Stock Units, such Market Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. Payment of any vested Market Stock Units will be made in whole Shares only and any fractional Shares will be forfeited at the time of payment.

3. Vesting Schedule. Subject to Section 5, the Market Stock Units awarded by this Agreement will vest in Participant according to the Vesting Schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through each such date.

4. Change of Control. In the event of a Change of Control, the Performance Period shall be deemed to end upon the closing of the Change of Control for purposes of determining the Company's Stock Price Performance and the NASDAQ Composite Index Performance and the number of Market Stock Units that are Calculated Market Stock Units will be determined in accordance with the Performance Matrix and Section 1 of this Exhibit A. The Participant shall vest in the number of Calculated Market Stock Units determined based on the preceding sentence as follows:

(a) if Participant's employment is terminated without Cause or for Good Reason (as such terms are defined in Participant's individual employment agreement with the Company) within eighteen months following the occurrence of a Change of Control, then 100% of his or her unvested Calculated Market Stock Units will fully vest, provided the Participant executes and does not revoke a release of claims as provided for in Participant's employment agreement (as a necessary condition to the receipt of severance thereunder).

(b) in accordance with Section 1 of this Exhibit A, the Administrator shall not be entitled to eliminate or reduce the number of Calculated Market Stock Units determined in accordance with Section 1 of Exhibit A following a Change of Control.

5. Forfeiture upon Termination of Status as a Service Provider. Subject to the provisions of Section 4, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Market Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.

6. Payment after Vesting. Any Market Stock Units that vest in accordance with Sections 3 and 4 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 8. Subject to the provisions of Section 20, any Shares will be issued to Participant as soon as practicable after the relevant vesting date, but in any event, within the period ending on the later to occur of the date that is two-and-one-half months from the end of (a) Participant's tax year that includes the vesting date, or (b) the Company's tax year that includes the vesting date.

7. Payments after Death. Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity

of the transfer and compliance with any laws or regulations pertaining to said transfer.

8. Withholding of Taxes.

- (a) Generally. The Participant is ultimately liable and responsible for all taxes owed in connection with the Market Stock Units, regardless of any action the Company or any of its Subsidiaries takes with respect to any tax withholding obligations that arise in connection with the Market Stock Units. Neither the Company nor any of its Subsidiaries makes any representation or undertaking regarding the treatment of any tax withholding in connection with the grant or vesting of the Market Stock Units or the subsequent sale of Shares issuable pursuant to the Market Stock Units. The Company and its Subsidiaries do not commit and are under no obligation to structure the Market Stock Units to reduce or eliminate the Participant's tax liability.
- (b) Payment of Withholding Taxes. Notwithstanding any contrary provision of this Agreement, no Shares will be issued to Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by the Participant with respect to the payment of any taxes which the Company determines must be withheld with respect to the Market Stock Units. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld. In addition and to the maximum extent permitted by law, the Company has the right to retain without notice from salary or other amounts payable to the Participant, cash having a value sufficient to satisfy any tax withholding obligations that cannot be satisfied by the withholding of otherwise deliverable Shares.

9. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant.

10. No Effect on Service. Participant acknowledges and agrees that the vesting of the Market Stock Units pursuant to Sections 3 or 4 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder). Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all, and will not interfere with the Participant's right or the right of the Company (or the Affiliate employing or retaining Participant) to terminate Participant as a Service Provider at any time, with or without cause.

11. Address for Notices. Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2560 Orchard Parkway, San Jose, CA 95131, or at such other address as the Company may hereafter designate in writing.

12. Grant is Not Transferable. Except to the limited extent provided in Section 7, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.

13. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

14. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

15. Plan Governs. This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.

16. Administrator Authority. The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Market Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

17. Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to Market Stock Units awarded under the Plan or future Market Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

18. Captions. Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

19. Agreement Severable. In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

20. Section 409A. Notwithstanding anything in the Plan or this Agreement to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Market Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to death, and if (x) Participant is a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Market Stock Units will result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the payment of such accelerated Market Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless the Participant dies following his or her termination as a Service Provider, in which case, the Market Stock Units will be paid in Shares to the Participant's estate as soon as practicable following his or her death. It is the intent of this Agreement to comply with the requirements of Section 409A so that none of the Market Stock Units provided under this Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and any proposed, temporary or final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

21. Governing Law. This Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Market Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Market Stock Units is made and/or to be performed.

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By Participant's acceptance of this Agreement, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Market Stock Units.

PARTICIPANT: ALIGN TECHNOLOGY, INC.

Signature By _____

Print Name Title

Joseph Hogan, President and CEO

ALIGN TECHNOLOGY, INC.
CEO FORM
AMENDED AND RESTATED 2005 INCENTIVE PLAN
NOTICE OF GRANT OF MARKET STOCK UNITS

Unless otherwise defined herein, the terms defined in the Amended and Restated 2005 Incentive Plan (the "Plan") will have the same defined meanings in this Notice of Grant of Market Stock Units (the "Notice of Grant").

Participant:**Address:**

You (the "Participant") have been granted an award ("Award") of market-performance based Restricted Stock Units ("Market Stock Units"), subject to the terms and conditions of the Plan, this Notice of Grant and the Market Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") [and consistent with the terms of the Participant's Amended and Restated Chief Executive Officer Employment Agreement dated April 17, 2015 (the "CEO Employment Agreement"),] as follows:

Date of Grant:

Target Number of Market Stock Units: _____ Market Stock Units (the "Target Number of Market Stock Units")

Maximum Number of Market Stock Units: _____ (the "Maximum Number of Market Stock Units")

Performance Period: Three years from [_____] of the year of grant (the "Performance Period"). The Performance Period is subject to adjustment under certain limited circumstances under Section 3(a) of Exhibit A below.

Performance Matrix: The number of Market Stock Units in which Participant may vest in accordance with the Vesting Schedule will depend upon the Company's Stock Price Performance (as defined below) as compared to the NASDAQ Composite Stock Price Performance (as defined below) for the Performance Period and will be determined in accordance with Section 1 of Exhibit A.

Vesting Schedule: Subject to the terms and conditions of the Plan and the provisions in the attached Market Stock Unit Agreement and consistent with the Participant's CEO Employment Agreement, the Participant will vest in his or her Calculated Market Stock Units (as defined below) on the 3-year anniversary of the Date of Grant (the "Vesting Date"). The schedule by which the Calculated Market Stock Units may vest is subject to adjustment and acceleration under certain limited circumstances under Section 3 of Exhibit A below).

By accepting this agreement, you and the Company agree that this Award is granted under and governed by the terms and conditions of the Plan and the Agreement, each of which are made a part of this document. You further agree to accept, acknowledge and execute this Agreement as a condition to receiving any Market Stock Units under this Award.

Nothing in this Notice of Grant or in the attached Agreement or in the Plan shall confer upon Participant any right to continue in service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining Participant) or of Participant, which rights are hereby expressly reserved by each, to terminate Participant's service at any time for any reason, with or without cause.

EXHIBIT A**MARKET STOCK UNIT AGREEMENT**1. Grant.

(a) The Company hereby grants to Participant under the Plan an Award of Market Stock Units, subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.

(b) Subject to Section 3 below, the number of Market Stock Units in which the Participant may vest in accordance with the Vesting Schedule set forth in the Notice of Grant will depend upon the Company's Stock Price Performance as compared to the NASDAQ Composite Index Performance calculated on the [_____] (the "Measurement Date"), determined as follows:

(i) Performance Calculation.

1. The "Company's Stock Price Performance" means the percentage increase or decrease in (i) the average adjusted closing price per share of the Company's common stock during the 30 trading-day period ending [_____] of the year of grant over (ii) the average adjusted closing price of the Company's common stock during the 30 trading-day period ending on the Measurement Date.

2. The "NASDAQ Composite Index Performance" means the percentage increase or decrease in (i) the adjusted index value of the NASDAQ Composite Index during the 30 trading-day period ending February 15 of the year of grant over (ii) the adjusted index value of the NASDAQ Composite Index during the 30 trading-day period ending on the Measurement Date.

3. The Company's Stock Price Performance will be compared against the NASDAQ Composite Index Performance (each expressed as a growth rate percentage) to result in a growth rate (the "Growth Rate Delta") equal to the Company's Stock Price Performance minus the NASDAQ Composite Index Performance. The Growth Rate Delta will be calculated on the Measurement Date.

(ii) Market Stock Unit Calculation.

1. If the Growth Rate Delta is equal to 0%, the number of Market Stock Units that will be eligible to vest (the "Calculated Market Stock Units") on the Measurement Date will equal 100% of the Target Number of Market Stock Units.

2. If the Growth Rate Delta is greater or less than 0%, the number of Market Stock Units that will be Calculated Market Stock Units will equal: (i) the Target Number of Market Stock Units, multiplied by (ii) the sum of (A) 100% plus (B) three times the Growth Rate Delta; provided, however, that in no event will more than the Maximum Number of Market Stock Units become Calculated Market Stock Units. If the Growth Rate Delta is less than or equal to negative-33.3%, then the number of Target Market Stock Units that will become Calculated Market Stock Units will equal 0.

(iii) Examples (for illustration purposes only).

1. Example #1: If the Growth Rate Delta equaled 20%, then 160% (equal to 100% plus (3 times 20%)) of the Target Number of Market Stock Units would be Calculated Market Stock Units.

2. Example #2: If the Growth Rate Delta equaled negative-20%, then 40% (equal to 100% plus 3 times negative-20%) of the Target Number of Market Stock Units would be Calculated Market Stock Units.

2. Company's Obligation to Pay. Each Market Stock Unit represents a value equal to the Fair Market Value of a Share on the date it is granted. Unless and until the Market Stock Units will have vested in the manner set forth in Section 3, Participant will have no right to payment of any such Market Stock Units. Prior to actual payment of any vested Market Stock Units, such Market Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. Payment of any vested Market Stock Units will be made in whole Shares only and any fractional Shares will be forfeited at the time of payment.

3. Vesting Schedule. The Market Stock Units awarded by this Agreement will vest in Participant according to the Vesting Schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through the Vesting Date; provided however:

(a) Upon a Change of Control (as such term is defined in the Participant's CEO Employment Agreement), and subject to Participant's continuing to be a Service Provider through such date, the vesting of the Calculated Market Stock Units will accelerate on a pro rata basis based on (i) the amount of time that has lapsed between the Date of Grant and the date of the closing of the Change of Control relative to (ii) the original 3-year performance period (with the number of Calculated Market Stock Units eligible to be earned calculated using the amount to be paid to holders of the Company's Common Stock in the Change of Control transaction). Any unvested Calculated Market Stock Units that do not accelerate based on the terms of the preceding sentence will vest ratably in substantially equal installments on each anniversary of the Date of Grant that occurs following the closing date of such Change of Control transaction with the final vesting date to be the 3-year anniversary of the Date of Grant, to the extent any Calculated Market Stock Units remain outstanding following the Change of Control and subject to Participant continuing to be a Service Provider through the applicable vesting date.

(b) In the event Participant's employment with the Company terminates as a result of Participant's death or Disability (as such term is defined in the Employment Agreement) following the Start Date (as such term is defined in the Employment Agreement), then, on the date of such termination, Participant will vest in the Calculated Market Stock Units (with the number of Calculated Market Stock Units eligible to be earned calculated using the date of employment termination as the measurement date for purposes of calculating the Company's total shareholder return compared to that of the NASDAQ Composite).

(c) If upon or within 18 months following a Change of Control (as such term is defined in the CEO Employment Agreement) (i) the Company (or any parent or subsidiary or successor of the Company) terminates Participant's employment with the Company other than for Cause (as such term is defined in the CEO Employment Agreement), death or Disability (as such term is defined in the CEO

Employment Agreement), or (ii) Participant resigns from such employment for Good Reason (as such term is defined in the CEO Employment Agreement), then, subject to the terms and conditions of Section 8 of the Employment Agreement, Participant will be entitled to 100% accelerated vesting.

4. **Forfeiture upon Termination of Status as a Service Provider.** Subject to Section 3 hereof, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Market Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.

5. **Payment after Vesting.** Any Market Stock Units that vest in accordance with Section 3 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 7. Subject to the provisions of Section 19, any Shares will be issued to Participant as soon as practicable after the relevant vesting date, but in any event, within the period ending on the later to occur of the date that is two-and-one-half months from the end of (a) Participant's tax year that includes the vesting date, or (b) the Company's tax year that includes the vesting date.

6. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

7. **Withholding of Taxes.**

(a) **Generally.** The Participant is ultimately liable and responsible for all taxes owed in connection with the Market Stock Units, regardless of any action the Company or any of its Subsidiaries takes with respect to any tax withholding obligations that arise in connection with the Market Stock Units. Neither the Company nor any of its Subsidiaries makes any representation or undertaking regarding the treatment of any tax withholding in connection with the grant or vesting of the Market Stock Units or the subsequent sale of Shares issuable pursuant to the Market Stock Units. The Company and its Subsidiaries do not commit and are under no obligation to structure the Market Stock Units to reduce or eliminate the Participant's tax liability.

(b) **Payment of Withholding Taxes.** Notwithstanding any contrary provision of this Agreement, no Shares will be issued to Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by the Participant with respect to the payment of any taxes which the Company determines must be withheld with respect to the Market Stock Units. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld. In addition and to the maximum extent permitted by law, the Company has the right to retain without notice from salary or other amounts payable to the Participant, cash having a value sufficient to satisfy any tax withholding obligations that cannot be satisfied by the withholding of otherwise deliverable Shares.

8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant, provided that the Participant shall be entitled to any award adjustments provided pursuant to Section 18(a) of the Plan.

9. **No Effect on Service.** Participant acknowledges and agrees that the vesting of the Market Stock Units pursuant to Section 3 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder), subject, however, to the provisions in Section 3(a)-(c) above. Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all, and will not interfere with the Participant's right or the right of the Company (or the Affiliate employing or retaining Participant) to terminate Participant as a Service Provider at any time, with or without cause.

10. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2820 Orchard Parkway, San Jose, CA 95131, or at such other address as the Company may hereafter designate in writing. Any notice to be given to the Participant regarding his Market Stock Unit award shall comply with the notice provisions in the Participant's CEO Employment Agreement.

11. **Grant is Not Transferable.** Except to the limited extent provided in Section 6, or, in the event of Participant's death, by his will or the laws of descent or distribution (pursuant to Section 15 of the Plan) or as otherwise determined by the Plan Administrator (pursuant to Section 15 of the Plan), this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void. Notwithstanding the above, the rights relating to Participant's Restricted Stock Unit grant can be exercised on the Participant's behalf by his legal representative in the event of his legal incapacity, or, in the event of his death, by his designated beneficiary (if any) or, if no beneficiary is designated with respect to his Restricted Stock Units, by his estate.

12. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

13. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority. The Company represents and acknowledges that, as of the Date of Grant, there are currently no delivery restrictions in effect of the type referred to in this Section 13.

14. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.

15. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Market Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

16. **Electronic Delivery.** The Company may, in its sole discretion, decide to deliver any documents related to Market Stock Units awarded under the Plan or future Market Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

17. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

18. **Agreement Severable.** In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

19. **Section 409A.** Notwithstanding anything in the Plan or this Agreement to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Market Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to death, and if (x) Participant is a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Market Stock Units would result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the payment of such accelerated Market Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless the Participant dies following his or her termination as a Service Provider, in which case, the Market Stock Units will be paid in Shares to the Participant's estate as soon as practicable following his or her death. It is the intent of this Agreement to comply with the requirements of Section 409A so that none of the Market Stock Units provided under this Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and any proposed, temporary or final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

20. **Governing Law.** This Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Market Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Market Stock Units is made and/or to be performed.

[Remainder of Page Intentionally Left Blank]

By Participant's acceptance of this Agreement, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement, but does not waive any rights he has under his CEO Employment Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Market Stock Units if and to the extent that the Company is not otherwise notified of any such change.

JOSEPH M. HOGAN

Signature



**Letter of Assignment
Long Term International Assignment**

December 9, 2019

Zelko Relic
[Address Withheld]

Dear Zelko:

This letter of assignment (the "Agreement") is to confirm a mutual understanding between you and Align Technology, Inc (the "Home Company") of the terms and conditions applying to your long-term international assignment (the "Assignment") to Align Technology Switzerland GmbH (the "Host Company") as outlined below:

Home Location:	[Withheld]
Host Location:	[Withheld]
Length of Assignment:	3 years
Effective Date:	January 1, 2020
Estimated Completion Date:	December 31, 2023
Assignment Location Job Title:	CTO and SVP, Global R&D
Annual Base Salary:	\$440,000 USD

The terms and conditions outlined in this Agreement will be in effect only for the period of your employment on this Assignment. The term of the Assignment may be extended by written agreement of the parties.

During the Assignment, you shall be based at the offices of the Host Company in the Host Location, or at such other location as may be agreed upon by you and the Home Company. You shall, however, also travel to other locations at such times as may be appropriate for the performance of your duties under this Agreement. During the Assignment, you shall perform services as requested by, and under the sole direction and control of, the directors, officers and employees of the Host Company, acting only on behalf and for the benefit of the Host Company. In the event this Assignment is extended or a new assignment occurs, a new written agreement shall be executed. You are subject to reassignment to any of the Home Company's locations throughout the world. Such reassignment will depend on the future needs of the Home Company.

During the Assignment and any period that you are on assignment for the Home Company outside the Home Location, this Agreement and the benefits contained herein, are contingent upon you being authorized to work and reside in the Host Location. Home Company (and Host Company if necessary) will support your application for any visas, residence permits or other necessary authorizations.

If you lose or fail to obtain your authorization to work in the Host Location at any time, for any reason during the life of this Agreement or your Assignment, Home Company will consider your circumstances, but may, at its sole discretion, consider all or any portion of this Agreement void.

The Assignment and Your "At-Will" Employment

Your Assignment is temporary in nature. At all times during your Assignment, you will remain an at-will employee of Home Company. The terms and conditions of your offer letter and proprietary information and inventions agreement with Home Company (collectively "Offer Letter") will remain applicable, unless modified by this Agreement. This Agreement is based on our confidence that this Assignment and your continued

employment with Home Company will be a mutually rewarding and enriching experience, but it is not an employment contract, and does not represent a guarantee of continued employment for any period of time. Regardless of any statement contained in this Agreement, your employment with the Home Company is "employment at-will", which means that either you or the Home Company may terminate your employment relationship at any time, for any reason, with or without cause, and with or without notice to the other party. Nothing in this Agreement is intended to modify or alter the at-will nature of your employment relationship. For the avoidance of doubt, this does not in any way give rise to a direct employment relationship between you and the Host Company. Your employment with the Home Company is subject to the laws of the Home Location. Host Location law shall not apply to this Assignment or the services performed during your Assignment, and you hereby agree to waive all claims under Host Location law, if any.

If you die, become disabled or the Home Company terminates your employment for reason other than for Cause before the end of this Assignment, the Home Company will cover the cost of returning you and your accompanying family members as well as your personal effects back to the Home Location immediately. "Cause" is determined by the Home Company in its sole discretion, but examples of Cause would include conduct by you involving dishonesty, failure to follow the "Employment Restrictions" Section below, or failure to abide by any material term of this Agreement or your Offer Letter.

Home Company requires you, during the course of your Assignment, to abide by all requirements set out in the Home Company's International Long Term Assignment Policy (the "Policy"). As part of this, should any requirement set out in the Policy conflict with any requirement of your employment with the Home Company or the Offer Letter, the former will take precedence to the extent allowed by applicable law.

Depending on the documentation needed to support your Assignment, you may also be required to enter into a local employment agreement with the Host Company covering the period of your Assignment.

Please note that all allowances and benefits provided in this Agreement cease upon your return to the Home Location or upon reassignment to a new location, the terms of this Agreement will cease to have effect and you will revert to the terms and conditions of your Offer Letter.

Your Assignment to the Host Company may be voluntarily ended by you upon thirty (30) days' prior written notice, or involuntarily ended by either the Home Company or the Host Company, at any time, for any reason, and without payment of any indemnity by the Home or Host Company unless expressly required by applicable law. If the Home Company or the Host Company ends this Assignment early, it will attempt to give you thirty (30) days' prior notice, to assist you in preparing for the transition.

If you voluntarily resign from employment with the Home Company while on Assignment, all Assignment-related relocation payments, Assignment-related allowances and Assignment-related support provided under this Agreement will cease upon the date of resignation to the extent allowed by applicable law. In situations where you voluntarily resign from employment or are involuntarily terminated for "Cause," neither Home Company nor Host Company will bear any relocation costs, unless expressly required by the law applicable.

For the avoidance of doubt, the termination of your employment with the Home Company shall automatically terminate your Assignment under this Agreement. If your employment with the Home Company terminates during the Assignment, the continuing obligations in your Offer Letter will remain in effect.

Further, as a requirement to receive any Assignment-related benefits, you will be required to provide your signed acknowledgement and acceptance of Exhibit B attached herein, which shall be applicable for the duration of your Assignment to the extent allowed under applicable law.

Employment Restrictions – Conflict of Interest, Compliance with Applicable Laws

It is understood that during your Assignment, and employment with Home Company, you will not engage in any employment or business enterprises that would in any way conflict with your service and the interests of the Home Company or the Host Company. The Home Company's Code of Conduct, Export/Import, and any other regulation to lawful trade policies apply to all transactions and conflicts of interest. In addition, you agree to comply with all applicable laws in the Host Location, including all applicable laws concerning governmental payments. Except as permitted under the express written policies of the Home Company, you shall not, directly or indirectly, pay, give or offer anything of value to any foreign government officer, employee or representative, or to any foreign political party or candidate for or incumbent in any foreign political office, for any personal or business reasons, including in order to assist in obtaining, retaining or directing business.

Administration

You will continue to be an employee of the Home Company and will continue to be paid by the Home Company from the Home Location payroll. Salary actions, including timing and amounts of increases (if any), will be consistent with the Home Company's customary payroll and performance review practices in effect in your Home Location. While on Assignment, incentive payments will be administered and paid according to the customary incentive policies and practices of the Home Company.

Employee Assignment Benefits

Throughout your Assignment, unless otherwise provided in this Agreement, you shall be entitled to participate in any employee benefit plans, programs or arrangements of the Home Company for which you are eligible, as well as any benefit plans, programs or arrangements of the Home Company designed to replace the existing plans, programs or arrangements during your Assignment. These benefits and assignment allowances and reimbursements, including those that follow in this Agreement, are excluded from your regular salary and shall not be considered for purposes of determining any notice, overtime, 13 months' pay, severance, bonus, vacation pay, holiday allowance, or similar to the extent allowed under applicable law. Any severance or severance-related payments that may be payable under any non-U.S. jurisdiction will reduce the amount payable under the Home Company's prevailing severance or severance-related practices, if any, in the United States.

These Assignment benefits and allowances are provided at the sole discretion of Home Company. You shall not acquire a right to such benefits and allowances, and Home Company reserves the right to change, modify, amend or discontinue such benefits and allowances at any time, at its sole discretion, to the extent allowed by applicable law. You understand and agree that the benefits provided under your Offer Letter (if any) and U.S. benefit policies which are directly related to your performance of work in Home Location (e.g. transportation allowance) will cease to apply during your Assignment.

Vacation

You will be eligible for vacation under the Home Company's vacation policy, unless otherwise required by local law.

Holidays

You will be eligible to observe the local policy for holidays in the Host Location.

Taxation

You will be covered by Home Company's tax equalization policy for the duration of your Assignment. Home Company's philosophy regarding tax equalization is that as an international assignee, you will neither materially gain nor lose from the difference in income and social tax costs between your Home and Host Location, within certain parameters. Thus, while on the Assignment, you will pay approximately the same U.S. income (U.S. federal, state and local) and social security tax, on tax equalized income, which you would have paid had you remained in your Home Location.

You will be required to comply with all Home Location, Host Location and foreign laws regarding personal income and social security taxes and thus you will be responsible for ensuring timely completion of personal tax returns in the Host and Home locations (as required).

To assist you in this regard, the Home Company will designate a tax service provider and pay for the preparation of required tax returns and tax equalization settlement calculations for you for all tax years affected by the Assignment. You will be required to meet with the Home Company-designated tax service provider for a tax briefing prior to your departure from the Home Location and after arrival in the Host Location to confirm that you understand the tax implications of the Assignment. You will be required to use the tax return preparation services of the Home Company's designated tax service provider. The Home Company will not reimburse any fees incurred by you in utilizing the services of another tax service provider.

To the extent permissible under applicable laws, it is intended that you will remain covered under your Home Location social security scheme. However, if you are subject to social security charges in the Host Location during the Assignment, and the Host Location permits you to apply for a refund of such charges, you agree to apply for such refund, and have such refund paid to Host Company or Home Company where possible. If it is not possible for a refund to go directly to Host Company or Home Company, then you agree and authorize Home Company or Host Company, as applicable, to deduct and set off any such amounts refunded to you from any payments due from Home Company or Host Company to you, up to the maximum extent permitted by law. If the set-off is insufficient to cover the refund that you received, you agree to pay the Home Company or Host Company, as applicable, the amount still outstanding.

You will be responsible for penalties and interest charges, if any, incurred as a result of your personal actions.

By accepting this Assignment, you confirm your agreement to the terms and conditions of the Home Company's tax equalization policy including, but not limited to:

A.your agreement to pay hypothetical tax as determined in accordance with the Home Company's tax equalization policy.

B.your authorization that the Home Company may deduct such hypothetical tax from your base salary and other earnings in accordance with your regular payroll schedule.

C.your agreement that any additional hypothetical tax due from you to the Home Company will be settled by you within thirty (30) days.

D.your agreement to provide upon request and on a timely basis all necessary data to enable Home Company's designated tax service provider to prepare your relevant tax returns in both the Home Location and Host Location.

E.your agreement to keep your tax return filing obligations in both the Home Location and Host Location up to date and in good order.

F.your agreement to abide by the terms and conditions of the Home Company's tax equalization policy, which shall be evidenced by your signed acknowledgment and acceptance of Exhibit C attached herein.

Assignment Allowances

In addition to your Home Location compensation, you will be entitled to receive the Assignment allowances and provisions as described in the Policy. The amount of each of these allowances is specified in the Summary of Long Term International Assignment Provisions, attached herein as Exhibit A, and will be reviewed with you by your international assignment consultant.

While you are on the Assignment, all Assignment allowances, deductions and other compensation items referenced herein will be administered by the Home Company from the Home Location payroll.

Severability

The provisions of this Agreement are severable. If any provision is found by any court of competent jurisdiction to be unreasonable and invalid, that determination shall not affect the enforceability of the other provisions. Furthermore, if any of the restrictions against various activities is found to be unreasonable and invalid, the court before which the matter is pending shall enforce the restriction to the maximum extent it deems to be reasonable or valid.

Governing Law/Venue

This Agreement and all related matters in dispute thereto shall be construed in accordance with California State substantive law without regard to the choice of law principles thereof.

All questions concerning the construction, validity and interpretation of this Agreement arising during the period of this Agreement and/or directly or indirectly relating to or arising out of the Assignment including, but not limited to, claims of discrimination arising under state or federal law, the termination thereof, and/or to the interpretation and/or implementation of this Agreement, will exclusively be subject to arbitration. The arbitration will be held in California in the United States of America, and will be governed by the rules as established at that time by the American Arbitration Association for the resolution of employment disputes.

To the extent that you are entitled to rights, benefits or compensation under the laws of both Host Location and your Home Location, you agree that you will be entitled to such rights, benefits, or compensation that are no greater than those provided to you under the terms of this Agreement, so that any advantages, entitlements or protections that may apply to you under the laws of both jurisdictions may not be combined.

No Waiver

No failure or delay by any party in exercising any right, power or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or particular exercise of the same preclude any further exercise thereof or the exercise of any other right, power or remedy. Without limiting the foregoing, no waiver by any party of any breach of any provision of this Agreement shall be deemed to be a waiver of any subsequent breach of that or any other provision of this Agreement.

Withholding/Deductions

All amounts paid pursuant to this Agreement shall be subject to deductions and withholding for taxes (income, social, foreign or otherwise) to the extent agreed to by you or required by applicable law.

Internal Revenue Code Section 409A

Certain payments, reimbursements, and benefits to be made to you under this Agreement may be subject to Section 409A of the U.S. Internal Revenue Code ("Section 409A"). The Home Company intends that this Agreement will be administered and interpreted in accordance with Section 409A so that amounts payable under the Agreement shall be exempt or compliant with Section 409A. If any provision of this Agreement is ambiguous as to its compliance with Section 409A, the provision shall be read in such a manner so that all payments comply with Section 409A. Any benefits or amounts payable under this Agreement upon your termination of employment that constitute deferred compensation under Section 409A (i) shall be paid only if such termination constitutes a separation from service under Section 409A, and (ii) if you are a "specified employee", the payment shall be delayed until six months and one day from the date of termination of employment.

Any reimbursement of benefits will be made not later than the last day of your taxable year following the year in which the related expense was incurred (subject to you providing any required supporting documentation) in accordance with Treas. Reg. Section 409A-3(i)(1)(iv). Any reimbursement payments due to you shall not be subject to liquidation or exchange for another benefit and the amount of such expenses eligible for reimbursement or such benefits that you receive in one taxable year shall not affect the expenses eligible for reimbursement or the amount of such benefits that you will receive in any other taxable year.

Any amounts payable to you pursuant to any tax equalization agreement (within the meaning of Treas. Reg. Section 1.409A-1(b)(8)(iii)) shall be made not later than the last day of your second taxable year following the year in which your U.S. Federal income tax return is required to be filed (including any extensions) for the year to which the compensation subject to the tax equalization payment relates, or, if later, the second taxable year following the latest such taxable year in which your foreign tax return or payment is required to be filed or made for the year to which the compensation subject to the tax equalization payment relates. In the event of a tax audit, litigation or other tax proceedings related to the Policy, supplemental tax equalization payments may be made during the period described in Treas. Reg. Section 1.409A-3(i)(1)(v).

The Home Company makes no representation or warranty and shall have no liability to you or any other person if any provision of the Agreement, the Policy or the Home Company's tax equalization policy is determined to constitute deferred compensation subject to Section 409A but does not satisfy an exemption from, or the conditions of, Section 409A.

Confidentiality

During the Assignment, your confidentiality obligations towards the Home Company will remain unaffected by your Assignment (and they extend to the Host Company during your Assignment). Upon termination of your employment and/or Assignment, you must return all copies of documents containing Confidential Information, as well as all Home or Host Company assets and property, including documents (in electronic or paper format), files, books, papers, memos, hardware, software, equipment, and electronic media storage, in your possession. Home Company hereby informs you, and you acknowledge your understanding, that under the U.S. Defend Trade Secrets Act of 2016 (the "DTS Act"), to the extent the DTS Act applies to you, you may not be held criminally or civilly liable for certain disclosure of a "trade secret," as defined in the DTS Act, made in confidence to a government official or to an attorney for the sole purpose of reporting or investigating a suspected violation of law.

Data Privacy

You hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this Agreement by and among, as applicable, the Home Company and its affiliates for the exclusive purpose of managing and administering your Assignment.

You understand that the Home Company holds certain personal information about you, including, but not limited to, your name, home address and telephone number, date of birth, email address, family size, marital status, sex, beneficiary information, emergency contacts, passport/visa information, age, language skills, drivers license information, nationality, C.V. (or resume), wage history, employment references, social insurance number or other identification number, salary, job title, employment or severance contract, current wage and benefit information, personal bank account number, and tax related information for purposes of managing and administering your Assignment ("Data").

You understand that Data may be transferred to any third parties assisting in the management and administration of your Assignment, that these recipients may be located in the Home Location or elsewhere, and that the recipient's country may have different data privacy laws and protections than your country. You understand that you may request a list with the names and addresses of any potential recipients of the Data by contacting the Human Resources Department.

You authorize the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of managing and administering your Assignment. You understand that Data will be held only as long as is necessary to manage and administer your Assignment.

You understand that you may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing the Human Resources Department.

Third Party Beneficiary

Each of the Home Company group companies (the Home Company and its subsidiaries and affiliates) is a third party beneficiary of this Agreement and each of them has the full right and power to enforce rights, interests and obligations under this Agreement without limitation or other restriction.

Assignment Logistics

Aires is Home Company's designated relocation management company and, as such, will be coordinating all aspects of your Assignment including coordination of suppliers, policy questions, payroll (calculations of allowance, deductions) and general questions and concerns. You will be contacted by an international assignment consultant from Aires to setup your initial consultation call.

Please acknowledge receipt of this Agreement and agreement with its terms by signing the two originals and returning one to the person listed below.

Sincerely yours,

Signature Date

Stuart Hockridge
SVP, Global Human Resources

ACKNOWLEDGE AND AGREE: _____

Zelko Relic Date

This signature denotes that you have read and understood the Policy and this Agreement.

Exhibit A

Summary of International Long Term Assignment Provisions

Employee Name: Zelko Relic
 Host Location: [Withheld]
 Payroll Location: United States

Provision Description	Payment
PRE-ASSIGNMENT	
Medical Exams	All medical exams required to secure necessary visas and work permits are to be reimbursed under the provisions of your existing medical coverage. Should payment for such exams not be covered under your insurance policy, expenses for such exams for you will be reimbursed upon submission to Home Company.
House-hunting Trip	You will be provided with a house-hunting trip. The purpose of this trip is designed to assist you in setting realistic expectations about the Host Location's housing, neighborhoods, amenities, schools, and daily living in a cultural environment for you. Reimbursement includes round-trip business class airfare via the most direct route, local transportation, reasonable meals and lodging for a maximum of five (5) days in accordance with the Home Company's travel policy. Such payment will be made by Aires upon submission of expense report and receipts.
Destination Services	You will receive professional area orientation and home finding services during your house-hunting trip. These services will be provided by a Host Location representative who is a local area expert. The fees for this service will be directly billed to Home Company.
Immigration Assistance	An independent outside provider will coordinate the application of the necessary visa/work permit as soon as you have accepted the Assignment. The designated provider will advise you of the appropriate documentation needed to expedite filing of the applications. The fees for this service will be directly billed to Home Company. Reimbursement for obtaining passports will be provided upon submission to Aires (approved assignment expense report form and receipts).
Final Travel to Host Country (En route travel)	The Company will pay for final transportation expenses for you in accordance with the Home Company travel policy. Such payment will be made by Aires upon submission of expense report and receipts.
Cross Cultural Orientations	Home Company will provide you cross- cultural training to adapt to your new environment. The fees for this service will be direct billed to Home Company.
Relocation Allowance	To assist with a smooth transition into the Host Location, Home Company will provide you with a "miscellaneous allowance" equal to \$25,000 USD . The purpose of such allowance is to purchase miscellaneous items, such as drapes, hardware, small appliances, adaptors, automobile registration and licensing fees, telephone installation charges, connection of appliances, costs not allowed in shipping and storage of household goods limitations, the creation or update of a will and estate planning, that may be necessary upon moving to the Host Location. This is a one-time payment provided at the start of the Assignment paid in the Home Location in Home Location currency. Home Company will pay for any taxes incurred in association with this allowance. No receipts are required for this payment.
Temporary Accommodations	When necessary, you may require temporary accommodations in the Home Location immediately prior to assignment departure and immediately upon arrival in the Host Location when assignment housing has not been secured. You will be entitled to a total of sixty (60) days (to be used in either the Home or Host Location or both) of temporary accommodations. Such payment will be made by Aires upon submission of expense report and receipts.
Home Country Storage of Household Goods	Home Company will pay for the storage of household goods in the Home Location, where applicable. Home Location storage of household goods will be provided for the length of the Assignment plus 30 days. Home Company will arrange and pay for the insurance costs associated with the household goods storage. The fees for this service will be direct billed to Home Company.
ON - ASSIGNMENT	
Home Leave	You are eligible to take two (2) annual home leaves for every twelve (12) months on Assignment. Annual home leave is provided to enable you to: <ul style="list-style-type: none"> renew ties with friends / family keep abreast of the social, cultural, political and economic environment in the Home Location visit the Home Location to sustain contacts with associates, discuss career development issues and facilitate repatriation. Home Company requires that annual home leave be taken in the Home Location. Reimbursable expenses are: Airfare and ground transportation to/from the airport for you in accordance with the Home Company's travel policy. You are eligible to take home leave after a minimum of ninety (90) days in the Host Location. Final home leave must be taken no less than six (6) months prior to repatriation. Home leave trips should be scheduled to coincide with business meetings held at the Home Location whenever possible. Reimbursement includes round-trip business class airfare via the most direct route Such payment will be made by Aires upon submission of expense report and receipts.
Cost of Living Allowance (COLA)	You may receive a Cost of Living Allowance (COLA) of \$7,000 USD per month to assist in maintaining a style of living comparable to that in the Home Location. The COLA is based on indices supplied to Home Company by a third party international data consultant. This source prices the differences in goods and services between the Home and Host Location, factoring in current exchange rates. Your salary and family size at the Host Location are used to calculate the COLA. Should your marital status and family size change during the course of your Assignment, it is your responsibility to immediately notify Home Company of changes in marital status and family size. The COLA is calculated at the start of your Assignment and is reviewed periodically to adjust the differential up or down if necessary. It may be brought about by changes in base salary, Host Location, family size and extreme fluctuations in inflation or exchange rates. The COLA will be paid as part of the Home Company's normal payroll cycle and will be grossed up for taxes.
Host Location Housing Allowance	Home Company will provide assistance with housing in the Host Location in the form of a housing allowance in the amount of 6,000 CHF per month to cover the cost of reasonable housing. If utilities are not included in the rent, the Home Company will also cover the expenses for the actual utility costs such as electricity, gas, oil, and/or water. If you choose to rent housing that is more expensive than the limits set by Home Company, the additional costs will be your responsibility. The security deposit for the rental property will be advanced to you by Home Company and is expected to be repaid in full once the lease has terminated. Please note that any damage to the property, beyond normal wear and tear, will be your responsibility. Customary local rental agent fees associated with acquiring the Host Location rental will be paid by Home Company. Housing costs are determined based on base salary and family size by an outside consultant. The housing allowance will be paid to you as part of the Home Company's normal payroll cycle or directly to the landlord if deemed beneficial for tax purposes. These amounts will be grossed up for taxes. Applicable utilities such as gas, electric, etc. will also be paid by Home Company as an allowance as part of the Home Location's normal payroll cycle and will be grossed up for taxes.
Host Location Transportation	An allowance of \$1,771 USD per month will be provided for the lease of an automobile. The maximum amount of such payment will be determined by third party recommendations.

ALIGN TECHNOLOGY, INC.
AMENDED AND RESTATED 2005 INCENTIVE PLAN
EXHIBIT A

OFFICER APPOINTED PRIOR TO SEPTEMBER 2016

RESTRICTED STOCK UNIT AGREEMENT

1. **Grant.** The Company hereby grants to Participant under the Plan an Award of Restricted Stock Units, subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.
2. **Company's Obligation to Pay.** Each Restricted Stock Unit represents a value equal to the Fair Market Value of a Share on the date it becomes vested. Unless and until the Restricted Stock Units will have vested in the manner set forth in Sections 3 and 4, Participant will have no right to payment of any such Restricted Stock Units. Prior to actual payment of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. **Vesting Schedule.** Subject to Section 4, the Restricted Stock Units awarded by this Agreement will vest in Participant according to the vesting schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through each such date; *provided, however*, that the paragraph (c) of the Notice of Grant shall apply in the event Participant ceases to be a Service Provider as a result of termination without Cause (as defined in the employment agreement between the Company and Participant (the "Employment Agreement") or if Participant resigns for Good Reason (as defined in the Employment Agreement) and paragraph (d) of the Notice of Grant shall apply in the event Participant ceases to be a Service Provider within 12 months of a Change of Control (as defined in the Employment Agreement) as a result of termination by the Company without cause or if Participant resigns for Good Reason.
4. **Forfeiture upon Termination of Status as a Service Provider.** Subject to paragraphs (c) and (d) of the Notice of Grant, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Restricted Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.
5. **Payment after Vesting.** Any Restricted Stock Units that vest in accordance with Section 3 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 7.
6. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
7. **Taxes.**
 - (a) **Generally.** The Participant is ultimately liable and responsible for all taxes owed in connection with the Restricted Stock Units, regardless of any action the Company or any of its Subsidiaries takes with respect to any tax withholding obligations that arise in connection with the Restricted Stock Units. Neither the Company nor any of its Subsidiaries makes any representation or undertaking regarding the treatment of any tax withholding in connection with the grant or vesting of the Restricted Stock Units or the subsequent sale of Shares issuable pursuant to the Restricted Stock Units. The Company and its Subsidiaries do not commit and are under no obligation to structure the Restricted Stock Units to reduce or eliminate the Participant's tax liability.
 - (b) **Payment of Withholding Taxes.** Notwithstanding any contrary provision of this Agreement, no Shares will be issued to the Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by the Participant with respect to the payment of any taxes which the Company determines must be withheld with respect to the Restricted Stock Units. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld. In addition and to the maximum extent permitted by law, the Company has the right to retain without notice from salary or other amounts payable to the Participant, cash having a value sufficient to satisfy any tax withholding obligations that cannot be satisfied by the withholding of otherwise deliverable Shares.
8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant.
9. **No Effect on Service.** Participant acknowledges and agrees that the vesting of the Restricted Stock Units pursuant to Section 3 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder) (subject, however, to paragraphs (c) and (d) of the Notice of Grant). Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all, and will not interfere with the Participant's right or the right of the Company (or the Affiliate employing or retaining Participant) to terminate Participant as a Service Provider at any time, with or without cause.
10. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2820 Orchard Parkway, San Jose, CA 95131, or at such other address as the Company may hereafter designate in writing.
11. **Grant is Not Transferable.** Except to the limited extent provided in Section 6, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.
12. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.
13. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.
14. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.
15. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.
16. **Electronic Delivery.** The Company may, in its sole discretion, decide to deliver any documents related to Restricted Stock Units awarded under the Plan or future Restricted Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
17. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.
18. **Agreement Severable.** In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.
19. **Governing Law.** This Award Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Restricted Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed.

By Participant's acceptance of this Agreement, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Restricted Stock Units.

PARTICIPANT: _____

Signature _____

Print Name _____

**ALIGN TECHNOLOGY, INC.
AMENDED AND RESTATED 2005 INCENTIVE PLAN
NOTICE OF GRANT OF MARKET STOCK UNITS**

Unless otherwise defined herein, the terms defined in the Amended and Restated 2005 Incentive Plan (the "Plan") will have the same defined meanings in this Notice of Grant of Market Stock Units (the "Notice of Grant").

Participant:
Address:

You (the "Participant") have been granted an award ("Award") of market-performance based Restricted Stock Units ("Market Stock Units"), subject to the terms and conditions of the Plan, this Notice of Grant and the Market Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") as follows:

Date of Grant: February 20, ____
Target Number of Market Stock Units: xxx (the "Target Number of Market Stock Units")
Maximum Number of Market Stock Units: xxx (the "Maximum Number of Market Stock Units")

Performance Period: Means the three year period commencing on February 15 of the year of grant and ending on the third year anniversary of such date (subject to Sections 4 and 5 of Exhibit A (the "Performance Period")).
Performance Matrix: The number of Market Stock Units in which Participant may vest in accordance with the Vesting Schedule will depend upon the Company's Stock Price Performance (as defined below) as compared to NASDAQ Composite Stock Price Performance (as defined below) for the Performance Period and will be determined in accordance with Section 1 of Exhibit A.
Vesting Schedule: Subject to Sections 4 and 5 of Exhibit A and the terms of the Plan, the Participant will vest in his or her Calculated Market Stock Units (as defined below) on third-year anniversary of the date of grant (the "Vesting Date").

By accepting this agreement, you and the Company agree that this Award is granted under and governed by the terms and conditions of the Plan and the Agreement, each of which are made a part of this document. You further agree to accept, acknowledge and execute this Agreement as a condition to receiving any Market Stock Units under this Award.

Nothing in this Notice of Grant or in the attached Agreement or in the Plan shall confer upon Participant any right to continue in service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining Participant) or of Participant, which rights are hereby expressly reserved by each, to terminate Participant's service at any time for any reason, with or without cause.

EXHIBIT A

MARKET STOCK UNIT AGREEMENT

1. Grant.

(a) The Company hereby grants to Participant under the Plan an Award of Market Stock Units, subject to all of the terms and conditions in the Notice of Grant, this Agreement and the Plan.

(b) The number of Market Stock Units in which the Participant may vest in accordance with the Vesting Schedule set forth in the Notice of Grant will depend upon the Company's Stock Price Performance as compared to the NASDAQ Composite Index Performance calculated on February 15, 2022 (the "Measurement Date") with 100% of the Market Stock Units eligible to vest on the Vesting Date. The actual number of Market Stock Units that will vest on the Vesting Date will be determined as follows:

(i) Performance Calculation.

1. The "Company's Stock Price Performance" means the percentage increase or decrease in (i) the average adjusted closing price per share of the Company's common stock during the 30 trading-day period ending on February 15 of the year of grant over (ii) the average adjusted closing price of the Company's common stock during the 30 trading-day period ending on the Measurement Date. Notwithstanding the foregoing, in the event of a Change of Control of the Company, the "Company's Stock Price Performance" means the percentage increase or decrease in (i) the average adjusted closing price per share of the Company's common stock during the 30 trading-day period ending on February 15 of the year of grant over (ii) the per share value of the Company's common stock paid to its stockholders in connection with the Change of Control.

2. The "NASDAQ Composite Index Performance" means the percentage increase or decrease in (i) the adjusted index value of the NASDAQ Composite Index during the 30 trading-day period ending on February 15 of the year of grant over (ii) the adjusted index value of the NASDAQ Composite Index during the 30 trading-day period ending on the Measurement Date.

3. The Company's Stock Price Performance will be compared against the NASDAQ Composite Index Performance (each expressed as a growth rate percentage) to result in a growth rate (the "Growth Rate Delta") equal to the Company's Stock Price Performance minus the NASDAQ Composite Index Performance. The Growth Rate Delta will be calculated on the Measurement Date.

(ii) Market Stock Unit Calculation.

1. If the Growth Rate Delta is equal to 0%, the number of Market Stock Units that will be eligible to vest (the "Calculated Market Stock Units") on the Vesting Date will equal 100% of the Target Number of Market Stock Units.

2. If the Growth Rate Delta is greater or less than 0%, the number of Market Stock Units that will be Calculated Market Stock Units on the Vesting Date will equal: (i) the Target Number of Market Stock Units, multiplied by (ii) the sum of (A) 100% plus (B) three times the Growth Rate Delta; provided, however, that in no event will more than the Maximum Number of Market Stock Units become Calculated Market Stock Units on the Vesting Date. If the Growth Rate Delta is equal to negative-33.3%, then the number of Target Market Stock Units that will become Calculated Market Stock Units on the Vesting Date will equal 0.

(iii) Examples (for illustration purposes only).

1. If the Growth Rate Delta on the Measurement Date equaled 20%, then 160% (equal to 100% plus (3 times 20%)) of the Target Number of Market Stock Units would be Calculated Market Stock Units and would vest on the Vesting Date.

2. If the Growth Rate Delta on the Measurement Date equaled negative-20%, then 40% (equal to 100% plus (3 times negative-20%)) of the Target Number of Market Stock Units would be Calculated Market Stock Units and would vest on the Vesting Date.

2. Company's Obligation to Pay. Each Market Stock Unit represents a value equal to the Fair Market Value of a Share on the date it is granted. Unless and until the Market Stock Units will have vested in the manner set forth in Sections 3, 4 and 5, Participant will have no right to payment of any such Market Stock Units. Prior to actual payment of any vested Market Stock Units, such Market Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. Payment of any vested Market Stock Units will be made in whole Shares only and any fractional Shares will be forfeited at the time of payment.

3. Vesting Schedule. Subject to Section 6, the Market Stock Units awarded by this Agreement will vest in Participant according to the Vesting Schedule set forth on the attached Notice of Grant, subject to Participant continuing to be a Service Provider through each such date.

4. Change of Control. In the event of a Change of Control, the Performance Period shall be deemed to end upon the closing of the Change of Control for purposes of determining the Company's Stock Price Performance and the NASDAQ Composite Index Performance and the number of Market Stock Units that are Calculated Market Stock Units will be determined in accordance with the Performance Matrix and Section 1 of this Exhibit A. The Participant shall vest in the number of Calculated Market Stock Units determined based on the preceding sentence as follows:

(a) On the date of, and contingent upon, the Change of Control, Participant will vest in that number of Calculated Market Stock Units equal to (i) (A) the number of calendar months (including any partial month) that have elapsed from the commencement of the Performance Period through the date of the Change of Control, (B) divided by 36, multiplied by (ii) the number of Calculated Market Stock Units, with the result rounded down to the nearest whole Share.

(b) The Calculated Market Stock Units that do not vest pursuant to Section 4(a) will vest on the Vesting Date, unless vested earlier in accordance with the terms of this Award, Section 18 of the Plan or any employment or other change in control agreement by and between the Company and Participant.

(c) Notwithstanding the foregoing, if Participant's employment is terminated Without Cause or for Good Reason (as such terms are defined in Participant's individual employment agreement with the Company) within twelve months following the occurrence of a Change of Control, then 100% of his or her unvested Calculated Market Stock Units will fully vest, provided the Participant executes and does not revoke a release of claims as provided for in Participant's employment agreement (as a necessary condition to the receipt of severance thereunder).

(d) In accordance with Section 1 of this Exhibit A, the Administrator shall not be entitled to eliminate or reduce the number of Calculated Market Stock Units determined in accordance with Section 1 of Exhibit A following a Change of Control.

5. **Termination without Cause or a Resignation for Good Reason Not Following a Change of Control.** In the event Participant's employment with the Company is terminated without Cause or if Participant terminates his or her employment for Good Reason (as such terms are defined in Participant's individual employment agreement with the Company) and such termination does not occur on or within twelve months following a Change of Control, the Performance Period shall be deemed to end upon the Participant's employment termination date for purposes of determining the Company's Stock Price Performance and the NASDAQ Composite Index Performance and the number of Market Stock Units that are Calculated Market Stock Units will be determined in accordance with the Performance Matrix and Section 1 of this Exhibit A. Subject to Participant executing and not revoking a release of claims as provided for in Participant's employment agreement (as a necessary condition to the receipt of severance thereunder), Participant shall vest in that number of Calculated Market Stock Units equal to (i) (A) the number of months (including any partial month, expressed as a fraction) that have elapsed from the commencement of the Performance Period through the date of the termination of employment, (B) divided by 36, multiplied by (ii) the number of Calculated Market Stock Units, with the result rounded down to the nearest whole Share. The remaining unvested Calculated Market Stock Units will be forfeited at no cost to the Company and Participant will have no further rights thereunder.
6. **Forfeiture upon Termination of Status as a Service Provider.** Subject to the provisions of Section 4 and 5, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Market Stock Units awarded by this Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.
7. **Payment after Vesting.** Any Market Stock Units that vest in accordance with Sections 3, 4 and 5 will be paid to Participant (or in the event of Participant's death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable tax withholding obligations as set forth in Section 9. Subject to the provisions of Section 21, any Shares will be issued to Participant as soon as practicable after the relevant vesting date, but in any event, within the period ending on the later to occur of the date that is two-and-one-half months from the end of (a) Participant's tax year that includes the vesting date, or (b) the Company's tax year that includes the vesting date.
8. **Payments after Death.** Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
9. **Withholding of Taxes.**
- (a) **Generally.** The Participant is ultimately liable and responsible for all taxes owed in connection with the Market Stock Units, regardless of any action the Company or any of its Subsidiaries takes with respect to any tax withholding obligations that arise in connection with the Market Stock Units. Neither the Company nor any of its Subsidiaries makes any representation or undertaking regarding the treatment of any tax withholding in connection with the grant or vesting of the Market Stock Units or the subsequent sale of Shares issuable pursuant to the Market Stock Units. The Company and its Subsidiaries do not commit and are under no obligation to structure the Market Stock Units to reduce or eliminate the Participant's tax liability.
- (b) **Payment of Withholding Taxes.** Notwithstanding any contrary provision of this Agreement, no Shares will be issued to Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by the Participant with respect to the payment of any taxes which the Company determines must be withheld with respect to the Market Stock Units. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may satisfy such tax withholding obligations, in whole or in part, by withholding otherwise deliverable Shares having an aggregate Fair Market Value sufficient to (but not exceeding) the minimum amount required to be withheld. In addition and to the maximum extent permitted by law, the Company has the right to retain without notice from salary or other amounts payable to the Participant, cash having a value sufficient to satisfy any tax withholding obligations that cannot be satisfied by the withholding of otherwise deliverable Shares.
10. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder, unless and until certificates representing such Shares will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant.
11. **No Effect on Service.** Participant acknowledges and agrees that the vesting of the Market Stock Units pursuant to Sections 3, 4 or 5 hereof is earned only by Participant continuing to be a Service Provider through the applicable vesting dates (and not through the act of being hired or acquiring Shares hereunder). Participant further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of Participant continuing to be a Service Provider for the vesting period, for any period, or at all, and will not interfere with the Participant's right or the right of the Company (or the Affiliate employing or retaining Participant) to terminate Participant as a Service Provider at any time, with or without cause.
12. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company, in care of Stock Administrator at Align Technology, Inc., 2560 Orchard Parkway, San Jose, CA 95131, or at such other address as the Company may hereafter designate in writing.
13. **Grant is Not Transferable.** Except to the limited extent provided in Section 8, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.
14. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.
15. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares to Participant (or his estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of the payment of any Shares will violate federal securities laws or other applicable laws, the Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.
16. **Plan Governs.** This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.
17. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Market Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.
18. **Electronic Delivery.** The Company may, in its sole discretion, decide to deliver any documents related to Market Stock Units awarded under the Plan or future Market Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
19. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.
20. **Agreement Severable.** In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.
21. **Section 409A.** Notwithstanding anything in the Plan or this Agreement to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Market Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to death, and if (x) Participant is a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Market Stock Units will result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the payment of such accelerated Market Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless the Participant dies following his or her termination as a Service Provider, in which case, the Market Stock Units will be paid in Shares to the Participant's estate as soon as practicable following his or her death. It is the intent of this Agreement to comply with the requirements of Section 409A so that none of the Market Stock Units provided under this Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and any proposed, temporary or final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.
22. **Governing Law.** This Agreement shall be governed by the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Market Stock Units or this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of Santa Clara County, California, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Market Stock Units is made and/or to be performed.

[Remainder of Page Intentionally Left Blank]

By Participant's acceptance of this Agreement, Participant represents that he or she is familiar with the terms and provisions of the Plan, and hereby accepts this Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of this Agreement. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Agreement. Participant further agrees to notify the Company upon any change in the residence indicated in the Notice of Grant of Market Stock Units.

PARTICIPANT: ALIGN TECHNOLOGY, INC.

Signature By

Print Name Title

Joseph Hogan, President and CEO

Subsidiaries of Align Technology, Inc.

The registrant's principal subsidiaries as of December 31, 2019, are as follows:

Entity

Align Tech De Costa Rica, Costa Rica

Align Technology, B.V., Netherlands

Aligntech de Mexico, S. de, Mexico

Align Technology, Inc., Delaware

Align Technology Ltd.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-214493, No. 333-190351, No. 333-143319, No. 333-134477, No. 333-125586, No. 333-161054, No. 333-176134, No. 333-168548, No. 333-116912, No. 333-82874) of Align Technology, Inc. of our report dated February 28, 2020 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
February 28, 2020

CERTIFICATIONS

I, Joseph M. Hogan, certify that:

1. I have reviewed this annual report on Form 10-K of Align Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2020

/s/ JOSEPH M. HOGAN

Joseph M. Hogan
President and Chief Executive Officer

I, John F. Morici, certify that:

1. I have reviewed this annual report on Form 10-K of Align Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2020

/s/ JOHN F. MORICI

John F. Morici
Chief Financial Officer and Senior Vice President, Global Finance

