

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ALIGN TECHNOLOGY, INC.

Petitioner

v.

3SHAPE A/S

Patent Owner

Case IPR2022-00144

U.S. Patent No. RE48,221

PETITIONER'S UPDATED EXHIBIT LIST

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Petitioner submits this Updated Exhibit List to accompany submission of Exhibit 1048, Plaintiff and Counterclaim Defendant Align Technology, Inc.’s Stipulation Regarding IPR2022-00144 and IPR2022-00145, filed December 16, 2021 in *Align Technology, Inc. v. 3Shape A/S et al.*, 6:20-cv-00979 (W.D. Tex.).

PETITIONER’S UPDATED EXHIBIT LIST

Exhibit	Description
1001	U.S. Patent No. RE48,221 to Öjelund <i>et al.</i>
1002	File History of U.S. Patent No. RE48,221 (“Prosecution History”)
1003	Declaration of Dr. Chandrajit Bajaj (“Bajaj Decl.”) in support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. RE48,221
1004	<i>Curriculum Vitae</i> of Dr. Chandrajit Bajaj
1005	<i>Intentionally Left Blank</i>
1006	U.S. Patent Publication No. 2005/0212756 to Marvit <i>et al.</i>
1007	<i>Intentionally Left Blank</i>
1008	<i>Intentionally Left Blank</i>
1009	Öjelund Provisional, U.S. Provisional Application No. 61/420,138 (filed December 6, 2010)
1010	Giammanco et al., “Using 3D Laser Scanning Technology to Create Digital Models of Hailstones,” American Meteorological Society, July 2017.
1011	Ireland et al., “3D surface imaging in dentistry – what we are looking at,” British Dental Journal, Vol. 205, No. 7, October 11, 2008.
1012	U.S. Patent No. 6,485,413 to Boppart <i>et al.</i>

Exhibit	Description
1013	Orhan H. Karatas and Ebubekir Toy, "Three-dimensional imaging techniques: A literature review," <i>European Journal of Dentistry</i> , Vol. 8, No. 1, March 2014.
1014	B. H. Broadbent, "A New X-Ray Technique and Its Application to Orthodontia," <i>The Angle Orthodontist</i> , Vol. I, No. 2, February 4, 1931.
1015	Nathan S. Birnbaum and Heidi B. Aaronson, "Dental impressions using 3D digital scanners: virtual becomes reality," <i>Compend. Contin. Educ. Dent.</i> , Vol. 29, No. 8, October 2008; 494, 496, 498-505.
1016	U.S. Patent No. 5,131,844 to Marinaccio <i>et al.</i>
1017	U.S. Patent No. 6,592,371 to Durbin <i>et al.</i>
1018	Hajeer <i>et al.</i> , "Current Products and Practices Applications of 3D imaging in orthodontics: Part II," <i>Journal of Orthodontics</i> , Vol. 31, No. 2, June 2004.
1019	U.S. Patent No. 5,722,412 to Pflugrath <i>et al.</i>
1020	U.S. Patent No. 6,645,148 to Nguygen-Dinh <i>et al.</i>
1021	U.S. Patent No. 5,181,181 to Glynn
1022	U.S. Patent Publication No. 2006/0092133 to Touma <i>et al.</i>
1023	Bornik <i>et al.</i> , "A Hybrid User Interface for Manipulation of Volumetric Medical Data," 3DUI '06: IEEE Symposium on 3D User Interfaces, March 2006.
1024	U.S. Patent No. 6,227,850 to Chishti <i>et al.</i>
1025	U.S. Patent Publication No. 2010/0009308 to Wen <i>et al.</i>
1026	U.S. Patent Publication No. 2013/0110469 to Kopelman
1027	U.S. Patent Publication No. 2012/0062557 to Dillon <i>et al.</i>

Exhibit	Description
1028	U.S. Patent Publication No. 2007/0031774 to Cinader, Jr. <i>et al.</i>
1029	U.S. Patent No. 9,329,675 to Öjelund <i>et al.</i>
1030	<i>Inter Partes</i> Review Certificate, U.S. Patent No. 9,329,675 K1 to Öjelund <i>et al.</i>
1031	Final Written Decision for <i>Inter Partes</i> Review of U.S. Patent No. 9,329,675 in IPR2018-00197, May 29, 2019.
1032	U.S. Patent No. 4,342,227 to Petersen <i>et al.</i>
1033	U.S. Patent No. 5,563,343 to Shaw <i>et al.</i>
1034	Steele <i>et al.</i> , “Bodies in motion: Monitoring daily activity and exercise with motion sensors in people with chronic pulmonary disease,” <i>J. Rehabil. Res. Dev.</i> , Vol. 40, No. 5, Suppl. 2, October 2003.
1035	Hale <i>et al.</i> , “Measuring free-living physical activity in adults with and without neurologic dysfunction with a triaxial accelerometer,” <i>Arch. Phys. Med. Rehabil.</i> , Vol. 89, No. 9, September 2008.
1036	Greg Welch and Eric Foxlin, “Motion Tracking: No Silver Bullet, but a Respectable Arsenal,” <i>IEEE Computer Graphics and Applications</i> , Vol. 22, No. 6, December 10, 2002.
1037	Steven Nasiri, “A Critical Review of MEMS Gyroscopes Technology and Commercialization Status,” <i>InvenSense</i> , 2005.
1038	Hannes Kaufmann, “Applications of Mixed Reality,” Thesis, Vienna University of Technology, May 27, 2009.
1039	Welch <i>et al.</i> , “High-Performance Wide-Area Optical Tracking: The HiBall Tracking System,” <i>Presence: Teleoperators and Virtual Environments</i> , Vol. 10, No. 1, February 2001.
1040	Nintendo, “Introducing Wii MotionPlus, Nintendo’s upcoming accessory for the revolutionary Wii Remote,” <i>The Wayback Machine</i> , July 14, 2008.

Exhibit	Description
1041	Daniel Turner, "Hack: The Nintendo Wii," MIT Technology Review, July 1, 2007.
1042	U.S. Patent Publication No. 2008/0070684 to Haigh-Hutchinson
1043	Brad A. Myers, <i>CRC Handbook of Computer Science and Engineering</i> , 2d. Ed., Allen B. Tucker, January 27, 2003, "Graphical User Interface Programming"
1044	Foley et al., <i>Introduction to Computer Graphics</i> , Addison-Wesley, 1994, "Chapter 2.2: Basic Interaction Handling," "Chapter 6: Viewing in 3D," and "Chapter 8: Input Devices, Interaction Techniques, and Interaction Tasks."
1045	Donald Hearn and M. Pauline Baker, <i>Computer Graphics</i> , 2d. Ed., Prentice Hall, 1994, "Chapter 2: Overview of Graphics Systems," "Chapter 8: Graphical User Interfaces and Interactive Input Methods," and "Chapter 9: Three-Dimensional Concepts."
1046	File History of U.S. Patent No. 9,329,675 ("675 Prosecution History")
1047	<i>3Shape A/S v. Align Technology, Inc.</i> , IPR2021-01383, Petition for <i>Inter Partes</i> Review of U.S. Patent No. 10,728,519, August 20, 2021.
1048	Plaintiff and Counterclaim Defendant Align Technology, Inc.'s Stipulation Regarding IPR2022-00144 and IPR2022-00145, Case No. 6:20-cv-00979 (W.D. Tex.), December 16, 2021.
1049-1104	<i>Intentionally Left Blank</i>
1105	U.S. Patent Publication No. 2006/0020204 to Serra et al.
1106	U.S. Patent Publication No. 2007/0171220 to Kriveshko
1107	<i>Intentionally Left Blank</i>
1108	U.S. Patent Publication No. 2005/0237581 to Knighton et al.

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