UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CLEARCORRECT OPERATING LLC,
Petitioner,

v.

ALIGN TECHNOLOGY INC.,
Patent Owner.

Case IPR2025-00819
Patent No. 11,154,384

PETITIONER'S UPDATED EXHIBIT LIST

Pursuant to 37 C.F.R. § 42.63(e), Petitioner ClearCorrect Operating LLC hereby submits a current listing of Petitioner exhibits. Exhibit 1169 is being filed today.

Exhibit	Description
1001	U.S. Patent No. 11,154,384 B2 (issued Oct. 26, 2021)
1002	U.S. Patent No. 9,655,691 B2 (issued May 23, 2017)
1003	U.S. Patent Application Publication No. 2005/0100853 A1 (published May 12, 2005)
1004	U.S. Patent No. 10,973,613 B2 (issued Apr. 13, 2021)
1005	U.S. Patent Application Publication No. 2011/0020761 A1 (published Jan. 27, 2011)
1006	D.S. Porter and R.S. Beavers, *Dishwasher Safe*, PLASTICS TECHNOLOGY (Dec. 2007) [Appendix 1 to Declaration of Lauren Gluckman]
1007	Expert Declaration of Dr. Tim Osswald, Ph.D.
1008	International Patent Application Publication No. WO 2006/096558 A2 (published Sept. 14, 2006)
1009	Bayer Corporation, TEXIN® 990R *Thermoplastic Polyurethane* Product Information (Nov. 2002)
1010	Prosecution History of U.S. Patent Application No. 13/470,681 (now U.S. Patent No. 9,655,691 B2)
1011	Prosecution History of U.S. Patent Application No. 15/476,655 (now U.S. Patent No. 10,973,613 B2)
1012	Declaration of Lauren Gluckman

Exhibit	Description
1013	Appendix 2 to Declaration of Lauren Gluckman - Penn State University Libraries Public Catalog for EX1006, https://catalog.libraries.psu.edu/catalog/83884
1014	Align Technology Inc.'s Preliminary Infringement Contention Charts and Identification of Priority Dates, *Align Technology Inc. v. ClearCorrect Operating LLC*, Case No. 6:24-CV-00187-ADA-DTG (W.D. Tex. July 18, 2024)
1015	*Curriculum Vitae* of Dr. Tim Osswald, Ph.D.
1016	Prosecution History of U.S. Patent Application No. 17/214,487 (U.S. Patent No. 11,154,384 B2)
1017	Intentionally Left Blank
1018	Prosecution History of U.S. Patent Application No. 17/902,445 (now U.S. Patent No. 11,648,091 B2)
1019	W.J. Schrenk & T. Alfrey, Jr., *Chapter 15: Coextruded Multilayer Polymer Films and Sheets*, *in* POLYMER BLENDS, Vol. 2 129 (1978)
1020	U.S. Patent No. 5,692,894 (issued Dec. 2, 1997).
1021	Joint Claim Construction Statement, *Align Technology, Inc. v. ClearCorrect Operating, LLC*, Case No. 6:24-cv-00187-ADA-DTG (W.D. Tex. Jan. 3, 2025) (ECF No. 142)
1022	ClearCorrect's Preliminary Invalidity Contentions, *Align Technology, Inc. v. ClearCorrect Operating LLC*, Case No. 6:24-CV-00187 (W.D. Tex. Sept. 26, 2024)
1023	Complaint for Damages and Injunctive Relief, *Align Technology, Inc. v. ClearCorrect Operating, LLC*, Case No. 6:24-cv-00187 (W.D. Tex. Apr. 11, 2024) (ECF No. 1)
1024	Prosecution History of U.S. Patent Application No. 12/814,725 (published as U.S. Patent Application Publication No. 2011/0020761 A1)

Exhibit	Description
1025	Appendix 3 to Declaration of Lauren Gluckman - Penn State University Libraries MARC Record, https://catalog.libraries.psu.edu/catalog/83884/marc_view
1026	Internet Archive, *Bayer Polymers Product Guide – Properties* (archived May 26, 2001), Bayer Corporation – Polymers Division, https://web.archive.org/web/20010526121639/http:/www.polymers-usa.bayer.com/orgs/bayer/unpro/ku/texin/990r.htm (last visited April 12, 2025) [Appendix 4 to Declaration of Lauren Gluckman]
1027	Appendix 5 to Declaration of Lauren Gluckman - Internet Archive, https://archive.org/
1028	Appendix 6 to Declaration of Lauren Gluckman - Wayback Machine, https://web.archive.org/
1029	Appendix 7 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20250000000000*/bayer%20polymers%20division
1030	Appendix 8 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20010615000000*/http://bayer.polysort.com/
1031	Appendix 9 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20010331154037/http://bayer.polysort.com/
1032	Appendix 10 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20010406054033/http://www.polymers-usa.bayer.com/
1033	Appendix 11 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20010411060538fw_/http://www.polymers-usa.bayer.com/products.htmlhttps://web.archive.org/web/20010411060538fw_/http://www.polymers-usa.bayer.com/products.html

Exhibit	Description
1034	Appendix 12 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20010413201339/http://www.polymers-usa.bayer.com/orgs/bayer/unpro/products_plastics.htm
1035	Appendix 13 to Declaration of Lauren Gluckman - Bayer Polymers Division Search, https://web.archive.org/web/20010418213115/http://www.polymers-usa.bayer.com/orgs/bayer/unpro/p_TEXIN.htm
1036	T. OSSWALD AND J. HERNANDEZ-ORTIZ, POLYMER PROCESSING MODELING AND SIMULATION (2006) ("Osswald (2006)")
1037	T. OSSWALD AND J. HERNANDEZ-ORTIZ, POLYMER PROCESSING MODELING AND SIMULATION (2006) ("Osswald (2006)-2")
1038	T. OSSWALD, POLYMER PROCESSING FUNDAMENTALS (1998) ("Osswald (1998)")
1039	T. OSSWALD AND G. MENGES, MATERIALS SCIENCE OF POLYMERS FOR ENGINEERS (2012) ("Osswald (2012)")
1040	E. BAUR ET AL., PLASTICS HANDBOOK THE RESOURCE FOR PLASTICS ENGINEERS (M. Smith ed., 5th ed. 2019)
1041	WO 2008/104371 A2 (published Sept. 4, 2008)
1042	S. EBNESAJJAD ET AL., HANDBOOK OF ADHESIVES AND SURFACE PREPARATION (2011)
1043	M. TROUGHTON, HANDBOOK OF PLASTICS JOINING: A PRACTICAL GUIDE (2008)
1044	Covestro, Lamination: Wide-Ranging Films Portfolio for Protective and Adhesive Functions, https://solutions.covestro.com/en/highlights/articles/theme/processing-technology/lamination (last accessed Feb. 24, 2025),
1045	R. JONES, MECHANICS OF COMPOSITE MATERIALS (1999)

Exhibit	Description
1046	D. MATTOX, HANDBOOK OF PHYSICAL VAPOR DEPOSITION (PVD) PROCESSING (1998)
1047	Bixby International, Coextrusion Process, https://www.bixbyintl.com/process/extrusion-coextrusion (last accessed April 12, 2025)
1048	L. Alfadil et al., *Assessment of Wear Characteristics, Longevity and Stiffness of Essix-Type Retainers*, 28 CLINICAL ORAL INVESTIGATIONS 184 (2024)
1049	R. Ponitz, *Invisible Retainers*, 59 AM. J. ORTHO 266 (1971)
1050	U.S. Patent No. 5,975,893 (issued Nov. 2, 1999) ("Chishti")
1051	U.S. Patent No. 6,077,075 (issued Jun. 20, 2000) ("Bedard")
1052	U.S. Patent Application Publication 2009/0246724 A1 (published Oct. 1, 2009) ("Chen")
1053	P. PAINTER AND M. COLEMAN, ESSENTIALS OF POLYMER SCIENCE AND ENGINEERING (2009)
1054	ISO 178, *Plastics -Determination of Flexural Properties* (2019)
1055	ASTM D790-17, *Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials* (2021)
1056	ASTM D638-14, *Standard Test Method for Tensile Properties of Plastics* (2021)
1057	ISO 527-1, *Plastics—Determination of Tensile Properties—Part 1: General Principles* (2012)
1058	H.J. Qi, et al., *Durometer Hardness and the StressStrain Behavior of Elastomeric Materials*, 76 RUBBER CHEM AND TECH 419 (2003)
1059	ASTM D2240-15, *Standard Test Method for Rubber Property—Durometer Hardness* (2016)

Exhibit	Description
1060	ISO 48-4, *Rubber, Vulcanized or Thermoplastic—Determination of Hardness—Part 4: Indentation Hardness by Durometer Method (Shore Hardness)* (2018)
1061	L.W. McKeen, INTRODUCTION TO CREEP, POLYMERS, PLASTICS AND ELASTOMERS, in *The Effect of Creep and Other Time Related Factors on Plastics and Elastomers*, 1-41 (2015)
1062	ASTM D395-03, *Standard Test Methods for Rubber Property—Compression Set* (2003)
1063	ISO 815-1, *Rubber Vulcanized or Thermoplastic—Determination of Compression Set—Part 1: At Ambient or Elevated Temperatures* (2019)
1064	Alemnis, *What Is Stress Relaxation of Materials?* (July 27, 2023), https://alemnis.com/what-is-stress-relaxation-of-materials/
1065	ASTM D2990-01, *Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics* (2001)
1066	ISO 899-1, *Plastics—Determination of Creep Behaviour—Part 1: Tensile Creep* (2017)
1067	M. FOX, OPTICAL PROPERTIES OF SOLIDS (2010)
1068	L. Vandenberg et al., *Bisphenol-A and the Great Divide: A Review of Controversies in the Field of Endocrine Disruption*, 30 Endocrine Reviews 75 (2009)
1069	S. Vogel, *The Politics of Plastics: The Making and Unmaking of Bisphenol A "Safety"*, 99 Am. J. Pub. Health 559 (2009)
1070	NTP Technical Report, Nat'l Inst. Health, *Carcinogenesis Bioassay of Bisphenol A in F344 Rats and B6C3F$_1$ Mice* (1982)

Exhibit	Description
1071	A. Soto and C. Sonnenschein, *Environmental Causes of Cancer: Endocrine Disruptors as Carcinogens*, 6 Nat'l Rev Endocrinol. 363 (2010)
1072	NTP Technical Report, Nat'l Inst. Health, *Endocrine Disruptors Low-Dose Peer Review* (2001)
1073	L.D. Pup et al., *Carcinogenetic Mechanisms of Endocrine Disruptors in Female Cancers (Reviews)*, 36 ONCOLOGY REPORTS 603 (2016)
1074	K. Suzuki et al., *Content and Release of Bisphenol A from Polycarbonate Dental Products*, 19 DENTAL MATERIALS J 389 (2000)
1075	A. Fleisch et al., *Bisphenol A and Related Compounds in Dental Materials*, 126 PEDIATRICS 760 (2009)
1076	S.Y. Chung et al., *Dental Composite Fillings and Bisphenol A Among Children: A Survey in South Korea*, 62 INT'L DENTAL J 65 (2012)
1077	Y.G. Kang et al., *Release of Bisphenol A from Resin Composite Used to Bond Orthodontic Lingual Retainers*, 140 AM. J OF ORTHODONTICS & DENTOFACIAL ORTHOPEDICS 779 (2011)
1078	S. Nagel et al, *Relative Binding Affinity-Serum Modified Access (RBA-SMA) Assay Predicts the Relative In Vivo Bioactivity of the Xenoestrogens Bisphenol A and Octylphenol*, 105 ENV'T HEALTH PERSPECTIVES 70 (1997)
1079	F. vom Saal and C. Hughes, *An Extensive New Literature Concerning Low-Dose Effects of Bisphenol A Shows the Need for a New Risk Assessment*, 113 ENV'T HEALTH PERSPECTIVES 926 (2005)

Exhibit	Description
1080	F. vom Saal et al., *Chapel Hill Bisphenol A Expert Panel Consensus Statement: Integration of Mechanisms, Effects in Animals and Potential to Impact Human Health at Current Levels of Exposure*, 24 REPROD TOXICOL. 131 (2007)
1081	Government of Canada Takes Action, https://www.canada.ca/en/news/archive/2008/04/government-canada-takes-action-another-chemical-concern-bisphenol-a.html (Apr. 18, 2008)
1082	BPA Ban - Suffolk County, New York, Ch. 704, Art. II, of the Code 2009 (amended Mar. 24, 2009 by L.L. No. 7-2009)
1083	BPA Ban - Minnesota, Ch. 325F, §§ 1-2, SF247 (Feb. 9, 2010)
1084	BPA Ban - Chicago, Illinois, 7-28-637 BPA-Free Kids Ordinance (Added Coun. J. 5-13-09, p. 62794, § 2; Amend Coun. J. 11-16-11, p. 13798, Art. II, § 6)
1085	BPA Ban - Connecticut, Public Act No. 09-103 (June 3, 2009)
1086	BPA Ban - Washington, House Bill Report HB 1180 (2009)
1087	BPA Ban - Wisconsin, 2009 Wisc. Act 145, 2009 Senate Bill 271 (enacted Mar. 3, 2010)
1088	BPA Ban - Maryland, Senate Bill SB213 (effective on July 1, 2010)
1089	BPA Ban - Vermont, VT LEG 258370.1 No. 112 An Act Relating to Bisphenol A, S.247 (approved May 19, 2010)
1090	BPA Ban - New York, Bisphenol A-Free Children and Babies Act, S. 3296 (Mar. 13, 2009)
1091	BPA Ban - Massachusetts, 105 CMR 650.000 (2010)
1092	BPA Ban - Delaware, Section 1. Amend Chapter 25, Title 6, Delaware Code (2011)

Exhibit	Description
1093	BPA Ban - Maine, Maine Dept. Environmental Protection 06-096, Ch. 822 (effective Jan. 9, 2011)
1094	*Safety of Phthalates and Bisphenol-A in Everyday Consumer Products: Hearing Before the Subcomm. On the Comm, Trade, and Consumer Protection of the H. Comm. on En. and Commerce*, 110 Cong. 2 (2008) (No. 110-125)
1095	Euro Comm., *Bisphenol A: EU Ban on Baby Bottles to Enter into Force Tomorrow* (May 30, 2011)
1096	*China Bans BPA in Infant Feeding Bottles*, SAFEGUARDS: SGS Consumer Testing Services (May 11, 2011)
1097	R. Trager, *US BPA Usage Could be Curbed*, Chemistry World, https://www.chemistryworld.com/news/us-bpa-usage-could-be-curbed/3004184.article (Mar. 11, 2009)
1098	P. Bailin et al., *Public Awareness Drives Market for Safer Alternatives: Bisphenol A Market Analysis Report*, Investor Environmental Health Network (Sept. 15, 2008)
1099	Tupperware®, *BPA Free: About BPA & Product Materials*, https://www.tupperware.com/pages/bpa-free?srsltid=AfmBOoofPB499or57QOHHqdmLS-LiJ203tpbguf46m1crNnBjGfP2WQl (accessed Dec. 16, 2024)
1100	S. Rust and M. Kissinger, *Maker Acknowledges BPA Worries*, Milwaukee J. Sentinel, https://archive.jsonline.com/watchdog/watchdogreports/41186522.html (Mar. 12, 2009)
1101	Food and Drug Administration, Bisphenol A (BPA): Use in Food Contact Application, https://www.fda.gov/food/food-packaging-other-substances-come-contact-food-information-consumers/bisphenol-bpa-use-food-contact-application# (last updated Nov. 2014)

Exhibit	Description
1102	*3M Confirms No BPA in Its Dental Products*, https://www.drbicuspid.com/dental-specialties/smile-design/restorations/article/15360518/3m-confirms-no-bpa-in-its-dental-products (Sept. 13, 2010)
1103	3M Press Release (May 9, 2023)
1104	U.S. Patent No. 9,022,903 B2 (issued May 5, 2015)
1105	Internet Archive Wayback Machine, *Tritan Availability Between Nov. 4, 2016-Feb. 18, 2009*
1106	U.S. Patent Pub. No. 2012/0136089 A1 (published May 31, 2012)
1107	U.S. Patent No. 8,979,410 (issued Mar. 17, 2015)
1108	U.S. Patent Pub. No. 2012/0021151 A1 (published Jan. 26, 2012)
1109	U.S. Patent Pub. 2013/0085530 A1 (published Apr. 4, 2013)
1110	U.S. Patent No. 9,060,918 B1 (issued June 23, 2015)
1111	Ultradent Press Release, https://www.dentalproductsreport.com/view/ultradent-products-supports-fda-ban-baby-products-containing-bpa (Sept. 1, 2012)
1112	R. Goszkowski, *New BPA-Free Restorative Matches Competition's Strength*, https://www.drbicuspid.com/dental-specialties/smile-design/restorations/article/15364587/new-bpa-free-restorative-matches-competitions-strength (Apr. 3, 2012)
1113	First Choice, *What Are the Benefits of Invisalign® Invisible Braces and How Does the Process Work?*, https://firstchoicedental.com/blog/what-are-benefits-invisalignr-invisible-braces-and-how-does-process-work/ (Mar. 23, 2011)

Exhibit	Description
1114	T. Deligio, *Eastman Opens Expanded Tritan Plant, Copolyester's Rapid Rise Continues*, https://www.plasticstoday.com/plastics-processing/eastman-opens-expanded-tritan-plant-copolyester-s-rapid-rise-continues (May 14, 2010)
1115	Eastman Chemical to Expand Tritan Capacity, Zacks Equity Research (Aug. 1, 2013)
1116	Eastman Press Release (Jan. 31, 2014)
1117	L. Gao and A. Wichelhaus, *Forces and Moments Delivered by the PET-G Aligner to a Maxillary Central Incisor for Palatal Tipping and Intrusion*, 87 Angle Orthodontist 534 (2017)
1118	Internet Archive, *Eastman Product Data Sheets Tritan Copolyester MX710, EX401, MX711, TX1000, TX1001, TX1500HF, TX1501HF, TX2000, TX2001* (archived Aug. 17, 2009, Nov. 21, 2008, Nov. 19, 2008, Nov. 22, 2008, Nov. 23, 2008) (last visited Apr. 12, 2025)
1119	Federal Court Management Statistics-Profiles, United States District Courts – National Judicial Caseload Profile (Mar. 31, 2025) (available at https://www.uscourts.gov/sites/default/files/document/fcms_na_distprofile0331.2025.pdf)
1120	LegalMetric Time to Trial Report, Texas Western District Court, Patent Cases, January 2010 to August 2025
1121	WDTX Calendar Year 2024 Statistical Public Report (available at https://www.txwd.uscourts.gov/wp-content/uploads/District%20Statistics/2024/Calendar%20Year%202024%20Statistical%20Public%20Report.pdf?_wpnonce=70b2778e25)
1122	Jan. 31, 2025, WDTX Amended Order Assigning Business of the Court
1123	May 30, 2024, WDTX Order Assigning the Business of the Court as it relates to Patent Cases

Exhibit	Description
1124	Lex Machina, Cases Reassigned to Judge Albright (July 23, 2025)
1125	Lex Machina, Patent Cases Reassigned to Judge Albright (July 23, 2025)
1126	Fourth Scheduling Order, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. June 12, 2025) (ECF No. 188)
1127	Redacted Copy of Patent Owner's Motion to Stay June 17, 2025, Discovery Order Regarding Align's Production of Customer Contracts, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. July 8, 2025) (ECF No. 198)
1128	Order, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. July 8, 2025) (ECF No. 196)
1129	Defendants ClearCorrect Operating, LLC and ClearCorrect Holdings, Inc.'s Answer and Affirmative Defenses and Counterclaim-Plaintiffs' Counterclaims to Align Technology, Inc.'s Complaint for Damages and Injunctive Relief, *Align Technology, Inc. v. ClearCorrect Operating, LLC*, Case No. 6:24-cv-00187 (W.D. Tex. Apr. 11, 2024) (ECF No. 56)
1130	Claim Construction Order, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. June 5, 2025) (ECF No. 185)
1131	Joint Claim Construction Statement, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. Jan. 3, 2025) (ECF No. 142)
1132	Stipulated Joint Motion to Amend the Case Schedule, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. Mar. 18, 2025) (ECF No. 164)

Exhibit	Description
1133	Third Scheduling Order, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. Mar. 20, 2025) (ECF No. 165)
1134	Joint Motion to Amend the Case Schedule, *Align Tech., Inc. v. ClearCorrect Operating, LLC*, No. 6:24-cv-00187-ADA-DTG (W.D. Tex. Jun. 6, 2025) (ECF No. 187)
1135	Intentionally Left Blank
1136	USPTO Rescinds Memorandum Addressing Discretionary Denial Procedures (Feb. 28, 2025)
1137	Prosecution History of U.S. Patent Application No. 17/858,825 (now U.S. Patent No. 11,648,090 B2)
1138	Align Testing Spreadsheet (PDF) (CONFIDENTIAL – PARTIES AND BOARD ONLY)
1139	Align Testing Spreadsheet (PDF) (CONFIDENTIAL – PARTIES AND BOARD ONLY)
1140	(CONFIDENTIAL – PARTIES AND BOARD ONLY)
1141	(CONFIDENTIAL – PARTIES AND BOARD ONLY)
1142	Align Testing Spreadsheet (native) (SERVED, NOT FILED)
1143	Align Testing Spreadsheet (native) (SERVED, NOT FILED)
1144	Align Technology 2013 Q4 Financial Slides
1145	Align Technology 2024 Q1 Financial Slides
1146	Align Technology, https://www.invisalign.com/provider (last visited April 23, 2026)

Exhibit	Description
1147	Align Technology, https://www.aligntech.com/patents (last visited April 23, 2026)
1148	Reply Expert Declaration of Dr. Tim Osswald, Ph.D.
1149	Transcript of Deposition of Dr. Robert Kimmel (April 17, 2026)
1150	Transcript of Deposition of Yan Chen (April 8, 2026) (REDACTED VERSION AND CONFIDENTIAL – PARTIES AND BOARD ONLY)
1151	U.S. Patent Application Publication No. US 2012/0322951 (filed June 17, 2011) ("Eastman")
1152	Internet Archive, *Eastman Tritan™ Copolyester FX100 Data Sheet* (archived January 22, 2014), Eastman Chemical Co., https://web.archive.org/web/20140122132516/http://ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71068695, dated March 30, 2010 (last visited May 29, 2026)
1153	Internet Archive, *Eastman Tritan™ Copolyester FX200 Data Sheet* (archived September 28, 2011), Eastman Chemical Co., https://web.archive.org/web/20140122100843/http:/ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71069060, dated March 29, 2010 (last visited May 29, 2026)
1154	P. Yue et al., *Phase-field simulations of interfacial dynamics in viscoelastic fluids using finite elements with adaptive meshing*, 219 J. COMPUTATIONAL PHYSICS 47 (2006)
1155	J.K. Kim & C.D. Han, *Polymer-Polymer Interdiffusion During Coextrusion*, 31 POLYMER ENGINEERING AND SCIENCE 258 (1991)
1156	U.S. Patent No. 7,641,828 (filed Oct. 12, 2004; issued January 5, 2010) ("DeSimone")
1157	Transcript of Deposition of Naga Kusima (April 24, 2026)

Exhibit	Description
1158	Z. Zhang et al., *Melt-spun poly(ethylene terephthalate-co-1,4-cyclohexanedimethylene terephthalate) (PETG) copolyester fibers: Synergistic effect of chemical and crystal structure regulation*, 65 POLYMER ENGINEERING AND SCIENCE 755 (2024)
1159	Intentionally Left Blank
1160	C. Berti et al., *Poly(1,4-cyclohexylenedimethylene 1,4-cyclohexanedicarboxylate): Influence of Stereochemistry of 1,4-Cyclohexylene Units on the Thermal Properties*, 46 J. POLYMER SCIENCE 619 (2008)
1161	HARRY R. ALLCOCK & FREDERICK W. LAMPE, CONTEMPORARY POLYMER CHEMISTRY (2d ed. 1990) (excerpt)
1162	Intentionally Left Blank
1163	U.S. Patent No. 7,210,926 (filed Nov. 10, 2003)
1164	U.S. Patent No. 4,826,420 (filed Dec. 14, 1987)
1165	S.R. Morris & C.T. Sunt, *Analysis of Forming Loads for Thermoplastic Composite Laminates*, 27 COMPOSITES 633 (1996)
1166	G. Latini et al., *DI-2-Ethylhexyl Phthalate and Endocrine Disruption: A Review*, 4 ENDOCRINE, METABOLIC & IMMUNE DISORDERS - DRUG TARGETS 37 (2004)
1167	Declaration of Kelley Hayes Greenhill
1168	*Bay Materials Announces Zendura® FLX™ Thermoformable Material for Orthodontic Clear Aligner Therapy Appliances*, PR News Wire, https://web.archive.org/web/20190527023742/https:/www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html (last visited May 29, 2026)
1169	Marked Excerpts of Patent Owner's Sur-Reply

Respectfully submitted,

Dated: August 21, 2026

By: / Charles T. Collins-Chase /
Charles T. Collins-Chase, Lead Counsel
Reg. No. 78,019

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Petitioner's Updated Exhibit List** and **Exhibit 1169** were served on August 21, 2026, via email directed to counsel of record for the Patent Owner at the following:

Michael T. Rosato
Patrick M. Medley
Wilson Sonsini Goodrich & Rosati
701 Fifth Avenue, Suite 5100
Seattle, WA 98104-7036
Email: mrosato@wsgr.com
Email: pmedley@wsgr.com

Matthew A. Argenti
Wilson Sonsini Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94304
Email: margenti@wsgr.com

Dated: August 21, 2026

By: / William Esper /
William Esper
Senior Litigation Paralegal
Finnegan, Henderson, Farabow,
Garrett & Dunner, LLP