

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HS HYOSUNG ADVANCED MATERIALS CORP.,

Petitioner,

v.

KOLON INDUSTRIES, INC.,

Patent Owner.

Case No. IPR2025-00663

U.S. Patent No. 10,196,765

**PETITIONER'S SURREPLY TO PATENT OWNER'S REQUEST FOR
DISCRETIONARY DENIAL OF INSTITUTION**

EXHIBIT LIST

EX	Description
1001	U.S. Patent No. 10,196,765 (“the ’765 patent”)
1002	File History of the ’765 Patent
1003	Declaration of Jon Rust, Ph.D.
1004	<i>Curriculum Vitae</i> of Jon Rust, Ph.D.
1005	Japanese Patent No. 2009-68549
1006	Certified Translation of Japanese Patent No. 2009-68549 (“Tamura”), prior art under at least 35 U.S.C. §102(a)(1)
1007	U.S. Pat. No. 5,558,144 (“Nakayasu”), prior art under at least 35 U.S.C. §102(a)(1)
1008	U.S. Pat. No. 4,155,394 (“Shepherd”), prior art under at least 35 U.S.C. §102(a)(1)
1009	Intentionally Left Blank
1010	European Patent Pub. No. 0405887A1 (“Buchanan”), prior art under at least 35 U.S.C. §102(a)(1)
1011	Intentionally Left Blank
1012	Certified Translation of Korean Patent Disclosure No. 10-2006-0126101 (“Chung”), prior art under at least 35 U.S.C. §102(a)(1)
1013	U.S. Pat. App. Pub. No. 2010/071826 (“Yokokura”), prior art under at least 35 U.S.C. §102(a)(1)
1014	Intentionally Left Blank
1015	U.S. Pat. App. Pub. No. 2005/0249949 (“Rowan”), prior art under at least 35 U.S.C. §102(a)(1)
1016	Intentionally Left Blank

1017	Intentionally Left Blank
1018	Intentionally Left Blank
1019	Korean Patent Disclosure No. 10-2006-0126101 (“Chung”)
1020	Intentionally Left Blank
1021	Certified Translation of PCT Publication No. WO 2009/134063 (“Kwon”), prior art under at least 35 U.S.C. §102(a)(1)
1022	Intentionally Left Blank
1023	U.S. Pat. App. Pub. No. 2003/0159768 (“Fritsch”), prior art under at least 35 U.S.C. §102(a)(1)
1024	Intentionally Left Blank
1025	Intentionally Left Blank
1026	Intentionally Left Blank
1027	ASTM International. <i>ASTM D885-01: Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers</i> . ASTM International, 2001.
1028	ASTM International. <i>ASTM D885-02: Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers</i> . ASTM International, 2002.
1029	ASTM International. <i>ASTM D885-03: Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers</i> . ASTM International, 2003.
1030	ASTM International. <i>ASTM D885-04: Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers</i> . ASTM International, 2004.
1031	ASTM International. <i>ASTM D885-06: Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers</i> . ASTM International, 2006.

1032	ASTM International. <i>ASTM D885-07: Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers</i> . ASTM International, 2007.
1033	Excerpts from <i>1997 Annual Book of ASTM Standards, Section 7 Textiles, Volume 07.01 Textiles (I): D 76-D 3218</i> , American Society for Testing and Materials, 1997.
1034	Intentionally Left Blank
1035	PCT Publication No. WO 2009/134063 (“Kwon”)
1036	Japanese Industrial Standard JIS L 1017 (1995)
1037	Japanese Industrial Standard JIS L 1017 (2002)
1038	ASTM D885M, available at https://standards.globalspec.com/std/782145/astm-d885m
1039	ASTM-D885M, available at https://www.documentcenter.com/standards/show/ASTM-D885M
1040	Patent L.R. 4-3 Joint Claim Construction and Prehearing Statement, <i>Kolon Industries, Inc. v. Hyosung Advanced Materials Corp. et al.</i> , 8:24-cv-00415-JVS-JDE (C.D. Cal. Feb. 20, 2025).
1041	Copy of Wood Mackenzie’s webpage providing a summary of a report entitled: “Nylon PA66 tyre yarns and fabrics Insight” and available at https://www.woodmac.com/reports/chemical-markets-nylon-pa66-tyre-yarns-and-fabrics-insight-353783/ .
1042	Copy of tire cord manufacturer Kordsa’s brochure for Twixtra® product, available at https://kordsa.com/kordsa/cdn/uploads/000005251_twixtrav2.pdf
1043	Copy of tire cord manufacturer Toray’s webpage, available at http://www.toray-hybrid.com/en/product/tirecord.html .
1044	Copy of tire cord manufacturer Teijin’s webpage, available at https://www.teijin-frontier.co.th/productdanservice/Detail/2-16-Tire-Cord-Fabric-Products .

1045	Copy of tire cord manufacturer Indorama Venture's webpage, available at https://mobility.indoramaventures.com/productsmarkets/tire .
1046	United States District Courts' National Judicial Caseload Profile from 2025
1047	Screenshot of Docket Navigator's Analysis of Judge James V. Selna
1048	Order Granting Hyosung Advanced's Motion to Stay Pending <i>Inter Partes</i> Review, <i>Kolon Industries, Inc. v. HS Hyosung Advanced Materials Corp., et al.</i> , Case No. 8:24-cv-415-JVS-JDE, Dkt. 149.
1049 ¹	English and Korean Copy of the Korean high court's invalidity ruling.
1050	Order Granting Motions to Dismiss, <i>Kolon Industries, Inc. v. HS Hyosung Advanced Materials Corp., et al.</i> , Case No. 8:24-cv-415-JVS-JDE, Dkt. 82.

¹ Patent Owner argues that Exhibit 1049 does not comply with 37 C.F.R. §42.63(b) because a certified translation was not provided. Petitioner intends to rely on a certified translation post-institution, but can provide it now to the Director if needed. Regardless, Patent Owner does not dispute the outcome of the judgment.

Although Patent Owner requested additional briefing to address the Korean High Court’s invalidity judgment against the Korean counterpart of the ’731 patent, Patent Owner’s reply (Paper 10, “DD Reply”) largely rehashes the same, flawed arguments it made in its Request (Paper 7, “DD Request”). None of Patent Owner’s arguments address the fact or substance of the Korean judgment, nor do they necessitate any additional briefing. Regardless, as Petitioner explained in its Response (Paper 9, “DD Response”), none of Patent Owner’s arguments outweigh the parties’ lack of settled expectations with respect to the ’765 patent. DD Response, 21-25.

Patent Owner’s only purportedly new argument—that the age of the ’765 patent created settled expectations—has no relation to the Korean judgment. DD Reply, 3 (quoting *iRhythm*, IPR2025-00363 and *Amgen*, IPR2025-00601). The Director should reject this argument as it was never made in the Response and, more importantly, it violates the Director’s clear instruction that Patent Owner’s reply should be “limited to addressing the arguments” about the Korean judgment. Ex. 3101.

Nevertheless, the ’765 patent was issued in 2019 and little more than 6 years old when the petition in this proceeding was filed, which was not enough time to create settled expectations. *Cambridge Indus. USA, Inc. v. Applied Optoelectronics*,

Inc., IPR2025-00434, Paper 11 at 2–3 (June 26, 2025) (finding patent issued in 2019 lacked settled expectations).

In addition, to the extent that minimal settled expectations arose during the patent’s six years of enforcement, they are outweighed by the examiner’s material error. *Anthony Inc. v. ControlTec, LLC*, IPR2025-00559, Paper 12 at 2 (July 16, 2025) (“Although the challenged patents have been in force for approximately eighteen and seventeen years, Petitioner appears to show a material error by the Office, and it is an appropriate use of Office resources to review the potential error.”). As Petitioner explained in its Response, the examiner materially erred by allowing the claims over the prosecution prior art because the claims recite a “partial covering structure”—a limitation that Patent Owner does not dispute is disclosed by both Nakayasu and Fritsch. DD Response, 6–11.

Patent Owner argues that because Petitioner did not challenge the ’765 patent’s Korean counterpart, Petitioner must have had settled expectations of its validity. DD Reply, 2–3. But Petitioner refrained from challenging the ’765 patent’s Korean counterpart because it had no expectation of being sued for patent infringement. DD Response, 22–23. Indeed, as the District Court held, Patent Owner’s February 2021 letter was *insufficient* to put Petitioner on notice of Patent Owner’s rights, as it did not identify any infringing products or activity. Ex. 1050, 5. And Patent Owner remained radio silent for three years following delivery of that

letter, reinforcing Petitioner’s belief that Patent Owner had no rights to enforce against Petitioner. DD Response, 22.

Tellingly, Patent Owner does not address the fact that the ’731 patent has similar limitations as the ’765 patent, and thus the Korean challenge of the ’731 patent’s Korean counterpart—using similar art presented here—should have removed any expectation of validity. DD Response, 24. Patent Owner’s focus on *Petitioner’s* actions as evidence of Petitioner’s settled expectations fails to address the crux of the matter—Patent Owner’s own expectations and lack thereof in view of the similar art and challenged claims in the Korean action, as well as Patent Owner’s prolonged inaction in enforcing its rights. Patent Owner’s lawsuit against Petitioner was the first time it had asserted the patent against anyone. *Intel Corp. v. Proxense LLC*, IPR2025-00327, Paper 12 at 3 (June 26, 2025) (“[A] patent may have been in force for years but may not have been ... asserted”).

Date: July 31, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 31, 2025, true and correct copies of the foregoing document were served via electronic mail to Patent Owner's counsel of record:

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