

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

POSCO CO., LTD. et al.,
Petitioner,

v.

ARCELORMITTAL,
Patent Owner.

Case IPR2024-01377
Patent 11,326,227

**PETITIONER'S REPLY TO PATENT OWNER'S
SUPPLEMENTARY RESPONSE RE: *FINTIV***

UPDATED LIST OF EXHIBITS

EX-1001	U.S. Patent No. 11,326,227 to Drillet (“the ’227 Patent”)
EX-1002	Excerpts from the Prosecution History of the ’227 Patent (“the Prosecution History”)
EX-1003	Declaration of Dr. Michael Miles
EX-1004	Curriculum Vitae of Dr. Michael Miles
EX-1005	Engels et al., “Controlling and Monitoring of the Hot-Stamping Process of Boron-Alloyed Heat-Treated Steels” (2006) (“Engels”)
EX-1006	Translation Certificate of Michael L. Magee
EX-1007	Excerpt from “New Developments in Sheet Metal Forming” (2006)
EX-1008	Declaration of Prof. Mathias Liewald
EX-1009	Declaration of Christoph Wohlstein
EX-1010	“Engels” and “Hein,” in English and German, provided by the German National Library
EX-1011	[Reserved]
EX-1012	[Reserved]
EX-1013	[Reserved]
EX-1014	Cornette et al., “High Strength Steels for Automotive Safety Parts,” SAE Technical Paper Series 2001-01-0078 (2001) (“Cornette”)
EX-1015	Declaration of Mel DeSart

EX-1016	U.S. Patent Application Publication No. 2004/0009366 ("Takagi")
EX-1017	Japanese Patent No. JP3738754
EX-1018	Translation and Certificate of Translation for portions of EX-1017
EX-1019	Hein et al., "Hot Stamping of USIBOR 1500 P: Part and Process Analysis Based on Numerical Simulation" (2006) ("Hein")
EX-1020	Hein et al., "Pressharten von USIBOR 1500 P: Simulationsbasierte Bauteil- und Prozessanalyse" (2006)
EX-1021	Vaissiere et al., "Development of Pre-Coated Boron Steel for Applications on PSA Peugeot Citroën and RENAULT Bodies in White," SAE Technical Paper Series 2002-01-2048, reprinted from the Proceedings of the 2002 SAE International Body Engineering Conference and Automotive & Transportation Technology Conference (2002) ("Vaissiere")
EX-1022	Declaration of June Ann Munford - #1
EX-1023	U.S. Patent No. 6,296,805 ("Laurent")
EX-1024	French Patent Publication No. FR2833504
EX-1025	Translation of EX-1024 and Certificate of Accuracy
EX-1026	GMW14400 material specification ("GMW14400")
EX-1027	Declaration of June Ann Munford - #2
EX-1028	U.S. Patent No. 9,708,683 ("the '683 Patent")
EX-1029	Final Written Decision for IPR2019-01275, corresponding to EX-1028

EX-1030	Record of Oral Hearing for IPR2019-01275
EX-1031	Petition for IPR2019-01275
EX-1032	Somani et al., “Dimensional Changes and Microstructural Evolution in a B-bearing Steel in the Simulated Forming and Quenching Process,” ISIJ International, Vol. 41 (2001) (“Somani”)
EX-1033	Japanese Patent Publication JP2004244704
EX-1034	Translation of EX-1033 and Certification of Accuracy
EX-1035	WO Patent Application Publication No. WO02/103073
EX-1036	European Publication No. EP1865086
EX-1037	Translation of EX-1036 and Certification of Accuracy
EX-1038	Winkel, “Quenches for press hardening steel plate in the car industry” (2004)
EX-1039	Translation of EX-1038 and Certification of Accuracy
EX-1040	Excerpts from Vander Voort, “Microindentation Hardness Testing,” ASM Handbook, Vol. 8 (2000)
EX-1041	Manual for Buehler IndentaMet 1100 Series Indentation Hardness Tester (2005)
EX-1042	Vander Voort and Lucas, “Microindentation Hardness Testing,” Advanced Materials and Processes (Sept. 1998)
EX-1043	Qian et al., “Comparison of nano-indentation hardness to microhardness,” Surface & Coatings Technology 195 (2005)
EX-1044	E 384-05 Standard Test Method for Microindentation Hardness of Materials (2005)

EX-1045	Garcia-Aranda, “Étude thermomécanique et modélisation numérique de l’emboutissage à chaud de l’Usibor 1500,” École Nationale Supérieure des Mines de Paris (2004)
EX-1046	Translation of portions of EX-145 and Certification of Accuracy
EX-1047	Eriksson et al., “Testing and evaluation of material data for analysis of forming and hardening of boron steel components,” Modelling Simul. Mater. Sci. Eng. 10 277 (2002)
EX-1048	[Reserved]
EX-1049	WO Patent Application Publication No. 2004/106573
EX-1050	Translation of EX-1049 and Declaration of Accuracy
EX-1051	[Reserved]
EX-1052	[Reserved]
EX-1053	Plaintiff Arcelormittal’s Complaint for Patent Infringement, <i>Arcelormittal v. Vinfast Auto LLC et al.</i> , Case No. 2-24-cv-03128-1 (CDCA), April 16, 2024
EX-1054	Order Granting Joint Stipulation to Stay, <i>Arcelormittal v. Vinfast Auto LLC et al.</i> , Case No. 2-24-cv-03128-1 (CDCA), June 30, 2024
EX-1055	Court Opinion Granting Plaintiff’s Motion for Partial Summary Judgment, <i>Wirtgen America, Inc., v. United States, et al.</i> , ITC Court No. 20-00027, May 18, 2020
EX-1056	Ken Parker and Daniel Lammie, “Moving Forward in the Face of an ITC Exclusion Order”, June 2023
EX-1057	Respondent’s Opening Statement, Vinfast, ITC Inv. No. 337-TA-1402

EX-1058 Direction Examination of Dr. Stuart Brown, Vinfast, ITC Inv.
No. 337-TA-1402

EX-1059 Transcript of Evidentiary Hearing- Volume 3, ITC
Investigation No. 337-TA-1402, March 5, 2025

EX-1060 Transcript of Evidentiary Hearing- Volume 4, ITC
Investigation No. 337-TA-1402, March 6, 2025

Fintiv favors institution. No tribunal will resolve grounds based on Engels and Takagi prior to the Board. And Petitioner, POSCO Co., Ltd., is not a party to any parallel proceeding. These factors eliminate *Fintiv*'s concerns over efficiency and inconsistent results. With strong merits, institution should be granted.

Further, Patent Owner ("PO") presumes that rescission of the 2022 Memo endorses consideration of ITC investigations for *Fintiv* analysis. Not so. The Memo addressed several issues and its rescission now leaves each open; indeed, the rescission did not state that *Fintiv* applies to administrative ITC proceedings like it does for district court litigation. And good reasons remain for why it should not.

ITC investigations do not *parallel* IPRs because invalidity rulings at the ITC carry *no* preclusive effect on other forums. *Texas Instr. Inc. v. Cypress Semi. Corp.*, 90 F.3d 1558, 1569 (Fed. Cir. 1996). The Board has explained that the "ITC does not have the authority to invalidate a patent in a way that is applicable to other forums, and thus ITC decisions do not preempt issues addressed in an *inter partes* review." *Nichia Corp.*, IPR2019-01259, Paper 21, 27 (Jan. 2020). Absent PTAB action, the same invalidity issues will need to be litigated again even if the ITC finds claims invalid. *Id.*, 27-28. Indeed, PO can assert the '227 patent in other lawsuits in different courts and against other defendants, regardless of the ITC's determination. For these reasons, ITC investigations do "not render [an IPR] proceeding duplicative or ... a waste of the Board's resources." *Samsung Elecs.*

Co., IPR2018-01410, Paper 14, 18 (Jan. 2019). Thus, *Fintiv* is inapplicable to PO's sole basis for *Fintiv* denial—its ITC investigation against VinFast.

A. VinFast's district court case is stayed, no motion for stay has been filed at the ITC, and no litigation against POSCO exists to stay

Factor 1 favors institution or is neutral. PO's district court case against VinFast is stayed. EX-1053; EX-1054. Nothing on record suggests that VinFast would not move to stay the ITC investigation if IPR is instituted, and the Board should not attempt to predict whether/how a different court will proceed.

B. Any litigation against POSCO and VinFast's district court case will come well after this IPR

Factor 2 favors institution. Because the ITC cannot invalidate claims, future litigation remains even if the ITC finds the '227 patent invalid. And because PO otherwise chose to assert the '227 patent against only VinFast in a stayed district court proceeding and could assert it against POSCO regardless of the ITC result, future litigation over validity would necessarily follow the FWD.

Even considering the ITC, the time between conclusion of an IPR and a full trade investigation favors the IPR. In contrast to trials, ITC investigations do not conclude with the hearing. An ID will not issue until over three months later. Another four months pass before a FD. Then another 60 days pass for presidential review. But the case is not done yet. If an exclusion order is issued, the Parties often pursue advisory or modification proceedings before the ITC or move to

litigation at Customs, which is itself subject to more litigation before the Court of Intl. Trade (“CIT”). Like the ITC, both Customs and CIT perform “a substantive patent analysis,” including invalidity review, to determine whether the exclusion order applies to redesigned products. EX-1055, 14, 1-10. In this process, the CIT looks to PTAB rulings. *Id.*, 8. Thus, the violation phase is only the start of a trade dispute with more litigation (e.g., Rule 177 (7-26 weeks), advisory (3.2 months), modification (10.4 months), enforcement (12.76 months) proceedings) to follow. EX-1056. Given the broader timeline, the Board’s statutory deadline comes first.

C. Investment in the parallel proceeding by the court and the parties

Factor 3 favors institution. No investment has occurred in a lawsuit against POSCO or in VinFast’s district court case. The ITC’s ID is not due until over three months after the Board’s institution due date. The Board has refused to exercise discretion in similar circumstances. *3Shape*, IPR2020-00223, Paper 12, 34 n.15; *Wirtgen*, IPR2018-01201, Paper 13, 11-12; *Feit Elec. Co.*, IPR2018-00921, Paper 9, 8-9, 34-35 (Oct. 2018). Further, Petitioner diligently filed its petition less than 4 months after the ITC investigation was instituted.

D. The petition’s grounds are completely different from those heard by the ITC, and address 11 more claims

Factor 4 strongly favors institution. PO overstates overlap by providing excerpts of ITC documents to obfuscate lack of overlap. PO provided 3 of 46 slides used for respondents opening statement to exaggerate the importance of the IPR

references. EX-2008; EX-1057. And PO did not submit the slides presenting VinFast's invalidity case. In those slides, the primary references in this IPR, Engels and Takagi, were listed on 5 of 131 invalidity slides and were only briefly discussed as part of the "State of the Art." EX-1058, 41, 47-50; EX-1059 (Day 3); EX-1060 (Day 4). The thrust of the ITC invalidity case involves two pieces of prior art—Volkswagen Passat and Lachmann—that are not part of the IPR. EX-1058, 54-168. The Passat is a vehicle from 2005, which is a product ineligible for Board consideration and cannot overlap with this IPR. EX-1058, 54-109; EX-1059; EX-1060. Lachmann was not submitted as an exhibit and has no overlap. And to be clear, the only grounds advanced by the petition will not be addressed by the ITC judge. In fact, the record demonstrates, with certainty, that minimal hearing resources were devoted to discussing Engels and Takagi as only part of the "State of the Art." And no resources will be devoted by the ITC judge in considering validity of the '227 patent over Engels and Takagi because Engels and Takagi were not advanced as grounds at the hearing. Further, the petition covers every claim of the '227 patent, including 11 claims not asserted at the ITC.

E. The parties are different

Factor 5 strongly favors institution. PO initiated ITC proceedings against VinFast, not POSCO. Yet, PO asserts, without justification, that its case against VinFast should result in denial of POSCO's petition. Indeed, PO cites no authority

justifying extension of *Fintiv* to a petition filed by an alleged supplier based on parallel customer litigation. Here, when PO filed suit against VinFast, POSCO filed this petition to protect itself. This action aligns with the purpose of the AIA to efficiently resolve validity to avoid future litigation. Denying POSCO's petition based on litigation with just one of its customers would thwart Congress' intent.

For these reasons, the Board routinely grants institution when a customer lawsuit proceeds in parallel with a supplier petition and RPI designation is a non-factor. *Dolby Labs., Inc.*, IPR2020-00661, Paper 13, 8-12 (Oct. 2020); *Applied Materials, Inc.*, IPR2021-01344, Paper 17, 28 (Feb. 2022); *Intel Corp.*, IPR2023-01145, Paper 11, 43 (Mar. 2024). As with Petitioner in the Dolby case, POSCO named its customer, VinFast, as an RPI "out of an abundance of caution" and "to avoid unnecessary litigation at the PTAB." *Dolby Labs., Inc.*, IPR2020-00661, Paper 13, 11. And it did so despite VinFast having no involvement or control over this IPR. *Applied Materials, Inc.*, IPR2021-01344, Paper 17, 28.

F. Other circumstances strongly favor institution

Merits strongly favor institution. PO's argument against Engels requires a narrow interpretation of superficial layer and also the presence of an undisclosed sixth phase when Engels expressly discloses "[f]ive phases." EX-1005, 142. PO makes no substantive challenge to the Takagi grounds, arguing that GMW14400 is not a printed publication despite ample evidence to suggest otherwise. Paper 7, 5-8.

Respectfully submitted,

Dated March 11, 2025

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4) and 42.205(b), the undersigned certifies that on March 11, 2025, a complete and entire copy of this PETITIONER'S REPLY TO PATENT OWNER'S SUPPLEMENTARY RESPONSE RE: *FINTIV* was provided by email to the Patent Owner by serving the correspondence address of record as follows:

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