

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENNOX INDUSTRIES INC.,

Petitioner,

v.

ROSEN TECHNOLOGIES LLC,

Patent Owner.

IPR2023-00717

U.S. Patent No.: 7,156,318

**PETITIONER'S AUTHORIZED REPLY TO
PATENT OWNER'S PRELIMINARY RESPONSE**

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STATUTES

35 U.S.C. § 314(a)	1
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PETITIONER’S EXHIBIT LIST

Ex[No.]	Description of Documents
1001	U.S. Patent No. 7,156,318 (“’318 Patent”)
1002	Declaration of R. Jacob Baker, Ph.D., P.E.
1003	Prosecution File History of the ’318 Patent
1004	U.S. Patent No. 6,032,867 (“ <i>Dushane</i> ”)
1005	International Patent Application Publication No. 2003/040839 (“ <i>Geiwitz</i> ”)
1006	Joint Claim Construction Statement, <i>Rosen Technologies LLC v. Lennox Industries, Inc.</i> , No. 3:22-cv-00732-K (N.D. TEX Feb. 2, 2023)
1007	Geiwitz U.S. Provisional Application 60/339,511, filed October 22, 2001 (“ <i>Provisional</i> ”)
1008	Transcript of Deposition of Howard J. Rosen, December 14, 2022, <i>Rosen Technologies LLC v. Lennox Industries, Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex.) (“ <i>Inventor’s Deposition</i> ”)
1009	U.S. Patent Application Publication No. 2003/0142121 (“ <i>Rosen</i> ”)
1010	“EmbeddedButtons: Supporting Buttons in Documents” by Eric A. Bier (“ <i>Bier</i> ”), published October 1992 in <i>ACM Transactions on Information Systems</i> , Vol. 10, No. 4, pp. 381-407
1011	Scheduling Order, <i>Rosen Technologies LLC v. Lennox Industries, Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex. Sept. 1, 2022)
1012	Cardio Manual
1013	U.S. Patent Application Publication No. 2003/0034898 (“ <i>Shamoon</i> ”)
1014	Statutory Disclaimer and Declaration of Howard Rosen entered in U.S. Patent No. 6,824,069 (“ <i>The Disclaimer</i> ”)

Ex[No.]	Description of Documents
1015	International Patent Application Publication No. WO 02/48851 A2 by Smith (“ <i>Smith</i> ”)
1016	U.S. Patent No. 5,460,327 (“ <i>Hill</i> ”)
1017	IPR2022-01402 Patent Owner’s Preliminary Response
1018	IPR2022-01402 Petition
1019	U.S. Patent No. 7,083,109 (“ <i>Pouchak</i> ”)
1020	Intel®386ex Data Sheet, May 1996 (“Intel Data Sheet”)
1021	Excerpts of <i>Microsoft Computer Dictionary</i> (4 th ed., 1999)
1022	<i>Motif Programming Manual</i> , Volume 6 A by Dan Heller and Paula M. Ferguson (“MOTIF”)
1023	Electronic Order Granting Unopposed Motion to Amend Scheduling Order, <i>Rosen Technologies LLC v. Lennox Industries, Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex. March 13, 2023)
1024	A Taxonomy of Internet Appliances by Sharon Eisner Gillett, William H. Lehr, John T. Wroclawski, and David D. Clark
1025	U.S. Patent No. 7,084,859 (“ <i>Pryor</i> ”)
1026	Plaintiff’s Amended Disclosure of Asserted Claims and Preliminary Infringement Contentions, <i>Rosen Technologies LLC v. Lennox Industries, Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex. Nov. 21, 2022)
1027	<i>PC Hardware: A Beginner’s Guide</i> by Ron Gilster
1028	Declaration of Sylvia D. Hall-Ellis, PH.D.
1029	Joint Motion to Stay Pending <i>Inter Partes</i> Review, <i>Rosen Technologies LLC v. Lennox Industries Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex. July 28, 2023)

Ex[No.]	Description of Documents
1030	Docket Navigator Statistics Regarding Grant of Joint Motions to Stay Pending <i>Inter Partes</i> Review
1031	Order Granting Joint Motion to Modify Deadlines, <i>Rosen Technologies LLC v. Lennox Industries Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex. June 1, 2023)
1032	Decision Granting Institution of <i>Inter Partes</i> Review, <i>Unified Patents, LLC v. Rosen Technologies LLC</i> , IPR2022-01402, Paper 10 (P.T.A.B. Mar. 23, 2023)
1033	Katherine K. Vidal, Memorandum: Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022)
1034	Email from Trials@USPTO.GOV (August 23, 2023)
1035	Joint Motion to Modify Deadlines, <i>Rosen Technologies LLC v. Lennox Industries Inc.</i> , No. 3:22-cv-00732-K (N.D. Tex. Aug. 24, 2023)

I. INTRODUCTION

As authorized by the Board (EX1034), Petitioner submits this reply to certain arguments in Patent Owner's ("PO") Preliminary Response (Paper 6 ("POPR")).

II. THE *FINTIV* FACTORS FAVOR INSTITUTION

PO's argument that the Board should exercise its discretion and deny institution under 35 U.S.C. § 314(a) and *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential) ("*Fintiv*") lacks merit.

A. Factor 1: The parties' joint motion to stay will likely be granted.

PO's argument that this IPR will not promote efficient resolution of the litigation conflicts with its position in the district court. POPR at 9. The POPR acknowledges that "the Parties *jointly filed* a Motion to Stay[.]" *Id.* at 9-10. PO conceded in the motion "that judicial economy would best be served by" a stay pending resolution of the IPR and that a stay "would prevent duplication of effort[.]" EX1029 at 1. In a joint filing on August 24, 2023, both parties again requested that the Court grant the joint motion to stay. EX1035 at 1. Thus, both parties agree that validity of the challenged patent should be adjudicated before the Board.

While the district court has not yet granted the motion to stay, it is likely that the stay will be granted and so this factor favors institution. *Samsung Elecs. Co., Ltd. v. Scramoge Tech. Ltd.*, IPR2022-00284, Paper 12 at 17-18 (P.T.A.B. Jun. 22, 2022) (factor weighs against denying institution where "it appears that a stay may be granted" based on parties' joint request for a stay). All eighteen joint motions

to stay pending IPR filed in the district where the litigation is pending have been granted. EX1030 at 1. A stay “allays concerns about inefficiency and duplication of efforts.” *Fintiv* at 6 (a stay “has strongly weighed against” denying institution).

B. Factor 3: Patent Owner overstates investment in the litigation.

PO alleges significant investment in the litigation but identifies only infringement and invalidity contentions and claim construction briefing. POPR at 10. These are “typical of the early stages of litigation” and this factor “does not favor” denying institution. *Apple Inc. v. Smart Mobile Techs. LLC*, IPR2022-00808, Paper 24 at 52 (P.T.A.B. Sept. 29, 2022). No claim construction order has issued.

An institution decision is expected by November 17, 2023. Currently, discovery closes January 15, 2024. EX1031 at 1. Dispositive motions are due February 15, 2024. *Id.* at 2. Moreover, the parties recently filed a *joint* motion to modify the Scheduling Order such that, if granted, opening expert reports would be due January 11, 2024, discovery would close April 25, 2024, dispositive motions would be due May 30, 2024, and the trial date would be pushed four months to October 8, 2024—all well after the date for the institution decision. EX1035 at 1-2. To date, only the parties’ claim construction experts and two fact witnesses have been deposed. Accordingly, there will be “much work remain[ing]” when this proceeding is ready for institution. *Sand Revolution II, LLC v. Cont’l Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 11 (P.T.A.B. June 16, 2020).

While PO notes that Petitioner waited to file until close to the statutory deadline (POPR at 10), Petitioner filed the Petition after the resolution of Petitioner's motion to dismiss in the parallel litigation to conserve the resources of the Board and the parties. See Paper 2 ("Pet.") at 96. Petitioner worked diligently and filed the Petition within three months after the district court denied the motion. The Board should not discourage reasonable efforts to avoid multiplying proceedings by penalizing a petitioner who tried to avoid the need for IPRs. In any event, it is improper for the Board to consider the time it took to file a timely petition because such consideration effectively amounts to injecting laches issues into the *Fintiv* analysis. The Supreme Court has determined that laches may not be considered when Congress has established a hard and fast rule for timeliness. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 960 (2017).

PO cites *Immersion Sys. LLC v. Midas Green Techs., LLC*, PGR2021-00104, Paper 15 at 10 (P.T.A.B. Jan. 31, 2022) to suggest that Petitioner's delay favors denying institution, but in that case the petitioner did not argue that the petition was filed in a diligent manner. *Id.* at 12. PO's reliance on *Verizon Bus. Network Servs. LLC v. Huawei Techs. Co. Ltd.*, IPR2020-01278, Paper 12 at 11 (P.T.A.B. Jan. 26, 2021) is also misplaced, because in that case fact discovery and exchange of expert reports was set to be completed **before** the institution decision, and trial was set for approximately eight months **before** the Board's deadline to reach a final decision.

Id. at 9-10. No such facts are present here. *NXP USA, Inc. v. Impinj, Inc.*, IPR2021-01556, Paper 10 at 8-9 (P.T.A.B. Apr. 21, 2022) is also inapposite, because the petitioner did not address investment in the litigation or the timeliness of filing the petition. *Id.* at 8. Here, Petitioner has explained why it filed the Petition when it did, and PO does not meaningfully dispute Petitioner’s diligence in doing so.

C. Factor 4: Any overlap does not warrant denying institution.

PO is correct that references relied upon in Grounds 1 and 2 are identified in Petitioner’s invalidity contentions. POPR at 12. PO does not dispute, however, that the Petition challenges claims that are not at issue in the litigation (Claim 14). Pet. at 97. Moreover, the parties have *jointly* requested a stay of the litigation pending the outcome of this IPR. If the joint motion to stay is granted, which is likely, then there would be no overlap and PO’s concerns about “conflicting” rulings would be mitigated. POPR at 12. Both parties agree that validity should be adjudicated before the Board. Institution should not be denied based on speculation regarding overlap at the time of institution.

D. Factor 6: Patent Owner’s merits arguments are unavailing.

PO’s attack on the Petition’s merits is unfounded. POPR at 13-14. PO argues that the grounds “fail to disclose at least ‘program stored in said memory for displaying messages received from said remote correspondent.’” *Id.* at 14. Challenged Claims 1, 3-5, 7, 9, 11, and 14 of the ’318 Patent, however, do not recite

a “program stored in said memory for displaying messages received from said remote correspondent.” EX1001 at 13:5-58, 13:64-14:12, 14:15-19, 14:22-26, 14:29-33, 14:38-39.

PO further disputes that Grounds 1 and 2 disclose “displaying on said liquid crystal display a second legend indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning equipment component, which second control function is active when the second legend is viewable.” POPR at 18. But the Petition, supported by the unrebutted testimony of Petitioner’s expert, R. Jacob Baker, Ph.D., explains in detail how the proposed combinations teach this aspect of the claims. See Pet. at 48-49, 87; EX1002, ¶¶ 213-16, 289-300, 310. PO’s *Fintiv* argument fails to rebut that the merits of the Petition are compelling. See Pet. at 98; EX1033 at 4.

Accordingly, Factors 1, 3, 4, and 6 favor institution. PO acknowledges that Factor 2 is neutral under the current Scheduling Order, and the parties have jointly requested that the trial date be pushed back by four months to October 8, 2024. POPR at 10; EX1035 at 2. Institution should not be denied based on Factor 5. Thus, a holistic view of the *Fintiv* factors favors institution.

III. The “Virtual Button” of Claim 1 is Not Required to be “Non-Static”

PO’s implicit claim construction that the “virtual button” in Claim 1 of the ’318 Patent must be a “non-static virtual button” is not supported by the claims

or the specification of the '318 Patent. *See, e.g.*, POPR at 1, 2, 17. PO asserts that “the '318 Patent disclosed the use of legends along with non-static virtual buttons to allow for an easily understandable thermostat programming.” *Id.* at 2. However, the text of Claim 1 of the '318 Patent only recites a “virtual button,” not a “non-static virtual button.” *See* EX1001 at 13:33-58. In fact, neither the words “static” nor “non-static” ever appear in the claims or specifications of the '318 Patent. *See generally id.* PO attempts to read a “non-static virtual button” limitation into Claim 1 to try to differentiate the '318 Patent from the cited prior art references of *Geiwitz* (EX1005), *Rosen* (EX1008), and *Cardio Manual* (EX1012), all of which disclose the use of virtual buttons in a thermostat. *See, e.g.*, POPR at 17.

Furthermore, PO states “*Cardio Manual* likewise used static buttons,” implying that it does not disclose the “virtual buttons” required by Claim 1. *Id.* at 20. The POPR’s assertion contradicts PO’s ’069 Disclaimer admitting that *Cardio Manual* “describes a programmable thermostat with a touch screen interface whose pictorial includes representations of virtual buttons.” EX1014 at 5. PO’s disclaimer is thus inconsistent with its implied claim construction argument.

IV. The “Legend” of Claim 1 is not Required to be on the Virtual Button

PO’s implicit, or arguably explicit, claim construction that the “legend” in Claim 1 must be on the virtual button itself (POPR at 5-6) is not supported by the claims of the '318 Patent and is contradicted by the specification. PO attempts to

define the “legend” in Claim 1 as “the content appearing on the virtual button indicative of a control function.” *Id.* at 6. However, Claim 1 only states that the claimed legend must be “establish[ed] on said liquid crystal display” and says nothing about the legend being on the virtual button itself. EX1001 at 13:32; *see also id.* at 13:52-53 (“displaying on said liquid crystal display a second legend”). The specification of the ’318 Patent states that the “image representative of a first virtual button may be shown on the touch screen display with graphics (alphanumeric characters and/or icons) **on or closely associated with** the first virtual button,” signaling that the legend does not need to be on the virtual button itself. *Id.* at 3:53-56 (emphasis added); *see also* Pet. at 44-45.

Furthermore, PO’s implied construction directly contradicts the PTAB’s Institution Decision in IPR2022-01402 (Paper 10). *See* EX1032 at 10. The PTAB has previously “decline[d] to adopt Patent Owner’s asserted construction” that “a ‘legend’ means ‘content displayed on a virtual button,’” citing the reasons enumerated above. *Id.* at 10-11.

V. CONCLUSION

Petitioner respectfully requests institution of *inter partes* review.

Respectfully Submitted,

September 7, 2023

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CERTIFICATE OF SERVICE

In accordance with 37 C.F.R. § 42.6(e), the undersigned certifies that on September 7, 2023, a complete and entire copy of the **PETITIONER'S AUTHORIZED REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE** and Exhibits 1029-1035 were served on Patent Owner via email at the following correspondence addresses:

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