UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BERKSHIRE HATHAWAY ENERGY COMPANY and
PACIFICORP,
Petitioners

v.

BIRCHTECH CORP.
Patent Owner

IPR2025-00717
Patent 10,926,218

PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW

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2001	Declaration of Justin T. Nemunaitis
2002	Declaration of Richard Cochrane
2003	Original Complaint for Patent Infringement, *Midwest Energy Emissions Corp., et al. v. Vistra Energy Corp., et al.*, C.A. 1:19-cv-01334, ECF No. 1 (D. Del. July 17, 2019)
2004	Transcript of Jury Trial, *Midwest Energy Emissions Corp., et al. v. Arthur J. Gallagher & Co., et al.*, C.A. 1:19-cv-01334 (D. Del.) (Feb. 26, 2024–March 1, 2024)
2005	Non-Final Judgment Following Jury Verdict, *Midwest Energy Emissions Corp., et al. v. Arthur J. Gallagher & Co., et al.*, C.A. 1:19-cv-01334, ECF No. 697 (D. Del. March 8, 2024)
2006	Case Management Order, *In re: Midwest Energy Emissions Corp. Pat. Litig.*, No. 4:24-md-03132-SHL-WPK, ECF No. 60 (S.D. Iowa March 7, 2025)
2007	Complaint for Patent Infringement, *Midwest Energy Emissions Corp. v. Berkshire Hathaway Energy Company, et al.*, 4:24-cv-00243-SHL-WPK, ECF No. 1 (S.D. Iowa July 18, 2024)
2008	PacifiCorp's First Amended Answer, Affirmative Defenses, and Counterclaims in Response to Plaintiff's First Amended Complaint for Patent Infringement, *In re: Midwest Energy Emissions Corp. Pat. Litig.*, No. 4:24-md-03132-SHL-WPK, ECF No. 82 (S.D. Iowa March 21, 2025) (Redacted)
2009	Defendant MidAmerican Energy Company's First Amended Answer, Affirmative Defenses, and Counterclaims to Plaintiff's First Amended Complaint, *In re: Midwest Energy Emissions Corp. Pat. Litig.*, No. 4:24-md-03132-SHL-WPK, ECF No. 83 (S.D. Iowa March 21, 2025) (Redacted)
2010	Defendant Wisconsin Power and Light Company's First Amended Answer, Affirmative Defenses, and Counterclaims to First Amended Complaint, *In re: Midwest Energy Emissions Corp. Pat. Litig.*, No. 4:24-md-03132-SHL-WPK, ECF No. 87 (S.D. Iowa March 21,

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2011	Opening Expert Report of Dr. Stephen Niksa, *Midwest Energy Emissions Corp., et al. v. Arthur J. Gallagher & Co., et al.*, C.A. 1:19-cv-01334 (D. Del.)
2012	Pilot- and Full-Scale Demonstration of Advanced Mercury Control Technologies for Lignite-Fired Power Plants, Quarterly Report (for the Period October 1, 2003 – December 31, 2003), dated February 2004
2013	Pilot- and Full-Scale Demonstration of Advanced Mercury Control Technologies for Lignite-Fired Power Plants, Final Report, dated February 2005
2014	Mercury Control Technologies for Electric Utilities Burning Subbituminous Coals, Final Report (For the period January 1, 2004 through June 30, 2005), dated October 2005
2015	Center for Air Toxic Metals (CATM), 2003 Research Ideas, dated August 30, 2002
2016	Document Metadata for Center for Air Toxic Metals (CATM), 2003 Research Ideas
2017	Declaration of Thomas Erickson including PTC logbook entries
2018	Declaration of Inventor John Pavlish, dated July 27, 2020
2019	Plaintiff ME2C's Brief in Support of Its Motion for Preliminary Injunction, *Midwest Energy Emissions Corp. v. Berkshire Hathaway Energy Company, et al.*, 4:24-cv-00243-SHL-WPK, ECF No. 58-1 (S.D. Iowa Oct. 11, 2024)
2020	Defendants' Brief in Support of Their Resistance to Plaintiff's Motion for Preliminary Injunction, *Midwest Energy Emissions Corp. v. Berkshire Hathaway Energy Company, et al.*, 4:24-cv-00243-SHL-WPK, ECF No. 125 (S.D. Iowa Dec. 16, 2024) (Redacted)
2021	Plaintiff ME2C's Reply Brief in Support of Its Motion for Preliminary Injunction, *Midwest Energy Emissions Corp. v. Berkshire Hathaway Energy Company, et al.*, 4:24-cv-00243-SHL-WPK, ECF No. 139 (S.D. Iowa Dec. 23, 2024) (Redacted)
2022	DTE Electric Company Affiliates Report, dated December 31, 2023
2023	First Amended Complaint for Patent Infringement, *Midwest Energy*

	Emissions Corp., et al. v. Vistra Energy Corp., et al., C.A. 1:19-cv-01334, ECF No. 130 (D. Del. July 15, 2020)
2024	EPA, "Study of Hazardous Air Pollutant Emissions from Electric Utility Steam Generating Units—Final Report to Congress"
2025	EPA Clean Air Act Overview, https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-iii
2026	EPA, Mercury Study Report to Congress Vol. I (1997)
2027	EERC internal presentation, "Description of Test Facilities Particulate Test Combustor"
2028	EERC internal presentation, "Mercury Control Technologies for Electric Utilities Burning Lignite Coals, Introduction to Project" (12/4/2001)
2029	EERC internal presentation, "Mercury Control Technologies for Electric Utilities Burning Lignite Coals Project Kickoff Meeting" part 1 (2/28/2002)
2030	EERC internal presentation, "Mercury Control Technologies for Electric Utilities Burning Lignite Coals Project Kickoff Meeting" part 2 (2/28/2002)
2031	EERC internal presentation, "Mercury Control Technologies for Electric Utilities Burning Lignite Coals, Project Review Meeting" (2/25/2003)
2032	"JV TASK 45 – MERCURY CONTROL TECHNOLOGIES FOR ELECTRIC UTILITIES BURNING LIGNITE COAL, PHASE I BENCH- AND PILOT-SCALE TESTING Final Report" (Oct. 2003) (the "Oct. 2003 Report")
2033	Metadata for Notes on Center for Air Toxic Metals (CATM) 2003 Research Ideas
2034	DOE, Success Story for Sorbent Enhancement Additives
2035	EPA, Mercury and Air Toxics Standards, https://www.epa.gov/mats/cleaner-power-plants
2036	Order Denying Motions to Stay and Motion to Compel, *In re: Midwest Energy Emissions Corp. Pat. Litig.*, No. 4:24-md-03132-SHL-WPK, ECF No. 131 (S.D. Iowa May 22, 2025)

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2038	**RESERVED**
2039	**RESERVED**
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2042	**RESERVED**
2043	J. D. Kilgroe, C. B. Sedman, R. K. Srivastava, J. V. Ryan, C. W. Lee, S. A. Thorneloe, *Control of Mercury Emissions from Coal-Fired Electric Utility Boilers: Interim Report*, U.S. Environmental Protection Agency, Office of Research and Development, EPA-600/R-01-109, April 2002.
2044	**RESERVED**

I. INTRODUCTION

Patent Owner respectfully requests Director Review of the Director's August 22, 2025 Decision Referring the Petition to the Board ("Referral Decision") concerning the Challenged Patent. This decision presents at least one ground meriting reversal.

Patent Owner respectfully requests that the Director reconsider its Referral Decision to preserve the efficiencies of multi-district litigation. Patent Owner's infringement claims against Petitioners have been consolidated by the Judicial Panel on Multi-District Litigation to preserve judicial efficiency. Because Petitioners filed multiple petitions on a staggered schedule for the patents at issue, the Board is engaged in multiple duplicative proceedings, which is what the MDL Panel sought to avoid. That result is particularly inappropriate here given the settled expectations resulting from the fact that nearly all of those patents were litigated in Patent Owner's 2019 action ("the Delaware Litigation") against Petitioners' suppliers of refined coal.

II. STANDARD FOR DIRECTOR REVIEW

"Requests for Director Review of a Board's decision on institution . . . shall be limited to decisions presenting (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law." USPTO, Revised Interim Director Review Process § 2.B (last modified

Oct. 8, 2025), https://www.uspto.gov/patents/ptab/decisions/director-review-process. "Both discretionary and merits-based issues may be raised." *Id.* "The Director Review process provides a mechanism to correct errors at the institution stage, for example, to avoid unnecessary trials for patent owners." *Id*.

III. INEFFICIENT USE OF THE BOARD'S AND PARTIES' RESOURCES STRONGLY FAVORS ADJUDICATION IN THE MDL COURT

Before the Director and Board were originally **17** IPRs—now 15—filed against **6** patents.[1] The IPRs were filed over a six-month period from January 17, 2025, to July 18, 2025, by at least two different groups of petitioners. Each of the six patents are part of a single patent family, *see* Ex. 1004, and the claims of each patent cover similar subject matter. The district court is handling the dispute between the parties as a centralized MDL (the "MDL Court"), which operates with efficiencies that the Board should recognize and defer to. There is likely to be significant duplicative effort across the 15 remaining IPRs on related patents with similar subject matter.

[1] (1) IPR2025-00274 (filed Jan. 17, 2025), (2) IPR2025-00278, (3) IPR2025-00280, (4) IPR2025-00281, (5) IPR2025-00422 , (6) IPR2025-00423, (7) IPR2025-00424, (8) IPR2025-00425, (9) IPR2025-00687, (10) IPR2025-00688, (11) IPR2025-00717, (12) IPR2025-00718, (13) IPR2025-01117, (14) IPR2025-01118, (15) IPR2025-01322, (16) IPR2025-01323, (17) IPR2025-01324 (filed July 18, 2025). As the preceding list shows, there were originally 17 IPRs, but the Director denied institution of IPR2025-01117 and IPR2025-01118 on October 31, 2025. IPR2025-01117, Paper 19 (Oct. 31, 2025); IPR2025-01118, Paper 20 (Oct. 31, 2025).

The Director previously found that the existence of the MDL favors institution. By citing the existence of the MDL as support for IPR proceedings, the Director's decision may result in encouraging Defendants to seek venue transfers and avoid efficient MDL consolidation. Indeed, Patent Owner initially filed suit against Petitioners in a single venue and only sought MDL consolidation after Petitioners moved to sever and transfer portions of the case to various other districts.

Patent Owner also respectfully submits that this decision is contrary to the guidance from the Judicial Panel on Multi-District Litigation that: "Centralization is warranted to eliminate duplicative discovery; prevent inconsistent pretrial rulings (particularly with respect to claim construction and issues of patent validity); and conserve the resources of the parties, their counsel, and the judiciary." *In Re: Midwest Energy Emissions Corp. Patent Litigation*, MDL No. 3132, Dkt. No. 38 at 1–2. While a decision of unpatentability from the Board could result in some efficiency gains, that is also true when one patent is litigated in multiple courts and one of those courts resolves the question of invalidity first. Despite that fact, the Judicial Panel found it appropriate to consolidate Patent Owner's claims in the Southern District of Iowa. The Director should not create a contrary rule that undermines the efficiency of MDL. That is particularly true here

where the various IPRs are set on different schedules which may lead to iterative claim construction proceedings and duplicative discovery.

In recent IPRs, the Director determined that "eleven patents spanning ***nine different families that involve a diverse range of subject matter***" weigh against discretionary denial. *Tesla, Inc. v. Intellectual Ventures II LLC*, No. IPR2025-00217, Paper 9 at 3 (June 13, 2025) (emphasis added). In particular, the Director found that the "the Board is better suited to review a ***large number of patents involving diverse subject matter***." *Id.* (emphasis added). The situation in this IPR is different. Here, there are six patents in a single family, that cover similar subject matter. Because of that similarity, the Board and parties would be engaged in duplicative efforts throughout these 15 IPRs. This is an inefficient use of the Board's and parties' resources when efficient adjudication is already available and ongoing in the MDL.

Furthermore, there are at least two distinct groups of Petitioners across the 15 IPRs. The present Petitioners, or combinations thereof, have filed 12 of the original 17 IPRs and Union Electric Company filed the remaining five.[2] Union Electric Company filed their IPRs almost five months after this IPR was filed. Thus, adjudication in the single MDL proceeding is more efficient than the 15 IPRs before the Director and Board.

[2] Union Electric Company filed the IPRs numbered (13)–(17) in footnote 1.

In addition, there are other mechanisms for efficient litigation available to the district courts that are not available to the Board when conducting IPRs. For example, in the earlier Delaware Litigation, several patents were asserted but the Court imposed a claim narrowing requirement that ultimately simplified the issues to two patents. *See Midwest Energy Emissions Corp., et al. v. Arthur J. Gallagher & Co., et al.*, C.A. 1:19-cv-01334, ECF No. 689 (D. Del. March 1, 2024) (Final Jury Instructions). A similar method of simplification is not available to the Board in the conduct of these 15 IPRs.

Finally, Petitioners decided to file two petitions per patent with different theories of priority date. This gives rise to significant inefficiencies. These inefficiencies are likely to be replicated across at least 12 of the 15 IPRs because the Petitioners have filed two petitions against each of the six patents asserted in the MDL.

For the Director, the Board, and the parties, a simpler and more efficient solution to these challenges already exists—the MDL litigation. For all the reasons above, institution of this IPR should be discretionarily denied.

Dated: November 18, 2025

Respectfully submitted,

Birchtech Corp.

/Hamad M. Hamad/
Hamad M. Hamad, Reg. No. 64,641
Justin T. Nemunaitis (admitted *pro hac vice*)
Richard Cochrane (admitted *pro hac vice*)
CALDWELL CASSADY CURRY, P.C.
2121 N. Pearl St., Ste. 1200
Dallas, Texas 75201
Telephone: 214.888.4848
Facsimile: 214.888.4849
hhamad@caldwellcc.com
jnemunaitis@caldwellcc.com
rcochrane@caldwellcc.com
midwest@caldwellcc.com

CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6(e)(4)

It is hereby certified that on this 18th day of November, 2025, a copy of the foregoing document was served via electronic mail, as consented to by Petitioners upon the following counsel of record:

David J. Tobin (Reg. No. 60,776)
McDermott Will & Emery LLP
2501 North Harwood Street, Suite 1900
Dallas, TX 75201
Tel: (214) 210-2793

Email: dtobin@mwe.com
boaks@mwe.com
sfareed@mwe.com
ctatum@mwe.com
PacifiCorp-PTAB-ME2C@mwe.com

Date: November 18, 2025

/Hamad M. Hamad/
Hamad M. Hamad, Reg. No. 64,641