

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIBERTY ENERGY, INC. AND LIBERTY OILFFIELD SERVICES LLC
Petitioners,

v.

U.S. WELL SERVICES HOLDINGS, LLC
Patent Owner.

Case No. IPR2025-00778
Patent 11,959,533

**PETITIONERS' OPPOSITION TO
PATENT OWNER'S DISCRETIONARY DENIAL BRIEF**

UPDATED LIST OF EXHIBITS

Ex. No. ¹	Description
1001	U.S. Patent No. 11,959,533 to Oehring <i>et al.</i> entitled “Multi-plunger Pumps and Associated Drive Systems” (the “533 Patent”)
1002	File History for U.S. Patent No. 11,959,533
1003	Declaration of Dr. Robert Durham
1004	U.S. Patent Publication No. 2020/0256429 to Buckley, “Electric Drive Pump for Well Stimulation,” (“ <i>Buckley</i> ”) filed September 25, 2018 and published August 13, 2020.
1005	U.S. Provisional Application No. 62/562,943 to Buckley <i>et al.</i> , “Electric Drive Pump for Well Stimulation,” (“ <i>Buckley Provisional</i> ”) filed September 25, 2017.
1006	U.S. Patent Publication No. 2015/0361736 to Bergan <i>et al.</i> , “Heave Compensation Winches,” (“ <i>Bergan</i> ”), filed June 13, 2014 and published December 17, 2015.
1007	United States Patent No. 4,100,822 to Rosman, “Drive System for a Moving Mechanism,” (“ <i>Rosman</i> ”) filed April 19, 1976 and granted July 18, 1978.
1008	U.S. Patent Publication No. 2016/0533267 to Payne <i>et al.</i> , “Well Fracturing Systems with Electrical Motors and Methods of Use” (“ <i>Payne</i> ”), filed March 3, 2016 and published September 8, 2016.
1009	Chinese Publication No. CN103742382A to Yi, “Fracturing Pump Transmission System and Fracturing Truck,” (“ <i>Yi</i> ”), filed December 30, 2013 and published April 23, 2014.
1010	Certified English Translation of <i>Yi</i> and Translator’s Declaration
1011	Merriam-Webster Online Dictionary, “Pinion,” captured by the Internet Archive on August 17, 2017, available at

¹ Citations to patents are made by column and line cite; citations to patent publications are made by paragraph number; citations to Exhibit 1002 are made with reference to the Bates-stamped pagination; citations to other exhibits are made to the page number of the document itself.

	< https://web.archive.org/web/20170817030125/https://www.merriam-webster.com/dictionary/pinion >.
1012	D. T. Jelaska, <i>Gears and Gear Drives</i> . John Wiley & Sons, 2012.
1013	V. Tutterow and A. T. McKane, “Variable Speed Pumping: A Guide to Successful Applications,” Europump and Hydraulic Institute, 2004.
1014	August, R. <i>et al.</i> , “Dynamics of Planetary Gear Trains,” NASA Contractor Report 3793, June 1984 (“ <i>August</i> ”).
1015	U.S. Patent Publication No. 2016-03690609 to Morris <i>et al.</i> , “Mobile Fracturing Pump Transport for Hydraulic Fracturing of Subsurface Geological Formations,” (“ <i>Morris</i> ”), filed August 31, 2016 and published December 22, 2016.
1016	United States Patent No. 6,907,667 to Joyner <i>et al.</i> , “Method for Facilitating the Assembly of a Universal Joint,” (“ <i>Joyner</i> ”) filed October 14, 2002 and granted June 21, 2005.
1017	Karassik, Igor J., <i>et al.</i> , “Pump Handbook,” McGraw-Hill, 2008 (“ <i>Karassik</i> ”).
1018	Plaintiffs’ Amended Complaint, <i>U.S. Well Services, LLC et al. v. Liberty Energy, Inc. et al.</i> , No. 4:24-cv-00839 (S.D. Tex. June 3, 2024)
1019	Defendants’ Motion to Stay Pending <i>Inter Partes</i> Review, <i>U.S. Well Services, LLC et al. v. Liberty Energy, Inc. et al.</i> , No. 4:24-cv-00839 (S.D. Tex. March 19, 2025)
1020	Email from Case Manager to Counsel regarding Claim Construction Hearing in <i>U.S. Well Services, LLC et al. v. Liberty Energy, Inc. et al.</i> , No. 4:24-cv-00839 (S.D. Tex. February 12, 2025)
1021	Patent Scheduling Order, <i>U.S. Well Services, LLC et al. v. Liberty Energy, Inc. et al.</i> , No. 4:24-cv-00839 (S.D. Tex. May 23, 2024)
1022	Declaration of Sylvia Hall-Ellis, Ph.D.
1023	Claim Listing for Claims of ’533 Patent
1024	Morton, M., “Unlocking the Earth: A Short History of Hydraulic Fracturing,” GEO ExPro, Vol. 10, No. 6, December 2013 (https://geoexpro.com/unlocking-the-earth-a-short-history-of-hydraulic-fracturing/) (last accessed September 16, 2024).
1025	Wells, B.A., Wells, K.L., “Shooters – A “Fracking” History,” American Oil & Gas Historical Society, https://aoghs.org/technology/hydraulic-fracturing , last updated March 7, 2024.

1026	Montgomery, Carl T., Smith, Michael B., “Hydraulic Fracturing, a History of an Enduring Technology,” <i>Journal of Petroleum Technology</i> 62 (12), December 2010.
1027	Bourgoyne, Adam T. Jr., et al., “Applied Drilling Engineering,” <i>Society of Petroleum Engineering Textbook Series</i> , Volume 2, 1986.
1028	Vasilliou, Marius S., “Historical Dictionary of the Petroleum Industry,” Second Edition, Rowman & Littlefield, 2018.
1029	U.S. Patent Publication No. 2013/0306322 to Sanborn et al., entitled “System and Process for Extracing Oil and Gas by Hydraulic Fracturing” (filed Dec. 7, 2012 and published Nov. 21, 2013).
1030	U.S. Patent Publication No. 2012/0255734 to Coli et al., entitled “Mobile, Modular, Electrically Powered System for Use in Fracturing Underground Formations” (filed April 6, 2012 and published Oct. 11, 2012).
1031	Gardner Denver GD-2500 Quintuplex Well Servicing Pump Operating and Service Manual, captured by the Internet Archive on Sept. 17, 2005, available at https://web.archive.org/web/20120917102614/http://www.quincieoilfield.com/pdf/3.0%20Gardner%20Denver/2500/GD2500Q%20Op%20&%20Service%20Manual.pdf .
1032	Merriam-Webster Online Dictionary, “Quintuple,” captured by the Internet Archive on February 2, 2017, available at https://web.archive.org/web/20170202121725/https://www.merriam-webster.com/dictionary/quintuple .
1033	Mark’s Standard Handbook for Mechanical Engineers, Eleventh Edition, McGraw-Hill Companies, New York, 2007.
1034	Nesbitt, B., “Handbook of Pumps and Pumping: Pumping Manual International,” Elsevier, 2006.
1035	Langewis, Jr., C. and Gleeson, C. W., “Practical Hydraulics of Positive Displacement Pumps for High-Pressure Waterflood Installations,” <i>Society of Petroleum Engineers</i> , February 1971.
1036	Lewis, M. J. T., “Gearing in the ancient world,” Pergamon Press Ltd. 1993.
1037	Mabie, H. H., Reinholz, C. F., “Mechanics and Dynamics of Machinery,” (4 th Ed., 1987), John Wiley & Sons.
1038	Pawar, P. V. and Kulkarni, P. R., “Design of two stage planetary gear train for high reduction ratio,” <i>International Journal of Research in Engineering and Technology</i> , vol. 4, no. 6, pp. 150-157, June 2015.

1039	Camara, John A., “Electrical Engineering Reference Manual for the Electrical and Computer PE Exam,” 6 th ed. (Professional Publications, Inc. 2002), ISBN: 1-888577-56-8.
1040	Fink, Donald G., STANDARD HANDBOOK FOR ELECTRICAL ENGINEERS, 13 th ed. (McGraw-Hill, New York: 1993), ISBN: 0-07-020984-7.
1041	U.S. Patent Publication No. 2011/0241590 to Horikoshi et al., entitled “Motor Driving Apparatus Having Fault Diagnostic Function” (filed Feb. 11, 2011 and published Oct. 6, 2011).
1042	Roethemeyer, Dale E., Yankaskas, David R., “Evolution of Motor and Variable Frequency Drive Technology,” in <i>ACEEE Summer Study Proceedings on Energy Efficiency in Industry</i> , 1995, pp. 541-552.
1043	U.S. Patent No. 3,186,222 to Martin, “Well Signaling System,” filed July 28, 1960 and issued June 1, 1965.
1044	U.S. Patent No. 3,075,136 to Jones, “Variable Pulse Width Parallel Inverters,” filed August 31, 1961 and issued January 22, 1963.
1045	U.S. Patent No. 3,262,036 to Clarke et al, “Means for Smoothly Varying the Speed of a Star-Connected Polyphase Induction Motor,” filed September 19, 1962 and issued July 19, 1966.
1046	Shepherd, William and Stanway, Jack, “Unbalanced Voltage Control of 3-Phase Loads by the Triggering of Silicon Controlled Rectifiers,” <i>IEEE Transactions on Industry and General Applications</i> , no. 3, pp. 206-216, 1965.
1047	Hickok, H. N., “Adjustable Speed—A Tool for Saving Energy Losses in Pumps, Fans, Blowers, and Compressors,” <i>IEEE Transactions on Industry Applications</i> , no. 1, pp. 124-136, 1985.
1048	DeWinter, Frank A. and Kedrosky, Brian J., “The Application of a 3500-hp Variable Frequency Drive for Pipeline Pump Control,” in <i>IEEE Transactions on Industry Applications</i> , Vol. 25, No. 6, 1019-1024 1989.
1049	Perrin, M., Kohn, G., Mugford, S., Seggewiss, G., “Induction Motors, Reciprocating Compressors and Variable Frequency Drives,” <i>Record of Conference Papers. IEEE Industry Applications Society 44th Annual Petroleum and Chemical Industry Conference</i> , 15-17 Sept. 1997 1997, pp. 1-9, doi: 10.1109/PCICON.1997.648162.
1050	Lockley, B., Wood, B., Paes, R., DeWinter, F., “IEEE Std 1566 – The Need for a Large Adjustable Speed Drive Standard,” in <i>2006 Record of Conference Papers – IEEE Industry Applications Society 53rd</i>

	<i>Annual Petroleum and Chemical Industry Conference</i> , 11-15 Sept. 2006, pp. 1-10, doi: 10.1109/PCICON.2006.359687.
1051	Manz, L. B., “The motor designer’s viewpoint of an adjustable speed drive specification,” <i>IEEE Industry Applications Magazine</i> , vol. 1, no. 1, pp. 16-21, 1995.
1052	Baseer, M., “Electric Machines and Adjustable Speed Drives,” in University of Bradford Electric and Telecommunications Research Seminar Series, 8 th Workshop Proceedings, April 1, 2009, 131-134.
1053	U.S. Patent No. 9,410,410 to Broussard et al., entitled “System for Pumping Hydraulic Fracturing Fluid using Electric Pumps” (filed Nov. 16, 2012 and issued Aug. 9, 2016).
1054	Johns, Cort MacLean, “Industrial Revolutions: From Ctesibius to Mars,” ABC Book Center, 2021.
1055	Federal Court Management Statistics (December 31, 2024), available at < https://www.uscourts.gov/sites/default/files/2025-02/fcms_na_distprofile1231.2024.pdf >
1056	<i>Guidance on USPTO’s Recission of “Interim Procedure for Discretionary Denials in AIA Post-Grand Proceedings with Parallel District Court Litigation”</i> (March 24, 2025)
1057	Federal Court Management Statistics (December 31, 2024), available at < https://www.uscourts.gov/sites/default/files/document/fcms_na_distprofile0331.2025.pdf >
1058	Order Adopting Claim Construction Memorandum and Order, <i>U.S. Well Services, LLC et al. v. Liberty Energy, Inc. et al.</i> , No. 4:24-cv-00839, Dkt. 128 (S.D. Tex. July 8, 2025)
1059	<i>Liberty Energy Inc. v. U.S. Well Services, LLC</i> , IPR2025-00066, Paper 1 (Petition) (PTAB Oct. 31, 2024)
1060	<i>Liberty Energy Inc. v. U.S. Well Services, LLC</i> , IPR2025-00105, Paper 6 (Patent Owner’s Preliminary Response) (PTAB Oct. 31, 2024)

Petitioners file this response to Patent Owner’s Discretionary Denial Brief (Paper 7, the “Brief”). The *General Plastic* and *Fintiv* factors favor institution, and the Petition does not fail to provide focused expert testimony, nor does it fail the particularity requirement under 35 U.S.C. § 312(a)(3).

I. THE *GENERAL PLASTIC* FACTORS FAVOR INSTITUTION

PO’s reliance on *General Plastic* to support its argument for discretionary denial under § 314(a) is misplaced, because the circumstances of this proceeding more closely resemble those of *Code200, UAB v. Bright Data, Ltd.*, IPR2022-00861. None of the *General Plastic* factors favors discretionary denial.

Factors 1-3: *General Plastic* factors 1-3 do not favor discretionary denial, because there are no “road-mapping” concerns under factor 3 or other concerns under factor 2 arising from the previously-filed petition in IPR2025-00105 (EX2011). In a *sua sponte* decision vacating a Board decision that denied institution, the Director explained that

General Plastic factor 1 must be read in conjunction with factors 2 and 3. Where the first-filed petition under factor 1 was discretionarily denied or otherwise was not evaluated on the merits, factors 1–3 only weigh in favor of discretionary denial when there are ‘road-mapping’ concerns under factor 3 or other concerns under factor 2.

Code200, UAB v. Bright Data, Ltd., IPR2022-00861, Paper 18, 5 (PTAB August 23, 2022) (precedential). As *General Plastic* noted with regard to road-mapping:

Multiple, staggered petitions challenging the same patent and same claims raise the potential for abuse. The absence of any restrictions on follow-on petitions would allow petitioners the opportunity to strategically stage their prior art and arguments in multiple petitions, using our decisions as a roadmap, until a ground is found that results in the grant of review.

Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha, IPR2016-01357, Paper 19, 17 (PTAB Sep. 17, 2017) (precedential as to § II.B.4.i).

There are no concerns of “road-mapping” under factor 3 here, because (1) IPR2025-00105 was terminated on April 8, 2025, before the associated Petition was evaluated on its merits and (2) the Petition in this proceeding (Paper 1) is virtually identical to that in IPR2025-00105 and was not refined based on information learned in IPR2025-00105. *See* EX2009 (IPR2025-00105 Order Dismissing Petition). The only changes made to the Petition from that in IPR2025-00105 are (1) an update to the Mandatory Notices in Section I to briefly note the existence of IPR2025-00105, and (2) an update to the Petition’s analysis of § 314(a) in view of *Fintiv* in Section VII.A to reflect the circumstances of this proceeding and status of the parallel litigation. *Compare* Paper 1 (Petition), 1, 13-15 *with* EX2011 (Petition in IPR2025-00105), 1, 13-14. The Petition otherwise presents the exact same challenges with the exact same combinations of prior art references as in the Petition in IPR2025-00105. And Petitioners did not “refine” their arguments based on Patent Owner’s Preliminary Response in IPR2025-00105, a fact that PO acknowledges in its Brief

when it refers to the Petition filed in IPR2025-00105 as “a materially identical IPR petition” to the Petition filed in this proceeding. *See* Paper 7 (Brief), 1.

Thus, the “road-mapping” concerns under factor 3 are nonexistent here. *See Code200*, Paper 18, 5-6 (“Indeed, ‘road-mapping’ concerns are minimized when, as in this case, a petitioner files a later petition that raises unpatentability challenges substantially overlapping with those in the previously-filed petition and the later petition is not refined based on lessons learned from later developments.”) (precedential).

Further, other concerns under factor 2 have limited relevance here, because the Petition relies only on the same prior art references that were relied upon in IPR2025-00105. *General Plastic* explains that considering factors 2, 4, and 5 “allows [the Board] to assess and weigh whether a petitioner should have or could have raised **the new challenges** earlier.” *General Plastic*, Paper 19, 18 (emphasis added). When, as here, a later-filed petition does not introduce new grounds or new arguments, concerns of fairness related to factor 2 have minimal relevance. *See Code200*, Paper 17, 13-14 (PTAB July 25, 2022) (“The Board considers these factors ‘to assess and weigh whether a petitioner should have or could have raised the new challenges earlier.’ Based on the circumstances here, these factors have limited relevance. As discussed, the grounds in the previously-denied 1266 IPR substantially overlap with the grounds in this Petition, so there are no new challenges

at issue here. ... And because the asserted prior art is the same as the earlier-asserted art, we see no prejudice to Patent Owner due to the timing of the Petition.” (internal citations omitted)); *see also Code200*, Paper 18, 6 (“Although the Board considers factors 2, 4, and 5 ‘to assess and weigh whether a petitioner should have or could have raised the new challenges earlier’, factor 2 may also be relevant to the consideration of factors 1 and 3. That said, the Board correctly found here that factors 2, 4, and 5 ‘have limited relevance.’” (internal citations omitted)) (precedential).

Accordingly, the abuses that *General Plastic* factors 1-3 are design to guard against—*i.e.*, those arising from the unfair advantage afforded to a petitioner who files multiple petitions against the same claims of a patent using different art or arguments—are not present here, so these factors do not weigh in favor of discretionary denial.

Factors 4 and 5: *General Plastic* factors 4 and 5 do not favor discretionary denial, because there are no new challenges presented in the Petition in this proceeding. As noted above, considering factors 4 and 5 “allows [the Board] to assess and weigh whether a petitioner should have or could have raised ***the new challenges*** earlier.” *General Plastic*, Paper 19, 18 (emphasis added). And when, as here, a later-filed petition does not introduce new grounds or new arguments, factors 4 and 5 “have limited relevance.” *See Code200*, Paper 17, 13.

In its analysis of factors 4 and 5, PO criticizes the timing of the filing of the Petition in this proceeding, referring to it as a “nearly three-month delay in filing the current Petition, given that the 533 patent was eligible for IPR as of January 16, 2025.” See Paper 7 (Brief), 9. PO’s suggestion that the March 28, 2025 filing date of the Petition resulted from some sort of intentional delay is not accurate. Within four days of Petitioners discovering on their own that IPR2025-00105 was filed prematurely, Petitioners filed the present Petition. This immediate response to correct the premature filing of IPR2025-00105² shows the diligence at which Petitioners addressed their mistake, and the timing of the filing of the Petition has not prejudiced Patent Owner. See *Code200*, Paper 17, 14 (finding no prejudice to Patent Owner when Petitioner was reasonably diligent and asserted the same prior art as in the earlier IPR).

As discussed above, the filing of the Petition was not a tactical “delay” designed to gain unfair advantages by bringing new prior art or raising new arguments in the Petition. Because the Petition relies on the exact same art and arguments as those presented in IPR2025-00105, *General Plastic* factors 4 and 5 have limited relevance here and do not weigh in favor of discretionary denial.

² The premature filing of IPR2025-00105 was not identified by Patent Owner in its Preliminary Response in that proceeding.

Factor 6: PO claims that *General Plastic* factor 6 favors denial because “Petitioners have already wasted the finite resources of the Board by prematurely filing IPR2025-00105 in violation of 35 U.S.C. § 311(c),” which caused “both the Board and Patent Owner to expend unnecessary resources in IPR2025-00105” before that proceeding was terminated. Paper 7 (Brief), 10. This is not true.

As discussed above, the Board did not reach an institution decision in IPR2025-00105, and when that proceeding was terminated on April 8, 2025, the Board’s efforts had been limited to (1) notifying the parties of the filing date accorded to the petition and (2) issuing a brief order dismissing the IPR proceeding following Petitioners’ email to the Board requesting authorization to move to terminate the proceeding. *See* EX2009 (IPR2025-00105 Order Dismissing Petition). In view of these limited efforts, the “Board’s mission ‘to improve patent quality and restore confidence in the presumption of validity that comes with issued patents’ outweighs the impact on Board resources needed to evaluate the merits of a petition.” *See Code200*, Paper 18, 6 (citing *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 272 (2016)) (precedential).

Similarly, PO has not expended unnecessary efforts. In IPR2025-00105 PO’s efforts were limited to (1) its mandatory notices and power of attorney and (2) its Preliminary Response filed on March 21, 2025. Patent Owner filed its Preliminary Response in the present IPR on July 16, 2025. *See* Paper 8 (Patent Owner’s

Preliminary Response). And because the present Petition is substantively identical to that in IPR2025-00105, Patent Owner has simply re-filed in the present IPR its Preliminary Response from IPR2025-00105. The only differences between the Preliminary Response in the present IPR and the Preliminary Response from IPR2025-00105 include (1) minor revisions to Section I (Introduction) regarding the summary of PO's argument and noting IPR2025-00066, and (2) PO's removal of Sections IX and X from the Preliminary Response in IPR2025-00105, which included the same discretionary denial arguments that are included in PO's Brief. *Compare* Paper 8 (PO's Preliminary Response) with EX1060 (POPR from IPR2025-00105). Thus, the fact that PO prepared a Preliminary Response in IPR2025-00105 did not lead to unnecessary efforts given Patent Owner filed a substantively identical Preliminary Response to a substantively identical Petition in the present IPR

PO's reliance on the *Samsung Elec. Co. v. Rembrandt Wireless Techs., LP*, IPR2015-00114, Paper 14 (PTAB Jan. 28, 2015) and *Butamax Advanced Biofuels LLC v. Gevo, Inc.*, IPR2014-00581, Paper 8 (PTAB Oct. 14, 2014) cases is misplaced. In each of those cases, the Board found that *General Plastic* factor 6 favored discretionary denial because merits-based decisions had already been reached in previous proceedings challenging the same patent. *See Samsung*, IPR2015-00114, Paper 14, 6-7 ("On its face, it is more efficient for the parties and the Board to address a matter once rather than twice. The sole difference between

what Petitioner presents in this proceeding and what Petitioner presented in IPR '518 with respect to the challenge of claims 2, 19, 49, 52, 53, and 59 of the '580 patent is that Petitioner now provides further reasoning in support of the same combination of prior art. Therefore, the 'same prior art' was 'previously presented' to the Board, with respect to the same claims. Petitioner is requesting, essentially, a second chance to challenge the claims." (internal citations omitted)), 4-5 (noting that the Board in IPR '518 did not institute an IPR of claims 2, 19, 49, 52, 53, and 59 based on the grounds at issue); *see also Butamax*, IPR2014-00581, Paper 8, 12-13 ("More significantly, we observe that the obviousness grounds asserted in the present Petition are expressly intended to 'squarely address[] the alleged deficiencies identified by the Board' in our Decision in the 539 IPR. In other words, the four obviousness grounds are 'second bites at the apple,' which use our prior decision as a roadmap to remedy Butamax's prior, deficient challenge. Allowing similar, serial challenges to the same patent, by the same petitioner, risks harassment of patent owners and frustration of Congress's intent in enacting the Leahy-Smith America Invents Act." (internal citations omitted)). As discussed above, Petitioners here are not taking a "second bite at the apple" or otherwise trying to address information/positions from PO or the Board that it learned in IPR2025-00105. Reliance on the *Samsung* and *Butamax* cases is therefore inapposite.

The concern of wasting Board and Patent Owner resources is minimized here, because IPR2025-00105 involved minimal investment from the two. And this case does not present the same concerns of wasted judicial resources dealing with a “second bite at the apple” that is the topic of many Board decisions, such as those cited by PO in its Brief. Thus, *General Plastic* factor 6 does not favor discretionary denial.

Factor 7: Because IPR2025-00105 was terminated before an institution decision was issued, there is no concern that the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review cannot be met. Factor 7 does not weigh in favor of discretionary denial.

II. THE *FINTIV* FACTORS FAVOR INSTITUTION

Fintiv factors 1, 2, 4, and 6 weigh against denying institution in view of the express invitation for a re-urged motion to stay in the parallel litigation, the slipping case schedule in the parallel litigation, the *Sotera* stipulation made in the Petition, and the compelling merits of the Petition.

Factor 1: This factor weighs against denying institution, because the Court’s denial of Petitioners’ motion to stay is expressly limited in time and expressly invites a re-urged motion to stay. EX2002, 1 (“[T]he Motion to Stay is DENIED at this time.”), 7 (“Defendants may re-urge their Motion for Stay at such time as a decision

on IPR as to all Asserted Patents has been issued.”); *see Apple Inc., v. Fintiv, Inc.*, IPR2020-00019 (“*Fintiv*”), Paper 11, 6-7 (PTAB Mar. 20, 2020) (stating that when court “has denied a motion for stay without prejudice” and will “reconsider a motion to stay if a PTAB trial is instituted,” that fact “weighed against” denying institution).

And *Fintiv* precedent clearly contradicts PO’s invitation to speculate on the success of future motions for stay, particularly here where the Court specifically contemplates a re-urged motion to stay. *See Fintiv*, Paper 11, 6-7; *LG Energy Sol’ns Ltd. v. Molecular Rebar Dsn., LLC*, IPR2024-01006, Paper 8, 36-37 (PTAB Dec. 16, 2024) (finding district court’s willingness to consider a motion to stay weighs against denying institution); *Google LLC v. Mullen Ind. LLC*, IPR2025-00019, Paper 14, 9-10 (PTAB May 12, 2025).

Factor 2: For Factor 2, PO argues that Petitioners’ presentation of general time-to-trial statistics is an “attempt to cloud the issue.” Paper 7, 10-11. But current USPTO guidance expressly permits the Board to consider time-to-trial statistics. Guidance on USPTO’s rescission of “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” (March 24, 2025). Current time-to-trial statistics place the parallel trial in May 2026 based on the filing of the original complaint but in August 2026 based on the filing of the

amended complaint that first asserted the '533 Patent in the litigation.³ EX1057, 36 (indicating 26.3-month median time to trial in SDTX).

The trial date is expected to slip further. The district court judge did not enter the Markman order until July 7, 2025, weeks after its scheduling order due date of June 11. *See* EX1058; EX2007, 2. As the schedule is tied to entry of the Markman order and expressly invites the parties to seek an amended schedule if the order is delayed beyond June 11, trial will be further delayed. *See* EX2007, 2-4.

In view of ongoing delays in the district court and time-to-trial statistics placing trial contemporaneous with the FWD, factor 2 weighs slightly against denial, not slightly in favor. *See Fintiv*, Paper 11, 9-10.

Factor 3: At the time of the projected institution deadline (October 2025), substantive motion practice will have yet to commence in the parallel district court litigation, limiting the amount of resources invested in the parallel litigation. EX2007, 3. And as noted above in the factor 2 discussion, the trial date is expected to slip further and bring other deadlines, such as the close of fact and expert

³ The original complaint in the parallel litigation was filed on March 6, 2024. The March 2024 filing date skews the trial timing for '533 Patent, because the '533 Patent did not issue until April 16, 2024 and was not asserted in the litigation until June 6, 2024. *See* EX1001, cover; EX1018.

discovery, with it. This factor is therefore neutral. *See Samsung Elecs. Co., Ltd. v. Dynamics Inc.*, IPR2020-00505, Paper 11, 12 (PTAB August 12, 2020) (finding *Fintiv* factor 3 neutral where “substantial investments” by the parties had been made in the parallel ITC litigation at the time of the institution decision, including (1) the holding of a Markman hearing, (2) the issuance of an order construing some claims, (3) the completion of fact discovery, (4) the exchange of expert reports and deposition of expert, and (5) the filing of motions for summary determination).

Factor 4: This factor strongly favors institution in light of Petitioners’ *Sotera* stipulation proffered in the Petition. *See* Paper 1 (Petition), 14-15; *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12, 18-19 (PTAB Dec. 1, 2020) (precedential as to §II.A); EX1056, 2-3 (stating that a *Sotera* stipulation is “highly relevant” to the *Fintiv* analysis). PO does not substantively address this stipulation but instead attempts to criticize Petitioners’ stipulation email of June 16. But PO ignores the fact that Petitioners provided their *Sotera* stipulation *in the Petition*. *See* Paper 1 (Petition), 14-15.

Factor 5: Petitioners do not dispute they are the Defendants in the parallel district court litigation.

Factor 6: For factor 6, PO argues that the Board’s analysis in the ’258 Patent Institution Decision (EX2006) suggests that the merits of the current Petition are weak. Paper 7 (Brief), 18-24. This is not so. In the ’258 Patent IPR, PO’s argument

was based on an improper bodily incorporation standard for obviousness that the Institution Decision adopted when determining that the petition in that proceeding did not adequately explain why a POSITA would have been motivated to combine the *Buckley* and *Yi* references with the *Bergan* reference. The misapplication of the bodily incorporation standard should not taint the otherwise strong merits of this petition.

The petition in IPR2025-00066, like the current Petition does here, presented two sets of grounds that each relied chiefly on the combination of a primary reference (*Buckley* (Grounds 1A-8A) or *Yi* (Grounds 1B-9B)) and a secondary reference, *Bergan*. See EX1059, 9-11 (Summary of the Grounds); see also Paper 1 (Petition), 11-12 (Summary of the Grounds). And as done in the current Petition, the petition in IPR2025-00066 relied upon *Buckley* and *Yi* for their teachings of drive pumps that are driven by multiple motors and *Bergan* for its teaching of a planetary gearing system used to couple multiple motors to a rotating load. See, e.g., EX1059, 22-29, 36-39; Paper 1 (Petition), 26-33, 51-54.

The Board in IPR2025-00066 provided that “[p]lanetary gear systems are designed differently for different purposes,” and that

Petitioner does not sufficiently show that a POSITA would have known that *Bergan*’s planetary gear system, which is designed to drive, and provide heave compensation to, a hoisting drum on a floating platform, would be suitable for use in *Buckley* to drive an electric drive pump

used to drive a fluid end for the pumping of a fracturing fluid into a well.

EX2006, 20. The same analysis was applied to the combination of *Yi* and *Bergan*. *Id.*, 25.

The Board’s discussion regarding the combination of *Buckley* and *Bergan* (and *Yi* and *Bergan*)—which focused on the different purposes of the *Buckley/Yi* and *Bergan* systems—was tantamount to a bodily incorporation argument. “The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . . Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981); *Halliburton Energy Services, Inc. v. U.S. Well Services, LLC*, IPR2021-01032, Paper 12, 28 (PTAB January 11, 2022). “Any modification of a prior art device will result in changes thereto, as a matter of course; the question, rather, is whether there existed sufficient motivation for a person of ordinary skill to make the proposed modifications in light of the evidence of record.” *Halliburton*, Paper 12, 28.

As explained in the present Petition, the *Buckley-Bergan* combination and the *Yi-Bergan* combination do not require that the planetary gearing system as described in *Bergan* be “bodily incorporated” into *Buckley*’s and *Yi*’s drive pumps; rather, the combinations simply detail how *Buckley*’s and *Yi*’s drive pumps would have utilized

a planetary gearing configuration to couple the pumps with the multiple driving motors. *See* Paper 1 (Petition), 19-21, 48-49. And as explained in the Petition, there are several straightforward motivations for making the combinations. *See id.* That *Bergan*'s planetary gearing system is described in the context of a much larger system (*i.e.*, a hoisting drum on a floating platform) that those described in *Buckley* and *Yi* (*i.e.*, drive pumps) is irrelevant to the obviousness analysis, as the Board has rejected such a "bodily incorporation"-type analysis in numerous instances. *See, e.g., Halliburton Energy Services, Inc. v. U.S. Well Services, LLC*, IPR2021-01035, Paper 40, 28-29 (PTAB January 17, 2023); *Halliburton*, IPR2021-01032, Paper 12, 28.

Further, the Board in IPR2025-00066 found that Petitioners had not sufficiently established that a POSITA would have been motivated to combine *Buckley*, *Bergan*, and *Jelaska*, where *Jelaska* was relied upon for its teaching regarding the claim limitation "wherein a gear ratio of the planetary gear train and a speed at which the plurality of motors operates are selected so as to limit a maximum pump speed associated with the multi-plunger pump," which is found in the independent claims of the '258 Patent. *See* EX2006, 21-22. While the Petition relies upon *Jelaska* in the same manner, the relevant claim language here is limited to dependent Claim 19. *See* Paper 1 (Petition), 83-87. Indeed, the only grounds where *Jelaska* is a relied-upon reference are Grounds 5A-6A and 5B-6B, which relate to

dependent Claims 19-21. *See id.*, 83-92. Even accepting the Board’s analysis on this point (which Petitioners do not concede), any similar findings here should not bar institution, because the combination of *Buckley*, *Bergan*, and *Jelaska* is used in a limited manner that does not affect every challenged claim as it did in IPR2025-00066.

The merits of the current Petition are strong, and the Board should not be swayed by the improper “bodily incorporation”-type analysis from the ’258 Patent Institution Decision as urged by PO. Nor should the Board’s prior analysis regarding the combination with *Jelaska* bar institution here, because *Jelaska* is used in grounds that relate only to dependent Claims 19-21. Factor 6 favors institution.

III. THE PETITION DOES NOT FAIL TO PROVIDE FOCUSED EXPERT TESTIMONY, NOR DOES IT FAIL THE PARTICULARITY REQUIREMENT UNDER 35 U.S.C. § 312(A)(3)

PO first raises issue with Dr. Durham’s testimony, characterizing it as being “unfocused” simply due to the length of his declaration (EX1003). *See* Paper 7 (Brief), 25. PO appears to confuse Dr. Durham’s thoroughness with a lack of focus, and it fails to identify any particular portion of Dr. Durham’s declaration that indicates anything but focused, detailed testimony. The difference in page count between the Petition and Dr. Durham’s declaration can largely be attributed to efforts made to streamline the Petition to bring it within the word count limit to

which Dr. Durham's declaration is not subjected. The length of Dr. Durham's declaration does not weigh against institution.

Next, PO argues that the Petition raises voluminous and excessive grounds based on the *Adaptics* decision. Paper 7 (Brief), 26-29. PO criticizes the number of references relied upon in each of the Petition's grounds and identifies Grounds 8A and 8B as particularly "egregious" because each of those grounds "contain a minimum of eight references," which PO compares to the "'catch-all' ground in *Adaptics* that was determined to be 'not reasonably bounded in scope and unduly burdensome for both Patent Owner and the Board to address.'" *Id.*, 28 (citing *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20, 21 (PTAB Mar. 6, 2019)). This comparison is not warranted. In *Adaptics*, the "catch-all" ground listed ten different prior art references connected with the conjunction "and/or," which expanded the ground "to include combinations of three, four, or more references, yielding hundreds of possible combinations." *Adaptics*, Paper 20, 18-19. No such ground exists in the Petition, and there is no concern of any of the grounds in the Petition yield an excessive number of combinations as was the case in *Adaptics*.

Further, the critique of the number of grounds and references in each ground is misplaced, because the "concern in *Adaptics* was not the number of grounds, references, or asserted claims, but that the Petition suffer[ed] from a lack of particularity" by raising "catch-all" grounds. *Samsung Elecs. Co., Ltd. et al v.*

Resonant Sys., Inc., IR2023-00993, Paper 17, 24 (PTAB Jan. 10, 2024). As long as the Petition is pled with particularity, the number of grounds and references alone does not bar institution. *See id.*, 5-6, 29 (declining to follow *Adaptics* for 30 grounds applying 11 references); *see also Google LLC, v. Nobots LLC*, IPR2022-00941, Paper 11, 6-7, 27-28 (PTAB Dec. 1, 2022) (declining to follow *Adaptics* for 14 grounds applying 8 references); *see also Freewheel Media, Inc. v. Intent IQ, LLC*, IPR2024-00422, Paper 10, 17-18 (PTAB Oct. 2, 2024) (declining to follow *Adaptics* for 11 alleged grounds applying 9 references). As discussed above, the Petition does not raise any “catch-all” grounds, so the Petition is pled with particularity and the number of grounds and references alone should not bar institution.

Finally, PO’s assertion that the number of grounds and references in the Petition is an attempt to “throw[] mountains of evidence at the Board without explanation or identification of the relevant portions of that evidence” is unfounded. *See* Paper 7 (Brief), 29. Each of the prior art references listed in the grounds of the Petition is utilized for particular purposes and disclosures that are explicitly identified in the Petition. The Petition does not leave any guesswork for the Board or otherwise require the Board to “cobble together a single theory of invalidity”—Petitioners’ theories are laid bare in the Petition.

IV. CONCLUSION

For the above reasons, Petitioners respectfully request that the Director deny Patent Owner's request for discretionary denial and order the Board to consider the Petition on the merits.

Respectfully submitted,

BAKER BOTTS L.L.P.



Chad C. Walters (Reg. No. 48,022)
Lead Counsel for Petitioners

Date: July 16, 2025

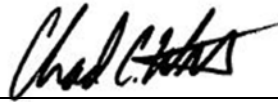
2001 Ross Ave., Suite 900
Dallas, TX 75201-2980
Phone: (214) 953-6511
Fax: (214) 661-4511
chad.walters@bakerbotts.com

CERTIFICATE OF SERVICE

In accordance with 37 C.F.R. § 42.6(e), the undersigned certifies that on the 16th day of July 2025, a complete and entire copies of this PETITIONERS' RESPONSE TO PATENT OWNER'S DISCRETIONARY DENIAL BRIEF and Exhibits 1057-1060 were served on Patent Owner via electronic mail at the following addresses:

beferguson@winston.com;
mhopkins@winston.com;
sborder@winston.com;
rquarles@winston.com; and
IPR-Profrac-USWell@winston.com.

BAKER BOTTS L.L.P.



Chad C. Walters (Reg. No. 48,022)
Lead Counsel for Petitioners

Date: July 16, 2025

2001 Ross Ave., Suite 900
Dallas, TX 75201-2980
Phone: (214) 953-6511
Fax: (214) 661-4511
chad.walters@bakerbotts.com

**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME
LIMITATION, TYPEFACE REQUIREMENTS, AND TYPE STYLE
REQUIREMENTS**

1. This Opposition to Patent Owner's Discretionary Denial Brief complies with the type-volume limitation of 14,000 words, comprising 4,276 words, excluding the parts exempted by 37 C.F.R. § 42.24(a).

2. This Petition complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word in 14-point Times New Roman.

Respectfully submitted,

BAKER BOTTS L.L.P.



Chad C. Walters (Reg. No. 48,022)

Lead Counsel for Petitioners

Date: July 16, 2025

2001 Ross Ave., Suite 900
Dallas, TX 75201-2980
Phone: (214) 953-6511
Fax: (214) 661-4511
chad.walters@bakerbotts.com