

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WESTERN DIGITAL TECHNOLOGIES, INC.,
Petitioner,

v.

GODO KAISHA IP BRIDGE 1,
Patent Owner.

Case No. IPR2024-01494
Patent No. 11,968,909

**PATENT OWNER'S REPLY TO OPPOSITION TO
MOTION TO TERMINATE *EX PARTE* REEXAMINATION
PURSUANT TO 35 U.S.C. §315(d) AND 37 C.F.R. §42.122(a)**

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Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents. 77 Fed. Reg. 48680, 48690 (Aug. 14, 2012) (codified at 37 C.F.R. pt 42).....	1
John A. Squires, <i>Pre-order Procedure regarding Substantial New Question determination in ex parte Reexamination Proceedings</i> , Official Gazette Notice (Apr. 1, 2026), https://perma.cc/42BN-MASL	2

MANUAL OF PATENT EXAMINING PROCEDURE

MPEP §2224	1
MPEP §2294	1

EXHIBIT LIST

Exhibit	Description
2001	Kittel, C., <i>Introduction to Solid State Physics</i> , 6th Edition, 1986, pgs. 13-15, 18, 23 (“Kittel”)
2002	Duke, C.B., <i>Tunneling in Solids</i> , Solid State Physics: Advances in Research and Applications, 1969, pgs. 1, 6-7, 34-35, 78-79 (“Duke”)
2003	Definition of “ferromagnetism,” Oxford English Reference Dictionary, Second Edition, pg. 513 (“Oxford English Reference Dictionary”)
2004	“Ferromagnetism,” The New Encyclopaedia Britannica: Volume 4, 15th Edition, 2003, pgs. 748-749 (“Britannica”)
2005	Zhu, J.G., et al., <i>Magnetic tunnel junctions</i> , Materials today, Volume 9, Number 11, November 2006, pgs. 36-45 (“Zhu”)
2006	Wulfhekel, W., et al., <i>Single-crystal magnetotunnel junctions</i> , Applied Physics Letters, Volume 78, Number 4, January 2001, pgs. 509-511 (“Wulfhekel”)
2007	Hard disk Market – Global Industry Analysis and Forecast (2025-2032), https://www.maximizemarketresearch.com/marketreport/global-hard-disk-market/63888/
2008	Yuasa citations, https://scholar.google.com/citations?view_op=view_citation&hl=en&user=kb5EQcsAAAAJ&citation_for_view=kb5EQcsAAAAJ:3fE2CSJlr18C
2009	Yuasa citations 2, https://scholar.google.com/citations?view_op=view_citation&hl=en&user=kb5EQcsAAAAJ&citation_for_view=kb5EQcsAAAAJ:kNdYIxmWkoC
2010	Wang, S.X., et al., <i>Magnetic Information Storage Technology</i> (Academic Press 1999) (Chapter 6)
2011	RESERVED

Exhibit	Description
2012	Parkin, S.P, et al., <i>Giant tunneling magnetoresistance at room temperature with MgO (100) tunnel barriers</i> , Nature Materials, 3 (2004), 862-867
2013	Transcript of Deposition of Jeffrey Bokor, Ph.D. (June 24, 2025)
2014	Transcript of Deposition of Jeffrey Bokor, Ph.D. (June 25, 2025)
2015	Djayaprawira, D., et al., <i>230% room-temperature magnetoresistance in CoFeB/MgO/CoFeB magnetic tunnel junctions</i> , Applied Physics Letters, 86(9) (2005)
2016	Yuasa, S., et al., <i>High Tunnel Magnetoresistance at Room Temperature in Fully Epitaxial Fe/MgO/Fe Tunnel Junctions due to Coherent Spin-Polarized Tunneling</i> , Japanese Journal of Applied Physics, 43(4B), (2004) L588
2017	Yuasa, S., et al., <i>Giant room-temperature magnetoresistance in single crystal Fe/MgO/Fe magnetic tunnel junctions</i> , Nature Materials, 3(12) (2004), 868-871
2018	Statutory Disclaimer Under 37 C.F.R. §1.321(a)
2019	Marrows, C.H., <i>Spin-polarised currents and magnetic domain walls</i> , Advances in Physics, 52(8), (2005) 585-713
2020	Tsymbal, E., et al., <i>Handbook of Spin Transport and Magnetism</i> , 2012
2021	Nagamine, Y, et. al., <i>Ultralow resistance-area product of $0.4 \Omega (\mu\text{m})^2$ and high magnetoresistance above 50% in CoFeB/MgO/CoFeB magnetic tunnel junctions</i> , Applied Physics Letters, 89 (2006), 16507
2022	Nakatani, T., et al., <i>Read sensor technology for ultrahigh density magnetic recording</i> , MRS Bulletin, Materials Research Society, 43(2), (2018) 106-111
2023	Jiang, B., et al., <i>Tunneling magnetoresistive devices as read heads in hard disk drives</i> , Journal of Magnetism and Magnetic Materials, 571 (2023) 170546

Exhibit	Description
2024	The 23rd (FY2022) Japan Society of Applied Physics Achievement Award Recipients (with English translation), The Japan Society of Applied Physics, https://www.jsap.or.jp/outstanding-achievementaward/recipients/recipients23
2025	JSAP Outstanding Achievement Award Recipients, The Japan Society of Applied Physics, https://www.jsap.or.jp/english/awards/outstanding-achievementaward/recipients
2026	2021 New Fellows, IEEE Japan Council, https://ieeelp.org/en/kaiin/fellow/fellow21.html
2027	JST owned patent wins Future Creative Invention Prize at the National Invention Award 2021, Japan Science and Technology Agency, https://www.jst.go.jp/report/2021/210525_e.html
2028	Dr. Shinji Yuasa profile, https://www.jst.go.jp/impact/sahashi/en/system/index.html
2029	AIST wins three Science and Technology Awards in the 2016 Minister of Education, Culture, Sports, Science and Technology Commendation for Science and Technology, https://www.aist.go.jp/aist_j/news/prize/pr20160412_3.html
2030	Yuasa, S., <i>Magnetoresistance and Spin-Transfer Torque in Magnetic Tunnel Junctions</i> , IEEE Transactions on Magnetics, IEEE Magnetics Society Distinguished Lecturers for 2012, Vol. 48, No. 1, 2012
2031	Shinji Yuasa – IEEE Magnetics Society, https://ieeemagnetics.org/contact/shinji-yuasa#biography
2032	AIST: 20th Tsukuba Prize winner, https://www.aist.go.jp/aist_j/news/prize/itemid025-000077.html
2033	Announcing the winners for “Tsukuba Prize,” “Esaki Leona Prize,” and “Tsukuba Encouragement Prize”: Ibaraki Prefectural Science and Technology Promotion Foundation (with English translation), https://www.tsukuba-sci.com/cms/?p=9853

Exhibit	Description
2034	AIST: 34th Inoue Harunari Prize, https://www.aist.go.jp/aist_j/news/prize/itemid025-000082.html
2035	RESERVED
2036	RESERVED
2037	Saito, Y. et al. <i>Correlation between barrier width, barrier height, and dc bias voltage dependences on the magnetoresistance ratio in Ir-Mn exchange biased single and double tunnel junctions</i> , Jpn J. Appl. Phys. 39, L1035–L1038 (2000)
2038	Maat, S., et al., <i>Physics and Design of Hard Disk Drive Magnetic Recording Read Heads</i> , Handbook of Spintronics, 2014
2039	Soukup, R.J., <i>Hot Electron Transport in Vacuum Deposited Thin Film Emission Diodes</i> , University of Minnesota, Ph.D., Physics, solid state, 1969, pgs. 1-209 (“Soukup-Dissertation”)
2040	U.S. Patent Application Publication No. 2006/0003185 A1
2041	J. C. Slonczewski, <i>Conductance and exchange coupling of two ferromagnets separated by a tunneling barrier</i> , Phys. Rev. B 39, 6995-7002 (1989)
2042	RESERVED
2043	RESERVED
2044	RESERVED
2045	RESERVED
2046	RESERVED
2047	RESERVED
2048	RESERVED
2049	RESERVED

Exhibit	Description
2050	RESERVED
2051	RESERVED
2052	RESERVED
2053	Declaration of Caroline A. Ross, Ph.D.
2054	<i>Curriculum Vitae</i> of Caroline A. Ross, Ph.D.
2055	U.S. Application No. 10/824835 File History (Partial)
2056	Citations to Butler: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C22&q=Butler+et+al.%2C+Spin-dependent+tunneling+conductance+of+Fe%7CMgO%7CFe+sandwiches%2C+63+Phys.+Rev.+B+054416+%282001%29&btnG=
2057	Citations to Soukup: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C22&q=Soukup+et+al.%2C+Voltage-Current+Characteristics+for+Electrical+Conduction+Through+Thin+MgO+Films%2C+41+J.+Appl.+Phys.+3229-+3236+%281970%29&btnG=
2058	Errata to EX2013 - Deposition of Jeffrey Bokor, Ph.D. (June 24, 2025)
2059	Errata to EX2014 - Deposition of Jeffrey Bokor, Ph.D. (June 25, 2025)
2060-2071	RESERVED
2072	EX2024 - The 23rd (FY2022) Japan Society of Applied Physics Achievement Award Recipients (with English translation), The Japan Society of Applied Physics, https://www.jsap.or.jp/outstanding-achievementaward/recipients/recipients23 with Amended Certification of Translation [SUPPLEMENTAL EVIDENCE - NOT FILED]
2073	Certified English Translation of EX2029 - AIST wins three Science and Technology Awards in the 2016 Minister of Education, Culture,

Exhibit	Description
	Sports, Science and Technology Commendation for Science and Technology, <i>available at</i> https://www.aist.go.jp/aist_j/news/prize/pr20160412_3.html [SUPPLEMENTAL EVIDENCE - NOT FILED]
2074	Certified English Translation of EX2032 - AIST, “Winner of the 20th Tsukuba Award,” <i>available at</i> https://www.aist.go.jp/aist_j/news/prize/itemid025-000077.html [SUPPLEMENTAL EVIDENCE - NOT FILED]
2075	Certified English Translation of EX2034 - AIST: 34th Inoue Harunari Prize, <i>available at</i> https://www.aist.go.jp/aist_j/news/prize/itemid025-000082.html [SUPPLEMENTAL EVIDENCE - NOT FILED]
2076	RESERVED
2077	RESERVED
2078	Declaration of Dara Del Rosario [SUPPLEMENTAL EVIDENCE - NOT FILED]
2079	Transcript of October 24, 2025 Board Conference Call
2080	RESERVED
2081	RESERVED
2082	RESERVED
2083	RESERVED
2084	RESERVED
2085	Transcript of Deposition of Jeffrey Bokor, Ph.D. (Oct. 30, 2025)
2086	Transcript of Deposition of Jeffrey Bokor, Ph.D. (October 31, 2025)
2087	Sur-Reply Declaration of Caroline A. Ross, Ph.D.
2088	Errata to EX2085 - Deposition of Jeffrey Bokor, Ph.D. (Oct. 30, 2025)

Exhibit	Description
2089	Errata to EX2086 - Deposition of Jeffrey Bokor, Ph.D. (Oct. 31, 2025)
2090	Patent Owner's Demonstrative Exhibits
2091	Request for <i>ex parte</i> reexamination of U.S. Patent No. 11,968,909, Control No. 90/016,097, filed by Western Digital Technologies, Inc. on March 29, 2026.

I. THE BOARD CAN TERMINATE THE REEXAM

Petitioner's assertion that the Board lacks the authority to terminate the reexam because it has not been ordered is unsupported and wrong. Paper 55 ("Opp."), 2. Neither of Petitioner's non-precedential Board decisions says that.

The Board has the authority to terminate "*any... matter or proceeding*" involving the patent "before the Office." Paper 54 ("Mot."), 1-2; 35 U.S.C. §315(d); 37 C.F.R. §42.122(a). In adopting Rule 122, the Office was explicit that the covered matters include an *unordered* "*ex parte* reexamination *proceeding*" where the three-month statutory time period under 35 U.S.C. §303 is running." 77 Fed. Reg. 48680, 48690 (Aug. 14, 2012). The Request initiated a new "matter or proceeding" (Control No. 90/016,097) triggering §303's three-month time period.

The Director's 4/1/26 Official Gazette Notice, titled "*Pre-order* Procedure regarding Substantial New Question determination in *ex parte Reexamination Proceedings*," characterizes an unordered reexam as a "proceeding." The MPEP does too. MPEP §2224 ("*After the filing of the request for ex parte reexamination*, any letters sent to the... Office relating to the *resulting ex parte reexamination proceeding* should identify the proceeding"); MPEP §2294 (an "[*e*]*x parte* reexamination *proceeding*[]" may be concluded" and "the *proceeding... brought to an end... by a denial of reexamination*").

Even if the unordered reexam were not a "proceeding" (it is), the reexam is a

“*matter* involving the patent... before the Office.” 37 C.F.R. §42.122(a). Rule 122 indisputably gives the Board authority to terminate the reexam.

II. THE BOARD SHOULD TERMINATE THE REEXAM

A. The Request’s Grounds Could Have Been in the Petition

Petitioner does not dispute that Parkin was cited on the ’909 Patent and Kishi was used in an examiner rejection months *before* the Petition was filed. Mot., 2-3. Petitioner says this ignores IPB’s allegedly “momentous decision to concede unpatentability of the subject matter [sic] ’909 Patent claims by abandoning identical claims in its child continuation... *after* the IPR Petition was filed.” Mot., 3. Petitioner cites no authority supporting its assertion that IPB’s abandonment of the child application “*concede[d]* unpatentability.” There is no such authority. Applicants abandon continuations for many reasons and often weigh the cost of continuing prosecution against the incremental value of the continuation claims over the issued claims. Abandoning the child application does not estop IPB from defending the patentability of its ’909 Patent claims and does not remove Petitioner’s burden to prove those claims unpatentable.

If Petitioner thought it mattered, it could have waited to file the Petition (no time bar was imminent) to see how IPB responded to the Examiner’s Kishi rejection. Petitioner *chose* not to. Petitioner’s carefully curated words do not deny it knew about Kishi (and Parkin) when the Petition was filed. Opp., 3-4. Despite

alleging now that Kishi and Parkin are slam dunk prior art, Petitioner made the *strategic decision* to not use them in the Petition's grounds. Its remorse about that decision does not justify another serial challenge after its instituted IPR. Mot., 3-4.

B. There Is No Justification for Petitioner's Delay

Even if the Board considers the abandonment of the child application to be justification for Petitioner to file a reexam request (it is not), Petitioner never disputes that it cited that abandonment in its IPR2025-00701 petition filed *more than a year before the Request*. Mot., 5. Moreover, Petitioner never explains why it filed its Request on the Sunday following the Friday issuance of a related FWD and does not deny that Petitioner was *waiting* to file the already-prepared Request. Mot., 9-10. Petitioner offers no justification for waiting until a year after the abandonment of the child application to file its Request on the eve of the FWD.

C. Termination Would Preserve the Estoppel's Viability

Characterizing the Motion as a "premature" request to apply estoppel is disingenuous given that estoppel will never apply to the already-filed Request. Opp., 4; Mot., 8. The Motion seeks to preserve the estoppel provision's core purpose: holding Petitioner to the results of the FWD Petitioner sought. Mot., 7-9.

IPB never argued that "concurrent IPR and reexamination proceedings" are prohibited. Opp., 5. IPB argued that §315(d) grants the Director the authority to manage concurrent proceedings and the discretion to terminate the reexam. Mot.,

8-9. The assertion that the reexam complies with “current guidance” (Opp., 5) cites *no* “guidance” from Director Squires. The Director’s “guidance” in *PacifiCorp* that an instituted IPR petition advancing multiple grounds, as the Petition does here, should suffice (Mot., 4) is not “inapplicable” (Opp., 5). Petitioner’s citation to *Apple* and its argument that the proposed “rules are not currently in force” (Opp. 4-6) miss the mark. IPB never argued that those rules were “in force.” IPB argued that the commentary accompanying the proposed rules reveals how Director Squires will exercise his discretion under §315(d) in this case. Mot., 3-9.

D. Wasted Resources, Inconsistent Results, and Prejudice

Petitioner ignores the Director’s guidance that repeated administrative attacks against a patent are inefficient, waste Office resources and risk inconsistent results. Mot. 3-4. Petitioner’s assertion that its second serial attack is different due to a phantom “concession” that the ’909 Patent claims are unpatentable fails. *Supra* §II.A. Petitioner also ignores the Director’s guidance that using different prior art does not justify a second attack. Mot., 6. Alleging that different grounds “moot[s] risk of inconsistent results” (Opp., 6) ignores the Director’s guidance that even strong patents become unreliable if subjected to serial challenges. Mot., 5.

Petitioner’s assertion that IPB is not prejudiced by Petitioner’s second serial attack (Opp., 7-8) ignores that Petitioner chose *different prior art* after the prior art presented in this IPR did not hold up at trial. Mot. 6-7. IPB stipulated to a stay

pending the outcome of *this IPR*. IPB never consented to staying the litigation through a second attack Petitioner waited more than a year to bring. *Supra* §II.B. *Emerson* does not help Petitioner. Opp., 7-8. There, the Board did not decline to terminate the reexam because it used different prior art. Indeed, the Board found that waiting to file the reexam until just before FWD provided “the opportunity to adjust [] invalidity challenges.” *Emerson*, IPR2017-00359, Paper 62 at 17-19. The Board only excused that because, “[u]nlike *Ariososa*,” the petitioner had a “colorable reason” for waiting. *Id.* Petitioner provided no such “reason” here. *Supra* §II.B.

E. IPB’s Timing Request

After *not* denying that it waited to file the Request to impose time pressure (*id.*), Petitioner seeks to capitalize on it. Opp., 9. IPB’s position is that the “pendency of” the IPR under §315(d) will not terminate when the FWD issues. But if the Board is disinclined to grant the Motion, IPB asks that it defer issuing the FWD until Director Squires reviews that Motion decision to ensure that any termination order he may issue *indisputably* issues during the pendency of the IPR.

III. CONCLUSION

Not terminating the reexam would encourage others to follow the same playbook: enjoy a full IPR trial, gauge how the IPR grounds fare, file a reexam as a hedge, and wait until just before the FWD issues to avoid estoppel. That is not how the system should work. Mot., 2-9. The Board should terminate the reexam.

Respectfully submitted,
Godo Kaisha IP Bridge I

Date: April 16, 2026

By: /Richard Giunta /
Richard F. Giunta, Reg. No. 36,149

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

I certify that on April 16, 2026, a copy of the foregoing document, including any exhibits filed therewith, is being served via electronic mail, as previously consented to by Petitioner, upon the following:

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Date: April 16, 2026

/Dara Del Rosario/
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