

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
SAMSUNG ELECTRONICS CO., LTD., and
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioners,

v.

MULLEN INDUSTRIES LLC,
Patent Owner.

Case No. IPR2025-00227
Patent No. 9,635,540

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

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1001	U.S. Patent No. 9,635,540 (“the ’540 patent”)
1002	Prosecution History of U.S. Patent No. 9,635,540
1003	Declaration of David H. Williams (“Williams-Decl.”)
1004	Curriculum Vitae of David H. Williams
1005	U.S. Patent No. 7,333,820 (“Sheha”)
1006	U.S. Provisional Patent Application No. 60/305,975 (“Sheha-Prov.”)
1007	U.S. Patent Application Publication No. 2004/0024846 (“Randall”)
1008	International Patent Application Publication No. WO 02/17075 (“Randall-WIPO”)
1009	U.S. Patent No. 7,233,795 (“Ryden”)
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1011	RESERVED
1012	U.S. Patent No. 7,013,148 (“Ganesh”)
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1019	U.S. Patent No. 7,366,522 (“Thomas”)
1020	RESERVED
1021	RESERVED
1022	International Patent Application Publication No. WO 01/91486 (“Darling”)
1023	U.S. Patent No. 6,084,951 (“Smith”)
1024	RESERVED
1025	U.S. Patent No. 6,415,224 (“Wako”)

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1026	RESERVED
1027	Korean Patent Application Publication No. 10-2001-0091381 (“Han”)
1028	RESERVED
1029	RESERVED
1030	U.S. Patent No. 6,754,665 (“Futagami”)
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1037	Federal Court Management Statistics–Profiles, U.S. District Courts–Combined Civil and Criminal (September 30, 2024) (available at https://www.uscourts.gov/file/79291/download)
1038	Docket Control Order in <i>Mullen Industries LLC v. Samsung Electronics Co., Ltd. et al.</i> , Case No. 2:24-cv-00049 (E.D. Tex.) (June 14, 2024) (Dkt. 30)
1039	Plaintiff’s Disclosure of Asserted Claims and Infringement Contentions in <i>Mullen Industries LLC v. Samsung Electronics Co., Ltd. et al.</i> , Case No. 2:24-cv-00049 (E.D. Tex.) (May 15, 2024)
1040	RESERVED
1041	RESERVED
1042	RESERVED
1043	RESERVED
1044	RESERVED
1045	RESERVED
1046	RESERVED
1047	RESERVED

Exhibit	Description
1048	RESERVED
1049	RESERVED
1050	RESERVED
1051	RESERVED
1052	RESERVED
1053	RESERVED
1054	U.S. Patent No. 6,867,733 (“Sandhu”)
1055	RESERVED
1056	RESERVED
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1073	U.S. Patent No. 6,154,745 (“Kari”)
1074- 1079	RESERVED

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1080	Plaintiff's Preliminary Pre-Trial Election of Asserted Claims in <i>Mullen Industries LLC v. Samsung Electronics Co., Ltd. et al.</i> , Case No. 2:24-cv-00049 (E.D. Tex.) served on March 20, 2025
1081	Apr. 18, 2025 Letter from United States Senate to Secretary Howard Lutnick
1082	Congressional Research Service, <i>The Patent Trial and Appeal Board and Inter Partes Review</i> , R48016 (May 28, 2024)
1083	“About Google,” available at: https://about.google/intl/ALL_us/around-the-globe/local-info/ (accessed May 25, 2025)
1084	“Samsung in America,” available at: https://news.samsung.com/us/samsung-in-america (accessed May 25, 2025)

I. INTRODUCTION

This IPR should be instituted; discretionary denial is not warranted. As discussed below, compelling economic interests favor institution. Contrary to Patent Owner's ("Mullen"'s) assertions, Mullen's choice to dismiss the patent challenged here ("the '540 patent") from the district-court litigation supports institution, not denial; the challenged claims' patentability has never before been adjudicated; there are no settled expectations of validity; and the Petition's use of expert testimony is entirely appropriate and supportive. The unpatentability grounds are strong; Mullen's arguments against them are exceedingly weak; and this is unsurprising given the Board's recent determinations, in instituting four of Petitioners' IPRs against Mullen's related patents, that the unpatentability case is strong.

The '540 patent is among a family of eight patents that share a specification and "recite well-known and obvious features of remotely locating a first wireless device from a second wireless device." *See Google LLC v. Mullen Industries LLC*, IPR2025-00018, Paper 14 at 13-14 (May 12, 2025) (granting institution); *accord* IPR2025-00019, Paper 14 at 13 (May 12, 2025) (granting institution); IPR2025-00021, Paper 14 at 11-12 (May 14, 2025) (granting institution); IPR2025-00124, Paper 14 at 12 (May 12, 2025) (granting institution). The lack of any true innovation actually deserving of patent protection is evident from the patents'

protracted prosecution history. It took Mullen *ten years* from the filing of the patents' shared specification in 2003 to get a first claim set (patent 8,374,575) granted in 2013 after seven rejections. Another *nine years* were then spent collecting seven more patents via incremental variations on the same base concepts.

After collecting all those claim variations on the same well-known and obvious concepts, Mullen simultaneously asserted all of them against Apple the day after the last patent (11,246,024) issued in 2022. Just as Petitioners have here, Apple filed eleven IPRs to challenge these eight patents (which collectively total *339 claims*); and the Board instituted eight of them. Rather than seeing those IPR trials through to judgment on the unpatentability of the instituted claims, Mullen settled with Apple and retained all 339 claims, which were used (together with another patent) to sue Samsung only a few months later. Now, faced with even stronger IPRs filed *by statutory right* by the subsequent defendant whom Mullen *deliberately chose* to sue sequentially, Mullen seeks to avoid the well-deserved cancellation of its unpatentable claims by using its own litigation conduct as both a sword and a shield, in order to retain the ability to continue to sue not only this defendant but unknown numbers of future targets on invalid patents that should never have issued in the first place.

The Board should not entertain Mullen’s request to reward its gamesmanship with discretionary denial of this IPR. These IPRs, and the patents they challenge, epitomize the very purpose of IPRs “to weed out bad patent claims” that are being levied against the industry and burdening American companies’ technological and economic contributions via “overpatenting.” *Thryv, Inc. v. Click-To-Call Techs., LP*, 590 U.S. 45, 54 (2020). “The PTAB was established as the signature accomplishment of the bipartisan Leahy-Smith America Invents Act, arguably the most important patent law enacted by Congress in the last 50 years.” EX1081, 2. “Congress was also concerned that poor-quality patents fueled litigation by so-called ‘patent trolls,’ a pejorative term for patent plaintiffs that do not manufacture or sell the patented products.” EX1082, pdf p. 2.

The challenged claims’ unpatentability, as amply demonstrated in the Petition, should be tried on the merits—just as the Board’s merits panel rightly determined is appropriate in five of the IPRs involved in the parties’ dispute so far. IPR2024-01472, Paper 9 (Mar. 31, 2025); IPR2025-00018, IPR2025-00019, IPR2025-00124, Paper 14 (May 12, 2025); IPR2025-00021, Paper 14 (May 14, 2025).

II. COMPELLING ECONOMIC INTERESTS FAVOR INSTITUTION

Compelling economic interests strongly support instituting this and Petitioners’ related pending IPRs. *See* Interim Processes for PTAB Workload

Management (Mar. 26, 2025), 2-3 (inviting parties to address “[c]ompelling economic, public health, or national security interests” as “relevant considerations” that “bear[] on the Director’s discretion”). This is the case in light of the technological contributions made by Petitioners in the United States; no such contributions are made by Mullen generally or as to the patents at issue in these IPRs.

Patent Owner Mullen Industries LLC (“Mullen”) makes no products, offers no services, and has no apparent business other than filing lawsuits.¹ Its website (mullenindustriesllc.com), as of this paper’s filing, is an empty page with a looping video of a street corner, a “contact us” button, and a “subscribe” field.² The patents it asserts against the industry at large are not focused in any one subject-matter area. To date, Mullen has sued Apple and then Samsung on nine mobile-device patents, as well as Meta on twelve augmented-reality/virtual-reality gaming patents. In contrast, all of these defendants do offer innovative products and services that contribute to the nation’s technological growth.

¹ *Mullen Industries LLC v. Apple Inc.*, No. 6:22-cv-00145 (WDTX); *Mullen Industries LLC v. Samsung Elecs. Co.*, No. 2:24-cv-00049 (EDTX); *Mullen Industries LLC v. Meta Platforms, Inc.*, No. 1:24-cv-00354 (WDTX).

² See also archived capture at <https://web.archive.org/web/20230331160924/https://mullenindustriesllc.com/>

Unlike Mullen, Petitioners have invested and continue to invest heavily in the American economy. For example, in 2024, Google invested over \$49 billion in research and development to power American technological leadership, and to produce unprecedented leaps in artificial intelligence and quantum computing capabilities that advance national security. *See* EX1083. Google created \$850 billion in economic activity for American businesses, nonprofits, publishers, creators, and developers in 2024; maintains offices or data centers in twenty-six states; and employs over 100,000 individuals throughout the United States. *See* EX1083. Similarly, Samsung has invested over \$100 billion in the United States, generated over \$31.2 billion with its U.S. facilities, and created over 175,000 jobs with its U.S. facilities. *See* EX1084.

III. MULLEN’S DISCRETIONARY-DENIAL ARGUMENTS ARE MERITLESS

A. Mullen’s Unilateral Decision to No Longer Assert the ’540 Patent in the District-Court Proceeding Is Irrelevant

Mullen argues that because “the ’540 Patent was dismissed from the district court litigation..., Petitioners, notably the Samsung Petitioners, have nothing to gain from the institution of the Petition” and the IPR is allegedly “purposeless.” Paper 10 (“DD-Brief”), 10. Mullen further purports to stipulate that if institution is denied, Mullen “agrees to not assert again in the future against the Samsung petitioners any claim challenged in this Petition.” *Id.* But the Samsung entities are

not the only Petitioners in this IPR, and Mullen neglects to make any mention of Google, or any other future targets against which Mullen may later decide to assert its invalid patent. Google and others in the industry—not just Samsung—deserve protection from unpatentable claims whose owner has already demonstrated a practice of asserting them serially against multiple companies.

In its lawsuit against Samsung, Mullen asserted the '540 patent along with eight other patents. After a full round of briefing, the district court dismissed Mullen's infringement claims—without prejudice to the '540 patent being later asserted—because Mullen did not plead infringement with the required specificity. Now, after having burdened the court and Samsung with its insufficient pleadings, Mullen purports to be concerned with avoiding “unnecessary expenditure” of resources, and invites the Board to insulate the patent it baselessly asserted against Samsung from further review. DD-Brief, 10. But, even taken at face value, Mullen's promise not to assert the '540 patent against the “Samsung petitioners” does not extend to Petitioner Google, or to customers of Samsung or Google, or to anyone else.

In addition, awarding patent owners discretionary denials for making limited, one-sided stipulations would circumvent the statute. Congress specifically enacted 35 U.S.C. §317, which dictates what the parties to an IPR proceeding should do to narrow their disputes and thereby terminate IPRs pursuant to

settlement. *See* 35 U.S.C. §317(a). For example, parties to an underlying litigation in which a patent owner asserts multiple patents resulting in multiple IPR petitions can, and do, avail themselves of §317 to partially resolve disputes by settlement as to patents that have been dropped from the litigation. This both simplifies the litigation and reduces the number of active IPR proceedings resulting from that litigation. *See, e.g., Hyundai Motor Am. v. StratosAudio, Inc.*, IPR2021-01371, Paper 18 at 1 (June 3, 2022) (granting joint motion to terminate IPR based on “a Covenant Not to Sue and Release Agreement” causing the lawsuit to be “partially dismissed as to the claims of the” patent challenged in the IPR). To ensure that such agreements can be scrutinized by the government, Congress requires such agreements to be in writing and filed with the Office. *See* 35 U.S.C. §317(b). To date, Mullen has not complied with §317 by agreeing to a covenant not to sue or other settlement with all the Petitioners to resolve this proceeding.

If Mullen genuinely seeks to avoid “unnecessary and counterproductive litigation costs” and “conserve the resources of the PTAB” (DD-Brief, 10), Mullen can and should work directly with Petitioners through the process Congress envisioned. Instead, Mullen is asking the Board to bless its attempts to circumvent Congress’s statutory process and avoid the transparency requirements of §317(b). The Board should decline this invitation.

B. The PTAB Has Never Adjudicated the Challenged Claims' Patentability

Mullen's assertion that the PTAB "already adjudicated the patentability" of the challenged claims in Apple's prior IPR2023-00098 is false. DD-Brief, 11. Although Apple filed a petition, no *inter partes* review was instituted, so the challenged claims' patentability was never adjudicated. *See California Inst. of Tech. v. Broadcom Ltd.*, 25 F.4th 976, 989 (Fed. Cir. 2022) (explaining that when the PTAB did not "institute[] review on...grounds raised in a petition," this leaves the non-instituted "grounds ***unadjudicated*** on the merits").³

A decision denying institution is not an adjudication of ***patentability***—it is merely a "threshold determination under § 314(a) of the question whether ***the petitioner*** has a reasonable likelihood of prevailing" in that IPR. *Thryv, Inc. v. Click-to-Call Techs., LP*, 590 U.S. 45, 56 (2020); 35 U.S.C. §314(a) (institution decision determines whether "the information presented in the petition...shows that there is a reasonable likelihood that the petitioner would prevail"). That ***Apple's petition*** was found unlikely to prevail does not in any way mean the challenged claims were determined to actually be ***patentable***. It is only "[u]pon ***electing to institute inter partes review***" that "the Board conducts a proceeding to evaluate the challenged claims' validity," and only "[a]t the conclusion of the

³ Bold italic emphases are added throughout unless otherwise noted.

proceeding—if review ‘is instituted and not dismissed’” that “the Board ‘issue[s] a final written decision with respect to the *patentability* of’ the challenged claims.” *Thryv*, 590 U.S. at 49 (citing 35 U.S.C. §316 and quoting §318(a)); *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 361 (quoting §318(a)). That did not happen in Apple’s IPR—because institution was denied, the *inter partes* review did not even commence, and the challenged claims’ patentability was not adjudicated, as no “final written decision with respect to the patentability” was issued under §318(a). Moreover, institution denial is “nonappealable” under §314(d); this, too, indicates that no “complete adjudicative process” occurred, as there was not a “full and fair opportunity to litigate” patentability. *See Innovad Inc. v. Microsoft Corp.*, 260 F.3d 1326, 1334 (Fed. Cir. 2001).

This Petition is different from Apple’s, and deserves its opportunity to demonstrate to the Board—in the ***first*** IPR to be instituted for adjudication of these claims—that the challenged claims are ***not*** patentable in the least. Mullen’s allegation that “the PTAB has already addressed the specific reference relied on by Petitioners in the instant Petition” (DD-Brief, 11) is misleading for omitting the key facts that (1) this Petition presents an independent set of grounds relying on ***new*** references that do ***not*** include the reference (Sheha) from Apple’s prior IPR, and (2) even this Petition’s set of grounds that do include Sheha combine it with

new references in a materially different combination that the Board has *not* considered before.

Ground 1 here relies on Randall, Darling, and Futagami—references that the Board has never before considered against the challenged claims.⁴ Only Grounds 6-10 rely on Sheha (one of Apple’s primary references), and combine it with Darling and Futagami—again, references that were *not* presented in Apple’s petition. As discussed in this Petition and in Section IV below, these references teach what the Board found missing from Sheha in IPR2023-00098, and Mullen’s only arguments to the contrary fail to even account for the references’ disclosures that the Petition cites.

Denying this IPR because Apple’s different petition was denied years earlier would be grossly unfair to Petitioners—who had no involvement in and no ability to influence the strength of Apple’s showing—and would set a dangerous

⁴ Any allegation that Randall is not materially different from Sheha is refuted by Mullen’s own brief—e.g., pages 28-34 alleging that Sheha does not teach a limitation that Mullen’s brief *does not dispute is taught by Randall*. Mullen has not attempted to raise 35 U.S.C. §325(d) as a basis for denying institution, with good reason. The Randall grounds demonstrate that “§325(d) is not sufficiently implicated such that its statutory purpose would be undermined by instituting the Petition.” *ETN Capital, LLC v. FBA Operating Co.*, IPR2024-01445, Paper 14 at 13-14 (February 28, 2025) (citing SAS Q&As (June 5, 2018), Question/Answer D1). Although the URL for the SAS Q&As appears now to be broken (*see ETN*, IPR2024-01445, Paper 14 at 14 n.12 (citing SAS Q&As as available at https://www.uspto.gov/sites/default/files/documents/sas_qas_20180605.pdf)), recent Board decisions such as *ETN* demonstrate that it remains Office guidance.

precedent incentivizing patentees to target seemingly weaker defendants with early lawsuits in order to exhaust the entire industry's one and only chance of attempting IPR before serially targeting other defendants who would have mounted stronger challenges. Encouraging bad patents to flourish in this manner is not what the PTAB should stand for.

C. There Are No “Settled Expectations of Validity” Here

Mullen is wrong to argue that “[t]here is a well-settled expectation that the ’540 Patent is valid.” DD-Brief, 12. According to Mullen, these “expectations” have arisen “[a]fter fourteen years of detailed examination by the USPTO, confirmation via the PTAB’s refusal to institute a prior petition for *inter partes* review, and [the patent] being in force for nearly a decade.” *Id.* To date, no exact definition has been provided of what constitutes “settled expectations” under the Interim Processes for PTAB Workload Management, but under any reasonable view of the term, it cannot apply to Mullen.

Mullen prosecuted the ’540 patent’s non-provisional application from March 25, 2003 to April 25, 2017. During this 14-year span, Mullen continually revised claims, substituted new claims (even after notices of allowance), filed requests for continued examination, and filed continuations, all contributing to keeping the ’540 patent’s application pending for years without issuance. *See generally* EX1002.

It was the actions of Mr. Mullen himself—a trained patent agent and then attorney—that produced the fourteen years of protracted prosecution of this family of patents. After the first claim set (patent 8,374,575) was granted in 2013, Mullen spent another nine years collecting seven more patents via incremental variations on the same base concepts, animated by the same broad, functional claim language and simplistic drawings. During this time, Mullen produced no products or services practicing the alleged inventions, and instead collected hundreds of patent claims to assert first against Apple, and then against Samsung.

Mullen’s alleged “well-settled expectation” of possessing valid patents could only arguably, at most, have lasted from 2022, when Mullen obtained its last patent in the family, until the next day, when Mullen began its campaign against Apple. And any such day-long expectation was then surely extinguished when the PTAB instituted IPRs against six of the eight patents in the family, finding a reasonable likelihood that most of the claims in the patent family were invalid. While Mullen points out that the ’540 patent escaped institution, this was only because Apple had not identified prior art that taught element [1C]. As discussed further in Section IV below, element [1C] adds the recitation of:

asking said second wireless device if said location access rights
are to be requested from said first wireless device after
determining that said second wireless device does not have said
location access rights for said first wireless device;

In other words, element [1C] asks the entity that lacks access whether that entity would like to request access. This unremarkable feature, which Petitioners have amply demonstrated is taught by prior art beyond the references Apple’s IPR presented, simply would not have given a reasonable person the expectation that the ’540 patent was valid. As this IPR’s Petition shows, straightforward prior art teaches this obvious feature.

As to Apple’s previous IPR that was denied institution, the Board has routinely declined to extend discretionary denial of so-called follow-on petitions to unrelated parties. *See, e.g., Volkswagen Group of Am. v. Neo Wireless*, IPR2022-01537, Paper 8 at 9-12 (May 5, 2023) (rejecting patent owner’s *General Plastic* argument because there was not shown to be a significant relationship between petitioner and the previous petitioner). This makes sense because depriving an unrelated petitioner an opportunity to present its own evidence and argument would be fundamentally unfair. *See Blonder-Tongue Labs. v. University of Illinois Found.*, 402 U.S. 313, 329 (1971) (“Some litigants—those who never appeared in a prior action—may not be collaterally estopped without litigating the issue.... Due process prohibits estopping them despite one or more existing adjudications of the identical issue which stand squarely against their position.”). Here, there was no prior adjudication on the merits, Apple did not present the same grounds of unpatentability that are presented by the Petition here, and precluding

the distinct Petitioners here from raising their challenges would be a violation of due process. Mullen’s discretionary-denial argument should be rejected.

D. The Petition’s Strong Grounds Are Appropriately Supported by Expert Testimony, and There Are No Unaddressed “Known Disputes” on Claim Construction

Mullen’s allegation that the Petition “excessively relies on the declaration of Mr. Williams’ to cure deficiencies” in the prior art (specifically Futagami) (DD-Brief, 14) is doubly meritless.

First, there are no deficiencies in the cited prior-art references. As discussed in Section IV below, Mullen only alleges there are deficiencies by ignoring the references’ explicit teachings that the Petition cites. Mullen’s assertion that “Futagami never teach[es] or suggest[s]” element [1C] (DD-Brief, 14) is refuted by explicit text in Futagami (e.g., in FIGs. 19-20) that is cited, reproduced, highlighted, and discussed in the Petition—as discussed further in Section IV.A.3 below—yet which Mullen fails to even acknowledge in its brief, let alone attempt to address and rebut. Mullen cannot invent “deficiencies” by pretending that explicit statements in the references and in the Petition do not exist.

Second, Mullen’s allegation that the Petition includes “excessive” reliance on “conclusory” expert testimony is itself utterly conclusory. Mullen’s single paragraph making this allegation (DD-Brief, 14-15) provides no substantive discussion nor any actual citation to specific pages of the Petition or paragraphs of

the declaration to demonstrate how the manner in which the Petition purportedly relies on any expert testimony for any specific point is “excessive.” Merely using the adjective “excessive” in a brief to characterize the Petition’s reliance on expert testimony does not make it so.

Indeed, as discussed in Section IV below, ***none*** of the issues raised by Mullen’s merits arguments require the Board to assess the correctness of any expert testimony ***at all*** in order to reject Mullen’s arguments as unfounded. The Board need only look at the statements in the prior-art references themselves that are cited and quoted in the Petition, the reasoning spelled out in the Petition that Mullen ignored and failed to address, and black-letter obviousness law, all of which compel the conclusion that there is ***nothing*** nonobvious about the challenged claims.

Mullen’s further attempts at discretionary-denial arguments directed to the Petition’s merits are unfounded, unexplained, and baseless. Mullen’s assertion that this Petition “recycles prior art grounds already dispensed with by the PTAB” (DD-Brief, 12-13) is false and misleading as this Petition’s grounds are all different from those in Apple’s prior IPR, as already discussed in Section III.B above. Mullen also makes a bare allegation that “the Petition...strategically chose not to address known disputes over the claim terms’ meaning” (DD-Brief, 12), but provides no explanation whatsoever as to what “disputes” Mullen is talking about

nor how any such “disputes” were allegedly “known.” The only claim constructions that Mullen’s brief proposes are that “[s]tep [a] must complete before step [h]” and that “[s]tep [f] must complete before step [g]” which “must complete before step [h].” DD-Brief, 7-8. Contrary to Mullen’s unsupported allegation (DD-Brief, 6), these claim-construction positions were not raised in Apple’s IPR. And, as discussed in Sections IV.A.2, IV.A.4, and IV.B.4 below, these claim-construction positions do not even matter to this IPR, because the Petition demonstrates (and Mullen ignores) that even these constructions are met by the prior art.

IV. THE PETITION’S MERITS ARE STRONG, AND MULLEN’S MERITS ARGUMENTS ARE EXTRAORDINARILY WEAK

This IPR challenges all claims 1-35 of the ’540 patent, of which only claim 1 is independent. Mullen’s discretionary-denial brief and its POPR (which merely repeats the same merits arguments as the discretionary-denial brief) only dispute the Petition’s merits as to claim 1.

At its core, ’540 claim 1 is similar to the claims of Mullen’s other patents for which the Board has already found that the Randall-based and Sheha-based grounds of Petitioners’ IPRs present “strong merits” that “weigh[] against

exercising discretionary denial.” *See* IPR2025-00018, Paper 14 at 14.⁵ Mullen’s claims all “recite well-known and obvious features of remotely locating a first wireless device from a second wireless device.” *Id.* at 13-14.⁶ As relevant to ’540 claim 1, the Board has already found in instituting Petitioners’ other IPRs that both Randall and Sheha independently disclose the second device requesting the first device’s location from a server, determining whether the second device has location access rights for the first device, and only providing the location to the second device if the first device has assigned access rights to the second device.

The only element not explicitly disclosed in Randall and Sheha is [1C], reciting “asking” the second device “if said location access rights are to be requested” from the first device, “after determining” that the second device does not have those access rights. This is what the Board found was missing from Sheha in Apple’s previous IPR2023-00098 (Paper 8 at 13-14). But Apple’s petition did not include—and the Office has never considered—Darling or Futagami, both of which Petitioners are newly presenting here. As this IPR’s Petition demonstrates—and Mullen does not dispute—Futagami explicitly teaches

⁵ *See also* IPR2025-00019, Paper 14 at 13; IPR2025-00021, Paper 14 at 12; IPR2025-00124, Paper 14 at 12.

⁶ *See also* IPR2025-00019, Paper 14 at 13; IPR2025-00021, Paper 14 at 11-12; IPR2025-00124, Paper 14 at 12.

to allow the second device to request access rights from the first device to sensitive personal information after the server determines that the second device does not already have those rights; and Darling explicitly teaches that the types of sensitive personal information to request access rights to include location information.

Petition, 10-11, 17-20. What Mullen ignores is the Petition's demonstration that Fugatami teaches the "asking" step before requesting the access rights. Petition, 18-20. The combinations of Futagami and Darling with Randall or Sheha are strong, and teach claim 1 so straightforwardly that Mullen only attempts to attack them by ignoring pages of explanation in the Petition and pretending their cited disclosures do not exist.

The merits arguments in Mullen's brief (and repeated in its POPR) are extraordinarily weak. This is not a run-of-the-mill merits case where there may be reasonable disputes. Mullen's arguments uniformly ignore (and therefore fail to reasonably address) the prior-art disclosures cited and the reasoning presented in the Petition, ignore black-letter obviousness law, and rehash arguments that the Board has already soundly rejected. The only supportable conclusion is that the Petition's merits are compelling and strong.

A. The Randall-Based Grounds Are Strong

Grounds 1-5 are based on Randall, which was not in Apple's prior IPR and has not been considered by the Office as to the '540 patent. Randall's disclosure

has a running example where wireless device user Alice shares her information with wireless device user Bob, including her location information. In instituting four of Petitioners' IPRs so far, the Board has found strong merits as to the unpatentability of Mullen's claims relating to access rights for a second wireless device (like Bob's) to access the location of a first wireless device (like Alice's). IPR2025-00018, Paper 14 at 14 ("strong merits"), 39; IPR2025-00019, Paper 14 at 13 ("the merits are strong"), 31; IPR2025-00021, Paper 14 at 12 ("strong merits"), 41; IPR2025-00124, Paper 14 at 12 ("strong merits"), 39.

The Randall-Darling-Futagami ground on '540 claim 1 is likewise strong.

1. Undisputed Elements: [1PRE], [1B], [1D]-[1E]

The Petition demonstrates that Randall itself discloses nearly all limitations of claim 1, with the exception of [1C]-[1D] which are met by the combination with Darling and Futagami. Petition, 11-32. This is undisputed for many limitations, and the few arguments that Mullen presents facially fail for ignoring the references' disclosures that the Petition cites.

2. Randall Explicitly Discloses Element [1A] in Petition-Cited Disclosures That Mullen Ignores

Element [1A] recites the second device (e.g., Bob's device in Randall) "requesting" the first device's location (e.g., Alice's location) from the server. Mullen's assertion that Bob's device in Randall is "*incapable* of requesting a location" (DD-Brief, 17) is refuted by Randall's explicit disclosure cited in the

Petition. Randall teaches that as Alice’s “location” gets “up-dated” on the server, Bob’s device accesses it by “polling the server” (EX1007, p. 24 “People tracking”)—i.e., “Bob can pull the new data into his device” (*id.*, [0053]), which is a “**request** (i.e. pull)” of the information from the server (*id.*, [0015]). Bob’s device makes this request by “sending various data tags defining its enquiry” to the server, and then “the server passes to Bob’s device the information *it requests.*” *Id.*, [0067]. All of this explicit disclosure is cited and quoted in the Petition at 14, and Mullen entirely ignores and fails to address it. *See* DD-Brief, 16-17.

Mullen’s assertion that Bob cannot “view Alice’s location” unless “Alice preemptively specified her location as accessible for Bob” (DD-Brief, 17) is irrelevant. Element [1A] does not require access rights to already exist or not exist in order for a device to make a location “request[,]” and neither does Randall. Bob’s device can “send[] to the server” a request including Alice’s “ADS number” together with “data tags defining” which of Alice’s information fields Bob wishes to access (EX1007, [0049], [0067]) before or after Alice has given him access to her location, specifically. If Bob’s request comes before Alice has given him location access, the server will determine that Bob does not yet have those access rights (meeting [1B]) and will not send him Alice’s location yet. Petition, 14-17 (citing EX1007, [0047], [0067], [0136], [0503]-[0512]). If Bob’s request comes

after Alice has given him location access rights, then “the server passes to Bob’s device the information it *requests*.” EX1007, [0067].

Mullen’s allegation that “Petitioners[] rel[y] on” expert “testimony” to meet [1A] (DD-Brief, 18) is thus untrue. As shown above, the Petition relies on *Randall’s disclosures*, cited and quoted in the Petition (at 11-14), which Mullen just chose to ignore. This is not changed by the fact that Petitioners’ expert cited the same Randall disclosures for [1A].

Mullen’s allegation that “Petitioner implicitly concedes that Randall does not teach or suggest” [1A] “by incorporating Darling” (DD-Brief, 17) is also facially false. The Petition (at 14) noted that “Darling *reinforces Randall’s teaching*” because Darling *similarly* explicitly teaches “receiving at the server a *request* from a second user querying where the first user is located” (EX1022, 2:1-15, 34:22-35:22, 89:23-30). Both Randall’s and Darling’s teachings are part of Ground 1, and Darling’s statements provide even further evidence of [1A]’s obviousness.

Mullen’s argument that Darling’s target device sends its location to the server before another device has requested it (DD-Brief, 17-18) is irrelevant because claim 1 recites no limitation regarding when or why the “first wireless device” sends its location to the server. Mullen argues that element [1A] (the second device requesting the first device’s location) must be performed before

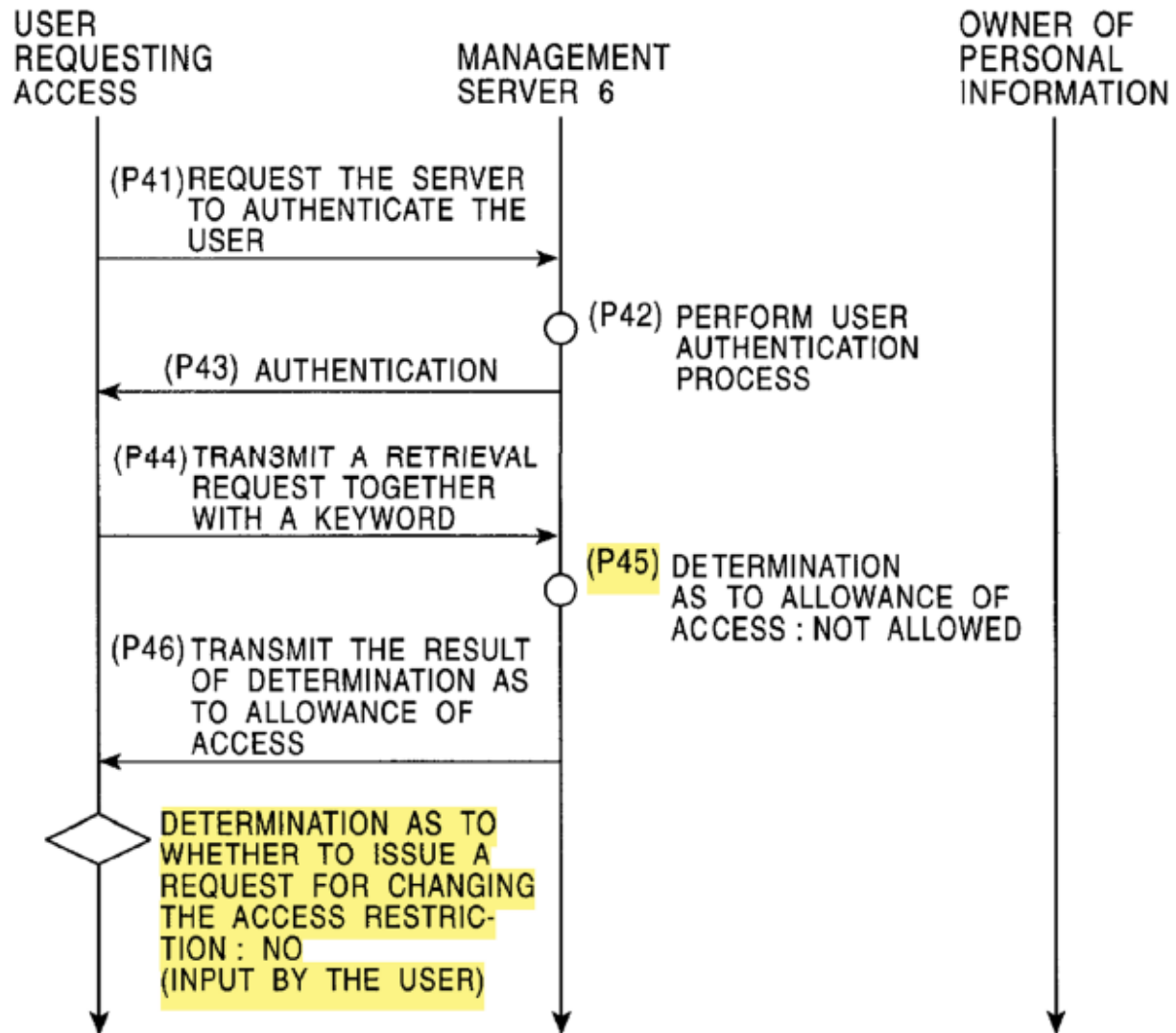
[1H] (DD-Brief, 7, 17-18), but [1H] is about providing the first device’s location “*from said server to said *second* wireless device*”—it is *not* about the first device sending its location to the server in the first place. Mullen’s claim-construction argument is thus irrelevant. Even if [1A] must be performed before [1H], Mullen does not dispute that Darling’s server sends the first device’s location to the second device after the second device requests it. Claim 1 never says that the first device’s location cannot be sent to the server before the second device requests it from the server, which is what Mullen says Darling teaches.

3. The Randall-Darling-Futagami Combination Meets [1C] Via Petition-Cited Futagami Disclosures That Mullen Ignores

Element [1C] recites “asking said second wireless device if said location access rights are to be requested from said first wireless device after determining that said second wireless device does not have said location access rights for said first wireless device.” The Petition demonstrated that the Randall-Darling-Futagami combination meets [1C] by applying the teachings of Futagami, including those in FIGs. 19-20, highlighted below and on pages 18-19 of the Petition. These teachings explicitly disclose—after the “management server” makes a “determination as to allowance of access: not allowed” in step (P45)—prompting the “user requesting access” (i.e., the user at the second wireless device)

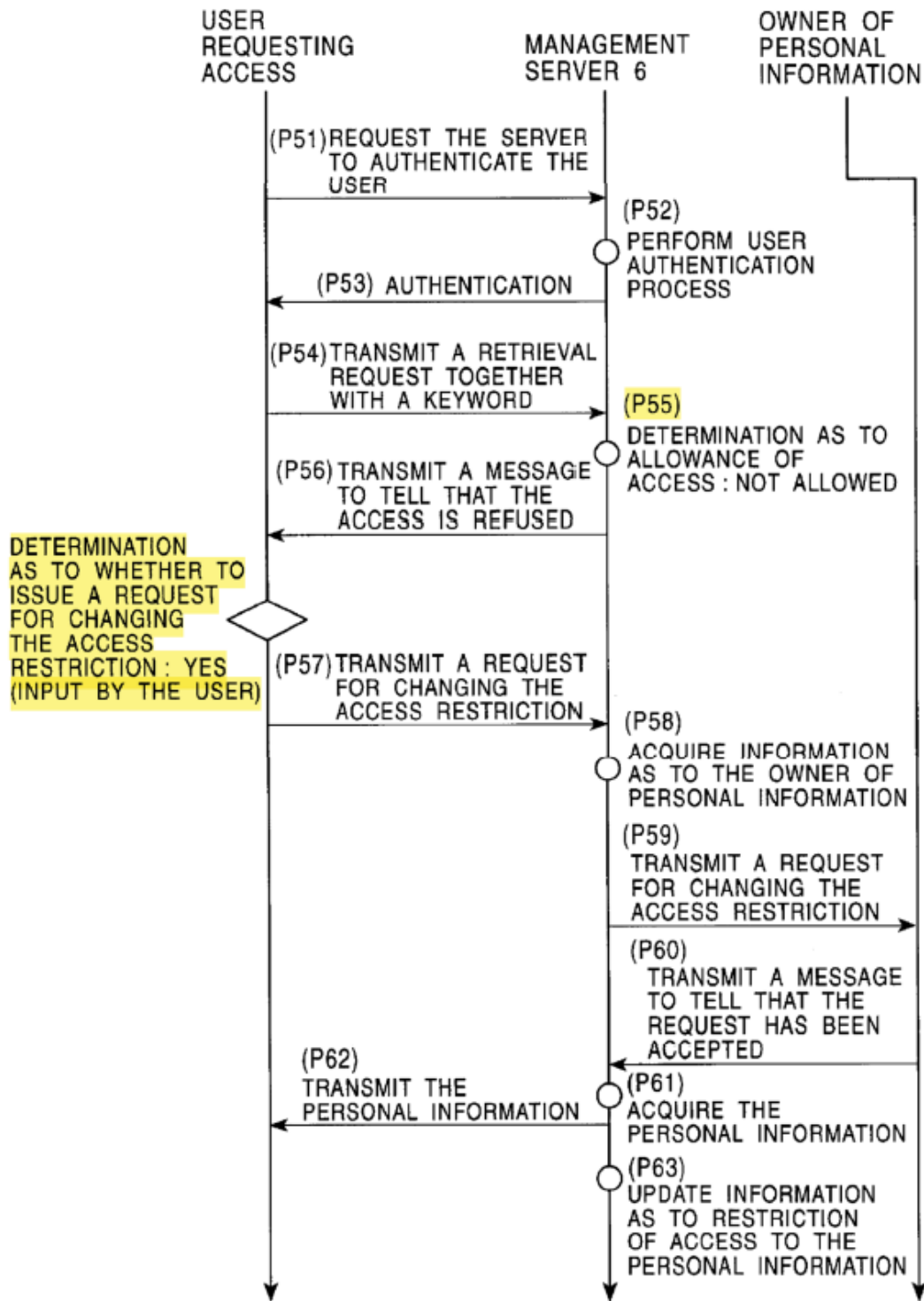
for a “determination as to whether to issue a request for changing the access restriction.” The user can respond by “input[ting]” “yes” or “no”:

FIG. 19



Futagami (EX1030), FIG. 19 (highlighted in Petition at 18)

FIG. 20



Futagami (EX1030), FIG. 20 (highlighted in Petition at 19)

As can be seen from these figures—reproduced, highlighted, and quoted as clear as day in the Petition at 18-19—this teaches what [1C] recites: asking the second device if the access rights (which are location access rights in the combination with Randall and Darling as the Petition establishes at 10-11) are to be requested from the first device after determining that the second device does not have those access rights.

Mullen’s brief *entirely ignores this disclosure* when arguing that “Futagami does not teach or suggest” element [1C]. DD-Brief, 19-21 (failing to ever discuss the highlighted “determination as to whether to issue a request for changing the access restriction” in Futagami’s FIGs. 19-20 or the Petition’s discussion of it). Mullen argues that Futagami’s “user, without being asked,” either “independently sends a message to the server” or “decides to not write” anything. DD-Brief, 21. But that assertion is inconsistent with what is explicitly written in the highlighted portion of Futagami’s FIGs. 19-20—which Mullen fails to even address, let alone attempt to demonstrate that it doesn’t refute Mullen’s argument. For example, FIG. 19 states that the user can input “no” as to “whether to issue a request.” Clearly the question of whether to issue a request is being *asked*—otherwise, if the user were simply deciding not to do anything without being asked, there would be nothing to input “no” to.

Mullen cannot refute Futagami's teachings by failing to address the specific Futagami disclosures that the Petition cites and discusses.

4. The Randall-Darling-Futagami Combination Meets [1F]-[1H] Regardless of Claim Construction

Mullen attempts to distinguish claim 1 over the Randall-Darling-Futagami combination by arguing that elements [1F]-[1H] must be performed in a particular order. DD-Brief, 25 (discussing claim-construction arguments *id.*, 7-8). Mullen's attempt fails for either or both of two independent reasons. First, Mullen's claim construction does not even matter, because the Petition demonstrated (and Mullen ignores) that Randall-Darling-Futagami meets even Mullen's construction via Futagami's teachings. Petition, 27, 30-31. Second, Mullen's claim construction is also wrong because its argument is premised on a misreading of the language in [1G], and Randall-Darling-Futagami meets the correct construction (which does not require any particular order) as well. Petition, 26-28, 30-32.

a. Mullen Ignores the Petition's Showing That Even Mullen's Claim Construction Is Met

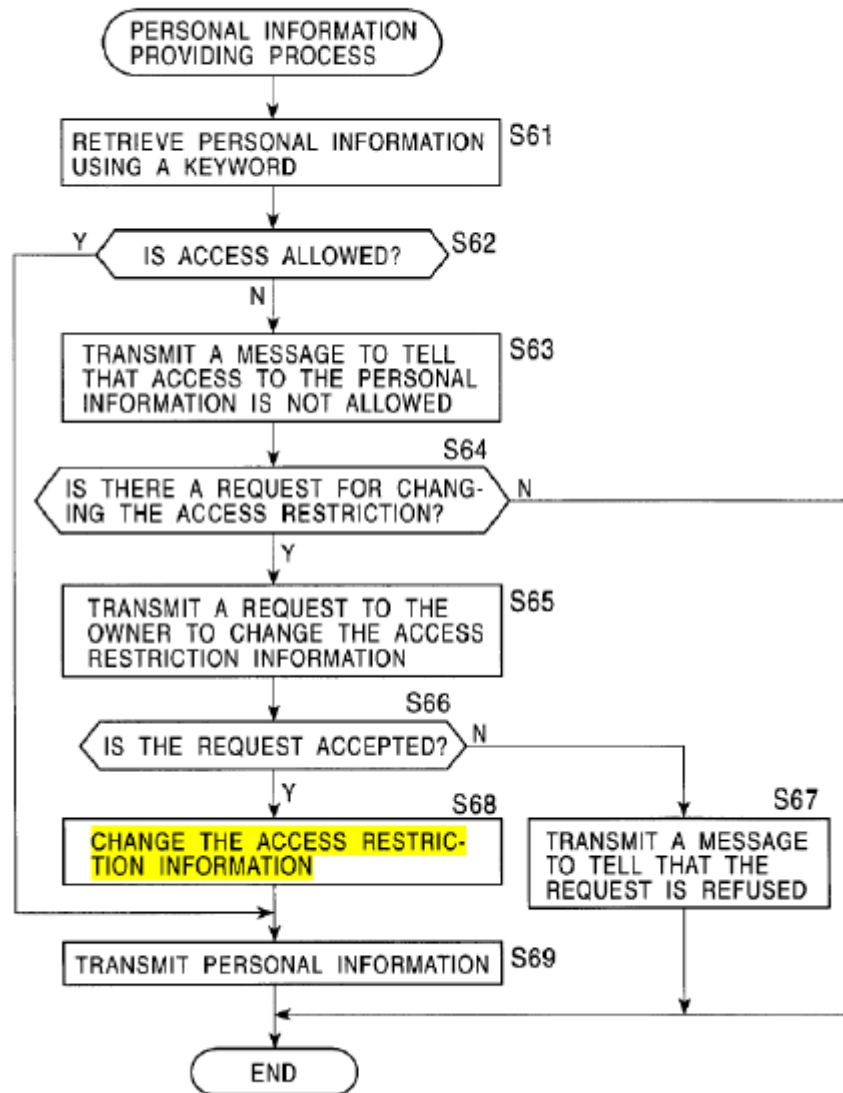
Elements [1F]-[1G] recite as follows:

- [1F] storing said location access rights on said server;
- [1G] determining said access rights assigned by said first wireless device to said second wireless device on said server;

- [1H] providing said location from said server to said second wireless device dependent upon said access rights.

Mullen argues that [1F] must occur before [1G], which must occur before [1H]. DD-Brief, 7-8, 25. This is of no consequence, because the Petition demonstrated that the prior art both teaches and renders obvious performing these acts in this order. The Petition does note that “claim elements [1F]-[1H] need not be performed in any particular order”—because that is correct as discussed in the next section below, and because Futagami discloses *one* embodiment (in FIG. 20) where [1H] can be performed before [1F]. Petition, 30. But the Petition *also* cited Futagami’s *other* embodiment (in FIG. 17), where [1F] (step S68) can be performed before [1H] (step S69). Petition, 27, 30-31. And the Petition demonstrated that, based on Randall’s teachings, [1G] can be performed after [1F] and before [1H]. Petition, 29-30. The Petition even further provided an alternative obviousness rationale, which Mullen also fails to address. Petition, 30-31.

FIG. 17



Futagami (EX1030), FIG. 17 (highlighted in Petition, 27)

None of this is mentioned in Mullen’s brief—let alone addressed and reconciled with Mullen’s argument. Mullen’s argument thus facially fails, for ignoring how the Petition demonstrated that even Mullen’s proposed claim construction is met by the prior art.

b. Mullen’s Claim Construction Is Also Wrong

Mullen’s argument also independently fails because its claim construction is wrong. Mullen argues that the reason [1F] must occur before [1G] is that [1G] allegedly “refers to determining the location access rights on the server that were *stored* on the server in” [1F]. DD-Brief, 7. But that is not what [1G] says. [1G] recites “determining said access rights *assigned* by said first wireless device to said second wireless device on said server.” By its own language, [1G] refers to the location access rights that were *assigned* on the server, not that were *stored*. The *assigning* occurs in element [1E]: “assigning said location access rights on said server to said second wireless device by said first wireless device.”

Thus, if anything, [1G] occurs after **[1E]**, and not necessarily after [1F]. [1G] can occur after [1E] and before [1H], and nothing in the claim language limits whether [1F] occurs before or after [1G]-[1H]. Mullen does not dispute that the Petition demonstrates the Randall-Darling-Futagami combination performing [1G] after [1E] and before [1H]. Petition, 23-32.

5. Mullen’s Arguments Against the Combination Ignore the Petition’s Rationales and the Law of Obviousness

Mullen’s scattershot arguments against the combinability of Randall, Darling, and Futagami all miss the mark.

First, Mullen’s argument that Futagami is “the direct opposite of Randall” because Futagami’s server gathers the requested information before checking

permission rights (DD-Brief, 23) is untrue. Randall's server receives Alice's location information whenever her GPS transmits it (*see* EX1007, p. 24 "People tracking"), which can be before Alice grants access rights to Bob "whenever Alice wishes to" (*id.*, [0509]) (cited in Petition, 23).

Moreover, the Petition does not and need not rely on any specific information-retrieval techniques from Futagami's specific system implementation. *See* DD-Brief, 23 (alleging Futagami employs "keyword[]" matching and a particular order of collecting personal information). The Petition's combination relies, just as a POSA would have, on Futagami's more generic ***teaching*** for "how to proceed when the requesting user does not already have access to the requested information, including providing the requesting user the option to request that the server request access from the target user." Petition 11 (citing EX1030, 15:40-16:32, 18:62-20:67, FIGs. 19-20). It does not matter how Futagami's system implements the information retrieval; the Petition demonstrates how Futagami's teachings about requesting access rights apply generically to Randall's system, which can use its own implementation for information retrieval.

It is black-letter law that "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined

teachings of the references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (C.C.P.A. 1981); *MCM Portfolio LLC v. Hewlett-Packard Co.*, 812 F.3d 1284, 1294 (Fed. Cir. 2015); *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1343 (Fed. Cir. 2020). “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 421 (2007). Mullen’s arguments run afoul of this well-settled law.

Next, Mullen argues that “Futagami does not disclose or even hint at using its system for sharing location information.” DD-Brief, 23, 19 (“Futagami contemplates using its system for ‘names, telephone numbers, addresses, dates of birth, and electronic mail address’—***not location information.***”) (Mullen’s emphasis). But Mullen ignores that the Petition specifically discussed how Futagami broadly characterizes these examples as types of “personal information” (Petition, 7, quoting EX1030); how Randall and Darling describe the same types of sensitive personal information and “teach that such personal information can include location information” (Petition, 8-10, discussing EX1007, EX1022), and how these teachings provide “motivation and reasonable expectation of success to apply to location requests in Randall’s system any of Darling’s and/or Futagami’s techniques for controlling access to personal information” (Petition, 10). Mullen fails to even address (much less refute) the Petition’s detailed explanations and

evidence. *See* DD-Brief, 23-24 (failing to even mention Darling’s teachings about location information discussed in the Petition).

None of Mullen’s arguments hold water. The Randall-based grounds are strong and merit institution.

B. The Sheha-Based Grounds Are Strong

Grounds 6-10 combine Sheha with Darling and Futagami. Though the Board found that Sheha does not disclose element [1C] in Apple’s earlier IPR (IPR2023-00098, Paper 8 at 13-14), the Sheha-Darling-Futagami combination satisfies [1C] via Futagami’s and Darling’s teachings as discussed above for Randall-Darling-Futagami. Mullen’s arguments against Sheha-Darling-Futagami for [1C] and for [1F]-[1H] fail in the same ways discussed above. Mullen’s only other merits arguments against the Sheha-based grounds (related to [1B]) have already been properly rejected by the Board in instituting others of Petitioners’ IPRs, as discussed below.

1. Undisputed Elements: [1PRE]-[1A], [1D]-[1E]

The Petition demonstrates that Sheha itself discloses nearly all limitations of claim 1, with the exception of [1C]-[1D] which are met by the combination with Darling and Futagami. Petition, 72-81. This is undisputed for many limitations, and Mullen’s arguments as to [1C], [1F]-[1H] (the same arguments presented for those elements as to the Randall-based grounds) fail for the reasons discussed above. As discussed below, Mullen’s [1B] arguments are the same arguments

about Sheha that the Board has already rightly rejected in others of Petitioners' IPRs, and fare no better here.

2. Sheha Discloses [1B]: The Board Has Already Rejected Mullen's Arguments, and Mullen Ignores the Petition's Further Arguments and Explanations

[1B] recites “determining that said second wireless device does not have location access rights for said first wireless device.” The Petition demonstrated that Sheha discloses [1B] because its first device has “privacy setting[s]”—also called “permission settings”—that can specify “allowance of position information transfers...*only* with the device owner's permission.” Petition, 74 (quoting EX1005, 4:59-5:46). The privacy/permissions settings information can include “defin[ing] a group of specific users that have access” via “a group database and authorization and authentication protocols.” Petition, 74 (quoting EX1005, 11:55-12:7).

Mullen makes two arguments alleging that Sheha does not meet [1B], and Mullen would have to win *both* arguments (and more) to distinguish Sheha. The Board has already rejected Mullen's similar arguments in others of Petitioners' IPRs, in ways that demonstrate why the arguments are just as meritless here.

First, Mullen argues that Sheha's first device's “privacy settings” or “permission settings” are “agnostic as to the identity of the caller.” DD-Brief, 28-29. Mullen argues that the access rights in [1B] must be “device specific.” *Id.*, 31.

Mullen made essentially the same argument in Petitioners’ other IPRs, and the Board has rightly rejected it every time, because Mullen’s claims do not require access rights to be unique/specific to the requesting device.⁷ Similarly, as the Petition here explained, “[1B]’s language encompasses *determining that said second wireless device does not have location access rights for said first wireless device* for any reason—including, e.g., if the *first wireless device* is not given *location access rights* to anybody.” Petition, 75. Mullen’s brief ignores this point made in the Petition, and says nothing to address it.

Second, as to Sheha’s group-database disclosure, Mullen cannot credibly argue that the defined “group of specific users that have access” (EX1005, 11:55-12:7) is agnostic to the users’ identities. Instead, Mullen argues that the disclosure only applies to landline devices and not to wireless devices. DD-Brief, 30. Again, the Board has already rejected this argument, because “Sheha discloses that the mobile-to-mobile embodiment uses the same authorization protocols as the

⁷ See IPR2025-00018, Paper 14 at 17 (finding ’418 patent claim 1 “does not recite that the permission is limited to permission for only the second wireless device”); IPR2025-00019, Paper 14 at 17 (finding ’283 patent “claim language does not limit the location access rights to be assigned only to the one other device, at the exclusion of other devices”); IPR2025-00021, Paper 14 at 14 (finding ’039 patent claim 1 “does not limit the location access rights to be of only the one other device, at the exclusion of other devices”); IPR2025-00124, Paper 14 at 16 (finding ’575 patent claim 1 “does not limit access to the location of the first telephone to one other device, at the exclusion of other devices”).

landline embodiments.” IPR2025-00018, Paper 14 at 26-27 (“agree[ing] with Petitioner” and rejecting “Patent Owner’s contention that the group database having permission to access location information is limited to landline-to-landline requests”).⁸

Additionally, even if Sheha were somehow found not to explicitly disclose [1B], the Petition established in the alternative that it would have been obvious to “provid[e] *location access rights* to an individual device,” to “allow[] permissions specific to individuals in addition to groups,” and/or to “us[e] mobile-to-mobile group permissions,” in view of POSAs’ background knowledge corroborated by Darling, Randall, Friedman, and Sandhu. Petition, 75-77. Mullen’s brief ignores and does not even attempt to address these obviousness showings.

Again, Mullen’s allegation that “the Petition’s incorporation of Darling and Futagami implicitly concedes that Sheha does not teach or suggest” [1B] (DD-Brief, 31) is facially false. The Petition (at 77) noted that “Darling and Futagami ***further*** render obvious” [1B]—i.e., even more than it is already obvious over Sheha alone and/or in view of background knowledge. Sheha’s, Darling’s, and Futagami’s teachings are all part of Ground 6, and any/all of them can provide even further evidence of [1B]’s obviousness. Mullen’s argument that “the Petition

⁸ See also IPR2025-00019, Paper 14 at 23; IPR2025-00021, Paper 14 at 25; IPR2025-00124, Paper 14 at 24-25.

incorporates by reference the combination of ***Randall*** with Darling/Futagami for this claim element” (DD-Brief, 32, Mullen’s emphasis) is also untrue. The Petition at 77 explains that Darling’s and Futagami’s ***disclosures*** meet [1B] “in the manner discussed” at page 17 of the Petition discussing the same limitation. The motivations and expectation of success for performing that limitation (under either party’s claim interpretation) in Sheha’s system were already discussed on pages 75-77 of the Petition.

3. The Sheha-Darling-Futagami Combination Meets [1C] Via Petition-Cited Futagami Disclosures That Mullen Ignores

Just like in the Randall-based grounds discussed in Section IV.A.3 above, the Petition demonstrated that the Sheha-Darling-Futagami combination meets [1C] by applying the teachings of Futagami, including those in FIGs. 19-20, explained on pages 17-20 of the Petition (§VI.E.1.c) which are incorporated on page 77 of the Petition. These teachings explicitly disclose what [1C] recites, and Mullen’s brief entirely ignores this disclosure when arguing that “Futagami does not teach or suggest” element [1C] “[a]s demonstrated above” in Mullen’s section on the Randall-based grounds. DD-Brief, 35. Again, Mullen cannot refute Futagami’s teachings by failing to address the specific Futagami disclosures that the Petition cites and discusses.

4. The Sheha-Darling-Futagami Combination Meets [1F]-[1H] Regardless of Claim Construction

Like with the Randall-based grounds, Mullen attempts to distinguish claim 1 over the Sheha-Darling-Futagami combination by arguing that elements [1F]-[1H] must be performed in the particular order proposed in Mullen's claim construction. DD-Brief, 40 (discussing claim-construction arguments *id.*, 7-8). And like with the Randall-based grounds, Mullen's attempt fails for either or both of two independent reasons. First, Mullen's claim construction does not even matter, because the Petition demonstrated (and Mullen ignores) that Sheha-Darling-Futagami meets even Mullen's construction via Futagami's teachings. Petition, 81. Second, Mullen's claim construction is also wrong, and Sheha-Darling-Futagami meets the correct construction as well. Petition, 79-81.

a. Mullen Ignores the Petition's Showing That Even Mullen's Claim Construction Is Met

For the same reasons discussed in Section IV.A.4.a above, Mullen's argument that [1F] must occur before [1G], which must occur before [1H] (DD-Brief, 7-8, 40) is of no consequence, because the Petition demonstrated that the prior art both teaches and renders obvious performing these acts in this order. The Petition demonstrated this by citing, quoting, reproducing, and discussing Futagami's teachings of two embodiments at pages 27-31 of the Petition, and referenced these teachings and discussion again at page 81 of the Petition.

Mullen’s argument thus facially fails, for ignoring how the Petition demonstrated that even Mullen’s proposed claim construction is met by the prior art.

b. Mullen’s Claim Construction Is Also Wrong

Mullen’s argument also independently fails because its claim construction is wrong, for the reasons discussed in Section IV.A.4.b above.

5. Mullen’s Arguments Against the Combination Ignore the Petition’s Rationales and the Law of Obviousness

Mullen’s arguments against combining Sheha with Darling and Futagami are as meritless as for Randall-Darling-Futagami discussed above.

Mullen first alleges that the Petition at 77 “incorporates the combination made with ***Randall*** and Futagami for a *Sheha*-based combination” and “concludes without explanation” that the combination meets [1C]. DD-Brief, 36 (Mullen’s emphasis). But Mullen ignores that the Petition at 77 cites not just “§VI.E.1.c” but also “§IX.B.” §IX.B on pages 70-72 of the Petition explains the Sheha-Darling-Futagami combination in detail, and Mullen simply ignores it. Mullen also ignores that §VI.E.1.c on pages 17-20 of the Petition specifically and in detail established how Futagami’s teachings disclose [1C] (as discussed in Section IV.A.3 above), and §IX.B on pages 70-72 of the Petition explained in detail how those teachings are applied to Sheha’s system in Sheha-Darling-Futagami. Mullen’s attack on Mr. Williams’s testimony (DD-Brief, 37-38), too, discusses only paragraph [0334] of

EX1003. It fails to even acknowledge, let alone refute, paragraphs [0309]-[0314] cited on pages 71-72 of the Petition.

Next, Mullen argues against Sheha-Darling-Futagami “[f]or the same reasons” as for Randall-Darling-Futagami. DD-Brief, 36. Those reasons fail as discussed in Section IV.A.5 above. Mullen argues that the combination is “unsuitable” because “Futagami is silent on location information” and “Futagami employs keyword searching.” DD-Brief, 32-33, 38. As discussed above, Mullen ignores and fails to address the Petition’s discussion of why Sheha’s, Darling’s, and Futagami’s teachings would have led POSAs to apply Futagami’s teachings to location information in Sheha’s system (Petition, 70-72), and the combination does not and need not bodily incorporate specific keyword-searching implementation details in order to demonstrate obviousness.

Finally, Mullen’s assertion that “Sheha is not concerned with disturbing users” because “Sheha only refers to sharing position information when one user *calls* (i.e., disturbs) another user” (DD-Brief, 37-38, Mullen’s emphasis) is refuted by Sheha’s explicit disclosure of sharing position information “without having to initiate a telephone call.” EX1005, 11:55-58 (cited in Petition, 70).

All of Mullen's merits arguments are exceedingly weak. The Petition's grounds are strong, and merit institution.⁹

Respectfully submitted,

Date: 2025-05-27

/Elisabeth Hunt/

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⁹ Petitioners reserve the right to challenge the March 26, 2025 Interim Process for PTAB Workload Management at least because it is legally invalid as (1) exceeding the Director's authority, (2) arbitrary and capricious, and (3) adopted without notice-and-comment rulemaking.

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24, the undersigned certifies that the foregoing **PETITIONERS' OPPOSITION TO PATENT OWNER'S DISCRETIONARY DENIAL BRIEF** contains 8,016 words excluding; a table of contents, a table of authorities, Mandatory Notices under § 42.8, a certificate of service or word count, or appendix of exhibits or claim listing. Petitioners have relied on the word count feature of the word processing system used to create this paper in making this certification.

Date: May 27, 2025

/Dara Del Rosario/
Dara Del Rosario
Paralegal
WOLF, GREENFIELD & SACKS, P.C.

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

I certify that on May 27, 2025, a copy of the foregoing document, including any exhibits or appendices filed therewith, is being served via electronic mail, as previously consented to by Patent Owner, upon the following:

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