UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

X1 DISCOVERY, INC.,
Patent Owner.

IPR2025-00253
Patent 7,370,035

PETITIONER'S OPPOSITION TO
PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

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LIST OF EXHIBITS

LIST OF NEWLY FILED EXHIBITS

Exhibits concurrently filed with Petitioner's Opposition To Patent Owner's Request For Discretionary Denial:

No.	Description
1080	N/A
1081	First Amended Complaint in *X1 Discovery, Inc. v. Microsoft Corporation* 8:23-cv-02415-GW-JDE (C.D. Cal), ECF No. 61 (May 9, 2025)
1082	Scheduling Order in *X1 Discovery, Inc. v. Microsoft Corporation* 8:23-cv-02415-GW-JDE (C.D. Cal), ECF No. 62 (May 15, 2025)
1083	*C.D. Cal. Time to Milestones*, Docket Navigator (last visited May 15, 2025)
1084	*Judge George H. Wu Time to Milestones*, Docket Navigator (last visited May 15, 2025)
1085	Initial Determination Granting Summary Determination of Non-infringement, *Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof*, 337-TA-1389, Order No. 18 (Sep. 3, 2024)
1086	Declaration of Arie Pellikaan, dated May 20, 2025

LIST OF PREVIOUSLY FILED EXHIBITS

No.	Description
1001	U.S. Patent No. 7,370,035 ("**'035 patent**")
1002	File History of U.S. Patent No. 7,370,035

No.	Description
1003	Declaration of Dr. Loren Terveen, dated December 19, 2024[1]
1004	Steve Schwartz, *Visual QuickStart Guide Entourage 2001 for Macintosh*, Peachpit Press (2001) ("**Entourage-1**")
1005	Bonita Sebastian et al., *Microsoft Office 2001 A Hands-On Guide for Macintosh*, Computer Literacy Press (excerpts) (2000) ("**Entourage-2**")
1006	Nan Barber & David Reynolds, *Office 2001 for Macintosh: The Missing Manual*, Pogue Press/O'Reilly (1st ed.) (Apr. 2001) ("**Entourage-3**")
1007	*Eudora Email User Manual for Windows Version 5.0*, QUALCOMM (Aug. 2000) ("**Eudora**")
1008	Alan R. Neibauer, *Running Microsoft Outlook 2000*, Microsoft Press (excerpts) (1999) ("**Outlook**")
1009	U.S. Patent No. 6,112,172 to True et al. ("**True**")
1010	U.S. Patent No. 5,444,823 to Trung D. Nguyen ("**Nguyen**")
1011	U.S. Patent No. 7,039,635 to Morgan et al. ("**Morgan**")
1012	U.S. Patent Application Publication No. 2002/0055981 to Spaey et al. ("**Spaey**")
1013	U.S. Patent No. 5,845,278 to Kirsch et al. ("**Kirsch**")
1014	U.S. Patent No. 4,255,796 to Gabbe et al. ("**Gabbe**")
1015	U.S. Patent No. 5,692,173 to Chee Heng Chew ("**Chew**")
1016	U.S. Patent No. 6,049,796 to Siitonen et al. ("**Siitonen**")

[1] Petitioner notes that a clerical error was made in the exhibit list filed with the Petition as to EX1003 and submits this corrected exhibit list identifying EX1003 as "Declaration of Dr. Loren Terveen, dated December 19, 2024."

No.	Description
1017	U.S. Patent No. 5,303,361 to Colwell et al. ("**Colwell**")
1018	U.S. Patent No. 6,741,985 to Robin A. R. Green ("**Green**")
1019	U.S. Patent No. 5,991,756 to Jiong Wu ("**Wu**")
1020	International Patent Application Publication No. WO 00/26762 to Mark Richanbach ("**Richanbach**")
1021	Jef Raskin, *The Humane Interface: New Directions for Designing Interactive Systems*, ACM Press (2000) ("**Raskin**")
1022	Richard M. Stallman, *GNU Emacs Manual* (1st ed.) (Jun. 1985) ("**GNU Emacs**")
1023	Ricardo Baeza-Yates & Berthier Ribeiro-Neto, *Modern Information Retrieval*, ACM Press (1999) ("**Baeza-Yates**")
1024	Sunny Lam, *The Overview of Web Search Engines* (Feb. 9, 2001) ("**Lam**")
1025	Oscar Vallarino, *On The Use Of Bit Maps For Multiple Key Retrieval*, Proceedings of the 1976 Conference on Data: Abstraction, Definition And Structure, 108-114 (Mar. 1976) ("**Vallarino**")
1026	Steve Lawrence & C. Lee Giles, *Context And Page Analysis For Improved Web Search*, IEEE Internet Computing, 38-46 (Jul.-Aug. 1998) ("**Lawrence**")
1027	Rawley D. Johnson et al., *Technical Reference Document Database System (TDOCS) Requirements Definition* (Aug. 1993) ("**Johnson**")
1028	Lev Finkelstein et al., *Placing Search in Context: The Concept Revisited*, ACM Transactions on Info. Sys., Vol. 20, No. 1, 116-131 (Jan. 2002) ("**Finkelstein**")
1029	U.S. Patent No. 6,952,805 to Tafoya et al. ("**Tafoya**")
1030	U.S. Patent No. 6,009,459 to Belfiore et al. ("**Belfiore**")
1031	U.S. Patent No. 5,220,625 to Hatakeyama et al. ("**Hatakeyama**")

No.	Description
1032	U.S. Patent No. 6,185,551 to Birrell et al. ("**Birrell**")
1033	U.S. Patent No. 6,839,702 to Patel et al. ("**Patel**")
1034	U.S. Patent No. 6,973,450 to Silverbrook et al. ("**Silverbrook**")
1035	U.S. Patent No. 6,834,276 to Jensen et al. ("**Jensen**")
1036	U.S. Patent No. 5,946,678 to Ijsbrand Jan Aalbersberg ("**Aalbersberg**")
1037	European Patent Application Publication No. EP 1 209 866 to Baldonado et al. ("**Baldonado**")
1038	Declaration of Delainey Tanner, dated November 18, 2024
1039	Kaitlin Duck Sherwood, *Overcome Email Overload With Eudora 5*, World Wide Webfoot Press (excerpts) (1st ed.) (2001)
1040	Claims Listing
1041	Donald E. Knuth, *The Art Of Computer Programming Vol. 3 Sorting And Searching*, Addison Wesley Longman (excerpts) (2nd ed.) (May 1998)
1042	United States District Courts Judicial Caseload Profile (excerpt)
1043	Steven Schwartz & Robert Correll, *Running Microsoft Office 2001 for Mac*, Microsoft Press (excerpts) (2001)
1044	Ben Shneiderman et al., *Clarifying Search: A User-Interface Framework For Text Searches*, D-Lib Mag. (Jan. 1997)
1045	N/A
1046	N/A
1047	N/A
1048	N/A
1049	N/A
1050	N/A

No.	Description
1051	N/A
1052	Ben Shneiderman, *Designing The User Interface: Strategies For Effective Human-Computer Interaction*, Addison Wesley Longman (excerpts) (3rd ed.) (1998)
1053	Claudine Badue et al., *Distributed Query Processing Using Partitioned Inverted Files*, Proc. Eighth Symp. on String Processing and Info. Retrieval, IEEE, 10-20 (2001)
1054	U.S. Patent No. 5,685,003 to Peltonen et al. ("**Peltonen**")
1055	Dick Pountain, *The New Penguin Dictionary of Computing*, Penguin Group (excerpts) (1st ed.) (2001)
1056	N/A
1057	Alfred & Emily Glossbrenner, *Search Engines For The World Wide Web*, PeachPit Press (3rd ed.) (2001)
1058	N/A
1059	Adam A. Wilcox, *PC Learning Labs Teaches Lotus Notes 3.0*, Ziff-Davis Press (1993)
1060	Declaration of Dr. Sylvia Hall-Ellis Dated December 16, 2024
1061	Stephen Londergan & Pat Freeland, *Lotus Notes R5 For Dummies Quick Reference*, IDG Books Worldwide, Inc. (1999)
1062	Declaration of Dr. Ingrid Hsieh-Yee Dated December 16, 2024
1063	Exhibit CX-0196 to Complainant's Pre-Trial Brief in the Matter of *Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof*, ITC-337-TA-1389 (August 29, 2024)
1064	Exhibit CX-0198 to Complainant's Pre-Trial Brief in the Matter of *Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof*, ITC-337-TA-1389 (August 29, 2024)
1065	Exhibit CX-0199 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)

No.	Description
1066	Exhibit CX-0203 to Complainant's Pre-Trial Brief in the Matter of *Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof*, ITC-337-TA-1389 (August 29, 2024)
1067	Exhibit CX-0204 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1068	Exhibit CX-0206 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1069	Exhibit CX-0208 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1070	Exhibit CX-0209 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1071	Exhibit CX-0211 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1072	Exhibit CX-0213 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1073	Exhibit CX-0214 to Complainant's Pre-Trial Brief in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (August 29, 2024)
1074	Exhibit CX-0215 to Complainant's Pre-Trial Brief in the Matter of *Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof*, ITC-337-TA-1389 (August 29, 2024)
1075	U.S. Patent No. 9,663,139 to Gross et al. ("**'139 patent**")
1076	File History of U.S. Patent No. 9,663,139
1077	U.S. Patent No. 10,552,490 to Gross et al. ("**'490 patent**")

No.	Description
1078	File History of U.S. Patent No. 10,552,490
1079	Transcript, Evidentiary Hearing (Vol. IV) in the Matter of Certain Computing Devices Utilizing Indexed Search Systems and Components Thereof, ITC-337-TA-1389 (excerpts) (October 9, 2024)

Pursuant to the Director's guidance on "Interim Processes for PTAB Workload Management" ("March 26 Memo"), Petitioner, Microsoft Corporation, submits this opposition to the request for discretionary denial submitted by Patent Owner ("PO"), X1 Discovery, Inc.

I. SUMMARY OF ARGUMENT

The Director should not discretionarily deny institution of this IPR at least because five of the six *Fintiv* factors heavily disfavor denial and because § 325(d) denial is inappropriate given that it is undisputed that none of the references were substantively considered by the Examiner during prosecution and the references in each obviousness ground teach what the Examiner found was missing in the prior art. The petition's merits are also compelling for reasons discussed below.

On *Fintiv*, the district court litigation: (1) has no trial date, and any trial would likely occur many months after the final written decision (FWD) given that the case has been stayed for the last 14 months and the *Markman* hearing (which typically occurs 18 months before trial) (EX1084) is set for October 16, 2025 (EX1082, 2) (Factor 2), (2) is in its nascent stages—only the complaint and amended complaint have been filed (Factor 3), and (3) very likely will be stayed if the IPRs are instituted given Judge Wu's history of granting stays in similar situations (Factor 1). *Infra* Sections II.A-C. Moreover, Petitioner served a timely *Sotera* stipulation (Factor 4), and the merits are compelling (Factor 6). *Infra* Sections II.D-E, IV. The only *Fintiv*

factor that weighs in PO's favor is Factor 5 (same party), which is true in nearly every IPR and is not even remotely sufficient to outweigh the other factors.

On § 325(d), none of the cited references were substantively considered by the Examiner during prosecution (Paper 1 at 3-4), which PO does not dispute. Further, a POSITA would understand that each of the petition's prior art combinations teaches exactly what the Examiner found was missing in the prior art—incrementally searching across documents for multiple search strings entered in a single search field—which PO also does not appear to dispute. For example, for Ground 1, the Lotus Notes references teach searching across documents for multiple search strings entered in the same search field and Raskin teaches performing such a multi-string search incrementally. Paper 1 at 15-26,26-32; EX1021 (Raskin), 127 ("[B]uilding a Boolean search pattern is made more effective when the early results of the pattern appear as the user adds to the pattern's specificity.") (quoted by Paper 1 at 25, 31). For Ground 2, the Entourage references disclose incrementally searching across documents for at least one search string entered in a search field and True expressly discloses performing such an incremental search on *multiple* strings entered in a single search field. Paper 1 at 40-51, 52-63.

Each of the two obviousness grounds raised in the petition have compelling merits because they explain why a POSITA would have been motivated with a reasonable expectation of success to combine the search functionality taught by the

Entourage and Lotus Notes references with well-known functionality expressly described by secondary references.

Ground	Reference	Claim Feature(s)
1	Lotus Notes References	Entering separated strings in a single search field;
	Raskin	Performing search incrementally
	Wu	Search each string separately and intersect results
2	Entourage References	Incrementally searching string entered in single search field
	True	Searching multiple strings entered in single search field
	Baeza-Yates	Search each string separately and intersect results

For Ground 1, the petition explains that a POSITA would have found it obvious to combine the Lotus Notes references' teachings to search across documents for multiple search strings entered in a single search field (such as is done by the Search Bar and/or Query Builder tools) with Raskin's teaching to perform the search incrementally at least because it was well known (and expressly taught by Raskin) that searching incrementally provides several advantages, including improving the tool's speed, responsiveness, effectiveness, and ease of use. Paper 1 at 25, 29-32. For Ground 2, the petition explains that a POSITA would have found it obvious to combine the Entourage references' teachings to search incrementally across documents for at least one search string entered in a single search field (such as is done by the Quick Find tool) with True's teaching to perform the incremental

search on multiple search strings at least because it was well known that such multi-string searches return more targeted, relevant results than single-string searches. Paper 1 at 50-51, 54-56, 59-63.

PO wrongly argues the following.

On *Fintiv*, PO advances several legally unsupported theories, including that the district court case will somehow manage to keep pace with the court's median 29.1-month schedule even though the case was stayed for nearly its entire 17-month existence (14 of 17 months) (EX2004; EX1082) and the *Markman* hearing was only recently set for mid-October 2025 (EX1082, 2). Paper 7 at 28-29. PO also wrongly argues that Factor 3 favors denial because there was significant investment in an ITC proceeding involving different patents in which Petitioner was not a named party, and that Petitioner's *Sotera* stipulation does not weigh Fintiv Factor 4 in favor of Petitioner at least because Petitioner is still free to pursue §§ 101 and 112 defenses in district court. Paper 7 at 29-32. However, PO cites no caselaw to support these arguments.

On § 325(d), PO does not appear to dispute that the petition's prior art combinations teach the single-field, multi-string incremental search the Examiner found was missing. Instead, PO advances the legally unsupported position that institution should be denied under § 325(d) because no single reference discloses this concept. Paper 7 at 18-19 ("The Director should also deny institution under 35

U.S.C. § 325(d) because … [e]ach of Petitioner's prior art references … teaches no more than [the art cited by the Examiner]."), 20-25. Of course, PO cites no caselaw to support this position because no such caselaw exists.

On the merits, PO's discretionary denial brief disputes the combination of the two Lotus Notes references (Wilcox and Londergan) for Ground 1, and, for Ground 2, disputes the combination of allegedly disparate search tools in the Entourage references and the combination of the Entourage references with True. These arguments are wrong at least because they mischaracterize the petition's prior art combinations. For its arguments as to the Lotus Notes references and the Entourage search tools, PO wrongly focuses on the described systems' search tools, which are specific embodiments/implementations of the references' teachings, whereas the petition relies on the concepts and functionality taught by the prior art references. For example, PO focuses on Lotus Notes' Search Builder tool (Paper 7 at 5-7) whereas the petition's Ground 1 relies on "the teachings from the Lotus Notes references on locating documents containing multiple strings entered in a single search field." Paper 1 at 23. For its arguments as to Entourage and True, PO wrongly focuses on a teaching in True that was not relied on by the petition—determining a confidence level that a word in an audio transcript was correctly transcribed. Paper 7 at 13. Thus, PO errs by focusing on the references' specific embodiments/implementations, rather than the teachings relied on by the petition,

and by pointing to teachings not relied on by the petition. This mischaracterization of the petition's prior art combinations infects each of PO's combination arguments.

Thus, Petitioner respectfully requests that the Director not discretionarily deny institution of this IPR at least because five of the six Fintiv factors heavily disfavor denial, § 325(d) denial is inappropriate, and the petition's merits are compelling.

II. INSTITUTION SHOULD NOT BE DENIED UNDER *FINTIV* BECAUSE FACTORS 1-4 AND 6 WEIGH HEAVILY AGAINST DENIAL

The district court litigation (1) has no trial date, and any trial would likely occur many months after the FWD given that the case has been stayed for the last 14 months and the *Markman* hearing (which typically occurs 18 months before trial) (EX1084) is set for October 16, 2025 (EX1082, 2) (Factor 2), (2) is in its nascent stages—only the complaint and amended complaint have been filed (Factor 3), and (3) very likely will be stayed if the IPRs are instituted given Judge Wu's history of granting stays in similar situations (Factor 1). These facts alone are enough to not discretionarily deny institution. Even if there were lingering *Fintiv* concerns, Petitioner's *Sotera* stipulation (Factor 4) and the petition's compelling merits (Factor 6) put them to bed.

A. Factor 2: No District Court Trial Date And Any Trial Will Likely Be Well After A FWD

Factor 2 weighs heavily against discretionary denial because trial has not been set and will likely occur many months after FWDs are due in July 2026[2].

Though the complaint was filed in December 2023, the case was stayed from March 2024 through May 2025. EX2004; EX1082. Thus, the case has been on pause for 14 of its 17 months. And during those first three months where the case was not stayed (from December 2023 to March 2024), nothing of substance occurred. The case was reassigned to Judge Wu and orders on pro hac applications were issued. That is it.

Thus, the case is effectively 14 months behind the median schedule, meaning the trial will likely be about 43 months after the filing of the complaint, not 29 months as indicated by the median time-to-trial statistics. This puts trial in July 2027, roughly one year after the FWDs are due.

Though a *Markman* hearing is set for mid-October (EX1082, 2), the median time from a *Markman* hearing to trial for Judge Wu is about 18 months[3] (EX1084),

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[2] This July 2026 FWD deadline assumes a standard 18-month schedule measured from the notice of filing date accorded (January 27, 2025). Paper 5.

[3] Judge Wu's median time to trial is 31 months and his median time to claim construction is 12.6 months (31 - 12.6 = 18.4). EX1084.

and for C.D. Cal., it is 15.4 months[4] (EX1083), putting trial somewhere between February and May of 2027, roughly 7-10 months after the FWDs are due. Thus, trial will likely occur at least many months after the FWDs are due.

PO wrongly assumes that the case will somehow manage to stay on track with the median 29.1-month schedule[5] despite the 14-month stay. Paper 7 at 28. Though PO appears to argue that some efficiencies will be gained from the ITC proceeding, it provides no evidence to support those assertions. Moreover, any efficiencies will be minimal since Petitioner was not a named party in the ITC proceeding and that proceeding involved different patents, one of which PO recently added to the district court case (the '977 patent on May 9, 2025). EX1081. Thus, there is no evidence to suggest the case will proceed significantly faster than normal. Indeed, the fact that PO is accusing two additional software offerings—File Explorer Search and SharePoint Search—that were not accused in the ITC proceeding (Windows Search

[4] The district court's median time to trial is 29.1 months (EX1042) and its median time to claim construction is 13.7 months (EX1083) (29.1 - 13.7 = 15.4).

[5] PO states that "29.1 months from [December 2023] filing is, therefore, on or about April 22, 2026." Paper 7 at 28. Petitioner believes PO meant that trial would be in "May 22, 2026," since 29.1 months from December 2023 is May not April 2026.

and Microsoft 365 Search) suggests that the case will likely not proceed at an accelerated pace.[6] EX1081, 5; EX1085, 5.

PO also wrongly faults Petitioner for using the statutorily guaranteed 1-year period to file its petitions. Paper 7 at 28-29. Such a stay when the case is in its infancy is precisely one of the circumstances where Petitioners should not be faulted for filing on or near the 1-year bar date. *Cf. Snap*, *Inc*. *v*. *SRK Tech. LLC*, IPR2020-00820 Paper 15 at 10-13 (PTAB Oct. 21, 2020) (Finding *Fintiv* factor 3 weighed against denial despite petitioner's delay in filing the petition more than a year after the filing of the complaint because only claim construction briefs, infringement contentions, and invalidity contentions had been exchanged in the parallel district court case); *Supercell Oy v*. *Gree*, *Inc*., PGR2020-00038 Paper 14 at 15 (PTAB Sept. 3, 2020). Thus, Petitioner should not be faulted for utilizing a statutorily granted right, especially given the 14-month stay.

[6] PO accused only Windows Search and Microsoft 365 Search in the ITC proceeding. EX1085, 5. In the district court case, however, PO accuses these two offerings as well as File Explorer Search and SharePoint Search. EX1081, 5.

B. Factor 3: District Court Case In Its Nascent Stages: Only The Complaint And Motions To Dismiss Have Been Filed; Claim Construction Hearing Set For Months After Institution Decisions

Factor 3 strongly weighs against discretionary denial because there has been almost no investment in the district court to date, and even by the time the institution decisions are due in these IPRs (July 27, 2025), there will still be only minimal investment.

To date, only the complaint and amended complaint (EX1081) have been filed. Judge Wu recently issued a scheduling order (EX1082), which sets out only minimal additional investments before the institution decisions are due on July 27. For example, PO's initial infringement contentions are not due until July 18 and Petitioner's invalidity contentions are not due until August 1. EX1082, 1. Opening claim construction briefs are not due until September 18 and the *Markman* hearing is scheduled for October 16. EX1082, 1-2.

PO points to investment in an ITC proceeding in which Petitioner was not a named party and which involved different patents than the ones challenged in these IPRs. PO cites no caselaw to support its argument that investment in that case has any bearing on *Fintiv* Factor 3. Because it does not. Thus, this legally unsupported and misplaced argument should be disregarded.

Moreover, any investment by the Petitioner and PO in the ITC proceeding has little to no bearing on their investment in the district court. The parties will not be able to skip steps or phases because of the ITC proceeding. The parties will still have to go through the *Markman*, discovery, summary judgment, and pre-trial and trial phases, including exchanging infringement and invalidity contentions, exchanging expert reports, conducting depositions, drafting substantive motions, responding to discovery requests, attending hearings, etc. Although there is some overlap in the subject matter between the three patents in these IPRs and the two patents in the ITC proceeding, the ITC patents are distinct at least in that they claim a search command feature not claimed by the three patents challenged in these IPRs.

To the extent PO points to a recently added patent from the ITC proceeding, those arguments should be dismissed at least because that patent was added belatedly and has already been found to not be infringed by Microsoft customers. At the time PO filed its brief, the three patents challenged in these IPRs were the only patents asserted in district court. Then, on May 9, nearly 17 months after it filed its initial complaint, PO added one of the patents from the ITC proceeding (the ’977 patent) via an amended complaint. EX1081. The ITC, however, already found that this patent was not infringed by Petitioner’s customers because the accused search functionality does not search the contents of documents. EX1085, 8-19.

C. Factor 1: District Court Case Will Likely Be Stayed If IPRs Instituted

Factor 1 weighs against discretionary denial because Judge Wu will likely grant a stay if the IPRs are instituted at least because he has done so in similar instances with even more investment in the district court proceeding. *See*, *e.g.*, *Mediatek Inc*. *v*. *NXP Semiconductors NV*, 2-21-cv-04969-GW-AFM (C.D. Cal.), ECF Nos. 112 (June. 21, 2022), 115 (Jun. 23, 2022) (granting a stay where IPRs were filed on five of six asserted patents and parties had already filed claim construction briefs and served infringement and invalidity contentions); *Polaris PowerLED Tech.*, *LLC v. Vizio*, *Inc*., 2-23-cv-03478, ECF No. 87 (C.D. Cal Apr. 8, 2024) (granting a stay even after a *Markman* Order had been issued); *Stratosaudio*, *Inc*. *v*. *Hyundai Motor America*, 2-22-cv-01712, ECF No. 137 (C.D. Cal. Apr. 28, 2022) (granting a stay even after a *Markman* Order had been issued).

Indeed, PO did not cite a single instance in which Judge Wu has denied a motion to stay where the PTAB has instituted IPR on most or all asserted claims and where the parties had not raised additional counterclaims or other causes of action (e.g., false advertising).

Moreover, the stay factors favor a stay.

The first stay factor (stage of the proceeding) favors a stay because, as explained above for *Fintiv* factor 3, the case is in its infancy. *Supra* Section II.B. By

the time an institution decision is issued in these IPRs (July 27, 2025), only the initial infringement contentions will have been served. EX1082, 1. The *Markman* hearing is not set until mid-October. EX1082, 2. Thus, Judge Wu is very likely to find that the first stay factor favors a stay at least because he has done so in instances with even more investment. *See*, *e.g.*, *Mediatek,* ECF No. 112 at 2-3 (finding the first stay factor to favor a stay despite modest progress having been made, including the filing of claim construction briefs).

The second stay factor (simplification) also favors a stay because three of the four asserted patents are subject to IPR. If the three IPRs are instituted, Judge Wu is very likely to find that the second stay factor favors a stay at least because he has done so in similar instances where most, but not all, of the asserted patents were subject to IPR. *See*, *e.g.*, *Mediatek,* ECF No. 112 at 1, 3-4 (finding the simplification factor to favor a stay where IPRs had been filed—not even instituted—on five of the six asserted patents).

The third stay factor (undue prejudice and tactical advantage) also favors a stay because the three originally asserted patents (the ’035, ’490, and ’139) are all expired, PO seeks only monetary damages, not an injunction, and Petitioner filed its IPR petitions before even receiving the infringement contentions. *See*, *e.g.*, *Mediatek,* ECF No. 112 at 5-7.

D. Factor 4: Petitioner's *Sotera* Stipulation Minimizes Any Duplicative Efforts Concerns

Factor 4 weighs heavily against discretionary denial because Petitioner's *Sotera* stipulation (EX2009) minimizes any concerns about duplicative efforts. *Sotera Wireless*, *Inc*. *v*. *Masimo Corp*., IPR2020-01019, Paper 12 at 19 (PTAB Dec. 1, 2020).

PO's argument that the *Sotera* stipulation has "no meaningful simplification of the issues" because it applies on a per-patent basis (i.e., if only a subset of the IPRs are instituted, Petitioner will still be free to pursue the same grounds on any patent for which IPR is denied) is wrong on two counts.

First, *Sotera* stipulations are on a per-patent basis because IPR proceedings, infringement allegations, and invalidity grounds are on a per-patent basis. With respect to the only patent challenged in this proceeding, the precedential decision of *Sotera* establishes the Petitioner's stipulation here does meaningfully simply the issues. It will avoid litigating the same invalidity/unpatentability ground in parallel for this patent. That is so whatever happens with the other patents. Finally, PO cites no case law to support its position that a *Sotera* stipulation has "no meaningful simplification of the issues" where multiple IPRs are involved. Paper 7 at 31.

Second, PO's argument flies in the face of the statute. Congress knew that often multiple patents are asserted in the same action. Yet, it limited an IPR

proceeding to a single challenged patent and cabined statutory estoppel (upon issuance of a final written decision) to that single patent. Nothing in the AIA or elsewhere in the Patent Act suggests that Congress intended that for members of the public to take advantage of this new procedure for removing improvidently granted patents they would be compelled to forfeit legitimate defenses to other patents. That would be contrary to the statutory framework and purpose of weeding out bad patents.

PO's argument that Petitioner did not stipulate to not pursue commercial prior art based on the IPR prior art is similarly misplaced because Petitioner has not raised, or given any reason to suggest that it will raise, commercial prior art based on the IPR art in the district court proceeding. The April 25 FAQs for Interim Processes for PTAB Workload Management ("FAQs")[7] state that a *Sotera* stipulation "may not be particularly meaningful" "[w]here the petitioner ***is relying*** [(present tense)] on corresponding system art in a co-pending proceeding." FAQ 14 (emphases added). This is not the case here. Petitioner is not currently relying on corresponding system art in the co-pending district court litigation and has given no reason to suggest that it will.

[7]https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management

PO next advances the legally unsupported argument that Factor 4 weighs in favor of denial because Petitioner did not "stipulate that it would not pursue any other invalidity theory not available to them in an IPR (e.g., under §§101 or 112)." Paper 7 at 31. This again is contrary to the IPR and PGR statutory framework which provides for estoppel in district court proportionate to the unpatentability grounds that may be asserted in the proceeding. And it would defeat the statute's purpose by forcing alleged infringers to forfeit all of their invalidity defenses in district court to take advantage of the new vehicle for revoking bad patents in the Patent Office.

PO's argument that Petitioner's *Sotera* stipulation is untimely is wrong and should be ignored because it is based on a PTO policy that had not even been announced when Petitioner served its *Sotera* stipulation (i.e., the change in PTO policy occurred ***after*** Petitioner served its *Sotera* stipulation).

When Petitioner filed the petitions, the existing caselaw permitted "eleventh hour" *Sotera* stipulations served after a POR. *BMW of N. Am., LLC v. NorthStar Sys. LLC*, IPR2023-01017, Paper 12 at 10 (PTAB Dec. 8, 2023). However, after learning on an April 17 Webinar that *Sotera* stipulations might need to be filed before the discretionary denial brief, Petitioner diligently served the *Sotera* stipulation the very next day (on April 18). It wasn't until a week later—April 25, 2025—that the PTO provided written notice of this change in policy.

Regardless, Petitioner's stipulation is timely under both prior PTAB precedent (which is the law that should apply) and current PTAB guidance (which was issued after Petitioner filed its *Sotera* stipulation). Petitioner's *Sotera* stipulation is timely under then-existing PTAB precedent because Petitioner filed its *Sotera* stipulation before the POPR was filed. *See BMW*, Paper 12 at 10.

Petitioner's *Sotera* stipulation is also timely under the new PTO guidance because it expressly permits stipulations filed before patent owner's discretionary denial brief. According to the FAQs: "petitioner should file a *Sotera* or *Sand* stipulation as soon as practicable, so that a patent owner may address the impact of the stipulation in its discretionary denial brief." FAQ 14. Here, Petitioner filed its stipulations ten days before PO filed its discretionary denial brief, and PO addressed this stipulation in its briefing. Thus, PO has no basis to complain that Petitioner's stipulation was untimely, even under the new guidance.

E. <u>Factor 6: The Petition's Merits Are Compelling</u>

Factor 6 weighs heavily against discretionary denial because the merits are compelling. The claims recite nothing more than the combination of well-known features whose benefits were also well known: entering separate strings in a single search field, performing the search incrementally as those strings are updated, and searching the strings separately and intersecting the results.

For example, it was well known and common sense that entering a two-string search (e.g., "John Doe") returns more targeted, relevant results than a single-string search (e.g., "John"). *E.g.*, EX1057, 27 ("Searching for two or more keywords—both of which *must* appear in the results—is an excellent strategy for doing precise searches and greatly reducing the number of search results you have to consider.") (quoted by EX1003, ¶¶121, 128).

It was also well known to enter multiple search strings in a single search field, separated by a string separator character (e.g., a space, comma, plus sign, ampersand (&), etc.), as this functionality dates back to at least the early 1990s and was widespread in prior art search engines (e.g., Google, Yahoo, etc.). EX1003, ¶¶40-41 (citing/discussing background references EX1009, EX1019-EX1020, EX1057, EX1059, EX1061).

It also was well known that incremental searches provided several advantages over more traditional delimited searches, including speed, effectiveness, ease of use, etc. *E.g.*, EX1021, 126 ("Incremental searching has a number of … advantages over delimited searching. Incremental searching wastes less of a user's time …. Another advantage of incremental search is that … it provides constant feedback …. From the point of view of interface engineering, the advantages of incremental searching are so numerous … I can see almost no occasions when a delimited search would be preferred.") (cited by Paper 1 at 20-22, 25, 28, 30-32).

It was also well known to search each string separately and intersect the results, as this was one of only a few ways of locating documents containing words matching both search strings. EX1003, ¶¶ 42-43, 140-144.

The two obviousness grounds raised in the petition explain why a POSITA would have been motivated with a reasonable expectation of success to combine the search tool functionality taught by the Entourage or Lotus Notes references with well-known functionality expressly described by secondary references.

Ground	Reference	Claim Feature(s)
1	Lotus Notes References	Entering separated strings in a single search field;
	Raskin	Performing search incrementally
	Wu	Search each string separately and intersect results
2	Entourage References	Incrementally searching string entered in single search field
	True	Searching multiple strings entered in single search field
	Baeza-Yates	Search each string separately and intersect results

For Ground 1, the petition explains that a POSITA would have found it obvious to modify the single-field, multi-string search functionality taught by the Lotus Notes references (such as is included in the Search Bar and/or Query Builder tools) to perform the search incrementally (as taught by Raskin), given that the benefits of doing so (speed, responsiveness, ease of use, etc.) were well known and expressly described by Raskin. *E.g.*, Paper 1 at 23-25, 26-32; *infra* Section IV.A.1.

The petition further explains that a POSITA would have found it obvious to incorporate Wu's teaching to search each string separately and intersect the results "at least because it was one of a limited number of well-known, predictable approaches, and was simple and easy to implement." Paper 1 at 32.

For Ground 2, the petition explains that a POSITA would have found it obvious to modify the single-field incremental search functionality taught by the Entourage references (such as is included in the Quick Find tool) to also search multiple strings, as taught by True, at least because it was well known that such multi-string searches return more targeted, relevant results than single-string searches. Paper 1 at 50, 54-56, 59-63. The petition further explains that a POSITA would have found it obvious to incorporate Baeza-Yates' teachings to search each string separately and intersect the results "at least because this was: (1) one of only a limited number (a few at most) of known ways to identify documents containing more than one search string, (2) simple, predictable and easy to implement, and (3) especially well suited for Entourage's incremental search" (Paper 1 at 64).

III. INSTITUTION SHOULD NOT BE DENIED UNDER § 325(d) BECAUSE THE REFERENCES ARE NOT CUMULATIVE

Institution should not be denied under § 325(d) because the prior art cited in the petition is not the same or substantially the same as the prior art considered during prosecution (*Advanced Bionics* factor 1). *Advanced Bionics*, *LLC v. MED-EL*

Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 10 (PTAB Feb. 13, 2020). Thus, institution should not be denied under § 325(d) because *Advanced Bionics* factor 1 disfavors denial. There is no need to consider *Advanced Bionic*s factor 2. *Advanced Bionics* Paper 6 at 10 (Factor 2 need only be considered if "it is determined that the same or substantially the same art or argument previously were presented to the Office.").

PO does not dispute that none of the cited references were substantively considered by the Examiner. It also does not dispute that the combination of references in each of the petition's obviousness grounds teaches what the Examiner found was missing in the prior art. Instead, PO wrongly argues that no single reference teaches this feature, without citing any legal authority requiring the missing feature be disclosed by a single reference. Paper 7 at 18-26. Indeed, the law does not require this. *Becton*, *Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017). Thus, even if PO were correct that no single reference teaches what the Examiner found was missing in the prior art (which Petitioner does not agree with), this argument is immaterial because it is not supported by the law.

A. PO Does Not Dispute That None Of The References Have Been Substantively Considered By The PTO

As explained in the petition, institution should not be denied under Section 325(d) because none of the cited references were substantively considered by the Examiner during prosecution (*Advanced Bionics* step 1). Paper 1 at 3-6. PO does not dispute this. Instead, it argues that "[s]ubstantially [s]imilar [a]rt [w]as [p]reviously [p]resented to the Patent Office." Paper 7 at 19. Not so, as explained in the petition and below.

B. The Unpatentability Challenges Are Not Cumulative Because Each Ground Relies On References That Teach What The Examiner Found Was Missing In The Prior Art

PO wrongly argues that the references are cumulative because no single prior art reference discloses what the Examiner found was missing in the prior art: incrementally searching across documents for two search strings entered in the same search field. Paper 7 at 18-26; EX1002, 287-288. This is contrary to governing law and disregards the petition's prior art combinations.

1. PO's Argument That A Single Reference Must Disclose What The Examiner Found Was Missing Is Wrong And Not Supported By The Law

PO cites no case law requiring the missing element be disclosed in a single prior art reference to avoid Section 325(d) denial. Indeed, there is no such law. Instead, the law is clear that the proper Section 325(d) inquiry looks to the "material differences between the *asserted art* and the prior art involved during examination,"

not between each asserted prior art reference and the prior art involved during examination. *Becton*, *Dickinson* Paper 8 at 17–18 (emphasis added); *see also St. Jude Med.*, *LLC*, *v. Snyders Heart Valve LLC*, IPR2018-00105 Paper 15 at 12 (PTAB May 3, 2018) (no 325(d) denial where petition relied on three references cited during prosecution and where PO alleged that the fourth reference was cumulative because the "evidence of record does not demonstrate that the Examiner considered the references in the combinations relied upon by Petitioner."). Thus, PO's 325(d) arguments should be dismissed because they are legally unsupported.

2. Lotus Notes+Raskin (Ground 1) And Entourage+True (Ground 2) Teach What The Examiner Found Was Missing In The Prior Art

Each obviousness ground teaches what the Examiner found was missing in the prior art: incrementally searching across documents for two partial search strings entered in the same search field. EX1002, 287-288.

For Ground 1, the petition explains how Lotus Notes and Raskin teach this concept because the Lotus Notes references teach searching across documents for two search strings entered in the same search field and Raskin teaches performing such a multi-string search incrementally to increase the search's speed, effectiveness, and ease of use. *E.g.*, Paper 1 at 25, 26-32; EX1003, ¶¶80-89. The petition also explains that, by its very nature, an incremental search inherently searches partial search strings because it starts searching as soon as the user enters a

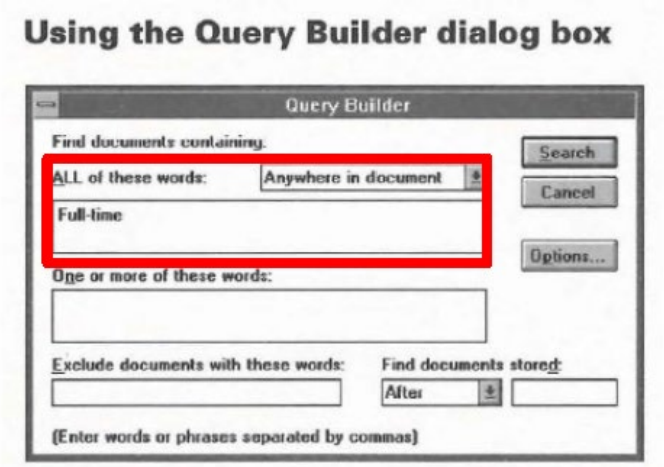
character. Paper 1 at 21 ("An incremental search … 'immediately begins to search' as soon as the user 'types the first character of the pattern'") (quoting Raskin (EX1021) at 125), 30-32. Thus, the Ground 1 combination is not cumulative to or substantially the same as the art considered during prosecution (*Advanced Bionics* Step 1).

PO does not dispute that Lotus Notes' Search Bar and Query Builder search across documents for two search strings entered in a single search field. Indeed, PO admits that at least the Search Bar includes this functionality. Paper 7 at 6 ("Wilcox describes the Query Builder feature in v. 3.0 as capable of searching on multiple words entered into a single search field.").

PO instead focuses on a *different* multi-word refinement tool of the Search Builder (Paper 7 at 20-22), ignoring the clear, express disclosure relied on in the petition of searching two strings entered in a single search field. Paper 1 at 24-29. As just a couple examples, the petition relies on the following disclosure from Londergan of this concept, implemented by the Search Bar, describing how a user can "type **gold and silver** to find documents that contain both the word *gold* and the word *silver*." EX1061, 140 (emphases in original) (quoted by Paper 1 at 29).

EX1061, 140. The petition also cites similar disclosure from Wilcox of this concept, implemented in the Search Bar, describing that "[y]ou can use the logical operators AND, OR, NOT, and ACCRUE to find documents that contain various combinations of words and text strings." EX1059, 162 (cited by Paper 1 at, e.g., 17, 29, 56).

Further, the petition cites disclosure from Wilcox of this concept, implemented by the Query Builder, in which "[t]o find documents containing all of several words, enter these words in the All Of These Words box. You should separate individual words by commas." EX1059, 162 (cited by Paper 1 at, e.g., 18-19, 29).



EX1059, 163 (red annotations added) (cited by Paper 1 at, e.g.,18-19, 29).

Thus, PO misleads by ignoring portions of the Lotus Notes references relied on by the petition that PO itself admits discloses the multi-string, single-field concept that it alleges are not a part of Lotus Notes' Search Builder.

PO also does not dispute that Raskin teaches performing an incremental search on multiple search strings and instead argues that: "Petitioner does not contend that Raskin discloses searching on multiple search strings *entered into a single search field*." Paper 7 at 22-23 (emphases added). *See also* Paper 1 at 31 (explaining that "Raskin specifically points to the type of search taught by Lotus Notes—a multi-string Boolean search—as a search that benefits from being performed incrementally. EX1021, 127 ('[B]uilding a Boolean search pattern is made more effective when the early results of the pattern appears as the user adds to the pattern's specificity.')).").

But whether Raskin expressly discloses that the search strings are entered in a single search field is irrelevant because the petition relies on Lotus Notes' disclosure of this concept. Paper 1 at 17, 27-28 (citing EX1059, 160-165; EX1061, 139-140). Specifically, the petition relied on Lotus Notes for its teachings on entering the search strings in the same search field and Raskin for its teachings to perform the search incrementally. Paper 1 at 23 ("A POSITA would have been motivated with a reasonable expectation of success to combine the teachings from the Lotus Notes references on locating documents containing multiple strings entered in a single search field with Raskin's teachings to provide search results incrementally."), 24-25, 29-32.

Thus, the Lotus Notes references and Raskin teach what the Examiner found was missing in the prior art and therefore Ground 1 should not be denied under § 325(d) at least because the references in Ground 1 are not substantially the same as, or cumulative of, the art submitted during prosecution (*Advanced Bionics* Step 1).

As for Ground 2, § 325(d) denial is inappropriate because True in combination with the Entourage references teach what the Examiner found was missing in the prior art. The petition explains how § 325(d) denial is improper because True was not substantively considered by the Examiner (*Advanced Bionics* Step 1) and teaches at least part of what the Examiner found was missing in the prior art (*Advanced Bionics* Step 2): incrementally searching two search strings entered in the same search field. Paper 1 at 3-4. Moreover, the petition explains how the combination of Entourage and True teaches incrementally searching across documents for multiple search strings entered in a single search field. *E.g.*, Paper 1 at 50 ("The Entourage+True+Baeza-Yates combination combines the Entourage references' teachings to incrementally locate documents, including emails, containing at least one search string entered in a search field with True's teachings to do so for multiple search strings.").

PO does not dispute that the Entourage+True combination teaches what the Examiner found was missing in the prior art. Instead, PO wrongly argues that "the Petition grossly misrepresents True's teachings; True does not teach incrementally

searching for multiple search strings entered into a single search field." Paper 7 at 24. PO's discretionary denial brief provides no justification for this conclusory assertion, including no explanation as to how or why the petition "grossly misrepresents True's teachings" or how or why True "does not teach incrementally searching for multiple search strings." Instead, PO's discretionary denial brief cites to paragraphs 129-132 of its expert declaration (EX2001).

These paragraphs, however, are inapposite and do not support PO's assertion. Specifically, these paragraphs dispute whether True searches across multiple documents and whether a POSITA would have been motivated to combine True with the Entourage references. EX2001, ¶¶129-132. But whether True searches across multiple documents is immaterial because Entourage teaches this concept. Paper 1 at 47, 50-63.

Though paragraph 131 of EX2001 disputes whether the search results in True necessarily or always include words that match both search string, the law does not require this. *E.g.*, *Unwired Planet*, *LLC v. Google Inc.*, 841 F.3d 995, 1002 (Fed. Cir. 2016); *Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003). Optional or occasional performance of a claimed function is enough to teach that function. *Unwired Planet* at 1002 ("It is enough that the combination would sometimes perform all the method steps."); *Hewlett-Packard* at 1326 ("Just as an accused product that sometimes, but not always, embodies a claimed method

nonetheless infringes … a prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.") (internal quotation marks omitted).

Here, PO does not dispute that True's search results include words that match both search strings in at least some instances. Indeed, the petition explains that True expressly discloses at least one instance in which a search result contains both the search string "queen" and the search string "mother." Paper 1 at 47, 60, 62, 63 (citing EX1009 (True), 5:43-49 ("[I]f the query is 'queen mother,' and a transcript window contains an occurrence of the word 'queen' with a confidence level of 0.27, another occurrence of the word 'queen' with a confidence level of 0.75, and an occurrence of the word 'mother' with a confidence level of 0.82, then the window's interest level is 1.84.")). This disclosure from True is sufficient to teach the claimed searching of multiple search strings.

Thus, § 325(d) denial is improper because the petition explains how Entourage and True in combination teach what the Examiner found was missing. Entourage teaches incrementally searching across documents for at least one search string and True teaches doing so for multiple strings. Paper 1 at 47, 50-63. Ground 2 should therefore not be denied under § 325(d) at least because the references in Ground 2 are not substantially the same as, or cumulative of, the art submitted during prosecution (*Advanced Bionics* Step 1).

IV. INSTITUTION SHOULD NOT BE DENIED UNDER THE MARCH 26 MEMO'S "OTHER CONSIDERATIONS"

A. The Merits Are Strong, Not Weak

As explained above for *Fintiv* Factor 6, the claims recite nothing more than the combination of well-known features: entering separate strings in a single search field, performing the search incrementally, and searching the strings separately and intersecting the results. *Supra* Section II.E. Each of the two obviousness grounds raised in the petition explains why a POSITA would have been motivated with a reasonable expectation of success to combine the search tool functionality taught by the Entourage and Lotus Notes references with well-known functionality expressly described by secondary references.

Ground	Reference	Claim Feature(s)
1	Lotus Notes References	Entering separated strings in a single search field;
	Raskin	Performing search incrementally
	Wu	Search each string separately and intersect results
2	Entourage References	Incrementally searching string entered in single search field
	True	Searching multiple strings entered in single search field
	Baeza-Yates	Search each string separately and intersect results

PO disputes the combination of the two Lotus Notes references (Wilcox and Londergan) for Ground 1, and, for Ground 2, disputes the combination of allegedly

disparate search tools in the Entourage references and the combination of the Entourage references with True. These arguments are wrong at least because they mischaracterize the petition's prior art combinations. For its arguments as to the Lotus Notes references and the Entourage search tools, PO wrongly focuses on the described systems' search tools, which are specific embodiments/implementations of the references' teachings, whereas the petition relies on the concepts and functionality taught by the prior art references. For example, PO focuses on Lotus Notes' Search Builder tool whereas the petition's Ground 1 relies on "the teachings from the Lotus Notes references on locating documents containing multiple strings entered in a single search field." Paper 1 at 23. For its arguments as to Entourage and True, PO wrongly focuses on a teaching in True that was not relied on by the petition—determining a confidence level that a word in an audio transcript was correctly transcribed. Thus, PO errs by focusing on the references' specific embodiments/implementations, rather than the teachings relied on by the petition, and by pointing to teachings not relied on by the petition. This mischaracterization of the petition's prior art combinations infects each of PO's combination arguments.

1. <u>The Ground 1 Prior Art Combination Is Strong</u>

The petition explains that a POSITA would have been motivated with a reasonable expectation of success to combine the complementary and corresponding teachings from the Lotus Notes references (Wilcox and Londergan) on searching

across documents for multiple strings entered in a single search field. *E.g.*, Paper 1 at 23 ("A POSITA would have been motivated with a reasonable expectation of success to combine the teachings from the Lotus Notes references on locating documents containing multiple strings entered in a single search field.").

PO disputes the combinability of Wilcox (EX1059) (describing Lotus Notes V3) and Londergan (EX1061) (describing Lotus Notes V5) by focusing on Londergan's Search Builder tool. Even though Wilcox and Londergan describe the same or substantially similar search functionality, including the same or substantially similar search tools of the same system (e.g., Lotus Notes' Search Bar), PO argues that the references are not combinable because Londergan's multi-word refinement feature of its Search Builder includes several search fields for entering search strings, whereas Wilcox's Query Builder provides only one. Paper 7 at 5-7. Specifically, PO argues that the combination of Wilcox and Londergan is "improper" because "the core user interface and search functionality differ materially between the two versions of Lotus Notes." Paper 7 at 7 (internal quotation marks omitted). To support this assertion, however, PO points only to the multi-word search refinement tool of Londergan's Search Builder, which includes multiple search fields. PO misleads by focusing on this multi-field disclosure and ignoring the references' complementary single-field disclosures relied on by the petition.

a) PO's Argument That The Lotus Notes References Are Not Combinable Because Of Londergan's Multi-Word Refinement Tool Is Immaterial

PO's argument that Londergan and Wilcox are not combinable is immaterial for two reasons.

First, whether the two Lotus Notes references are combinable is immaterial because each reference individually teaches the relevant claim elements for which the petition relies on Lotus Notes (e.g., searching across documents for multiple search strings entered in a single search field). *E.g.*, Paper 1 at 23-29, 33-34. For example, Londergan's Search Bar disclosure or Wilcox's Search Bar and/or Query Builder disclosures each teach the relevant claim elements. *E.g.*, Paper 1 at 17-19, 24, 26-30, 33-34. Indeed, PO does not dispute that the Search Bar disclosures or Wilcox's Query Builder disclosures teach the relevant claim elements at issue. Thus, PO's focus on the supposed incompatibility of Londergan's Search Builder and Wilcox's Query Builder is irrelevant and should be dismissed.

Second, whether the Query Builder and Search Builder are combinable is similarly immaterial because PO does not dispute that the Search Bar disclosure in Wilcox and/or Londergan teaches the claim elements for which the petition relies on Lotus Notes. *See* Paper 7 at 6.

b) <u>PO's Argument Is Legally Unsupported</u>

PO's argument that Londergan and Wilcox are not combinable because of Londergan's multi-word refinement tool is not supported by caselaw. Paper 7 at 5-7. Indeed, PO's discretionary denial brief cites no caselaw to support this assertion. It also ignores Londergan and Wilcox's otherwise complementary disclosures to search multiple search strings entered in a single search field (e.g., as in the Search Bar). In doing so, PO implies that the references must have a perfect one-to-one correspondence to be combinable. But this is an overly rigid interpretation of obviousness caselaw. A POSITA needs only a motivation to combine the relied-upon teachings from the references with a reasonable expectation of success. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417–18, 127 S.Ct. 1727 (2007). The petition provides exactly this:

> A POSITA would have been motivated to combine the complementary teachings on Lotus Notes from Londergan (EX1061) and Wilcox (EX1059) to obtain a more complete and comprehensive understanding of the Lotus Notes system, its features, and its capabilities. … A POSITA would have looked to Wilcox to gain a solid understanding of Lotus Notes' core functionality, and would have looked to Londergan for details on the new features in Lotus Notes 5 that were added to this core functionality. A POSITA would have reasonably expected

> success in combining the two references' complementary teachings on Lotus Notes' search functionality at least because the references describe using the same search tool (e.g., Lotus Notes' Search bar) for the same purpose: finding documents containing multiple strings entered in a single search field. Moreover, a POSITA would have understood Lotus Notes' core user interface and search functionality to be the same and/or at least compatible between the two versions.

Paper 1 at 24-25 (citation omitted).

Thus, PO's arguments as to the combinability of Wilcox and Londergan should be dismissed because they are not supported by law and because the petition provides a sufficient rationale for combining the Wilcox and Londergan references under the proper legal standard.

PO's discretionary denial brief also wrongly faults the petition for treating the Query Builder and Search Builder as "equivalent" (Paper 7 at 6, 7), but cites no caselaw requiring two references be "equivalent" to be combinable. Moreover, PO mischaracterizes the petition, which never expressly described the Query Builder and Search Builder as "equivalent." Instead, the petition analogized the two tools using a slash ("Query Builder/Search Builder") since both tools can be used instead of the Search Bar when entering a more complex search query (e.g., more than just a few search strings). Paper 1 at 13, 23. *See* EX1059, 162 ("Notes provides the Query

Builder dialog box to create complex queries."); EX1061, 142 ("Use [the Search Builder] when you want to look for more than just a couple of words or phrases.").

c) Londergan's Multi-Word Refinement Tool Would Not Demotivate A POSITA To Combine Wilcox And <u>Londergan's Complementary Teachings</u>

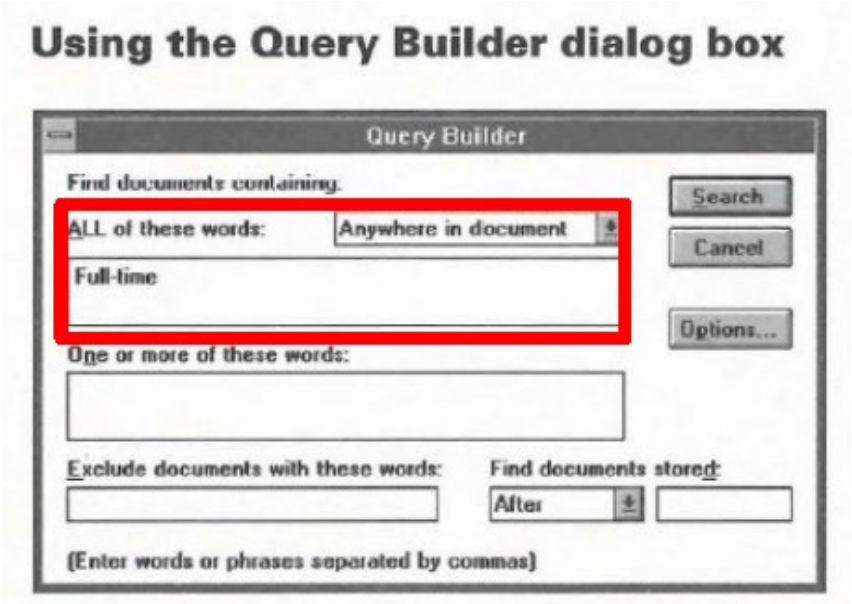
As explained in the petition, the Wilcox and Londergan references describe the same system (Lotus Notes) and the same or substantially the same Search Bar tool. Paper 1 at 16-17, 24. For example, both Wilcox's and Londergan's Search Bar searches across documents for multiple strings entered in a single search field. *E.g.*, Paper 1 at 17-19, 26-29. PO does not dispute this and even admits that "Wilcox describes the Query Builder feature in v. 3.0 as capable of searching on multiple words entered into a single search field." Paper 7 at 6.

EX1059, 164 (Wilcox's Search Bar) (cited by Paper 1 at 17-19, 26-28).

EX1061, 140 (Londergan's Search Bar) (cited by Paper 1 at 17-18, 29).

Wilcox's Query Builder also allows users to enter multiple search strings in a single search field separated by a comma, instead of a Boolean AND as in the Search Bar. EX1059, 162, ("To find documents containing all of several words, enter these

words in the All Of These Words box. You should separate individual words by commas.") (cited by Paper 1 at18-19, 26-29). PO does not dispute this.



EX1059, 163 (red annotations added) (cited by Paper 1 at18-19, 26-29).

The petition explains that it relies on these complementary teachings from Wilcox and Londergan to search across documents for multiple strings entered in a single search field. *E.g.*, Paper 1 at 23-24.

PO fails to explain why Londergan's multi-word refinement tool would demotivate a POSITA from combining these complementary disclosures in Londergan and Wilcox on this multi-string, single-field functionality. Although Londergan's multi-word refinement tool allows users to enter search strings in different search fields, Londergan explains that this may be useful in one specific use case: "when you want to look for more than just a couple of words or phrases."

EX1061, 142. PO fails to explain how this one specific use case would demotivate a POSITA from combining the references' complementary teachings to provide a single search field in other use cases, such as when entering fewer search strings (e.g., two or three search strings). Indeed, PO does not dispute that a POSITA would have been motivated to combine Wilcox's and Londergan's complementary teachings to provide a single search field (e.g., as in the Search Bar), and fails to explain why a POSITA would have been demotivated to do so because of the separate and distinct multi-word refinement tool of the Search Builder, which may be desirable in one specific use case.

PO also fails to explain how, even for the multi-word refinement tool's particular use case (entering many search strings), a POSITA would not be motivated to additionally or alternatively allow the user to enter the search strings in a single search field, separated by a comma, as in Wilcox's Query Builder. Londergan itself expressly references the Query Builder, suggesting to a POSITA that Londergan's multi-word refinement tool is not a replacement for the Query Builder. EX1061, 194 ("**Query Builder**: A dialog box you fill out that makes it easy to define the criteria for a full-text search."). Thus, this simple design choice difference between the Search Builder's multi-word refinement tool and the Query Builder for separating search strings (a comma vs. different search fields) would not cause a POSITA to completely disregard these references' otherwise complementary

teachings or treat the Query Builder's single search field and the multi-word refinement tool's separate search fields as wholly incompatible teachings. Instead, a POSITA would have understood these to be two possible options for allowing a user to enter many search strings.

2. **The Ground 2 Combination Is Strong**

The petition explains that a POSITA would have been motivated with a reasonable expectation of success to combine the complementary teachings from the Entourage references on incrementally searching across documents for at least one search string entered in a single search field with True's teachings to do so for multiple search strings. *E.g.*, Paper 1 at 50 ("A POSITA would have been motivated to combine the Entourage references' teachings to incrementally search at least one search string entered in a single search field … with True's express teachings to do so for multiple search strings entered in the search field."). The petition also pointed to Entourage's teachings to search multiple search strings (Paper 1 at 52-53) and relied on Entourage's teachings to highlight search terms in the results (Paper 1 at 75-76).

PO wrongly argues that the petition's reliance on these different functionalities in the Entourage references is improper because they are implemented by different search tools in the Entourage system. Paper 7 at 7-11. PO also wrongly argues that True is not combinable with the Entourage references. Paper 7 at 11-14.

a) The Petition Points To Complementary, Side-By-Side Functionalities In Entourage

The petition explains how it would have been obvious to a POSITA to combine the Entourage references' teaching to incrementally search across documents for at least one search string entered in a search field (e.g., as in the Quick Find tool) with True's teaching to do so for multiple search strings, especially given Entourage's teachings to receive multiple search strings in its Advanced Find tool. Paper 1 at 42, 50-63.

The petition also explains how it would have been obvious to highlight search terms in any located documents given Entourage's teachings to highlight terms in a document (e.g., as in the Find tool) and given that it was well known in the art to highlight the search terms to point the user to the relevant portions of the search result and give the user confidence in the search results. Paper 1 at 11, 75-77; EX1003, ¶¶48-52, 188-194.

PO first errs by focusing on Entourage's specific search tools (the Find, Advanced Find, and Quick Find tools)—and treating their underlying functionality as disparate features (Paper 7 at 7-11)—rather than addressing the petition's prior art combinations, which rely on the references' teachings to perform an incremental search, search multiple search strings, and highlight the search terms. *E.g.*, Paper 1 at 50, 52-53, 75-77.

PO then errs by faulting the petition for allegedly cherry-picking features from Entourage's side-by-side search tools (the Find, Advanced Find, and Quick Find tools) without providing a motivation to combine these allegedly disparate features. Paper 7 at 10. *See also*, *e.g.*, EX1004, 8-12 (describing the Find, Advanced Find, and Quick Find tools side by side), 161-164 (same). This argument is factually incorrect (the petition did provide reasons for combining these teachings), legally unsupported, and immaterial.

On the law, the Federal Circuit has repeatedly found that a Petitioner does not need to provide a supporting rationale for combining features from side-by-side embodiments because doing so "does not require a leap of inventiveness." *Boston Sci. Scimed*, *Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed. Cir. 2009); *see also Paice LLC v. Ford Motor Co.*, 681 F. App'x 904, 917 (Fed. Cir. 2017). Here, Entourage's three search tools are described side-by-side in at least the Schwartz reference (EX1004, 8-12, 161-164). Thus, the petition did not need to provide a reason for combining the incremental search functionality, single-field, multi-string search functionality, and the highlighting functionality from these side-by-side embodiments and PO's arguments to the contrary should be dismissed because they are contrary to law.

On the facts, the petition explains that Entourage's teaching to search for multiple strings (e.g., as in Advanced Find tool) at least suggests to a POSITA to do

so when performing an incremental search (e.g., the Quick Find tool), and would have been motivated to do so given True's express teaching to do so and given that the benefits of such multi-string searches (providing more targeted, relevant results) were well known.

> The Entourage references also expressly disclose 'searching for text string**s**' (plural), at least suggesting to a POSITA to receive multiple search strings in the single search field of Entourage's incremental Quick Find search. EX1004, 267-269 (emphasis added). … Moreover, a POSITA would have been motivated to incorporate True's express teachings to receive two search strings in the search field … to provide more targeted searching, as was common sense and well known in the art. *Supra* Section IV.B.2; EX1057, 27 ('Searching for two or more keywords—both of which *must* appear in the results—is an excellent strategy for doing precise searches and greatly reducing the number of search results you have to consider.').

Paper 1 at 53-54.

On the highlighting functionality, the petition explains that "highlighting a plurality of occurrences of the search string(s) provides several benefits, including pointing the user to the relevant portions of the document and increasing the user's confidence in the search results." Paper 1 at 77. Dr. Terveen further explained that

"as explained by Baeza-Yates, Johnson, and others, highlighting a plurality of occurrences of the search string(s) provides several benefits, including greater context and greater user confidence in the search results." EX1003, ¶157; *see also id*., ¶¶45 ("It was well known before 2002 to display the portion(s) of a located document containing the search term(s) and highlight the search term(s) to give the user confidence in, and context for, the search results. … EX1027, 3-10 ('In-document match highlighting and search capabilities can also support user confidence. When a document is selected for viewing from a search results list, the search terms matched in the document text should be highlighted.')"), 49-52, 192, 193 194.

Thus, PO's argument that the petition never explained why a POSITA would have been motivated to combine these different functionalities from Entourage is simply wrong and should be dismissed.[8]

These arguments are also immaterial.

[8] Although PO faults the petition for allegedly not providing a motivation to combine these functionalities from the Entourage references, PO's discretionary denial brief does dispute that there would have been a motivation.

PO's arguments as to the Advanced Find tool's multi-string search is immaterial because the petition relies on True—not Entourage—for its teachings on receiving multiple search strings in the same search field. Paper 1 at 50, 54-55.

PO's argument as to the Find tool's highlighting feature is immaterial for two reasons. First, the highlighting feature is immaterial because the petition relies on numerous background references, such as EX1017, EX1020, EX1023, EX1027, EX1028, EX1030, EX1031, EX1033-EX1036, EX1038, EX1044, EX1057, not just the Entourage references, to teach the claims' highlighting concept. Paper 1 at 11, 76-77; EX1003, ¶¶48-52, 188-194. Second, the highlighting concept is immaterial because it is recited in a dependent claim and is therefore irrelevant as to whether the petition demonstrates a reasonable likelihood of success on at least one claim (e.g., the independent claim), which is all that is required for institution.

b) The Petition Explains Why A POSITA Would Have Been Motivated To Combine Entourage's Teachings To Incrementally Search Across Multiple Documents With True's Teachings To Do So For Multiple Search Strings

The petition explains that the Entourage references teach incrementally searching a set of documents for at least one search string entered in a search field and explains that a POSITA would have been motivated with a reasonably expectation of success to do so for multiple search strings entered in the search field,

as taught by True, because it was well known that searching two strings instead of one provides more relevant, targeted results. Paper 1 at 41-42, 50, 52-63.

PO first argues that True does not teach what Entourage is allegedly missing—incrementally searching a set of documents for multiple strings—because (1) True does not search across documents, and (2) True's search method allegedly only sometimes (not always) performs the claimed step. Paper 7 at 12. Argument (1) is immaterial because it is based on a mischaracterization of the petition, and argument (2) is wrong on the law.

PO's argument that True does not disclose searching across documents is immaterial because Entourage discloses this concept. Specifically, the petition relies on Entourage for its teachings on incrementally searching a set of documents and True for its teachings to incrementally search multiple strings. Paper 1 at 41-42, 50 ("The Entourage+True+Baeza-Yates combination combines the Entourage references' teachings to incrementally locate documents … containing at least one search string entered in a search field with True's teaching to do so for multiple search strings.").

PO errs by focusing on only True's alleged lack of disclosure on searching documents, when PO itself acknowledges that the primary reference in the ground (Entourage) discloses this concept. Paper 7 at 12, 13 ("Entourage's search tools … search across multiple documents and databases such as email folders, calendars,

and notes.”). Thus, as explained in the petition, the Entourage+True combination teaches incrementally searching a set of documents for multiple strings entered in a single search field. Paper 1 at 50, 54-56, 59-63. PO’s argument that True does not search across documents is therefore immaterial and should be dismissed.

PO’s argument that True does not teach searching for multiple search strings because True’s incremental multi-string search does not always or necessarily return results containing words matching both search strings is wrong on the law. “It is enough that the combination would sometimes perform all the method steps.” *Unwired Planet*, 841 F.3d, 1002. “Just as an accused product that sometimes, but not always, embodies a claimed method nonetheless infringes … a prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.” *Hewlett-Packard*, 340 F.3d, 1326 (internal quotation marks omitted). Thus, this argument should be dismissed because it is contrary to law.

As explained in the petition, True teaches locating at least some transcript windows containing words that match both search strings. For example, True expressly discloses locating a transcript portion that includes both the search string “queen” and the search string “mother.” True (EX1009) at 5:43-49 (“[I]f the query is ‘queen mother,’ and a transcript window contains an occurrence of the word ‘queen’ with a confidence level of 0.27, another occurrence of the word ‘queen’ with a confidence level of 0.75, and an occurrence of the word ‘mother’ with a confidence

level of 0.82, then the window's interest level is 1.84."). This sufficiently teaches searching for multiple search strings.

PO next argues that a POSITA would not have been motivated to combine True's multi-string search with Entourage because True's search is allegedly less accurate because it searches an audio transcript, which may not accurately reflect the underlying audio. Paper 7 at 13. Thus, True assigns a confidence level to each word indicating the degree to which the search tool believes the word was accurately transcribed. Paper 7 at 13.

This argument is wrong because it mischaracterizes the combination and is factually unsupported. It mischaracterizes the petition because the petition did not rely on True's teaching to assess the veracity of transcribed audio. Instead, the petition relies on True for its teaching to perform a single-field incremental search on multiple strings. Paper 1 at 50 ("The Entourage+True+Baeza-Yates combination combines the Entourage references' teachings to incrementally locate documents … containing at least one search string entered in a search field with True's teaching to do so for multiple search strings."), 52-63.

The petition points to True's veracity assessor only to confirm that True treats the search terms as separate strings and searches the strings separately. Paper 1 at 62-63 ("The search tool separately searches each search string (e.g., 'queen' and 'mother') and displays 'query results … as the query is being input' (EX1009, 2:41-

42) according to the number of occurrences of the search strings in each document (transcript window) and the system's confidence that the strings were correctly transcribed by the speech recognizer. … A POSITA would have understood that True's search tool separately searches each search string at least because the search tool ranks the search results based on the number of occurrences of each search string in the audio transcript, regardless of their position in the audio transcript."). PO's position improperly requires wholesale bodily incorporation of True's entire search tool (including its veracity assessor) in the Entourage search tool. This is contrary to the petition's reliance on True only for its technical teaching of incrementally searching multiple search strings entered in a single search field.

True's separate and distinct teaching to also assess the veracity of the transcribed words does not make True incompatible with Entourage. *See Omega Pats*., *LLC v. BMW of N. Am*., *LLC*, No. 2022-2012, 2024 WL 227801, at *3 (Fed. Cir. Jan. 22, 2024) (upholding PTAB obviousness finding because the allegedly incompatible teaching in one of the prior art references was separate from the teaching relied upon by Petitioner's prior art combination). The only reason True's search is allegedly "less accurate" when performed on transcribed audio is because the transcription itself may not be accurate. This has nothing to do with the accuracy of the multi-string search functionality itself, however, which is what the petition relies on.

PO fails to explain how True's extra ability to assess the veracity of transcribed audio would demotivate a POSITA from incorporating True's separate and advantageous teaching to search multiple search strings, especially given Entourage's teaching to employ this functionality (e.g., in the Advanced Find tool). PO provides no explanation of how the teaching in True that the petition actually relies on—searching multiple strings—would make the incremental search functionality taught by the Entourage references any less accurate. Indeed, PO's discretionary denial brief does not dispute that a POSITA would have been motivated to ensure that Entourage's Quick Find search allows a user to enter multiple search strings in the search field, as taught by True, to return more targeted, relevant results, as was well known in the art. Paper 1 at 50, 54-56. That alone is dispositive. PO's attempt to hatch a demotivation argument by twisting the petition's prior art combination should be disregarded.

PO's argument that the petition did not explain how a POSITA would have reasonably expected to succeed in incorporating True's assignment of confidence levels is misplaced. Paper 7 at 14. The petition does not suggest incorporating True's teachings to assign confidence levels to each searched word's occurrence but rather explains that a POSITA would have been motivated with a reasonable expectation of success to incorporate True's more general teaching to incrementally search multiple search strings. Paper 1 at 50, 52-66. A POSITA would have understood that

this confidence level teaching is not necessary when searching Entourage's documents that originated from text not speech.

B. The Petition's Reliance On The Knowledge Of A POSITA Is Permissible And Supports Its Obviousness Showing

Despite the law being clear that Petitioners can rely on the knowledge of a POSITA to supply missing claim limitations and that the references in a prior art combination need not expressly disclose every claim element to render the claims obvious, PO wrongly argues to the contrary. Paper 7 at 15 (arguing that institution should be denied because "Petitioner relies heavily on its expert's conclusory opinions to: … use the alleged knowledge of a POSITA to fill in claim limitations missing from the prior art" and that "the Petition does not identify any express disclosure that True separately searches on multiple words entered into the search box").

As explained in the petition, all challenged claims are unpatentable under the proper obviousness standard. Paper 1 at 15-82. Moreover, PO's faulty legal argument is immaterial because the petition's prior art combinations still teach every claim element, even without the background knowledge of a POSITA.

1. PO Is Wrong For Faulting The Petition's For Allegedly Relying On The Knowledge Of A POSITA

As a matter of law, PO is wrong for faulting the petition for allegedly relying on the knowledge of a POSITA. *See*, *e.g.*, *Koninklijke Philips N.V. v. Google LLC*,

948 F.3d 1330, 1337 (Fed. Cir. 2020). PO overlooks Federal Circuit precedent holding that it is permissible to rely on expert testimony about the knowledge of a POSITA so long as that testimony is corroborated by evidence, such as from background prior art references. For example, in finding that Google permissibly relied on background knowledge to supply a missing limitation missing in the cited prior art reference, the Federal Circuit in *Koninklijke* stated that:

> Although the prior art that can be considered in inter partes reviews is limited to patents and printed publications, it does not follow that we ignore the skilled artisan's knowledge when determining whether it would have been obvious to modify the prior art. Indeed, … the inquiry into whether … the invention [would have been] obvious to a skilled artisan necessarily depends on such artisan's knowledge. … Philips argues that this case is analogous to *Arendi*. We disagree. In Arendi, the Board relied on nothing more than conclusory statements and unspecific expert testimony in finding that it would have been common sense ... to supply a limitation that was admittedly missing from the prior art. … Conversely, here the Board relied on expert evidence, which was corroborated by Hua.

948 F.3d, 1337-1338 (distinguishing *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016) on basis that Board in *Arendi* relied on unsupported,

conclusory expert testimony about a POSITA's knowledge, whereas the expert testimony in *Koninklijke* was supported by a background prior art reference). Here, the petition and Petitioner's expert, Dr. Terveen do exactly this: they cite several background references to evidence a POSITA's knowledge of certain well-known claim features. Paper 1, 8-11; EX1003, ¶¶30-50. Thus, PO's arguments that the knowledge of POSITA is improper or irrelevant should be disregarded.

a) The Knowledge Of A POSITA Supports The Petition's Merits

As explained by the petition and Dr. Terveen, the knowledge of a POSITA underscores the obviousness of these claims because the claims amount to nothing more than the combination of well-known concepts, such as incremental searching and searching multiple strings entered in a single search field. *E.g.*, Paper 1 at 1-2, 15, 25, 29-30, 50, 54-56. These are not bald assertions. The petition and Dr. Terveen cite several background references as evidence that these concepts were well known. *E.g.*, Paper 1 at 8-11; EX1003, ¶¶30-50.

b) PO Misapplies Obviousness Law By Arguing That Express Disclosure Of Every Element Is Required

Although Section 103 does not require express disclosure of each and every element, PO faults the petition for allegedly not showing where the True reference in Ground 2 expressly discloses separately searching multiple words (Paper 7 at 16). PO cites no caselaw requiring that every element be expressly disclosed, and indeed

the law has no such requirement. *See*, *e.g.*, *Apple Inc. v. Gesture Tech. Partners, LLC*, 129 F.4th 1367, 1377 (Fed. Cir. 2025) ("obviousness … does not require an express disclosure"). Thus, PO's legally unsupported argument regarding express disclosure of every claim element should be dismissed.

c) PO's Arguments Are Immaterial Because The Obviousness Combinations Teach Every Claim Element Even Without The Knowledge Of A POSITA

(1) The Petition And Dr. Terveen Both Explain How True Teaches Searching Multiple Strings Entered In A Single Search Field

PO's argument that institution should be denied because the petition and Dr. Terveen did not identify any express disclosure that True "separately searches on multiple words entered into the search box" is factually inaccurate and immaterial. Paper 7 at 15.

The argument is factually inaccurate because the petition and Dr. Terveen explain that True teaches separately searching multiple words, such as the words "queen" and "mother," entered in a search box. Paper 1 at 62-63; EX1003, ¶¶137-138. The petition and Dr. Terveen further explain that True's search tool locates a transcript window containing two instances of the word "queen" and one instance of the word "mother." *Id*. "[I]f the query is 'queen mother,' and a transcript window contains an occurrence of the word 'queen' with a confidence level of 0.27, another

occurrence of the word 'queen' with a confidence level of 0.75, and an occurrence of the word 'mother' with a confidence level of 0.82, then the window's interest level is 1.84 (0.27+0.75+0.82)." EX1009 (True), 5:43-49 (cited by Paper 1 at 63; EX1003, ¶138). Dr. Terveen explained that "[a] POSITA would have understood that True's search tool separately searches each search string at least because the search tool ranks the search results based on the number of occurrences of each search string in the audio transcript, regardless of their position in the audio transcript." EX1003, ¶138.

Even if True did not teach separately searching the search strings, PO's argument is immaterial because Baeza-Yates teaches this concept of separately searching two search strings. Specifically, the petition explains that:

> [W]hen implementing True's teachings to search two search strings, a POSITA would have been motivated with a reasonable expectation of success to incorporate Baeza-Yates' teachings to locate documents containing the two search strings by independently searching each string and then taking the intersection of those results (i.e., locating a first group of documents that has at least a first word that begins with the first string, locating a second group of documents that has at least a second word that begins with the second string, and identifying one or more documents that are included in each of the first and second groups of documents) at least because this was: (1) one of only a

> limited number (a few at most) of known ways to identify documents containing more than one search string, (2) simple, predictable and easy to implement, and (3) especially well suited for Entourage's incremental search.

Paper 1 at 64; *see also id*., 65-66 (explaining exactly how Baeza-Yates teaches this concept and how this concept was well known in the art). PO's discretionary denial brief does not dispute Baeza-Yates' teachings or its combinability with the Entourage references and True. Thus, any argument that True does not teach separately searching two search strings should be dismissed because it is irrelevant.

C. Institution Should Not Be Denied Because The Petition Maps The Prior Art Under The Claims' Plain And Ordinary Meaning

The petition applies the plain and ordinary meaning of all claim terms. Paper 1 at 14-15. PO wrongly argues that institution should be denied because Petitioner violated 37 C.F.R. § 42.104(b)(3) (requiring that the petition identify how the challenged claims are to be construed) by implicitly construing (1) a "string separator character" to include Lotus Notes' Boolean operator (e.g., AND), and (2) "documents" to include True's transcript windows. Paper 7 at 16-18. These arguments are immaterial, unsupported by law, and/or factually incorrect.

1. PO's Argument Is Immaterial Because The References Include Other Examples That Teach The Disputed Claim Terms

PO's argument as to Lotus Notes' Boolean operator is immaterial because the petition also points to Lotus Notes's disclosure of using a comma as a string separator character, which PO does not dispute is a string separator character. Paper 1 at 17, 27, 55-56. The petition also explains that it also would have been obvious to replace a Boolean AND with a well-known functional equivalent, such as a plus sign or space, which PO also does not dispute. Paper 1 at 27, n. 6 ("[I]t would have been obvious to a POSITA when implementing Raskin's teachings to perform the search incrementally to use a single-character string separator character, such as a plus sign, as was known in the art (*e.g.*, EX1057, 60, 109, 129, 151), or a comma, as described by the Lotus Notes references (EX1059, 159-165), at least because a POSITA knew that a goal of the incremental search is to minimize the number of characters the user has to enter before obtaining the desired search results. *E.g.*, EX1021, 125-127."); EX1003, ¶¶42-43.

Similarly, PO's argument as to True's transcript windows not being documents is immaterial because the petition relies on the Entourage references' teaching to search across documents, and PO does not dispute the Entourage references teach this concept. Paper 1 at 50, 56-60.

a) PO's Argument Should Be Dismissed Because It Is Not Supported By Any Law

PO cites no caselaw to support its arguments that affirmatively applying a plain and ordinary meaning construction and mapping art under that construction violates the regulation, or that doing so warrants discretionary denial. Thus, these arguments should be dismissed because they are legally unsupported.

PO's argument wrongly implies that even if a petition applies the plain and ordinary meaning for all claim terms, the petition must still set forth an affirmative construction for every term.

b) The Petition's Contention That The Plain And Ordinary Meaning Of The Claims' "String Separator Character" Encompasses Lotus Notes' Boolean AND Operator Does Not Violate The Regulation

As explained in the petition, the plain and ordinary meaning of a string separator character is exactly what it says it is: a character that separates strings. Paper 1 at 23-24 (n. 6, n. 7). "The'035 patent treats a space or other character as a string separator character if it causes the words/prefixes on either side of it to be treated as different strings (i.e., to be searched separately). *E.g.*, EX1001, 22:56-23:7; EX1002, 219, 236." Paper 1 at 27, n. 6. The petition explains that the Boolean AND causes the words on either side of it to be treated as different strings (rather than an exact phrase) because it instructs the search tool to find documents that

contain both search strings, regardless of where they are located (i.e., they can be non-adjacent). Paper 1 at 29, 30.

PO overlooks that the Boolean AND is separated on each side from the adjacent string by a space, which PO does not dispute is a string separator character. For example, the "and" in Londergan's exemplary "gold and silver" query is separated from each of the search strings "gold" and "silver" by a space. EX1061, 140.

PO's citation to claims 12 and 20 of the related '490 patent is misplaced. Specifically, PO argues that a Boolean AND operator is a modifier (*see* EX1077, claim 20), and concludes, without providing any sort of justification, that a modifier is separate and distinct from a string separator character (*see* EX1077, claim 12). Paper 7 at 17. PO does not explain, however, why a modifier is not a string separator character. PO also overlooks that the Boolean AND is separated on each side from the adjacent string by a space, which PO does not dispute is a string separator character.

Moreover, the patents' common specification contradicts this distinction between a string separator character and a modifier because, for at least some of the string separator characters recited in claim 12 of the related '490 patent (!, @, #, $, %, ^, &, *,), ;, :, ', ", ?, >), the specification describes these characters as modifiers to a search string. "[I]f a selected punctuation symbol, which can be a !, @, #, $, %,

^, &, *,), ;, :, ’, ”, ?, >, and/or other punctuation symbol, follows a word or character string directly, and is followed by a space, as in ‘mark$’ or ‘mark.’ or ‘mark−’, then optionally the word is searched as an exact match including the punctuation. So ‘mark-’ will not match ‘market’ or ‘mark[’].” EX1001, 26:22-32. Thus, the specification is clear that at least some of the string separator characters recited in claim 12 of the related ’490 patent are modifiers because they instruct the search tool to search for an exact match (i.e., they modify how the search tool interprets the search query and performs the search). As such, PO’s argument that the Boolean AND is not a string separator character should be dismissed because it is contrary to the specification.

V. CONCLUSION

The Director should not discretionarily deny institution of this IPR because there are no discretionary denial concerns, either under *Fintiv* or Section 325(d). The petition presents compelling merits and should be instituted.

Respectfully submitted,

Dated: May 28, 2025

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION PURSUANT TO 37 C.F.R. § 42.24

Consistent with the March 26 Memo, this opposition complies with the type-volume limitation of 37 C.F.R. § 42.24(b) because it contains **13,023** words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24.

The brief has been prepared in a proportionally spaced typeface using Microsoft Word for O365 in a 14-point Times New Roman font.

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CERTIFICATE OF SERVICE
IN COMPLIANCE WITH 37 C.F.R. § 42.6(e)(4)

The undersigned certifies that on May 28, 2025, a complete copy of **PETITIONER'S OPPOSITION TO PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIALAND EXHIBITS 1081-1086** were served on counsel for the Patent Owner via electronic mail as follows:

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