

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

TOUTVIRTUAL, INC.,
Patent Owner.

Case IPR2026-00295
U.S. Patent No. 11,656,915

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

REDACTED VERSION

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	THE DIRECTOR SHOULD DENY THE PETITION	2
A.	The <i>Fintiv</i> Factors Weigh Strongly in Favor of Denial	2
B.	Strong Settled Expectations Favor Denial	7
1.	ToutVirtual’s VirtualIQ Technology Addressed an Industry Need that Earned Praise and Recognition—Including by Microsoft Who Partnered with ToutVirtual in 2007.....	8
2.	Microsoft’s Awareness of ToutVirtual’s Portfolio, Combined with the District Court’s Parallel Validity Proceedings, Reinforce Strong Settled Expectations.....	11
C.	35 U.S.C. § 325(d) Favors Discretionary Denial	13
1.	Khandekar (Grounds 1A and 1B): Khandekar Was Previously Before the Office—Microsoft’s Own Construction Confirms No Material Error.....	13
2.	Hirschfeld Combinations (Grounds 2A and 2C): Hirschfeld is Substantially the Same as Singh, and Suffers from the Same Deficiency	16
3.	Khandekar-Vasilevsky (Ground 1D): The Office Already Rejected a Vasilevsky Combination as Inoperable—Microsoft’s Vasilevsky Combination Suffers the Same Fate	18
III.	CONCLUSION.....	20

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH,</i> No. IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020).....	13
<i>Amazon.com, Inc. v. Audio Pod IP, LLC,</i> No. IPR2025-00768, Paper 15 (P.T.A.B. Aug. 14, 2025).....	11, 12
<i>Amgen Inc. v. Bristol-Myers Squibb Co.,</i> No. IPR2025-00601, Paper 9 (P.T.A.B. July 24, 2025)	8, 11
<i>Apple Inc. v. Fintiv, Inc.,</i> No. IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020)	1
<i>Force Mos Tech. Co. v. ASUSTek Comput., Inc.,</i> No. 2:22-cv-00460-JRG, 2024 WL 1586266 (E.D. Tex. Apr. 11, 2024)	3
<i>Ingenico Inc. v. IOENGINE, LLC,</i> 136 F.4th 1354 (Fed. Cir. 2025)	6
<i>Jinkosolar Co. v. Longi Green Energy Tech. Co.,</i> No. IPR2025-00859, Paper 10 (P.T.A.B. Sept. 3, 2025).....	4
<i>Maxell Ltd. v. Apple Inc.,</i> No. 5:19-cv-00036-RWS, 2020 WL 10456915 (E.D. Tex. Apr. 27, 2020)	3
<i>Maxell, Ltd. v. Samsung Elecs. Co.,</i> No. 5:25-cv-00052-RWS, Dkt. No. 64 (E.D. Tex. Dec. 15, 2025)	2
<i>Motorola Solutions, Inc. v. Stellar, LLC,</i> No. IPR2024-01205, Paper 19 (P.T.A.B. Mar. 28, 2025)	5
<i>MSN Pharms., Inc. v. Breckenridge Pharm., Inc.,</i> No. IPR2025-01107, Paper 11 (P.T.A.B. Oct. 17, 2025)	4

<i>Murata Mfg. Co. v. Georgia Tech Rsch. Corp.</i> , No. IPR2025-00383, Paper 14 (P.T.A.B. July 29, 2025)	10
<i>NTP, Inc. v. Research in Motion, Ltd.</i> , 418 F.3d 1282 (Fed. Cir. 2005)	15
<i>NVIDIA Corp. v. Neural AI, LLC</i> , No. IPR2025-00608, Paper 16 (P.T.A.B. July 31, 2025)	4, 10, 12
<i>Samsung Elecs. Co. v. Vasu Holdings, LLC</i> , No. IPR2025-00446, Paper 12 (P.T.A.B. July 10, 2025)	2
<i>Shenzhen Tuoshu Tech. Co. v. Stratasys, Inc.</i> , No. IPR2025-00354, Paper 11 (P.T.A.B. June 12, 2025)	5
Statutes	
35 U.S.C. § 311(b)	6
35 U.S.C. § 325(d)	1, 2, 7, 13

PATENT OWNER'S EXHIBIT LIST

EXHIBIT	DESCRIPTION
2001	First Amended Docket Control Order, <i>ToutVirtual, Inc. v. Microsoft Corporation</i> , No. 25-cv-00943-RWS-RSP, Dkt. No. 35 (E.D. Tex. Feb. 23, 2026)
2002	Declaration of Vipul Pabari in Support of Patent Owner's Request for Discretionary Denial PROTECTIVE ORDER MATERIAL
2003	Declaration of James Hannah in Support of Patent Owner's Request for Discretionary Denial
2004	Docket Navigator webpage, Time to Trial in the Eastern District of Texas, dated January 1, 2024 through May 9, 2026
2005	Excerpts from U.S. District Court – Federal Case Management Statistics, Median Time from Filings to Trial (E.D. Tex.), 12-Month Periods Ending December 31, 2025, available at https://www.uscourts.gov/data-news/data-tables/2025/12/31/statistical-tables-federal-judiciary/t-3
2006	Summons in a Civil Action, <i>ToutVirtual, Inc. v. Microsoft Corp.</i> , No. 25-cv-00943-RWS-RSP, Dkt. No. 5 (E.D. Tex. Sep. 8, 2025)
2007	Excerpts from Defendant's Preliminary Invalidity Contentions, <i>ToutVirtual, Inc. v. Microsoft Corp.</i> , No. 25-cv-00943-RWS-RSP (E.D. Tex.), served on March 12, 2026
2008	U.S. Patent No. 8,799,431
2009	U.S. Patent No. 9,444,762
2010	ToutVirtual – VirtualIQ Pro 3 – Virtual Intelligence Best Practices

EXHIBIT	DESCRIPTION
2011	Reuters webpage, "Virtualization management takes center stage," dated August 26, 2009, available at https://www.reuters.com/article/business/environment/virtualization-management-takes-center-stage-idUS1669466711/
2012	ToutVirtual press release, "ToutVirtual Announces VirtualIQ Pro 3," dated January 13, 2009, available at https://www.toutvirtual.com/company/pr/VirtualIQ-Pro-January-13-2009.pdf
2013	Network Computing webpage, "ToutVirtual Unveils New Software," dated May 30, 2007, available at https://www.networkcomputing.com/network-management/toutvirtual-unveils-new-software
2014	PR.com press release, "ToutVirtual to Offer Product Suite via BT Engage IT," dated June 1, 2012, available at https://www.pr.com/press-release/417010
2015	Computer World webpage, "Computerworld Horizon Awards 2006 Honorees," dated August 21, 2006, available at https://www.computerworld.com/article/1649654/computer-world-horizon-awards-2006-honorees.html
2016	Network World webpage, "10 virtualization companies to watch," dated August 20, 2007, available at https://www.networkworld.com/article/824596/data-center-10-virtualization-companies-to-watch.html
2017	Network Computing webpage, "ToutVirtual Offered with Microsoft," dated April 5, 2007, available at https://www.networkcomputing.com/network-infrastructure/toutvirtual-offered-with-microsoft
2018	ToutVirtual press release - "ToutVirtual Announces Support for Microsoft Windows Server 2008 Hyper-V Virtualization," dated October 27, 2008

Patent Owner's Request for Discretionary Denial
IPR2026-00295 (U.S. Patent No. 11,656,915)

EXHIBIT	DESCRIPTION
2019	ToutVirtual, Inc. presentation, "Virtual Problems – Real Solutions," dated November 2006 PROTECTIVE ORDER MATERIAL
2020	E-mail from V. Pabari to T. Bailey and M. Neil, dated November 15, 2006 PROTECTIVE ORDER MATERIAL
2021	Excerpts of File History for U.S. Patent No. 8,799,431
2022	Excerpts of File History for U.S. Patent No. 11,656,915
2023	Order, <i>Maxell, Ltd. v. Samsung Elecs. Co.</i> , No. 5:25-cv-00052-RWS, Dkt. No. 64 (E.D. Tex. Dec. 15, 2025)
2024	U.S. Patent No. 10,810,050
2025	Petition for <i>Inter Partes</i> Review, <i>Microsoft Corp. v. ToutVirtual, Inc.</i> , No. IPR2026-00296, Paper 2 (P.T.A.B. Mar. 10, 2026)
2026	Default Protective Order

I. INTRODUCTION

The Director should deny institution under *Fintiv*, the settled expectations doctrine, and 35 U.S.C. § 325(d).

First, the *Fintiv* factors weigh strongly in favor of discretionary denial. *Apple Inc. v. Fintiv, Inc.*, No. IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential). Trial in the district court is scheduled for June 21, 2027, which is three months before a final written decision would be expected in this case, and there is little to no likelihood that the district court will stay the case pending a trial in this proceeding. Ex. 2001 at 1. Microsoft's narrow stipulation also precludes a trial in this case from representing a true alternative to the co-pending district court litigation: it allows Microsoft to re-litigate patentability under Sections 102 and 103 with unrestricted system art taken alone or in combination with art not asserted in this proceeding. Institution would, therefore, duplicate efforts and risk inconsistent decisions between both forums.

Second, strong settled expectations weigh in favor of discretionary denial. The '915 Patent is part of a patent portfolio that has been in force for 12 years and is the foundation for ToutVirtual's VirtualIQ technology, which met a recognized industry need and received praise and recognition—including from Microsoft. Microsoft, which operated in the same technology space, partnered with ToutVirtual in 2007. And it has been aware of ToutVirtual's '915 Patent family portfolio since

2006 as a result of the parties' partnership discussions and its own patent applications facing rejections based on the '915 Patent family portfolio. Ex. 2002 ("Pabari Decl."), ¶ 2. This prosecution-based notice is a natural consequence of the portfolio being a leader in the virtualization management technology space as demonstrated by having over 450 forward citations.

Finally, the '915 Patent family portfolio has been subject to examination by the Office for over two decades; the art that Microsoft asserts here is the same or substantially the same art and arguments subject to the two-decade long examination. It presents nothing new and identifies no error in the Office's analysis. Thus, discretionary denial is also warranted under 35 U.S.C. § 325(d).

II. THE DIRECTOR SHOULD DENY THE PETITION

A. The *Fintiv* Factors Weigh Strongly in Favor of Denial

Fintiv Factor 1: Whether the Parallel Proceeding will be Stayed

Factor 1 weighs in favor of discretionary denial because Microsoft has not moved for a stay, and it is highly unlikely that the district court would grant a stay even if trial was instituted in this case. *See Samsung Elecs. Co. v. Vasu Holdings, LLC*, No. IPR2025-00446, Paper 12 at 2 (P.T.A.B. July 10, 2025) (Factor 1 favors denial where "there is insufficient evidence that the district court is likely to stay its proceedings."); *see also* Ex. 2023, *Maxell, Ltd. v. Samsung Elecs. Co.*, No. 5:25-cv-00052-RWS, Dkt. No. 64 at 3 (E.D. Tex. Dec. 15, 2025) ("[C]ourts in this district

have a consistent practice of denying motions to stay when the PTAB has yet to institute post-grant proceedings.”) (citing cases).

First, this IPR proceeding would not simplify the district court litigation. The two oldest patents in the '915 Patent's family portfolio—U.S. Patent No. 9,444,762 (the “'762 Patent”) and U.S. Patent No. 8,799,431 (the “'431 Patent”)—are asserted at the district court but not challenged here. Accordingly, the district court is highly unlikely to stay the case because other asserted patents would “remain live” regardless of this IPR proceeding. *See Force Mos Tech. Co. v. ASUSTek Comput., Inc.*, No. 2:22-cv-00460-JRG, 2024 WL 1586266, at *4 (E.D. Tex. Apr. 11, 2024) (denying a stay where one of three asserted patents was unchallenged).

Second, by the time the Office decides whether to institute trial in this case, the district court litigation will have reached such an advanced state that a stay would unduly interfere with the ongoing proceeding. *Maxell Ltd. v. Apple Inc.*, No. 5:19-cv-00036-RWS, 2020 WL 10456915, at *2 (E.D. Tex. Apr. 27, 2020) (denying a motion to stay because the case was far enough along that it would have interfered with the ongoing proceeding). By the projected institution date (September 2026), the parties will have exchanged preliminary infringement and invalidity contentions, begun claim construction, and conducted source code review. Ex. 2001 at 5.

Fintiv Factor 2: Proximity of Trial to the Board's Final Written Decision

Factor 2 favors denial because trial is scheduled to commence three months

before the projected Final Written Decision (“FWD”). Trial is set for June 21, 2027; the projected FWD is September 16, 2027. Ex. 2001 at 1; *see MSN Pharms., Inc. v. Breckenridge Pharm., Inc.*, No. IPR2025-01107, Paper 11 at 2 (P.T.A.B. Oct. 17, 2025) (discretionarily denying institution where the projected FWD was a little over two months after the scheduled trial date). The median time-to-trial statistics for the Eastern District of Texas suggest that trial will begin around September 8, 2027, which remains earlier than the projected FWD date. Ex. 2004; Ex. 2005; Ex. 2006 at 1.

This timing means the district court and the Board would litigate validity concurrently, creating “significant duplication of effort, expense for the parties, and a risk of inconsistent decisions.” *NVIDIA Corp. v. Neural AI, LLC*, No. IPR2025-00608, Paper 16 at 2-3 (P.T.A.B. July 31, 2025). Thus, discretionary denial is also favored based on the time-to-trial statistics. *See, e.g., Jinkosolar Co. v. Longi Green Energy Tech. Co.*, No. IPR2025-00859, Paper 10 at 2 (P.T.A.B. Sept. 3, 2025) (discretionarily denying institution where the time-to-trial statistics suggested that the trial would start around the same time the FWD issued).

Fintiv Factor 3: Parties’ and Court’s Investment in Parallel Proceeding

Factor 3 favors denial because both parties will have invested significant resources at the district court. As discussed above, the parties will have exchanged preliminary infringement and invalidity contentions, conducted source code review,

and commenced claim construction proceedings. *See* § II.A (*Fintiv* Factor 1), *supra*; Ex. 2003 (“Hannah Decl.”), ¶ 6.

Fintiv Factor 4: Amount of Overlapping Issues Between Both Forums

Factor 4 favors denial because the district court litigation has asserted the same claims and references asserted here, and Microsoft's stipulation does not avoid inefficiencies and inconsistent outcomes. The claims asserted at the district court (claims 1-3 and 9-14) are also challenged here (claims 1-14). Pet. at 1-2; Ex. 2007 at 1. Also, the same five references in the Petition grounds, Khandekar, Bandhole, Fujino, Hirschfeld, and Smith, are asserted in the district court litigation along with many other references and system art. *Compare* Pet. at 1-2 with Ex. 2007 at 27-29.

Microsoft's narrow stipulation does not prevent the duplication of efforts or reduce the risk of inconsistent decisions between the forums. *See Motorola Solutions, Inc. v. Stellar, LLC*, No. IPR2024-01205, Paper 19 at 3-4 (P.T.A.B. Mar. 28, 2025) (vacating and denying institution because the petitioner's stipulation was not “a ‘true alternative’ to the district court proceeding” because the stipulation would not likely moot system art combinations); *Shenzhen Tuoshu Tech. Co. v. Stratasys, Inc.*, No. IPR2025-00354, Paper 11 at 2-3 (P.T.A.B. June 12, 2025) (denying institution because the “[p]etitioner's stipulation [merely] reduces, but does not eliminate, the inefficiencies”). The stipulation bars only two categories with respect to system art: (1) “combinations of prior art asserted in this proceeding . . .

with any other type of prior art, including unpublished system prior art,” and (2) “any unpublished system art corresponding to the prior art asserted in this proceeding.” Ex. 1053 at 1-2.

The first category leaves untouched any combination of system art with non-asserted art at the district court, which includes at least 10 publications and four systems. *Compare* Ex. 2007 at 27-29 *with* Ex. 1053 at Appendix. The second category leaves untouched system art that does not correspond to the references asserted here. Ex. 1053 at 1-2, Appendix. Microsoft's invalidity contentions assert four prior art systems against the '915 Patent, none of which are shown to correspond to the asserted references, making the stipulation's second category entirely illusory. *Compare* Ex. 2007 at 28-29 *with* Ex. 1053 at Appendix. Thus, the four systems taken alone or in combination with each other, or any of the at least 10 non-asserted references, remain free under the stipulation's own terms.

System art cannot be raised in an IPR proceeding under 35 U.S.C. § 311(b) and therefore is categorically beyond the reach of § 315(e)(2) estoppel at district court by making any stipulation that fails to address system art a stipulation that leaves invalidity grounds entirely free regardless of the IPR's outcome. *See Ingenico Inc. v. IOENGINE, LLC*, 136 F.4th 1354, 1365-66 (Fed. Cir. 2025). Microsoft's stipulation also does not extend to *ex parte* reexamination requests with the same asserted references or different ones. Ex. 1053 at 1-2 (stipulating to just the “Texas

Litigation”).

Fintiv Factor 5: Similarity of the Parties Between Both Forums

Factor 5 favors denial because Microsoft is also the defendant in the district court litigation.

Fintiv Factor 6: Other Factors Impacting the Board's Discretion

Factor 6 favors denial because, as established below, the § 325(d) analysis confirms that the Petition's primary references and arguments fail on the merits, *i.e.*, the same or substantially the same art and arguments were previously before the Office, and no material error exists.

B. Strong Settled Expectations Favor Denial

The Director should deny institution on the independent ground that ToutVirtual holds strong settled expectations in the '915 Patent. The '915 Patent is part of a portfolio in force since 2014 that is the foundation for ToutVirtual's VirtualIQ technology—an award-winning solution that addressed a recognized industry need for unified virtualization management.¹ Microsoft itself relied on

¹ The '915 Patent claims priority to a provisional application filed in 2005 through a chain of continuations, including U.S. Patent No. 10,810,050 (“the ‘050 Patent”) and '762 Patent in force since 2016, and the '431 Patent in force since 2014. Ex. 2024 at (60), (63); Ex. 2008; Ex. 2009.

VirtualIQ, partnering with ToutVirtual in 2007 after learning the technology was built on the '915 Patent family pending-platform. The portfolio's significance is further confirmed by over 450 forward citations, including citations in 17 of Microsoft's own patent applications, 5 of which faced rejections based on the portfolio. Hannah Decl., ¶¶ 7-8.

Moreover, the related '431 and '762 Patents, each in force for over a decade, are asserted in the co-pending district court litigation but unchallenged here. Under these circumstances, institution would waste Board resources and undermine the settled expectations ToutVirtual's long-in-force portfolio has earned.

1. ToutVirtual's VirtualIQ Technology Addressed an Industry Need that Earned Praise and Recognition—including by Microsoft Who Partnered with ToutVirtual in 2007

ToutVirtual's VirtualIQ technology, which embodies the '915 Patent, addressed an industry need and earned recognition—including from Microsoft, which operates in the same technology space and partnered with ToutVirtual in 2007. Pabari Decl., ¶¶ 3-6. Industry recognition of an innovative solution that met an industry need correlates to strong settled expectations. *See Amgen Inc. v. Bristol-Myers Squibb Co.*, No. IPR2025-00601, Paper 9 at 2 (P.T.A.B. July 24, 2025) (expressing that “there may be good reasons why a patent owner has strong settled expectations in a patent that has only been in force for three years” and that these reasons can “correlate[] to settled expectations”).

The 2000s saw virtualization management—the orchestration of virtual assets deployed on physical resources, including the identification, provisioning, performance monitoring, and dynamic reallocation of those assets across a network—take center stage. Ex. 2011 at 2; Pabari Decl., ¶¶ 3-6. As organizations increasingly employed different hypervisors—the software layers responsible for running multiple virtual machines on a single physical resource—the industry faced a need for a unified management tool that could provide a single view for managing virtualization across different environments. *Id.*

ToutVirtual's VirtualIQ technology met that need: it “help[ed] users get greater value from virtualization deployments by integrating, in a single console, several core disciplines like capacity planning, load balancing and automated VM management.” Ex. 2012 at 1. This praise was repeated by other industry professionals:

Multi-function tools that can manage across a variety of environments, such as VirtualIQ from ToutVirtual, are increasingly needed by IT to monitor and control their virtualized resources.

Ex. 2013 at 2; *see also* Ex. 2012 at 1 (“ToutVirtual's VirtualIQ Pro has provided us with a unified console to control server capacity, manage incidents, create and execute policies and ultimately optimize our virtualization environment.”); Ex. 2014 at 2 (“The key challenges faced by customers are around management processes for

virtualization and cloud. ToutVirtual's VirtualIQ products help by offering a 'single pane of glass.'"); Pabari Decl., ¶¶ 5-7.

ToutVirtual also received award recognition by *ComputerWorld*, which identified ToutVirtual as part of the "Computerworld Horizon Awards 2006 Honorees," and *Network World*, which named ToutVirtual as one of the "10 virtualization companies to watch" in 2007. Ex. 2015 at 15-16]; Ex. 2016 at 1; *see also* Pabari Decl., ¶¶ 8-9 ("Unlike standard product reviews, these honors are the result of a vetting process conducted by a committee of industry scouts, venture capitalists, and sitting CIOs from global enterprises").

As Microsoft began implementing its hypervisor (Windows Server 2008, Hyper-V), it also recognized ToutVirtual's contribution to the virtualization management space, and partnered with ToutVirtual in 2007. *Murata Mfg. Co. v. Georgia Tech Rsch. Corp*, No. IPR2025-00383, Paper 14 at 2-3 (P.T.A.B. July 29, 2025) (discretionarily denying institution where the petitioner was aware of the patent owner's involvement in the technology space "for a significant amount of time before filing its Petition"); *see also NVIDIA Corp.*, Paper 16 at 2-3. Microsoft stated it was "pleased that ToutVirtual is offering a virtualization solution for managing heterogeneous environments" (Ex. 2017 at 2) and its "support for Windows Server 2008 Hyper-V," which enabled "customers running Hyper-V [to] assess and optimize applications for their environments, assisting them in making

the right planning decisions” (Ex. 2018 at 1). In partnership discussions, Microsoft was made aware that VirtualIQ was [REDACTED]

[REDACTED]—the '915 Patent family portfolio. Ex. 2019 at 6; Pabari Decl., ¶¶ 10-12.

These facts—that ToutVirtual's VirtualIQ technology addressed a recognized industry need for unified virtualization management, earned awards from ComputerWorld and Network World, and was relied upon by Microsoft itself through a 2007 partnership in which Microsoft was informed the technology was built on a patent-pending platform—are the types of “good reasons” that give rise to strong settled expectations. *Amgen Inc.*, Paper 9 at 2. ToutVirtual has built its business around the '915 Patent and its family for over a decade, and the industry recognition and commercial reliance detailed above confirm the significance of those patent rights.

2. Microsoft's Awareness of ToutVirtual's Portfolio, Combined with the District Court's Parallel Validity Proceedings, Reinforce Strong Settled Expectations

Strong settled expectations also exist on the basis that the '915 Patent family portfolio is a foundational reference in the virtualization management space, as shown by over 450 forward citations, including Microsoft's patent applications dating back to 2008. Hannah Decl., ¶ 7.

These facts parallel *Amazon.com, Inc. v. Audio Pod IP, LLC*, No. IPR2025-00768, Paper 15 (P.T.A.B. Aug. 14, 2025) (“Amazon”). *Amazon* at 2-3

(discretionarily denying institution of a patent in force for less than five years where the petitioner was aware of the technology since 2007, and the patent portfolio since 2012, and where the validity of patents in force for over seven years would be decided at district court). Like the petitioner in *Amazon*, Microsoft has been aware of ToutVirtual's VirtualIQ technology and its portfolio since 2006, and the validity of the related long-in-force patents will be decided at district court.

ToutVirtual's '915 Patent family portfolio has been cited during prosecution of Microsoft's patent applications since 2008. Hannah Decl., ¶ 8. Since then, the portfolio has been referenced in 17 Microsoft applications and used as a basis for rejection against 5 of Microsoft's applications. *Id.* These citations confirm Microsoft's continued awareness of ToutVirtual's portfolio, which started no later than 2006, when the parties entered partnership discussions. *See* § II.B.1, *supra*. Notably, Microsoft did not challenge at the PTAB the related '431 and '762 Patents—which have been in force for over a decade—despite these patents in the portfolio being asserted in the district court litigation. The district court therefore will be considering the validity of these two patents before the projected final written decision is due in this proceeding. Accordingly, like the younger patent in *Amazon*, referring the '915 Patent to the Board “would be an inefficient use of Board resources.” *Amazon* at 3; *see also Nvidia Corp.*, Paper 16 at 2-3 (similar).

In view of the foregoing, Microsoft's longstanding awareness of the '915

Patent family portfolio, combined with the district court's consideration of the long-in-force '431 and '762 Patents, reinforces strong settled expectations and confirms that institution would be an inefficient use of Board resources. These considerations, together with judicial efficiency, warrant discretionary denial.

C. 35 U.S.C. § 325(d) Favors Discretionary Denial

The Director should also deny the Petition under § 325(d) because Microsoft raises substantially the same art and well-trod arguments that the Office considered closely during the roughly 20 years of prosecution of the '915 Patent and its priority applications, and it identifies no material error in the Office's analysis. *See Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, No. IPR2019-01469, Paper 6 at 8 (P.T.A.B. Feb. 13, 2020) (precedential).

Microsoft asserts nine grounds, five of which challenge Independent Claims 1 and 11 using **Khandekar** (Grounds 1A and 1B), **Khandekar-Vasilevsky** (Ground 1D), and **Hirschfeld** combinations (Grounds 2A and 2C). Pet. at 1-2. The Office has seen it all before, and no material error exists.

1. **Khandekar (Grounds 1A and 1B): Khandekar Was Previously Before the Office—Microsoft's Own Construction Confirms No Material Error**

Khandekar is listed as a prosecution-cited reference. *See, e.g.*, '915 Patent at (56); Ex. 1002 at 79, 125, 147. It was never used in a rejection, and for a good reason. ToutVirtual distinguished Khandekar during prosecution of the application

that led to the '431 Patent, which is the first application in the '915 Patent's priority chain. '915 Patent at (63). To overcome Khandekar, the Applicant argued that Khandekar "discloses a typical virtual environment in which machines are being provisioned." Ex. 2021 at 10. "Khandekar does not disclose or suggest the management of a virtual environment over a network by a controller as set forth in the claim[s]." *Id.* The Examiner agreed. *Id.* at 16. After the Applicant overcame Khandekar, the Office did not apply Khandekar in another rejection across the portfolio.

This reasoning extends to the '915 Patent. The virtualization management configuration as in the '431 Patent is similarly found in the independent claims of the '915 Patent—where a control center computer over a network manages virtual assets through virtualization layer instances running on each physical resource. '915 Patent at Claims 1, 11.

Microsoft cannot show material error by the Examiner for not applying Khandekar in a rejection against the '915 Patent application. Its own construction of "managed" confirms the distinction between Khandekar and the environment-level virtualization management, as claimed. That distinction pervades Microsoft's anticipation and obviousness analysis.

In the co-pending IPR2026-00296 proceeding—challenging the related '050 Patent—Microsoft construes the same term "managed" as recited in the same claim

limitation. Ex. 2025, (“’050 Pet.”) at 5-6. Although it does not do so here, because the ’915 and ’050 Patents share the same specification, Microsoft’s construction must be applied consistently here as well. *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005) (the same claim term in related patents sharing a specification must be interpreted consistently); Pabari Decl., ¶ 2. Microsoft construes “managed” to encompass five specific management functions, all of which are environment-level virtualization management actions that are carried out “without regard” to processors, operating systems, virtualization platforms, and application software of the virtualization environment (irrespective of any environment). ’050 Pet. at 5-6; *id.* at 3 (construing “without regard to”).

But in addressing “managed,” Microsoft maps this very limitation to Khandekar’s virtual machine monitor (VMM), a host-level monitor tied to a single vendor’s platform. ’050 Pet. at 12-14, 29-30 (Grounds 1A and 1B). Khandekar is a VMware patent, and its VMware VMM is designed to operate exclusively within a VMware environment, binding every operation to the host-level in that environment. Khandekar at 13:17-25 (“[A] VMM is already pre-installed on each host . . . so as to ensure compatibility and proper configuration,” with products “from VMware” providing that VMM.); *see also id.* at Abstract. Because Khandekar’s VMM operates at the *host level* and is *dependent on the VMware environment*, it is incapable of performing the environment-level, platform-agnostic management that

Microsoft's own construction demands. In short, Microsoft's construction and its mapping to Khandekar are irreconcilable.

Microsoft's construction and deficient mapping compel the conclusion that Khandekar does not manage in the way the claimed invention does, which in turn supports the Examiner's decision not to apply Khandekar against the '915 Patent application. Microsoft itself therefore forecloses its allegation that the Examiner failed to apply Khandekar in a rejection during prosecution of the '915 Patent application. See Pet. at 10.

2. Hirschfeld Combinations (Grounds 2A and 2C): Hirschfeld is Substantially the Same as Singh, and Suffers from the Same Deficiency

Hirschfeld is substantially similar to, and suffers from the same deficiency as, Singh previously considered by the Office. Singh (US Publication No. 2006/0069761) was applied in a rejection and overcome because its virtualization software runs on the operating system—rather than “on each of the physical resources.” The same is true for the Hirschfeld combinations.

Relevant here is the claim language “virtualization layer instances ***running on each of the physical resources.***” '915 Patent at Claims 1, 11 (emphasis added). The Applicant distinguished Singh because it provides “virtual system software that ***runs on the operating system***” which “cannot equate to” the claimed “virtualization layer instances ***running on each of the physical*** resources.” Ex. 1002 at 91-92

(emphasis added). The Examiner withdrew their rejection. *Id.* at 2-18.

Hirschfeld, alone or in combination, suffers from the same deficiency. Hirschfeld's virtualization software (VS)—which Microsoft ties to the virtualization configuration in its combinations—runs on the operating system of a server. *See* Pet. at 65 (“Hirschfeld's virtualization software 229 to manage logical operating systems . . . using a Smith-like VMM” (Element [1.3])) (Ground 2A); *see also id.* at 79 (Ground 2C) (referring to Element [1.3]). Hirschfeld includes three distinct layers: a hardware layer 210, an operating system (OS) layer 212, and a software layer 214. Hirschfeld at 8:39-41, 9:35-46, Fig. 2. Hirschfeld's virtualization software 229 is within the software layer 214, which sits above the OS layer 212 and runs on that OS layer as shown in figure 2. *Id.* at Fig. 2. Thus, just like Singh's virtual system software, Hirschfeld's virtualization software runs on the operating system layer, which, as argued during prosecution, does not equate to a virtualization layer running on the physical resource.

Thus, Hirschfeld is substantially the same as Singh previously before the Office and its virtual software running on the OS layer is deficient in the same way that the Applicant argued Singh's architecture to be deficient. Microsoft does not and cannot show how Hirschfeld's differs structurally from Singh that the Applicant distinguished during prosecution.

3. Khandekar-Vasilevsky (Ground 1D): The Office Already Rejected a Vasilevsky Combination as Inoperable—Microsoft's Vasilevsky Combination Suffers the Same Fate

The Office has previously considered Khandekar and Vasilevsky along with a Vasilevsky-Singh combination. Ex. 1002 at 90-97; *see also* § II.C.1, *supra*. That Vasilevsky combination was deemed inoperable for its intended purpose. The same conclusion applies here for Microsoft's Vasilevsky combination.

Whether Vasilevsky-Singh (prosecution) or Khandekar-Vasilevsky (petition), the combinations are inoperable because Vasilevsky is an entirely different architecture than Khandekar and Singh. Vasilevsky is directed to “grid computing in which **multiple computers** are virtualized to generate **a single virtualized computing system.**” Ex. 1002 at 93 (citing Vasilevsky, ¶ 57) (emphasis added); *id.* at 91. That is, “multiple computers [] generate a **single** virtualized system.” *Id.* at 93 (citing Vasilevsky, Fig. 1) (emphasis added). Because it does not disclose “**virtualization layer instances** running on **each of the one or more physical resources,**” the Examiner cited Singh. *Id.* at 95 (modifying “Vasilevsky by the teachings of Singh.”) (quoting Office Action, p.8). Singh's architecture has physical servers that “each compris[e] one or more virtual machines.” *Id.* at 94. However, as the Applicant argued, the modification—requiring each physical server to include multiple virtual machines in Vasilevsky—“would prevent the abstraction of each

computer . . . in Vasilevsky to generate a single virtualized system.” *Id.* at 95. This would render Vasilevsky inoperable. *Id.* A NOA then issued. *Id.* at 15-16.

Substituting Khandekar for Singh does not change the inoperability conclusion. Just like Singh, Khandekar's architecture has each physical server including multiple virtual machines. *Compare* Ex. 1002 at 94 (citing Singh's figure 1) *with* Pet. at 17 (annotation of Khandekar showing hosts (green) with multiple virtual machines (blue)). Vasilevsky operates in the inverse. Its management architecture operates as an integral component of a single virtualized computing system that is abstracted from multiple physical servers. Ex. 1002 at 93 (citing Vasilevsky, Fig. 1); Vasilevsky, ¶¶ 70-74, Fig. 2; *see also* Pet. at 32 (Vasilevsky capabilities are “implemented **via a management server/agent arrangement** in which the management server writes configuration information . . . that management agents read to configure **distributed server/virtual server execution.**”) (emphasis added). Thus, for “Khandekar's provisioning server 800 [to be] configured to include (or operate in conjunction with) a Vasilevsky-compatible manager [] and associated management database,” it would require the server to be abstracted into the “**single** virtualized computing system.” Pet. at 34 (proposing a “Khandekar-Vasilevsky System”). This would render Khandekar inoperable for its intended purpose of provisioning multiple virtual machines on one physical server.

The incompatibility is symmetric—Vasilevsky's architecture abstracts multiple physical servers into one single virtualized computing system, while Khandekar and Singh expand each individual physical server into multiple virtual machines. These two architectural principles are mutually exclusive: introducing the teachings of one into the other destroys the other's core function. Microsoft's reversal of the combination order does not create a new combination—the same incompatibility operates in both directions.

No material error of Vasilevsky's grid computing incompatibility with Khandekar-type references can be shown. Microsoft does not consider the distinct architectural differences between the references and how each independently operates. Instead, Microsoft simply, and perfunctorily states that "Khandekar's provisioning server environment would have been incorporated [with] Vasilevsky's management capabilities (e.g., manager 212)." Pet. at 33. Microsoft's conclusory incorporation explanation—incorporating Vasilevsky's manager into Khandekar without addressing the architectural incompatibility—is not a showing of material error. It is repackaging of the same combination the Office already found inoperable.

III. CONCLUSION

For all of these reasons, ToutVirtual requests that the Director deny institution of *inter partes* review of the '915 Patent.

Patent Owner's Request for Discretionary Denial
IPR2026-00295 (U.S. Patent No. 11,656,915)

Respectfully submitted,

Date: May 18, 2026

/James Hannah/

James Hannah (Reg. No. 56,369)
Kristopher Kastens (Reg. No. 57,517)
Elisa Santos (Reg. No. 83,399)
HERBERT SMITH FREEHILLS
KRAMER (US) LLP
333 Twin Dolphin Drive, Suite 700
Redwood Shores, CA 94065
Telephone: (650) 752-1700
james.hannah@hsfkramer.com
kris.kastens@hsfkramer.com
elisa.santos@hsfkramer.com

Jeffrey H. Price (Reg. No. 69,141)
Jeffrey Eng (Reg. No. 63,189)
Jenna Fuller (Reg. No. 74,212)
HERBERT SMITH FREEHILLS
KRAMER (US) LLP
1177 Avenue of the Americas
New York, NY 10036
Telephone: (212) 715-9100
jeffrey.price@hsfkramer.com
jeffrey.eng@hsfkramer.com
jenna.fuller@hsfkramer.com

Attorneys for Patent Owner
ToutVirtual, Inc.

CERTIFICATE OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. § 42.6(e), and pursuant to agreement by the parties that filing with the Board through the Patent Trial and Appeal Case Tracking System (P-TACTS) constitutes electronic service, service was made on Petitioners as detailed below.

<i>Date of service</i>	May 18, 2026
<i>Manner of service</i>	Electronic Filing with the Board (IPR42342-0156IP1@fr.com)
<i>Documents served</i>	PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL
<i>Persons Served</i>	Fish & Richardson P.C.: W. Karl Renner Usman Khan Ryan Chowdhury

/James Hannah/
James Hannah
Registration No. 56,369
Lead Counsel for Patent Owner