

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

TOUTVIRTUAL, INC.,
Patent Owner

Case IPR2026-00296
Patent 10,810,050

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

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LIST OF EXHIBITS

MS-1001	U.S. Patent No. 10,810,050 to Pabari (“the ’050 Patent”)
MS-1002	Prosecution History of the ’050 patent (“the Prosecution History”)
MS-1003	Declaration and Curriculum Vitae of Dr. Michael Mitzenmacher
MS-1004	U.S. Pat. No. 7,577,722 (“Khandaker”)
MS-1005	U.S. Pat. App. No. 2005/0044301 (“Vasilevsky”)
MS-1006	U.S. Pat. No. 6,880,002 (“Hirschfeld”)
MS-1007	U.S. Pat. App. No. 2002/0049803 (“Bandhole”)
MS-1008	U.S. Pat. No. 7,457,925 (“Fujino”)
MS-1009	Int. Pat. Pub. No. WO 02/03220 (“Tremain”)
MS-1010	Smith, James E. & Ravi Nair, “Virtual Machines: Versatile Platforms for Systems and Processes,” Morgan Kaufmann, 2005, ScienceDirect (“Smith”)
MS-1011	Declaration of June Munford
MS-1012	U.S. Pat. App. Pub. No. 2014/0344462 (“Pabari”)
MS-1013	U.S. Pat. App. Pub. No. 2015/0347167 (“Bonazzola”)
MS-1014	U.S. Provisional App. No. 60/708,473 (“Pabari-Provisional”)
MS-1015	U.S. Pat. App. No. 15/201,087 (“Pabari-Utility-Application”)
MS-1016- MS-1049	RESERVED

- MS-1050 Complaint, *ToutVirtual, Inc. v. Microsoft Corporation*, 2-25-cv-00943, EDTX (filed Sep. 8, 2025)
- MS-1051 Docket Control Order, *ToutVirtual, Inc. v. Microsoft Corporation*, 2-25-cv-00943, EDTX (issued Feb. 19, 2026)
- MS-1052 Appendix C, INFRINGEMENT CHART U.S. Patent No. 10,810,050, *ToutVirtual, Inc. v. Microsoft Corporation*, 2-25cv-00943, EDTX
- MS-1053 Petitioner's Stipulation
- MS-1054 Excerpts of the Prosecution History of the U.S. Pat. No. 8,799,431 ("431 Prosecution History")
- MS-1055 Microsoft Corporation, "Form 10-Q for the Quarterly Period Ended March 31, 2026," United States Securities and Exchange Commission, 29 Apr. 2026, Commission File No. 001-37845
- MS-1056 Microsoft Corporation, "Microsoft FY25 Second Quarter Earnings Conference Call," Microsoft Investor Relations, 29 Jan. 2025
- MS-1057 Smith, Brad, "The Golden Opportunity for American AI. Microsoft On the Issues," Microsoft Corporation, 3 Jan. 2025, <https://blogs.microsoft.com/on-the-issues/2025/01/03/the-golden-opportunity-for-american-ai/>
- MS-1058 General Services Administration, "Multi-Billion Dollar GSA OneGov Agreement with Microsoft Brings Steep Discounts for Microsoft 365, Copilot, and Azure Cloud Services" (Sep. 2, 2025)
- MS-1059 Nielson et al., "Microsoft FY25 Fourth Quarter Earnings Conference Call," July 30, 2025, <https://www.microsoft.com/en-us/investor/events/fy-2025/earnings-fy-2025-q4>

- MS-1060 “What is Azure Government,” Last updated May 18, 2026,
<https://learn.microsoft.com/en-us/azure/azure-government/documentation-government-welcome>
- MS-1061 “Datacenter Investments Drive Economic Growth in Central Washington,” Microsoft Local, Microsoft,
<https://local.microsoft.com/blog/datacenter-investments-drive-economic-growth-in-central-washington/>
- MS-1062 “CVE-2009-4849 Detail,” National Vulnerability Database, National Institute of Standards and Technology, 7 May 2010,
<https://nvd.nist.gov/vuln/detail/CVE-2009-4849>
- MS-1063 “Toutvirtual Virtualiq 3.2 Security Vulnerabilities, CVEs.” CVE Details, SecurityScorecard,
https://www.cvedetails.com/vulnerability-list/vendor_id-10821/product_id-19348/version_id-451232/Toutvirtual-Virtualiq-3.2.html
- MS-1064 DocketNavigator Statistics, Courts: Texas Eastern District; Judges: Robert W. Schroeder, III; Case Filing Date: On or After Jan. 1st, 2023
- MS-1065 DocketNavigator Statistics, Courts: Texas Eastern District; Case Filing Date: On or After Jan. 1st, 2023

I. INTRODUCTION

ToutVirtual's Discretionary Denial Briefing should be denied and the Director should proceed to consider the merits of Microsoft's Petition for *inter partes* review of U.S. Patent No. 10,810,050 ("the '050 Patent"). The decision to refer is a multi-factor analysis based on "the totality of the evidence and arguments presented." *Tesla, Inc. v. Bulletproof Property Management, LLC*, IPR2026-00204, Pap. 14, 2-3 (Director Jun. 15, 2026) (informative). Here, similar to *Tesla*, the request to discretionarily deny Microsoft's IPR petition should be rejected because: (1) the petitioner has submitted a broad stipulation thereby allowing the AIA review to function as an alternative to the co-pending litigation; (2) the '050 Patent was allowed as a result of material Examiner error; and (3) the petitioner brought an early challenge to the patent.

Notably, timing considerations and stipulations by Microsoft, each mitigate concerns over inconsistent outcomes or duplication of efforts, given the opportunity for an instituted IPR to function as an alternative to co-pending litigation. For instance, the median time to trial statistics demonstrate that trial is likely to occur only after the Board issues the final written decision. The same is evident from statistics for the relevant district court and judge of the pending litigation involving the '050 Patent. Each reveals the likely trial date will be in early October, which is after the final written decision is due to be issued on September 16, 2027. *See* MS-1064; MS-

1065. More, Microsoft has stipulated that it will not advance in the parallel litigation any ground that reasonably could have been raised in an IPR and any other ground based on a combination of system art with any prior art reference asserted as the basis of a ground. *See* MS-1053. As such, the form of stipulation offered by Microsoft is recognized as a “broad stipulation” that supports referral. *Tesla*, Pap. 14 at 2-3. Taken together, these facts avoid duplication of efforts between the co-pending litigation and an IPR.

Review is further warranted to address material Examiner errors during original examination of the '050 Patent. *See Magnolia Med. Tech., Inc. v. Kurin*, IPR2026-00097, Pap. 17, 8 (Director May 14, 2026) (precedential). The application for the '050 Patent received limited scrutiny during prosecution, and were allowed based on limitations clearly taught in the art. *See* §II.A.1, *infra*. Further, the Examiner conducted a clearly deficient prior art search before allowing the claims of the '050 Patent, and instead continued a myopic focus on a prior art reference applied during prosecution of all of the '050 Patent's parent applications, despite significantly varying claim scope. *See* §III.A.1, *infra*.

Additionally, ToutVirtual has not established settled expectations. The '050 Patent was issued on October 20, 2020—less than six years before the filing of Microsoft's Petition. ToutVirtual's attempts to conjure settled expectations by relying on older family members with significantly narrower claims also fails. The

'050 Patent issued years later and with broader claims clearly taught in the art.

Finally, the involvement of Microsoft in American manufacturing and commerce is beyond dispute. Simply said, Microsoft is one of the most significant contributors to the American economy and the products accused of infringement are said by ToutVirtual to implicate billions of dollars of investments in the American manufacturing operations. *See* MS-1050, 8-9; *Tesla*, Paper 14 at 5. Accepting ToutVirtual's request for discretionary denial would create significant uncertainty in the virtual server industry and have a detrimental impact to the American economy.

II. THE ACCUSED AZURE CLOUD COMPUTING PRODUCTS ARE RELATED TO SIGNIFICANT INVESTMENTS IN AMERICAN MANUFACTURING OPERATIONS

The Challenged Claims are alleged by ToutVirtual to implicate "Microsoft's Azure Cloud Computing products." MS-1050, 7. These products are part of the "Intelligent Cloud segment," which consists of "public, private, and hybrid server products and cloud services..." MS-1055, 27. Azure Cloud Computing products reflect a prominent portion of this segment given that recent increase in Intelligent Cloud revenue is "driven by Azure," and Microsoft's overall revenue increase between June 2024 and March 2025 was "\$36.5 billion" (18% increase), which was "driven by growth in Microsoft Cloud." *Id.*, 35; *see id.*, 31 ("Azure and other cloud services revenue increased 40%"); MS-1056, 6 ("Revenue...driven by Azure...").

Microsoft has also invested significant capital into U.S. data center buildout

to support its Intelligent Cloud segment. For example, in FY2025, Microsoft was on track to “invest approximately \$80 billion to build out AI-enabled datacenters,” and “[m]ore than half of this total investment will be in the United States, reflecting our commitment to this country and our confidence in the American economy.” EX1057, 2. Indeed, “Azure is the infrastructure layer for AI[,]” and Microsoft representatives confirm that these commitments “expand our data center capacity in line with both near-term and long-term demand signals.” EX1056, 2. Microsoft has therefore committed at least \$40 billion of Azure-related U.S. investments.

The size and scale of these operations is economically significant within the United States, with “Azure surpassed \$75 billion in annual revenue” and that Microsoft “stood up more than two gigawatts of new capacity” in a twelve-month period. MS-1059. Microsoft has also partnered with the U.S. General Services Administration (GSA) to provide federal agencies access to “Azure Cloud Services” as part of a OneGov agreement projected to generate “potential savings in \$3.1 billion in the first year.” MS-1058, 1.

Microsoft maintains specific types of Azure operations for sensitive domestic workloads, with “physically isolated datacenters and networks located in the US only” and uses the “same underlying technologies as global Azure.” *See* MS-1060. In Central Washington alone, datacenter construction activity between 2019 and 2024 “generated \$1.2 billion in economic impact” and “operations added another

\$269 million” in 2024. MS-1061. By contrast, ToutVirtual’s VirtualIQ platform achieved some recognition in 2009, but known security concerns relating to the technology arguably explain its lack of industry adoption after 2010, and thus, lack of industry impact during the ’050 patent time in force since 2020. *See* MS-1062.

III. MULTIPLE COMPELLING REASONS SUPPORT MERITS REVIEW AND INSTITUTION OF MICROSOFT’S IPR PETITION

A. The ’050 Patent Is The Product of Material Examination Errors

The examination record reflects two independent forms of examination error: (1) lack of proper consideration of prior art disclosures (Khandekar, Vasilevsky) available before the Office during prosecution, and (2) failures to satisfy statutory requirements under 35 U.S.C. § 112 and to identify a substantive error in applicant’s amendments due to a lack of written description support.

1. Error 1: The Examiner Overlooked Disclosure Within The Record Prior Art When Examining The “Virtual Assets” Feature

The Examiner failed to fully consider prior art in relation to the feature deemed to have led to allowance—“virtual assets” that are “software instantiations of computer systems” (Claims 1, 9). The Examiner withdrew all pending prior art rejections over applicant’s submission purporting to distinguish the applied prior art. *See* MS-1002, 54-67 (appeal brief); *id.*, 8-15 (Notice of Allowance). But as discussed below and demonstrated by the Petition, the “virtual assets” element is clearly disclosed by record prior art.

(a) The Examiner Overlooked Khandekar's Disclosures
Despite Prior Awareness Of Its Disclosure

ToutVirtual concedes that Khandekar was “listed as a prosecution-cited reference” and “never used in a rejection.” Req., 16 (citing MS-1002, 205, 277). But ToutVirtual fails to address the “virtual elements” feature that was the primarily focus of original examination and, instead redirects attention to aspects that were not the Examiner’s basis for allowance. Khandekar describes “virtual machines,” (or VMs) which the Petition identified as representing an example of the claimed “virtual assets.” *See, e.g.*, ’050 Pet., 14-15. Khandekar also describes a “virtual machine (VM)” as a “software abstraction” of a “physical computer system.” MS-1004, 6:24-42. Khandekar’s VMs are “software instantiations of computer systems” because the “VMs include software constructs that emulate connected physical hardware.” Pet., 18 (citing MS-1004, 6:24-27 in addressing [1.2]); *see* MS-1003, ¶¶136-39.

ToutVirtual’s reference to the application of Khandekar in prosecuting the ’050 Patent’s grandparent (U.S. 8,799,431, or the ’431 Patent) accentuates the error in examining of the ’050 Patent application. As discussed below (*see* §III.A, *supra*), while the claimed subject matter of the ’431 and ’050 patents are different, Khandekar’s disclosure addresses elements uniquely recited in the ’050 patent but not applied with respect to the ’431 patent. *See* EX1054, 298-99, 347-48, 413-14 (applying Khandekar’s Figure 3 disclosure as a supporting reference in combination

with Trossman); *and* Pet., 10-20 (applying Khandekar’s Figure 2 disclosure as a primary reference).

The ’431 and ’726 patent claims also each recite a “controller” as a key structural computer element in nearly every limitation that is otherwise absent in the Challenged Claims. ToutVirtual even suggests this element was deemed material to patentability—it specifically identified the “controller” as a key element in seeking to distinguish over Khandekar during examination of the ’431 patent. Applicant argued “Khandekar does not disclose or suggest the management of a virtual environment over a network **by a controller** as set forth in the claim.” EX2021, 10.

The Petition’s application of Khandekar also differs from the Examiner’s application of Khandekar in the ’431 Patent’s file history. For example, while the Petition applies teachings relating to Khandekar’s Figure 2, the Examiner relied on a narrow aspect of Khandekar and focused instead on Figure 3 (which did not capture the pertinent disclosure of a provisioning server 800 managing a plurality of host computers on which virtual machines are deployed). *Compare* Pet., 10-23 (applying Khandekar’s Figure 2), *and* MS-1054, 298-99, 413-414 (applying Khandekar’s Figure 3). This confirms the erroneous consideration of its disclosure.¹

(b) The Examiner Incorrectly Withdrew Rejections Over

¹ The ’431 and ’762 patent applications were each examined by the same Examiner that examined the ’050 patent.

Vasilevsky Based On Incomplete Consideration

The Examiner also failed to properly consider prior art disclosures in addressing the pending claims before allowance. The Examiner's application of Vasilevsky for the "virtual assets" was primarily limited to Vasilevsky's Figure 1 disclosure relating to operating system layer 130, virtualization layer 140. *See* MS-1002, 175-86 (first Office Action), 130-46 (Second Office Action), 78-93 (third Office Action), 7-15 (Appeal brief).

With this narrow focus, the Applicant similarly limited its purported distinctions to the same disclosures. But the Examiner and the applicant failed to address material disclosures within Vasilevsky of the claimed "virtual assets" element of [1.2]. For example, Vasilevsky's Figure 2 describes "virtual servers 208" that are separate from hardware nodes. *See* MS-1005, [0014], [0059], [0064], [0065], [0090], FIG. 2. Moreover, "[a] virtual server may be an instance of an architecture presented by a virtualization layer (e.g., layer 104)" and have "a persistent identity and defined set of resource requirements (e.g., Storage, memory, and network) resource access privileges, and/or resource limits." MS-1005, [0064]. This is at odds with Applicant's repeated characterization of Vasilevsky as lacking "virtual assets" that are "managed by the virtualization layer identified in Vasilevsky." *See* MS-1002, 60-61, 122-23, 167. Indeed, paragraph [0064] was never identified by the Examiner or applied in any prior art ground of rejection.

2. Error 2: The Examiner Overlooked Written Description Problems With Amendments Leading To Allowance

The Examiner also materially erred by overlooking that claim 9 was amended to recite a “processor” configuration that was not disclosed in the originally-filed application. As explained in Ground 3 of the Petition, claim 9 recites a “computer device with a **processor** and memory and a control center computer coupled to the computer device,” followed by operative provisioning steps performed by “the processor.” Pet., 73. Here, “the processor” is the processor of the claimed “computer device,” not the processor of the “control center computer.” *Id.*

But this “processor” configuration, added by amendment during prosecution, had no support in the original claims, and Applicant failed to identify the relevant parts of the specification as providing support. *Id.*; see MS-1002, 164-67, 248-50, 164; MS-1015, 2-36; MS-1014; MS-1003, ¶¶64-78, 333-36). Moreover, the specification lacks disclosure of a computing device separate from the control center computer configured to provide provisioning.

As Dr. Mitzenmacher explains, a person of ordinary skill in the art (POSITA) reviewing the priority documents of the ’050 patent (MS-1014; MS-1015) would not have been able to “identify any description within MS-1014 (August 15, 2005 Provisional Application) or MS-1015 (July 1, 2016 Utility Application) of the host machine’s processor receiving provisioning requests from users, [and] selecting which virtual asset to provision to which physical resource...” MS-1003, ¶77; see

id., ¶¶70-73. This lack of entitlement to priority warrants adjudication. *See* Pet., 74-75 (citing MS-1003, ¶¶68-72).

B. Institution Will Narrow The Parallel Litigation And Promote Efficient Use of Resources

1. The Final Written Decision Will Issue Contemporaneous with the Beginning of Trial, If Not Sooner

While the current trial schedule date is set for June 21, 2027, other dates have already been amended. *See* EX2001, 3-5 (showing numerous dates have been amended, including, *e.g.*, the deadline to complete expert discovery). Indeed, statistics for the Eastern District of Texas (EDTX) show that, since January 1, 2023, the median time to jury trial² is 24.8 months, and Judge Schroeder’s specific media time to jury trial is 25.1 months. *See* MS-1064; MS-1065. With the complaint having been filed September 8, 2025, these statistics would have the likely trial date falling in early October, 2027 or later. The final written decision is due no later than September 16, 2027. Thus, the statistically likely trial date will fall *after* the final written decision is issued.

Even if applying the median time to trial statistics cited by ToutVirtual, the trial would begin contemporaneously with the issuance of the final written decision,

² The parallel litigation involving the ’050 Patent will be a jury trial. *See* EX2001, 1 (noting “current date” of jury selection).

in September, 2027. *See* EX2004 (showing a median time to trial of 24 months),³ EX2005 (showing same). In *Geotab Inc. et al v. Fractus, SA*, IPR2025-01027, trial in EDTX was scheduled nearly four months before the final written decision was due to issue “in January 2027,” but “the parties offer[ed] time-to-trial statistics that suggest trial could begin between October 2026 and January 2027.” IPR2025-01027, Paper 15, 2. Deputy Director Stewart found that “these considerations neither favor nor counsel against discretionary denial.” *Id.*

2. The Early Stage of Litigation Coupled with Microsoft’s Broad *Sotera+* Stipulation Avoids Wasteful, Duplicative Efforts

Co-pending litigation is largely dormant, and it will remain similarly dormant through institution and much of the IPR proceeding, if instituted. *See* EX2001. Opening claim construction briefing is not due until November 6, 2026, nearly two

³ The Docket Navigator statistics cited by ToutVirtual are artificially narrowed.

ToutVirtual limited their statistics to the narrow window of cases filed on or after January 1, 2024, meaning many of the cases are only recently reaching trial. *See* EX2004. Moreover, ToutVirtual’s statistics encompass both jury *and* bench trials, even though the trial involving the ’050 Patent will be a jury trial. *See id.*; EX2001, 1. And ToutVirtual’s statistics inexplicably exclude “outliers,” even though there is no way to know at this early stage whether the co-pending litigation involving the ’050 Patent would itself qualify as an outlier.

months after institution. EX2001, 4. The claim construction hearing is scheduled for December 18, 2026, three months after institution. *Id.* And expert discovery does not complete until March 10, 2027, which is six months into the proceeding—after nearly all of the substantive briefing will be complete in this IPR. *Id.*, 3. The litigation is and will remain in its infancy through much of any instituted IPR proceeding. IPRs can also inform ongoing litigation. *See, e.g., CrowdStrike Inc. v. Webroot, Inc.*, IPR2023-00126, Pap. 9, at 10 (PTAB May 5, 2023) (early-stage investment weighs against denial).

Microsoft’s broad stipulation ensures this remains true through the final written decision and after. If the Director institutes IPR, the stipulation ensures Microsoft will not pursue in the parallel litigation any invalidity ground based on prior art patents or printed publications that were raised or reasonably could have been raised in the IPR. MS-1053. The stipulation extends *beyond Sotera* to further waive “combinations of prior art asserted in this proceeding ... with any other type of prior art, including unpublished system prior art, nor will it pursue any unpublished system art corresponding to the prior art asserted in this proceeding,” thereby avoiding duplicative effort and inefficiencies even if the litigation is not stayed upon institution. *Id.*; *Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, Pap. 19, at 4 (PTAB Mar. 28, 2025).

ToutVirtual’s reference to Microsoft’s invalidity contentions in a counterpart

proceeding involving the '050 Patent also mischaracterize Microsoft's stipulation.

See Req., 5-7 (citing EX2007). Microsoft's conditional stipulation is triggered "if the PTAB institutes review in this proceeding, and said institution is not later vacated, reversed, or otherwise withdrawn by rehearing or Director Review." MS-1053. Because the Director has not yet issued a decision regarding institution, this proceeding has not been instituted and there is no basis for ToutVirtual to suggest Microsoft acted contrary to its stipulations or its representations to the Office. And if IPR institution is granted, Microsoft will formally withdraw in the litigation any invalidity grounds implicated by the stipulation.

3. Holistic Consideration of the *Fintiv* Factors Favors Referral

Factor 1 (Stay)—Because no motion to stay has been filed, the outcome of such a motion cannot be inferred, nor the existence of stay known. *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Pap. 24, at 7 (June 16, 2020) (informative). Factor 1 is therefore *neutral*.

Factor 2 (Trial Date)—As described above, recent median time to trial statistics for both the Eastern District of Texas and Judge Schroeder indicate the trial is likely to start shortly *after* the final written decision must be issued. Yet, even the statistics cited by ToutVirtual show the trial and issuance of a final written decision will occur contemporaneously in September, 2024. Thus, Factor 2 favors referral or, at worst, is *neutral*.

Factor 3 (Investment)—As noted above, investment in the district court proceeding remains low. Claim construction briefing will not be begin to be filed until nearly two months *after* institution is due, and expert discovery will not complete until *six months after* institution. EX2001, 4-5. Indeed, document production will not even be complete until after institution. *Id.*, 4. Factor 3 therefore *favors referral*.

Factor 4 (Overlap)—As discussed above, Microsoft’s stipulation eliminates overlap between the IPR and the parallel litigation. Factor 4 *favors referral*.

Factor 5 (Parties)—While the parties in the parallel litigation are the same (Factor 5), this factor alone does not favor denial, particularly where, as here, the Petition demonstrates strong merits of unpatentability. Factor 5 is *neutral*.

Factor 6 (Merits)—The merits of the petition are compelling. As set forth in the Petition, the ’050 Patent claims are plainly unpatentable over the prior art. As discussed in §II.A, *supra*, the Examiner concluded, after an inappropriately brief examination effort, that Limitation [1.2] of independent claim 1 were not taught in the prior art. *See* MS-1002, 13-14; Pet., 14-15, 57-56. Factor 6 *favors referral*.

IV. TOUTVIRTUAL FAILS TO ESTABLISH SETTLED EXPECTATIONS

A. The ’050 Patent Is Young, Having Issued Less Than Six Years Before Microsoft’s Petition

ToutVirtual fails to show that it has settled expectations in the ’050 patent. It

does not. The '050 patent issued on 10/20/2020, less than six years before Microsoft's Petition was filed in March 2026. ToutVirtual presumptively lacks strong settled expectations on a young patent like the '050 patent. *Samsung Electronics Co., Ltd., v. Wilus Institute of Standards*, IPR2025-00935, Paper 12 at 2-3 (Sept. 26, 2025).

B. ToutVirtual's Contentions Of Commercial Success And Of Prior Relationship With Microsoft Lacks Relevance As It Fails To Even Allege A Relationship Between Either And The '050 Patent

Each of the events referenced in ToutVirtual's Request predate the issuance of the '050 patent by more than a decade, and ToutVirtual fails to demonstrate any nexus with the Challenged Claims that warrants vastly expanding the time frame for the settled expectations inquiry beyond the patent's time in force. Absent such nexus, none of the events identified in the Request bear any relevance to any settled expectations that ToutVirtual claims to have developed even before the '050 patent was filed.

ToutVirtual's cited authority is also inapposite. *Amgen* recognized that a newer patent may support settled expectations where the patent owner explains how an extraordinary investment of time, resources, research, development, trials, or regulatory approval correlates to those expectations. *Amgen Inc. v. Bristol-Myers Squibb Co.*, IPR2025-00601, Paper 9, 2 (Acting Director July 24, 2025). ToutVirtual fails to even allege similar types of investment here. *Amazon* and

NVIDIA likewise involved more particularized notice of patents or patent families, including issued ancestor patents or actual notice through commercial relationships. *Amazon.com, Inc. v. Audio Pod IP, LLC*, IPR2025-00768, Paper 15, 2-3 (Acting Director Aug. 14, 2025); *NVIDIA Corp. v. Neural AI, LLC*, IPR2025-00606, Pap. 16, 2-3 (Acting Director July 31, 2025). Here, generalized references to unmarked patents and the Earlier Patents in prosecution are neither particularized nor uniquely tied to the subject matter recited in the Challenged Claims.

Even if the events identified ToutVirtual's Request were relevant to the settled expectations inquiry (they are not), gaps in nexus with the Challenged Claims ultimately diminishes their significance. These events include: (1) issuance of two earlier-issued patents in the same family (Earlier Patents), (2) alleged prominence of its VirtualIQ technology, and (3) interactions with Microsoft in relation to the VirtualIQ technology.

Each event occurred between 2006 and 2009—*years* before the '050 patent's application was filed on 7/1/2016, and more than a decade before the Challenged Claims issued on 10/20/2020. These events therefore occurred outside the time in force of the '050 patent and therefore should have no impact on settled expectations..

Indeed, ToutVirtual's cited authority reinforces the importance of nexus. In *NVIDIA*, the Acting Director recognized that a later reissued patent had "not been in force for a significant period of time," even though the original patent issued years

earlier, because the reissued patent contained “different claims” from the original patent.” *NVIDIA*, Pap. 16, at 2-3. This makes sense because the mere existence of an earlier-issued patent in the same family, without additional circumstances not present here, should not bar Office review of an early challenge to a later-filed continuation application within its first six years in force.

The subject matter recited in the Earlier Patents and the Challenged Claims are also significantly different. For instance, the Earlier Patents include independent claims that each recite a “controller” that provisions “virtual assets” and this controller is not recited in the Challenged Claims. EX2008, Cl. 1; EX2009, Cl. 1. Those claims also recite a “Knowledge Block” used in connection with parameters for alerting or reallocating assets. *Id.* The Challenged Claims omit each of the “controller” and “Knowledge Block.” Claim 1 of the ’050 patent is also directed to a “self-service portal in a virtualization system” that automatically provisions a particular virtual asset—a focus that is absent from the claims of the Earlier Patents. MS-1001, Cl. 1.

ToutVirtual’s reliance on the VirtualIQ technology is also insufficient. The only reference to patent coverage of this technology is a general statement within presentation materials provided to Microsoft representatives on 2006 (i.e., nearly ten years before the ’050 Patent’s filing date). EX2019, 6 (noting that the VirtualIQ technology is a “patent-pending technology platform”). But the Request fails to

identify any feature within the Challenged Claims that was present in the VirtualIQ technology and that this feature is what contributed to the proclaimed industry success. *See* Req. 9-11. ToutVirtual also fails to identify any evidence of marking through identification of specific patents, or any evidence of enforcement prior to the Petition filing. Absent these indications, ToutVirtual’s reference to the VirtualIQ technology as reflecting any commercialization or application of the Challenged Claims is speculative at best.

Several of ToutVirtual’s exhibits that it claims represent a “recognized industry need and received praise and recognition” are based on ToutVirtual’s own press releases regarding its products, which should be given no weight. *See, e.g.*, EX2012; EX2014; EX2018; Req., 9-12 (citing the same). And while ToutVirtual identifies some third-party evaluations, it fails to tie the recognized aspects of VirtualIQ technology to the specific limitations of the Challenged Claims. *See* Req., 9-12 (citing EX2015, EX2016). Nor could it have, as no nexus exists. Instead, aspects of the VirtualIQ technology ToutVirtual proclaims as receiving “praise and recognition” relate, if at all, to elements—such as Knowledge Block parameters governing reallocation of virtual assets and automatic metric-driven reallocation of virtual assets—that were deliberately omitted from the Challenged Claims. Req., 2; *see* EX2008, Cl. 1; EX2009, Cl. 1.

C. To the Contrary, Contemporaneous Evidence Demonstrates the Industry Found Significant Flaws in ToutVirtual’s VirtualIQ

Technology

ToutVirtual also fails to identify any praise or recognition for the VirtualIQ technology after 2009. To the contrary, after 2009, industry sources publicly reported security vulnerabilities for the VirtualIQ technology. For example, the National Vulnerability Database reported that VirtualIQ contained “[m]ultiple cross-site request forgery (CSRF) vulnerabilities” that allowed remote attackers to “hijack the authentication of administrators” to create users, shut down, start, or restart virtual machines, and schedule activity. MS-1062. Another report states that VirtualIQ “contains cleartext SSH credentials,” allowing remote attackers to obtain sensitive information by reading username and password fields. MS-1063. Unsurprisingly, ToutVirtual does not address these vulnerabilities, which undercut any suggestion that the cited pre-2010 marketing statements and third-party comments establish durable industry praise for the VirtualIQ technology.

D. Absent Unique Circumstances, Prosecution Citations To Earlier Patents With Different Claims Also Do Not Establish Settled Expectations

ToutVirtual’s assertion that Microsoft had “continued awareness of ToutVirtual’s portfolio” is neither particularized nor tied to the Challenged Claims to inform the settled expectations inquiry relating to the ’050 patent. The citations concern the Earlier Patents, not the ’050 patent. *See* EX2003, ¶8. And, explained above, given the differences in claim language, any awareness created by

Microsoft's later encounter with the Earlier Patents is offset by differences in claim scope. EX2002, ¶¶10-12; EX2019, 6; EX2020, 1; EX2003, ¶8.

Further, each of the identified citations to the Earlier Patents in ongoing prosecution occurred before the '050 patent application was filed. *See* EX2003, ¶8. The latest prosecution event identified by ToutVirtual involved a non-final rejection citing the '431 patent publication on 8/13/2020. *Id.* Microsoft therefore could not have become aware of the '050 patent through a reasonable inquiry.

V. §325(D) DISCRETIONARY DENIAL IS NOT APPROPRIATE

ToutVirtual's 325(d) arguments are incomplete—they ignore material error under the second prong of the *Advanced Bionics* framework. *See* §II.A, *supra*. They also superficially address Hirschfeld, which was never before the Office during original examination. *Compare* Pet., 52-73, *and* Req., 19-20. Hirschfeld is also not cumulative of Singh because the Petition presents a new analysis of Hirschfeld, with respect to at least the claimed “virtualization layer” and the Examiner did not assess Singh with respect to this element. *See* Pet., 55-56. *Advanced Bionics* Part 1 is therefore not met, and the Director need not reach Part 2. *Thorne Research*, at 9; IPR2023-01369, Pap. 10, at 19 (PTAB Mar. 5, 2024). Material examination error (§II, *supra*) confirms discretionary denial under §325(d) is not appropriate.

VI. CONCLUSION

ToutVirtual's Request for Discretionary Denial should be denied.

Respectfully submitted,

Dated: June 16, 2026

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on June 16, 2026, a complete and entire copy of this Petitioner's Opposition to Patent Owner's Request for Discretionary Denial and Accompanying Exhibits were provided by email to the Patent Owner by serving the correspondence email address of record as follows:

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