

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NVIDIA CORPORATION,
Petitioners,

v.

NEURAL AI, LLC,
Patent Owner.

Case No. IPR2025-00610

U.S. Patent No. RE48,438

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

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Other Authorities

H. R. Rep. No. 112–98, pt. 1 (2011).....	36
Neurala, <i>Max Versace Talk at NVIDIA GTC EU 2016</i> , YOUTUBE, 16:10-50 (Nov. 7, 2016), https://www.youtube.com/watch?v=ugYUtKrdL48	9, 10

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1002	File History for U.S. Patent No. RE48,438 (Appl. No. 15/808,201)
1003	Declaration of Prof. Tajana Rosing, Ph.D.
1004	U.S. Patent No. 7,861,060 (“Nickolls”)
1005	U.S. Patent No. 7,139,003 (“Kirk”)
1006	Z. Luo, <i>Artificial Neural Network Computation on Graphic Process Unit</i> (IEEE 2005) (“ANN”)
1007	K. Oh, GPU implementation of neural networks (2004) (“Oh”)
1008	Japanese Unexamined Patent Appl. No. H04-237388A (“Tamura”)
1009	<i>The C programming Language</i> (1988)
1010	Excerpts of Patent Owner’s Infringement Contentions
1011	Numerical Recipes in C (2d ed. 2002)
1012	Jeanne Martin, <i>Fortran 90 Pointers vs. “Cray” Pointers</i> , 11 ACM SIGPLAN Fortran Forum (1992)
1013	Arthur Veen, <i>Dataflow Machine Architecture</i> (1986)
1014	Michael Flynn, <i>Some Computer Organizations and Their Effectiveness</i> (1972)
1015	Press Release – NVIDIA Launches the World’s First Graphics Processing Unit; GeForce 256 (Aug. 31, 1999)
1016	Excerpts of OpenGL Shading Language (2004)
1017	Excerpts of The Cg Tutorial: The Definitive Guide to Programmable Real-Time Graphics (2003)
1018	OpenGL 2.1 Reference Pages
1019	Advanced Image Processing with DirectX 9 Pixel Shaders (2004)
1020	GPGPU: Basic Math Tutorial
1021	Ian Buck, <i>Data Parallel Computation on Graphics Hardware</i> (2003)
1022	Youquan Liu, <i>Real-Time 3D Fluid Simulation on GPU with Complex Obstacles</i> (2004)

Exhibit	Description
1023	Declaration of Dr. Mary Bolin
1024	Declaration of Gordon McPherson
1025	Thomas Rolfes, <i>Artificial Neural Networks on Programmable Graphics Hardware</i> in <i>Game Programming Gems 4</i> (2004)
1026	P.J.G. Lisboa, <i>A review of evidence of health benefits from artificial neural networks in medical intervention</i> (2002)
1027	U.S. Patent Publ. No. 2003/0140179 (“Wilt”)
1028	Bertil Svensson, <i>SIMD Processor Array Architectures</i> in <i>PARALLEL PROCESSING IN INDUSTRIAL REAL-TIME APPLICATIONS</i> (1992)
1029	Michael Glover, <i>A Massively-Parallel SIMD Processor for Neural Network and Machine Vision Applications</i> (1993)
1030	Francisco Mesa-Martinez, <i>The UCSC Kestrel High Performance SIMD Processor: Present and Future</i> (2003)
1031	<i>Sotera</i> Stipulation
1032	GPU Gems 2: Programming Techniques for High-Performance Graphics and General-Purpose Computation (2005)
1033	Stipulated Protective Order
1034	Redline Showing Proposed Modifications to the Default Protective Order
1035	File History for U.S. Patent No. 8,648,867 (Appl. No. 11/860,254)
1036	Neurala Vision Inspection Automation (VIA) Software Brings New Technology to Visual Inspection, Neurala, https://www.neurala.com/tech (last visited July 11, 2025)
1037	Neurala, Neurala Announces Availability of Brain Builder on Sony’s AITRIOS™ Marketplace, (April 20, 2023), available at https://www.neurala.com/press-releases/neurala-announces-availability-of-brain-builder-on-sonys-aitrios-marketplace .
1038	NAI’s Original Complaint in <i>Neural AI, LLC v. NVIDIA Corp.</i> , No. 7:24-cv-00221 (W.D. Tex.), Dkt. 1, September 13, 2024
1039	Order in <i>Neural AI, LLC v. NVIDIA Corp.</i> , No. 7:24-cv-00221 (W.D. Tex.), Dkt. 5, September 16, 2024

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1040	Time to Milestones: California Northern District, DOCKETNAVIGATOR (last visited July 11, 2025).
1041	NAI's Responsive Claim Construction Brief in <i>Neural AI, LLC v. NVIDIA Corp.</i> , No. 7:24-cv-00221 (W.D. Tex.), Dkt. 74, June 10, 2025
1042	NVIDIA's Reply in Support of Transfer in <i>Neural AI, LLC v. NVIDIA Corp.</i> , No. 7:24-cv-00221 (W.D. Tex.), Dkt. 82, June 26, 2025
1043	Plaintiff Neural AI LLC's Preliminary Infringement Contentions, Exhibit 1 (Claim chart for Grace-Hopper), served January 14, 2025 in <i>Neural AI, LLC v. NVIDIA Corp.</i> , No. 7:24-cv-00221 (W.D. Tex.)
1044	USPTO Assignments, Patent assignment 068567/0282
1045	L. Neeves, <i>Speeding up Neurala's Brian Building with NGC</i> (July 31, 2019), https://www.neurala.com/blog/speeding-up-neurala-brain-builder-with-ai-containers-from-nvidia-ngc .
1046	N. Alarcon, <i>Inception Spotlight: AI Startup Neruala Sees 7X Speedup with NGC</i> (Sep. 25, 2019), https://developer.nvidia.com/blog/inception-spotlight-ai-startup-neurala-sees-7x-speedup-with-ngc/ .
1047	<i>NVIDIA® CUDA™ Unleashes Power of GPU Computing</i> , NVIDIA (Feb. 16, 2007), https://web.archive.org/web/20070329144655/http://www.nvidia.com/object/IO_39918.html .
1048	<i>NVIDIA Leads Performance Per Watt Revolution With "Maxwell" Graphics Architecture</i> , NVIDIA (Feb. 17, 2014), https://nvidianews.nvidia.com/news/nvidia-leads-performance-per-watt-revolution-with-maxwell-graphics-architecture-6622576 .
1049	<i>A Quantum Leap in Gaming: NVIDIA Introduces GeForce GTX 1080</i> , NVIDIA (May 6, 2016), https://nvidianews.nvidia.com/news/a-quantum-leap-in-gaming:-nvidia-introduces-geforce-gtx-1080 .
1050	<i>NVIDIA Launches Revolutionary Volta GPU Platform, Fueling Next Era of AI and High Performance Computing</i> , NVIDIA (May 10, 2017), https://nvidianews.nvidia.com/news/nvidia-launches-revolutionary-volta-gpu-platform-fueling-next-era-of-ai-and-high-performance-computing .

Exhibit	Description
1051	<i>NVIDIA Reinvents Computer Graphics with Turing Architecture</i> , NVIDIA (Aug. 13, 2018), https://nvidianews.nvidia.com/news/nvidia-reinvents-computer-graphics-with-turing-architecture .
1052	<i>NVIDIA’s New Ampere Data Center GPU in Full Production</i> , NVIDIA (May 14, 2020), https://nvidianews.nvidia.com/news/nvidias-new-ampere-data-center-gpu-in-full-production .
1053	<i>NVIDIA Announces Hopper Architecture, the Next Generation of Accelerated Computing</i> , NVIDIA (Mar. 22, 2022), https://nvidianews.nvidia.com/news/nvidia-announces-hopper-architecture-the-next-generation-of-accelerated-computing .
1054	<i>NVIDIA’s New Ada Lovelace RTX GPU Arrives for Designers and Creators</i> , NVIDIA (Sep. 20, 2022), https://nvidianews.nvidia.com/news/nvidias-new-ada-lovelace-rtx-gpu-arrives-for-designers-and-creators .
1055	Motion Success: Motion to Stay Pending Inter Partes Review — California Northern District, DOCKETNAVIGATOR (last visited Jun. 27, 2025).
1056	Texas Secretary of State, <i>Certificate of Amendment for Neural AI, LLC</i> (Jul. 15, 2024).
1057	K. Vidal, <i>Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation</i> , U.S.P.T.O. (Jun. 21, 2022).
1058	<i>USPTO Rescinds memorandum addressing discretionary denial procedures</i> (Feb. 28, 2025), https://www.uspto.gov/about-us/news-updates/uspto-rescinds-memorandum-addressing-discretionary-denial-procedures .
1059	Boalick, C.A.P.J., <i>Guidance on USPTO’s rescission of “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation”</i> , U.S.P.T.O. (Mar. 24, 2025).
1060	[REDACTED] (Sealed)
1061	[REDACTED] (Sealed)

Exhibit	Description
1062	[REDACTED] (Sealed)
1063	<i>Jetson TX1 Module</i> , NVIDIA, https://developer.nvidia.com/embedded/jetson-tx1 (last visited Jul. 11, 2025).
1064	Neurala, Press Release titled <i>Neurala Brings New AI Technology to NVIDIA Jetson Ecosystem</i> (June 14, 2016), available at https://www.neurala.com/press-releases/neurala-brings-new-ai-technology-nvidia-jetson-ecosystem
1065	NVIDIA AI, <i>How a Boston Startup Plans to Poach Poachers in Africa Using Intelligent Drones</i> , Medium, (July 10, 2017), available at https://medium.com/@NvidiaAI/how-a-boston-startup-plans-to-poach-poachers-in-africa-using-intelligent-drones-ec0a2b32d0e0

Pursuant to the Director's guidance concerning "Interim Processes for PTAB Workload Management" (Mar. 26, 2025) (the "Guidance"), Petitioner NVIDIA Corporation ("NVIDIA") submits this brief opposing Patent Owner Neural AI, LLC's ("NAI") Request for Discretionary Denial.

I. INTRODUCTION

The Director should refer NVIDIA's Petition on U.S. Patent No. RE48,438 (the "'438 patent")—which reissued in 2021—to a panel of the Board for a preliminary review of the merits. A Petition on a related reissue patent was recently denied institution under the Director's discretion but, as explained in NVIDIA's request for rehearing, that decision relies on two flawed premises that similarly should not control here: (1) a patent that reissued only recently cannot support "settled expectations" of validity, and (2) the Director must rely on actual time-to-trial statistics—not optimistic trial dates set by the Court—when evaluating efficiency concerns, and those statistics show trial on the '438 patent will occur *before* a Final Written Decision.

NAI—a non-practicing entity formed less than a year ago—recently acquired the '438 patent and now asserts it against NVIDIA. There is no evidence that in the short 4 years since it issued the '438 patent was ever commercialized in NVIDIA's industry, either by former owner Neurala, current owner NAI, or licensee [REDACTED]. There can be no settled expectations in such a young, uncommercialized patent.

The trial date and the minimal investment in the parallel district court proceeding further favor institution. Though Judge Albright has set a tentative trial date, his actual time-to-trial statistics suggest the Board would issue a Final Written Decision well before trial. In its decision on the related '461 patent, the Director mistakenly relied on Judge Albright's tentative trial date, without addressing actual time-to-trial statistics. Discovery has only just begun, and party investment remains low.

Because no legitimate settled expectations exist and the Petition presents a strong invalidity case that will get resolved before any trial on the '438 patent, IPR will provide an efficient and expert forum to address the issues. NVIDIA respectfully requests that the Director refer the Petition to a Board panel for preliminary review.

II. BACKGROUND

NAI sued NVIDIA, the world's leading GPU manufacturer, on September 13, 2024, in the Western District of Texas (the "Litigation"). NAI alleges that NVIDIA's GPU hardware and software infringes the '438 patent, which issued in 2021, a related reissue patent that issued in 2023, and a related grandparent patent that issued in 2014. Ex1010, 2–5. The Litigation is assigned to Judge Albright, who referred pre-trial proceedings to Magistrate Judge Gilliland. Ex1039. NVIDIA filed two Petitions for IPR against the '438 patent on April 30, 2025, and filed petitions

against the two related patents (8,648,867 and RE49,461) on February 24, 2025, and March 6, 2025, respectively.

The '438 patent purports to disclose an “accelerator system” for “GPU computation.” Ex1001, Abstract. The '438 patent issued from application no. 15/808,201, filed November 9, 2017, and claims priority to provisional application no. 60/826,892, filed September 25, 2006. Ex1001. During prosecution of the application for the related '867 patent, the applicant (Neurala) failed to respond to a 2010 non-final rejection, and the Examiner issued a notice of abandonment in 2011. Ex1035, 105–17, 153–54. The applicant then petitioned for revival in 2013, and argued that the claims were allowable with the inclusion an “accelerator controller” not disclosed in the Examiner-identified prior art. Ex1035, 155–73. The grandparent '867 patent issued on February 11, 2014. Ex1035.

NAI is a non-practicing entity that was incorporated July 11, 2024, just two months before it sued NVIDIA. Ex1042. NAI does not market any hardware or software products, has no licensees, and has not asserted the '438 patent against anyone except NVIDIA in the Litigation. *Id.* NAI acquired the rights to the '438 patent from Neurala, a company founded by the inventors of the '438 patent. Ex1039. Neurala has been using NVIDIA products since at least 2006, including GPUs and software applications accused of infringement in this case. Ex1064 (Neurala Press Release explaining that Neurala is developing “object tracking

software and collision avoidance software for the NVIDIA Jetson TX1 and TK1 platforms” and that Neurala has been using NVIDIA GPUs since 2006. The Jetson TX1 has the accused Maxwell GPU.); Ex1045, 4; Ex2006 ¶53 (accusing NGC); Ex1046.

NAI has not argued that any of Neurala's products implement the '438 patent, nor that Neurala marked any of its products or any licensee products with the patent number for the '438 patent. Neurala never asserted the '438 patent in litigation or accused NVIDIA of infringement before this lawsuit.

The Petition relies on four references, two of which were invented or authored by NVIDIA employees: U.S. Patent No. 7,139,003 (“Kirk”), filed on December 15, 2003, Ex1005; GPU implementation of neural networks (“Oh”), published in 2004 in the Journal of the Pattern Recognition Society, and publicly available around April 2004, Ex1007; Japan Patent Application No. H04-237388 (“Tamura”), filed January 22, 1991, and published on August 25, 1992, Ex1008; and “GPU Gems 2: Programming Techniques for High-Performance Graphics and General-Purpose Computation” (“GPU Gems”), published in March 2005, Ex1032. Oh was of record during prosecution, but was not substantively discussed or applied by the Examiner. Ex1002. None of the other three references were of record during the prosecution of the '438 patent. Ex1002. [REDACTED]

[REDACTED]

[REDACTED] Ex1002.¹

III. ARGUMENT

A. Settled Expectations of the Parties Weigh In Favor of Institution

The settled expectations of the parties weigh entirely in favor of NVIDIA. NAI—an entity formed less than one year ago—has no settled expectations. Nor does the prior patent owner, Neurala, have settled expectations in a patent that only issued in 2021. *Advanced Micro Devices, Inc. v. Concurrent Ventures LLC*, IPR2025-00479, Paper 10 at 2 (Jul. 10, 2024) (finding no settled expectations for a patent that issued in 2021); *Cambridge Indus. USA, Inc. v. Applied Optoelectronics, Inc.*, IPR2025-00434, Paper 11 at 2–3 (Jun. 26, 2025) (declining to discretionarily deny petitions because the challenged patents issued about 5-6 years ago). The recent issuance of the '438 patent alone negates NAI's arguments with respect to settled expectations.

While “settled expectations of the parties” include as one factor the time claims have been in force (Guidance, 2), the Director has provided “non-exclusive

¹ NVIDIA sets forth a timeline of important events in Appendix A. Several of these dates rely on the accuracy of NAI's representations. NVIDIA does not admit that any date asserted by NAI is accurate.

examples” of “considerations that weigh against a patent owner’s claim of settled expectations.” *Intel Corp. v. Proxense LLC*, IPR2025-00327, Paper 12 at 2–3 (Jun. 26, 2025). Relevant here, where “a patent may have been in force for years but may not have been commercialized, asserted, marked, licensed, or otherwise applied in a petitioner’s particular technology space, if at all,” discretionary denial based on settled expectations may not be appropriate. *Id.* This exact situation is present: neither NAI nor Neurala have argued that the ’438 patent was ever commercialized, asserted, marked, licensed, or otherwise applied in NVIDIA’s space. The ’438 patent issued just over four years ago. Although Neurala used the accused NVIDIA products for over a decade prior to the patent’s issuance and was intimately familiar with them, Neurala failed to assert that NVIDIA infringed any patent in the family of the ’438 patent. Thus, NVIDIA had a clear and well-settled expectation that Neurala would not assert the ’438 patent family against it. Furthermore, neither NAI nor Neurala can have settled expectations in the ’438 patent where an inventor withheld a known material reference during prosecution.

1. Neural AI Has No Settled Expectations Regarding the ’438 Patent

NAI does not have settled expectations in its ’438 patent because the patent has been in force for just over four years, NAI only acquired the patent less than a year ago, and NAI has not “commercialized, asserted, marked, licensed, or otherwise applied” the patent in NVIDIA’s space. *Proxense*, 2–3. The ’438 patent issued in

February 2021. Ex.1001. NAI makes no products and was formed two months before it sued NVIDIA. Ex1042, 6.

2. Prior Owner Neurala Has No Settled Expectations Because It Declined to Enforce Its Patent Family for Over a Decade

The lack of settled expectations in the '438 patent by Neurala (the prior owner) further demonstrate why the Director should not invoke discretionary denial. Indeed, NVIDIA had a settled expectation in the '438 patent *not* being asserted against it.

NAI has not claimed that Neurala, or any other party, practiced the '438 patent. Nor has it claimed that Neurala marked its software with the '438 patent. Ex2006. NAI also does not argue that Neurala ever licensed the '438 patent to other GPU makers. Since the '438 patent issued in 2021, there has been no demonstrated commercial use of the patent. Without such use, NAI cannot have any settled expectations in the validity of the patent. *Proxense*, 2–3. Indeed, parties do not show that their settled expectations have been upset “simply by showing that they have been denied the ability to exploit a property interest that they heretofore had believed was available” *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 130 (1978).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Furthermore, Neurala extensively used the accused NVIDIA GPUs and software for over a decade and never suggested that NVIDIA infringed any patent in the family of the '438 patent, much less enforced it. As illustrated below, not only did Neurala use NVIDIA GPUs and software, including the accused products, since

at least 2008, Neurala was deeply familiar with the accused products and worked with NVIDIA over the years to market Neurala products that used NVIDIA's accused GPUs. Despite its deep familiarity with NVIDIA GPUs and software, and its interactions with NVIDIA, Neurala never alleged that NVIDIA infringed any of its patents. It was with many years of hindsight that Neurala strategically sought reissue to submarine others in the marketplace who spent those years advancing the industry. These actions undermine any claim of settled expectations by Neurala.

By way of example, the following illustrates Neurala's continued use of NVIDIA GPUs from 2008 to the present, and continued interactions with NVIDIA regarding its use of NVIDIA products, without ever raising any allegation of infringement against NVIDIA:

- At a 2016 presentation, Neurala's CEO explained that Neurala had been using NVIDIA GPUs since 2008 and that its strategy was to let NVIDIA's "hardware evolve," such that "Neurala *[had] to do virtually nothing*" to achieve "twice the computing power . . . at no particular cost for [Neurala]."² Thus, not only did Neurala use NVIDIA GPUs and software without ever

² Neurala, *Max Versace Talk at NVIDIA GTC EU 2016*, YOUTUBE, 16:10–50 (Nov. 7, 2016), <https://www.youtube.com/watch?v=ugYUtKrdL48>.

alleging infringement, it benefited from NVIDIA's advances to its GPUs while Neurala sat back and "did virtually nothing." *Id.*

- In 2016, a Neurala press release explained that, having met the "exacting specifications of the Jetson Embedded Platform," Neurala has "joined the NVIDIA Jetson Embedded Platform." Ex1064. The press release further explained that Neurala was building "object learning, object tracking software and collision avoidance software for the NVIDIA Jetson TX1 and TK1 platforms." *Id.* The Jetson TX-1 incorporates a Maxwell GPU, which is one of the accused GPU architectures. Ex1063. Neurala described its then-current products as "Drones, Self-Driving Cars, Toys and Robots." Ex1064.
- In 2017, Neurala used NVIDIA GPUs and cuDNN (an NVIDIA software platform it relies on for its infringement allegations) to perform neural network calculations in drones to recognize elephant poachers. NVIDIA also published an article about Neurala's use of cuDNN and NVIDIA GPUs to enable Neurala's technology. Ex1065.
- In the 2017 presentation that Neurala allegedly presented to NVIDIA (Br. 42–47), Neurala touted its "Brains for Bots SDK" software, which Neurala designed to use the "NVIDIA Jetson TX1," an accused GPU. Ex2005, 3, 5–9, 11–16, 19.

- In 2019, both issued a press release advertising Neurala’s use of NVIDIA’s NGC platform, which allows Neurala to access the accused NVIDIA GPUs through the cloud, to increase the speed of its various software products. Ex1045, 4; Ex2006 ¶53 (listing NGC as an accused product); Ex1046 (NVIDIA article concerning Neurala’s use of NGC).
- To this day, Neurala advertises Vision Inspection Automation (“VIA”), software that is designed to work on computers with an NVIDIA GPU. Ex1036.

Thus, not only did Neurala use NVIDIA GPUs since at least 2008, it was deeply familiar with the accused products and worked with NVIDIA over the years on marketing Neurala products. However, despite its deep familiarity with NVIDIA GPUs and software, and further despite its interactions with NVIDIA, Neurala never alleged that NVIDIA infringed any of its patents. Instead, armed with these years of hindsight, Neurala sought reissue of one of its patents.

NAI’s brief fails to establish that Neurala had settled expectations in the ’438 patent. What NAI describes as a “close working relationship” (Br., 31) between Neurala and NVIDIA was actually [REDACTED]

[REDACTED]

[REDACTED]. See Ex1060, 5. NVIDIA and Neurala [REDACTED]

[REDACTED]

[REDACTED]. [REDACTED]. Ex1061. Despite this arrangement, Neurala never suggested that any NVIDIA product—including the software and hardware on which Neurala built its business—infringed any Neurala patent.

Further, NAI argues that Neurala has settled expectations because of the Patent Office's citations to related patents during prosecution of NVIDIA patents. Br., 33–40. Not so. The Patent Office's citation to the '220 publication (which later issued as the '867 patent) first occurred while the underlying application was abandoned. Ex2018, 247 (identifying the August 8, 2013 date, prior to the August 26 revival of the application); *Globus Medical, Inc. v. Spinelogik, Inc.*, No. IPR2025-00225, Paper 8 at 2 (Jun. 12, 2025) (finding no settled expectations where an issued patent had been abandoned). Any negative conclusions NAI seeks to draw from citations to Neurala patents or applications during NVIDIA's prosecution activities are overcome by the decade-long interactions between NVIDIA and Neurala throughout which Neurala *never* raised alleged infringement of its patents, giving NVIDIA an expectation they would not be asserted.

Finally, NAI argues that “Neurala's discussions with NVIDIA specifically and undeniably involved Neurala's patents, including the '867 patent and the related '828 patent (the precursor to the '461 and '438 reissue patents).” Br., 43. But NAI

presents no evidence to support that statement. Although the presentation that NAI alleges Neurala showed to NVIDIA in June of 2017 lists the '867 patent by number (Br., 8, 45–46), it only provided a *single sentence description* of the patent without any allegation that NVIDIA practiced the patent. Ex2005, at 10 (“Neurala IP dates back to 2006, where we patented [sic] a method for running difference and differential equations on GPUs (US 8,648,867).”). Neurala never informed NVIDIA of the '438 patent. And importantly, Neurala never even described the solution of the '867 patent and never listed any of the '867 patent's claims. Neurala also never claimed that NVIDIA's products infringed, despite having deep familiarity with NVIDIA products at that time. In fact, a holistic review of Neurala's presentation (Ex2005) clearly shows that Neurala solicited an investment based on its product—machine vision software—and not its patents, which are only mentioned in passing without any explanation as to their relevance to the Neurala product or the NVIDIA accused GPUs.

As such, neither NAI nor Neurala has any settled expectations in the validity of the '438 patent. To the contrary, it is NVIDIA that has settled expectations that Neurala and NAI would not allege infringement by the NVIDIA GPUs and software that Neurala had been using for over a decade.

3. Neither Neurala, Nor NAI, Can Have Settled Expectations in the Patent Office's Determination of Validity as Neurala and the Inventors [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] A goal of the Director's settled expectations doctrine is to promote "robust, predictable patent rights." *Tesla Inc. v. Charge Fusion Techs., LLC*, IPR2025-00152, Paper 11 at 3 (Jun. 12, 2025). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

B. The Inventors' Unfair Conduct During Prosecution Warrants Institution

While the Board does not adjudicate equitable defenses, “the Office may consider unfair dealings as a factor when determining whether to exercise discretion to deny institution.” *Tessell, Inc. v. Nutanix, Inc.*, IPR2025-00322, Paper 14, at 2 (Jun. 12, 2025). The inventors’ and prior assignee’s unfair dealings tilt the scales further toward institution in two ways.

[REDACTED]

The inventors also delayed prosecution of the related '867 patent by abandoning the application for more than two years during prosecution. Ex1063, 155–56. Although the Examiner revived the application two years after it was abandoned, the Examiner noted that it was “not apparent whether the person signing the statement of unintentional delay was in a position to have firsthand or direct knowledge of the facts and circumstances of the delay at issue.” Ex1063, 180–81.

The above conduct—[REDACTED]
[REDACTED]—prevented a fair prosecution of the patent and prejudiced the rights of innovators like NVIDIA. The Office should institute IPR in view of the '438 patent inventor's “unfair conduct.” *Tessell*, Paper 14 at 2.

C. Each *Fintiv* Factor is Either Neutral or Weighs Towards Institution

1. The Likelihood of Stay Is Neutral or Weighs Slightly Toward Institution

This factor is at least neutral because no litigation stay has been requested and no objective evidence exists regarding whether a stay in the litigation will be granted. The Board's practice is not to speculate regarding how a motion to stay may be decided. *Google LLC v. Mullen Indus. LLC*, IPR2025-00021, Paper 14 at 8–9 (May 14, 2025). NAI's arguments on this factor are incorrect.

NAI argues that a stay is unlikely where fact discovery is underway if IPRs are not instituted for all patents (Br., 14–16), but Judge Albright has previously granted a stay where both of these factors were present. *ParkerVision, Inc. v. NXP*

Semiconductors N.V., 6:23-cv-00389-ADA, at *6–7 (May 27, 2025) (Albright, J.) (granting a stay pending IPR of two of three patents in the litigation even though “[t]he early stages of th[e] case [were] long behind” the court). Neither condition is dispositive, and NAI has not shown that either condition holds here. Instead, Judge Albright considers “prejudice [to] the nonmoving party,” “whether proceedings have reached an advanced stage,” and whether the stay “will simplify[] the case before the court.” *Pedersen v. Oracle Corp.*, 6:22-cv-00410-ADA, ECF No. 42 at *2 (W.D. Tex. Aug. 24, 2023) (Albright, J.) (quotation omitted).

To the extent NVIDIA seeks a stay, NAI is unlikely to show that it will experience substantial prejudice, which arises from “loss of testimonial and documentary evidence” and the patentee’s “interest in the timely enforcement of its patent rights,” and is diminished by “dilatory conduct” including “delay in filing suit.” *Id.*, at *2–4. NAI and Neurala together delayed bringing this suit until over ten years after the parent patent issued. Ex1001 (issued Feb. 11, 2014); Ex2006 (Complaint, filed Sep. 13, 2024). NAI is a non-practicing entity with no licensees and did not even request equitable relief in its complaint. Ex2006, 93 (Prayer for Relief). Without the prospect of an injunction the court is unlikely to find NAI will experience prejudice from a stay pending IPR under these circumstances. *Pedersen*, 6:22-cv-00410-ADA, at *4; *Lone Star SCM Sys., LTD. v. Zebra Techs. Corp.*, 6:21-cv-00842-ADA, ECF No. 85 at *4 (Jul. 31, 2023) (W.D. Tex. Jul. 31, 2023)

(Albright, J.) (granting stay pending IPR where the plaintiff would be entitled only to monetary relief in view of the strength of the petition); *ParkerVision, Inc.*, 6:23-cv-00389-ADA, at *7–8 (same).

2. The Trial Date Weighs Towards Institution

Despite the scheduled trial date, a jury trial is exceedingly unlikely to occur prior to a Final Written Decision and most likely will not occur until six months afterwards. According to data from DocketNavigator and as summarized in Appendix B, Judge Albright has presided over 22 patent trials in the last two years, and each has been delayed by a minimum of three months relative to the originally scheduled trial date, with a median delay of 8 months. Appendix B (collating cases). Thus, the most likely trial date for this proceeding will be around May 2027 or later—several months after the November 30, 2026, statutory deadline for a Final Written Decision. Ex2008, 3.

NAI argues that the Director should not pay attention to a district court's regular practice and presume that the Western District will keep to its scheduled trial date, even though the Court has not done so once in two years and 22 trials. Indeed, the Director credited the Court's scheduled date and did not address these statistics in its Discretionary Denial of NVIDIA's other Petitions. *NVIDIA Corp. v. Neural AI, LLC*, IPR2025-00606, Paper 18 at 2 (Jul. 31, 2025). The Director should consider the Court's actual time-to-trial statistics in accordance with its own

guidance. Ex1059, 3. Based on those actual statistics, this factor weighs towards institution.

3. Lack of Investment in the Litigation Weighs Towards Institution

The parties' investment in the Litigation is minimal. The parties recently had a *Markman* hearing and discovery has only just opened. Ex2008. This factor weighs toward institution.

4. Lack of Overlap Between Cases Weighs Towards Institution

The Petition challenges claims 1–14, 16–34, and 40–54 of the '438 patent, whereas NAI has only asserted that NVIDIA infringes claims 1–10, 12–14, 16–18, 20–32, and 40–54. The validity of claims 11, 19, and 33–34 is not within the scope of the Litigation.

NVIDIA stipulated in the Petition that it would not “pursue in the Litigation the same grounds or any grounds that could reasonably have been raised in this Petition.” Pet., 77. NVIDIA's stipulation fully disclaims the grounds upon which NVIDIA is permitted to bring an IPR (including the grounds actually brought), so there will be no overlap between an instituted IPR and the Litigation. 35 U.S.C. §§ 311, 315(e); *Ingenico Inc. v. IOENGINE, LLC*, 136 F.4th 1354, 1366–67 (Fed. Cir. 2025). Requiring NVIDIA to also stipulate against raising system prior art would effectively rewrite the estoppel statute in contravention of Congress's express purpose. *See infra* § III(D)(2).

NAI argues that NVIDIA treats the prior art systems and the IPR art “interchangeably” because NVIDIA contends that each is “anticipatory.” Br., 28. But NVIDIA’s references provide alternative technical information showing how the elements of the ’438 patent were known to the public at the time of the alleged invention. That multiple references may anticipate the ’438 patent indicates the weakness of the claims, not overlap between proceedings.

NAI further argues that the Litigation will be “as expansive as ever,” following IPR. Not so. Upon institution, NVIDIA’s stipulation would simplify the parallel proceeding by preventing it from “pursu[ing] in the Litigation the same grounds or any grounds that could reasonably have been raised in this Petition.” Pet., 77. Further, the Petition alleges invalidity of claims 1–14, 16–34, and 40–54 of the ’438 patent, including each of the asserted claims. A Final Written Decision of invalidity would moot litigation over the ’438 patent.

5. The Identity of the Parties Is Neutral Relative to Institution

The Office routinely grants institution where parties are the same between the Litigation and the IPR. *See, e.g., Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 11 (Jun. 26, 2017). The Director’s discretionary review process has continued this practice. *See, e.g., Savant Techs. v. Feit Elec. Co.*, IPR2025-00260, Paper 16 at 2–3 (Jun. 12, 2025). NAI has not pointed to any other factor related to the identity of the parties, such as “a prior jury verdict of no

invalidity” in the Litigation, that would weigh against institution—indeed it cannot. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 14 n.27 (Mar. 20, 2020) (citing *Stryker Corp. v. KFx Med., LLC*, IPR2019-00817, Paper 10 (Sep. 16, 2019)). This factor is therefore neutral relative to institution.

6. Other Circumstances Weigh Towards Institution

Each other circumstance offered by NAI weighs towards institution. The merits of this petition are both strong and undisturbed by NAI’s brief in favor of discretionary denial. *See infra* § III(C)(6)(a).

a. The Strength of the Petition Weighs Toward Institution

NVIDIA’s petition presents a strong showing that all challenged claims of the ’438 patent are invalid. In its Brief, NAI argues that the merits of the Petition are weak, but NAI did not articulate any reason why the merits weigh against institution and instead deferred that discussion to its Patent Owner Preliminary Response (POPR). Br., 63–64. There are no arguments on the merits for Petitioner to respond to in this brief, and it will be too late to respond when NAI files a POPR the same day this response brief is filed. NAI’s arguments should therefore be given no weight.

NAI is incorrect that “the same or substantially the same prior art or arguments previously were presented to the Office.” Br., 58. Neither Kirk, Tamura, nor GPU Gems were before the Patent Office during prosecution. Ex1002. Oh was of record,

but was not substantively addressed by the Examiner. Ex1002. The Petitioner's arguments are thus not "substantially similar" to the arguments considered by the Examiner during prosecution, meaning the *Advanced Bionics* test is not met, contrary to NAI's assertion. Br., 58–63.

b. NVIDIA's Claim Construction Positions in the Petition Are Proper and Consistent with its Litigation Positions

A petition must identify "[h]ow the challenged claim is to be construed." 37 C.F.R. § 42.104(b)(3). NVIDIA's petition did precisely that—it submitted that "no construction of any claim term is necessary for the Board to resolve, and the Challenged Claims would have been obvious under any reasonable construction." Pet., 5; *see, e.g., E.I. du Pont De Nemours & Co. v. Unifrax I LLC*, 921 F.3d 1060, 1065 (Fed. Cir. 2019). The rules require nothing more.

NAI argues that NVIDIA adopts "inconsistent and irreconcilable" claim constructions between the Litigation and the IPR. Br. 64. This is incorrect. NVIDIA's claim construction position has been consistent, here and in the Litigation—each claim term should be accorded its plain and ordinary meaning. In the Litigation, NVIDIA argued that NAI's infringement positions "demonstrate that [NAI] interprets the claims having broader scope than the plain meaning." Ex1042, 5. Accordingly, NVIDIA asked the court's assistance to "ensure that the jury applies the proper claim scope." *Id.* Administrative Patent Judges at the Office do not

require that assistance, and so NVIDIA had no need to request any construction in its Petition. Pet. 5.

NAI has only listed several claim terms where NVIDIA asked the court's assistance—it has not identified any claim term with specificity or explained how NVIDIA's grounds are inconsistent with its construction in the Litigation. Br., 64–70. Indeed, it cannot—each of the invalidity grounds NVIDIA advances in its Petition is consistent with the construction NVIDIA seeks before in the Litigation and before the Panel.

c. NVIDIA's Expert Appropriately Explained the Knowledge of a POSITA

In the Guidance, the Director indicated that she will consider the “extent of the petition's reliance on expert testimony.” Guidance, 2. In *iRhythm*, the Director held that this factor weighs towards institution when the expert “explain[s] the background knowledge” of a POSITA, “provides citations to evidence in support of his statements,” and does not “fill gaps in the prior art.” *iRhythm Techs., Inc. v. Welch Allyn, Inc.*, IPR2025-00377, Paper 10 at 2–3 (Jun. 6, 2025).

NVIDIA's expert Dr. Rosing did exactly that—she explained the knowledge of a POSITA, cited the prior art, and did not engage in impermissible gap-filling. NAI alleges “large-scale gap filling,” but does not identify or explain a single instance of supposed such gap-filling. Br., 71. NVIDIA refuted the supposed examples NAI raised in its motions against related petitions. *See, e.g., NVIDIA*

Corp. v. Neural AI, LLC, IPR2025-00606, Paper 16, at 28 (Jul. 14, 2025). NAI has declined to extend, or even repeat, its arguments in its Motion.

Contrary to NAI's assertion, Dr. Rosing's testimony was an appropriate length. Similar to the *iRhythm* expert's declaration, Dr. Rosing explained the history of parallel computing to give context to the alleged invention of the '438 patent and thoroughly explained the prior art references in relation to the claims in fewer pages. As in *iRhythm*, the NVIDIA petition's degree of reliance on expert opinion weighs towards institution.

d. Multiple Petitions are Appropriate Given the Number and Complexity of the Challenged Claims

This Petition is one of two parallel petitions requesting IPR of the '438 patent. The Petitions rely on different base and supplemental prior art references for their invalidity grounds, with only two supplemental references in common. All grounds in this Petition rely on a combination of Kirk and Oh, and all grounds in the parallel petition rely on a combination of Nickolls and ANN. Both Petitions challenge 47 claims of the '438 patent, including each of the 43 claims which NAI has asserted against NVIDIA in the Litigation.

As explained in Petition's Statement Regarding Multiple Petitions, multiple petitions are justified because the number and complexity of the challenged claims are such that NVIDIA cannot address more than one primary combination in a single petition and comply with the Office's word limitations. Paper 3, 2–3 (citing 37

C.F.R. § 42.24; *Celco Partnership D/B/A/ Verizon Wireless et al. v. Headwater Research LLC*, IPR2024-01041, Paper 10 at 9–10 (Jan. 1, 2025)). Whether NVIDIA submitted two petitions with different art against the 47 claims or submitted two petitions against different claims with the same art, it would need two petitions to present the same arguments to the Office. NAI's attempt to distinguish *Celco* by arguing that it stands only for the proposition that multiple petitions are appropriate where they “challenge[] different claims of the same patent with the same references” elevates form over substance and should be ignored. Br., 55–56.

NAI's proposed stipulation does not moot this Petition. Though NVIDIA referenced NAI's meritless conception argument in its ranking paper, its justification for multiple petitions did not rest entirely on a perceived need to antedate NAI's asserted date of conception. As outlined above, NVIDIA's petitions are independently justified by the large number of challenged claims. Indeed, where NVIDIA petitioned for IPR against approximately 20 claims of NAI's other related patents, NVIDIA submitted only a single petition. IPR2025-00606, Paper 1 (petition for IPR of all 19 claims of U.S. Patent No. 8,648,867); IPR2025-00608, Paper 1 (petition for IPR of 21 claims of U.S. Patent No. RE49,461). Nor did NVIDIA suggest that the “only distinction between the two petitions is a potential priority dispute.” Br., 52. Kirk and Oh are different in several respects from Nickolls and

ANN, and institution would provide non-cumulative evidence of the invalidity of the 47 challenged claims of the '438 patent.

D. Grant of Discretionary Denial of this Petition for Non-Merits Considerations Is Improper on Multiple Grounds

For the reasons explained above, NVIDIA's Petition should be referred to a Board panel for preliminary merits review under the new Guidance. Even if the Director were inclined to deny the Petition, doing so would violate NVIDIA's due process rights and the APA. NVIDIA filed its Petition shortly after the Vidal Memo was rescinded and shortly after the new discretionary denial procedure was announced, receiving no "fair warning" as required by due process—particularly where the new requirements would demand different pre-filing conduct. Congress created IPR procedures to allow petitioners like NVIDIA to efficiently challenge weak patents, such as the patent at issue here. Applying new procedures retroactively undermines this Congressional intent and derogates NVIDIA's rights.

1. Rescission of the Vidal Memo and Announcement of the New Guidance Violates Due Process and the APA

Retroactive rescission of the Vidal Memo framework and application of the new framework announced after this Petition violates NVIDIA's due process rights and the APA.

a. Retroactive Rescission of the Vidal Memo and Application of New Standards to Deny NVIDIA's Petition Would Violate NVIDIA's Due Process Rights

Applying the Guidelines retroactively to a petition substantially prepared before the Guidelines were announced would violate NVIDIA's due process rights. Procedural due process protects property interests in government benefits "that are secured by 'existing rules or understandings.'" *Perry v. Sindermann*, 408 U.S. 593, 601 (1972) (citation omitted); *Goldberg v. Kelly*, 397 U.S. 254, 262 (1970). A party has a protected property interest in a government benefit when the government establishes that benefit with "'explicitly mandatory language,' in connection with the establishment of 'specified substantive predicates' to limit discretion." *Ky. Dept. of Corrections v. Thompson*, 490 U.S. 454, 463 (1989). The Vidal Memo, which describes itself as "binding guidance," created such a right in institution of a meritorious petition filed with a *Sotera* stipulation. Ex1057, 3, 9.

Retroactive rescission of the Vidal Memo violates Due Process. "To satisfy the Due Process Clause, [an agency] must at a minimum 'provide regulated parties fair warning of the conduct a regulation prohibits or requires.'" *Mexichem Fluor, Inc. v. EPA*, 866 F.3d 451, 462 (D.C. Cir. 2017). NVIDIA prepared its Petition, at considerable expense, in accordance with the requirements of the Vidal Memo—which was binding guidance until shortly before the Petition was filed—including providing a *Sotera* stipulation. Announcing and applying additional requirements

after filing does not give the “fair warning” required by Due Process, particularly where the new requirements would demand different pre-filing conduct, such as an earlier filing and a change in how the *Sotera* stipulation is treated under the Guidance as compared to how that stipulation was treated under the Vidal Memo. *Id.*; *see also Landgraf v. USI Film Prods.*, 511 U.S. 244, 269–70 (1994).

b. Retroactive Rescission of the Vidal Memo and Application of New Standards to Deny NVIDIA's Petition Would Also Violate the APA

The Director does not have the authority under the APA or the enabling statute to issue retroactive rules. Because “[r]etroactivity is not favored in the law,” agencies only have “the power to promulgate retroactive rules” when “that power is conveyed by Congress in express terms.” *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988). “Congress did not expressly grant the PTO those powers.” *Tafas v. Dudas*, 511 F. Supp.2d 652, 666 (E.D. Va. Oct. 31, 2007) (citing 35 U.S.C. § 2(b)(2)). Even if the Guidance could be characterized as a “general statement[] of policy” (it is not, *see infra* § III(D)(3)), the Patent Office would not have the power to impose the Guidance’s considerations retroactively because such statements of policy apply only “prospectively.” *Lincoln v. Vigil*, 508 U.S. 182, 197 (1993) (quotation omitted).

Application of the Guidelines to the Petition—substantially prepared before the Guidelines were announced—would be an improper retroactive application of

new law. *See Tafas*, 511 F. Supp. 2d at 666–67 (holding that application of new patent prosecution rules against an already-filed patent would be improperly retroactive). These rules would require different pre-filing conduct from NVIDIA, such as an earlier filing and a change in how the *Sotera* stipulation is treated under the Guidance as compared to how that stipulation was treated under the Vidal Memo. Thus, the imposition of Guidelines against the Petition would “retroactively alter the bargain” of filing an IPR. *Id.* at 667. Neither the APA nor the enabling statute permit this result.

2. Retroactive Rescission of the Vidal Memo and Institution of the Guidance Violates the APA for Lack of an Adequate Explanation

The Board and the Acting Director failed to articulate a satisfactory explanation for its decision to rescind the Vidal Memo and apply new Guidance to already-filed Petitions. These actions are therefore arbitrary, capricious, an abuse of discretion and not in accordance with law. *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 41 (1983) (An agency’s “rescission or modification” of prior guidance must “be set aside if found to be ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’” (*quoting* 5 U.S.C. § 706(2)(A))); *Id.*, at 43 (“[A] rescission is arbitrary and capricious if the agency does not “articulate a satisfactory explanation for its action.”).

In rescinding the Vidal Memo, the Office did not explain why it “disregard[ed] facts and circumstances that underla[id] or were engendered by the prior policy.” *Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 222 (2016) (quoting *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 516 (2009)). Nor did it show that it was “cognizant” of “serious reliance interests.” *Id.* (quoting *Fox*, 556 U.S. at 515). The Director did not address the reasoning outlined in the Vidal Memo. Instead, the Director justified the new rules according to Office priorities such as “PTAB efficiency” and “capacity,” the promotion of “consistent application of discretionary considerations in the institution of AIA proceedings,” and “the current workload needs of the PTAB.” *Id.* Even as to the Office’s interests, the Director did not cite any data indicating that these interests were not adequately served by the Vidal Memo, or that they would be better served by the Guidance. The Office presented “no findings and no analysis . . . to justify the choice made, [and] no indication of the basis on which the [agency] exercised its expert discretion,” and so it did not “cogently explain why it has exercised its discretion” to rescind the Vidal Memo. *State Farm*, 463 U.S., at 48 (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 167 (1962)).

Further, the Guidance did not address the “serious reliance interests” of parties like NVIDIA on the availability of IPR to challenge weak patents when it adopted new rules which insulate some patents from review. *Encico*, 579 U.S. at 222.

Congress established IPR to give petitioners like NVIDIA access to an efficient forum in which to challenge the validity of weak patents. *See Thryv, Inc. v. Click-to-Call Techs. LP*, 590 U.S. 45, 54 (2020). Nowhere does the Guidance or any other Office communication acknowledge this “serious reliance interest” engendered by “longstanding policies.” *Encico*, 579 U.S. at 222.

3. The Guidance Is Arbitrary and Capricious for Lack of Notice and Comment, as Were the *Fintiv* Factors and the Vidal Memo

The Guidance is also arbitrary and capricious because it announces new rules without notice and comment. The APA provides that an agency is “required to undergo notice and comment” when it creates a “substantive rule.” *Dep’t of Homeland Sec. v. Regents of the Univ. of California*, 591 U.S. 1, 11–12 (2020); 5 U.S.C. §§ 553(b)–(d). Though couched in terms of the Director’s discretion, the Guidance establishes a formal process for determining whether to deny institution and binds the Director to “determine whether discretionary denial of institution is appropriate . . . consistent with the discretionary considerations enumerated.” Guidance, 1–2; *Regents*, 591 U.S. at 18 (holding that a memo directing an agency to “establish a clear and efficient process for identifying individuals who met the enumerated criteria” established a substantive rule that must undergo to notice and comment). Although notice and comment rulemaking does not apply to “interpretative rules” or “general statements of policy,” this exception does not apply

here because the discretionary considerations have no relationship to the authorizing statute and exceed the bounds of the Director's discretion. § 553(b)(A); *infra* § III(D)(5).

Similarly, the considerations outlined in *Fintiv* and the Vidal Memo permitting discretionary denial for non-merits reasons are substantive rules issued without notice and comment. Therefore, even if the Director or the Office had sufficiently explained the rationale behind the Guidelines, the Vidal Memo, or *Fintiv*, the failure to engage in notice and comment violates the APA.

4. Discretionary Denial Based on the Proffered Non-Merits Grounds in the Guidance Would Exceed the Director's Authority

Discretionary denial is not appropriate because the Office should be limited to institution and denials based on the likelihood of success, not whether the Director views IPR as a good use of Office resources.

When a statute “confer[s] discretionary authority” to an agency, the agency’s discretion is nonetheless subject to “outer statutory boundaries of those delegations,” and so agencies must “exercise their discretion consistent with the APA.” *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, at 404 (2024). Whether an agency decides to do act or declines to act, it must “ground its reasons for action or inaction in the statute.” *Massachusetts v. E.P.A.*, 549 U.S. 497, 535 (2007).

The statute sets the outer boundary of the Director's discretion in section 314(a)—the Director may only consider the merits. For example, Section 316(a) outlines the authority of the Director to promulgate rules related to IPR. Relative to the institution decision, the Director only has the authority to “set[] forth the standards for the showing of **sufficient grounds** to institute a review under 314(a).” § 316(a)(2); *Ingenico*, 136 F.4th at 1366 (“[G]rounds are the theories of invalidity available to challenge a claim under 35 U.S.C. §§ 102 and 103”). The same section provides factors which the Director must consider when promulgating new regulations, but it carefully cabins the application of these factors to regulations within the limits of the Director's regulatory authority: “In prescribing regulations **under this section**, the Director shall consider the effect of **any such regulation**.” § 316(b).

Congress knew how to address non-merits concerns, and it did so in the statute without delegating their management to the Director's discretion. For example, Congress considered the impact of parallel proceedings in Article III courts and set forth non-discretionary limits on the efficient and just conduct of patent litigation. § 315(a), (b). The statute provides that inter partes review would not be available to a petitioner who “filed a civil action challenging the validity of a claim of the patent,” but that “[a] counterclaim challenging the validity of a claim does not constitute a civil action.” § 315(a). As another example, Congress set a time-bar to prevent

litigants from filing IPRs late in a litigation “to minimize burdensome overlap between inter partes review and patent-infringement litigation.” *Thryv*, 590 U.S. at 56; § 315(b). In sections 315(a)-(b), Congress did not commit management of “burdensome overlap” to the Director’s discretion—it established the proper balance in the statute.

Congress’s purpose for IPR—“to weed out bad patent claims efficiently”—confirms that the Director does not have the authority to discretionarily deny petitions for non-merits considerations. *Thryv*, 590 U.S. at 54. The text of the statute does not delegate broad power to deny institution in view of efficiency, settled expectations, overlap between proceedings, or any other consideration beyond the likelihood of success of the petition. Reading such a delegation into the text would contradict the purpose of the enabling statute. *Id.*

Furthermore, the Guidelines would write provisions out of the statute entirely, violating the separation of powers doctrine. *Util. Air Regul. Grp. v. E.P.A.*, 573 U.S. 302, 327 (2014). For example, NAI asks the Director to hold that its settled expectations weigh against IPR because NVIDIA cited a related application in an Information Disclosure Statement in 2013. Br. 33–40. Setting aside that the application that led to the ’438 patent was not filed until November 2017 and that the patent did not issue until 2021, the structure of the AIA indicates that Congress intended inter partes review to be available for the life of the patent. *Compare*

§ 311(c)(1) (a petition for inter partes review must be filed at least “9 months *after* the grant of a patent”); § 321(c) (a petition for post-grant review must be filed “*not later than* the date that is 9 months after the date of the grant of the patent”).

Other considerations outlined in the Guidance are similarly defective. Conditioning institution on a petitioner's willingness to forgo system art invalidity defenses would write section 315(e) out of the statute by Director fiat and thus violate separation of powers doctrine. *Ingenico*, 136 F.4th at 1366–67 (holding that IPR estoppel does not reach challenges based on system art); *supra* § III(C)(4). And refusing to institute based on a District Court's scheduled trial effectively strikes the non-discretionary one-year deadline for IPR petitions, measured from the date of the complaint, from the statute. § 315(b). These considerations would frustrate Congress's objective: “to weed out bad patent claims” in “a more efficient and streamlined patent system.” *Thryv*, 590 U.S. at 54 (quoting H. R. Rep. No. 112–98, pt. 1, p. 40 (2011)).

“Regardless of how serious the problem an administrative agency seeks to address,” “it may not exercise its authority in a manner that is inconsistent with the administrative structure that Congress enacted into law.” *Food and Drug Admin v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 125 (2000) (quotation omitted). The Director should not contradict Congressional directives by denying its petition according to the considerations NAI seeks to apply.

IV. CONCLUSION

NVIDIA respectfully requests that that the Director refer the Petition to a panel of the Board for a preliminary review of the merits.

DATED: August 28, 2025

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CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

Under the provisions of 37 C.F.R. § 42.24(d), the undersigned attorney hereby certifies that the word count for Sections I–IV and Appendices A and B of the foregoing Petition's Response to Request for Discretionary Denial is 8,941 according to the word count tool in Microsoft Word.

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CERTIFICATE OF SERVICE

The undersigned certifies service pursuant to 37 C.F.R. §§ 42.6(e) and 42.105(a), (b) on the Patent Owner of the Petitioner's Response to Request for Discretionary Denial and accompanying exhibits via email to the following addresses of record:

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APPENDIX A

Timeline of Significant Events

Date	Event
August 31, 1999	NVIDIA releases the GeForce 256. Ex1015.
December 2002	NVIDIA releases Cg, an auxiliary language designed for GPUs and based on C/C++. Ex2017.
December 15, 2003	U.S. Patent No. 7,139,003 (“Kirk”) is filed. Ex1005.
April 2004	GPU implementation of neural networks (“Oh”) is publicly available. Ex1007.
February 25, 2005	[REDACTED]
March 2005	GPU Gems’ first printing. Ex1023, 6.
May 13, 2005	[REDACTED]
July 3–5, 2005	[REDACTED]
July 28, 2005	GPU Gems is catalogued in the Brigham Young University libraries. Ex1023, ¶¶23–28.
July 20 – October 4, 2005	[REDACTED]
September 25, 2006	Provisional Application No. 60/826,892 filed. Ex1001.
February 16, 2007	NVIDIA announces the release of CUDA. Ex1047.

Date	Event
September 24, 2007	Patent Application No. 11/860,254, now the '867 patent, filed. Ex1001.
September 16, 2010	Examiner issues Non-Final Rejection of the '254 application. Ex1063, 105–117.
April 12, 2011	Examiner issues Notice of Abandonment of the '254 application in view of applicant's failure to respond to the non-final rejection. Ex1063, 153–54.
July 31, 2013	Applicant files Petition for Revival of the '254 application with an Amendment and Reply. Ex1063, 155–173.
August 26, 2013	Examiner grants Petition for Revival of the '254 application. Ex1063, 180–81.
February 11, 2014	The '254 application issues as the '867 patent. Ex2006, ¶35.
February 17, 2014	NVIDIA announces release of Maxwell. Ex1048.
February 3, 2016	NVIDIA and Neurala [REDACTED]
May 6, 2016	NVIDIA announces release of Pascal. Ex1049.
February 22, 2017	NVIDIA and Neurala [REDACTED]
May 10, 2017	NVIDIA announces release of Volta. Ex1050.
August 10, 2018	NVIDIA announces release of Turing. Ex1051.
May 14, 2020	NVIDIA announces release of Ampere. Ex1052.
February 16, 2021	RE48,438 is issued to Neurala. Ex1001.
March 22, 2022	NVIDIA announces release of Hopper. Ex1053.
September 20, 2022	NVIDIA announces release of Ada Lovelace. Ex1054.
March 14, 2023	RE48,438 is issued to Neurala. Ex2006, ¶35.
July 11–22, 2024	NAI forms and purchases the '438 patent and its family members from Neurala. Ex1056; Ex1044.
September 13, 2024	NAI sues NVIDIA for patent infringement in the Western District of Texas. Ex1038.
March 6, 2025	NVIDIA files the Petition for IPR of the '438 patent.

APPENDIX B

Actual Trial Dates in the Western District of Texas

Case	Scheduled Trial Date	Actual Trial Date	Months Delayed
<i>VLSI Technology LLC v. Intel Corporation</i> , 1-19-cv-00977	Oct. 5, 2020	May 27, 2025	57
<i>WSOU Investments LLC v. Cisco Sys., Inc.</i> , 6-21-cv-00128	Dec. 19, 2022	Feb. 10, 2025	26
<i>Via Transportation, Inc. v. RideCo Inc.</i> , 6-21-cv-00457	Mar. 21, 2023	Jan. 22, 2025	22
<i>TrackThings LLC v. Amazon.com, Inc.</i> , 6-23-cv-00133	Jul. 8, 2024	Oct. 7, 2024	3
<i>Identity Security LLC v. Apple, Inc.</i> , 1-22-cv-00058	Jan. 6, 2023	Sep. 30, 2024	21
<i>SVV Tech. Innovations Inc. v. ASUSTek Computer Inc.</i> , 6-22-cv-00311	Jan. 12, 2024	Sep. 23, 2024	9
<i>Paltalk Holdings, Inc. v. WebEx Communications, Inc.</i> , 6-21-cv-00757	Feb. 14, 2023	Aug. 26, 2024	19
<i>Lashify, Inc. v. Qingdao Lashbeauty Cosmetic Co., Ltd.</i> , 6-22-cv-00776	Apr. 8, 2024	Aug. 19, 2024	4
<i>AlmondNet, Inc. et al v. Amazon.com, Inc.</i> , 6-21-cv-00898	Aug. 21, 2023	Jun. 10, 2024	10
<i>SVV Technology Innovations Inc. v. Acer Inc.</i> , 6-22-cv-00640	Mar. 5, 2024	Jun. 3, 2024	3
<i>IOENGINE, LLC v. Roku Inc.</i> , 6-21-cv-01296	Dec. 16, 2023	Apr. 15, 2024	4
<i>ACQUIS LLC v. ASUSTek Computer Inc.</i> , 6-20-cv-00966	Dec. 12, 2022	Mar. 18, 2024	15
<i>Flypsi, Inc. v. Google, LLC</i> , 6-22-cv-00031	Oct. 11, 2023	Feb. 20, 2024	4
<i>Demaray LLC v. Samsung Electronics Co. Ltd.</i> , 6-20-cv-00636	Dec. 10, 2021	Feb. 12, 2024	26
<i>Sable Networks, Inc. et al v. Cloudflare, Inc.</i> , 6-21-cv-00261	Nov. 6, 2023	Feb. 5, 2024	3

Case	Scheduled Trial Date	Actual Trial Date	Months Delayed
<i>Ravgen, Inc. v. Natera, Inc.</i> , 1-20-cv-00692	Dec. 23, 2021	Jan 8, 2024	25
<i>The Trustees of Purdue University v. STMicroelectronics NV</i> , 6-21-cv-00727	Apr. 24, 2023	Nov. 27, 2023	7
<i>Impinj, Inc. v. NXP USA, Inc.</i> , 6-21-cv-00530	Feb. 21, 2023	Oct. 30, 2023	8
<i>IGT v. Zynga Inc.</i> , 1-23-cv-00885	Feb. 26, 2023	Oct. 16, 2023	8
<i>Steamscale, Inc. v. Cloudera, Inc.</i> , 6-21-cv-00198	Jul. 10, 2023	Oct. 10, 2023	3
<i>U.S. Well Servs., Inc. v. Halliburton Co.</i> , 6-21-cv-00367	Dec. 19, 2022	Aug. 21, 2023	8
<i>Touchstream Techs., Inc. v. Google, LLC</i> , 6-21-cv-00569	Feb. 10, 2023	Jul. 17, 2023	5

Minimum Delay Relative to Scheduled Trial Date: 3 Months.

Median Delay Relative to Scheduled Trial Date: 8 Months.