UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTION HEALTH, INC.,

Petitioner,

v.

UNIVERSITY OF BRITISH COLUMBIA,

Patent Owner.

IPR2025-01422

Patent No. 10,751,029

PATENT OWNER'S BRIEF FOR DISCRETIONARY DENIAL

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I. INTRODUCTION

Patent Owner, University of British Columbia ("UBC" or "Patent Owner"), respectfully requests that the Director exercise discretion to deny institution of an *inter partes* review ("IPR") proceeding of U.S. Patent No. 10,751,029 (the "'029 Patent") brought by Caption Health, Inc. ("Caption Health" or "Petitioner"). The '029 Patent claims important AI-based inventions related to improving medical imaging (e.g., allowing more accurate quality analysis, reducing the need for operators to retake patients' echocardiographic images and for doctors to review captured images multiple times).

Recently, the Director referred IPR2025-01066, involving U.S. 11,129,591 (the "'591 Patent"), to the PTAB. *See* IPR2025-01066, Paper 13 (Oct. 10, 2025). This IPR, however, presents different facts, and should be discretionarily denied.

First, because of Petitioner's delay in filing this IPR, time-to-trial statistics here weigh in favor of discretionary denial, whereas the Director found this consideration neutral in IPR2025-01066. *Second,* Patent Owner's settled expectations are even stronger for the '029 Patent (which issued earlier than the patent challenged in IPR2025-01066). *Third,* on the same day that the Director referred IPR2025-01066, Petitioner took inconsistent claim construction positions in

the district court litigation versus in both this IPR and IPR2025-01066.[1] For those reasons as well as additional reasons discussed below, the Director should discretionarily deny institution in this IPR.

II. THE DISTRICT COURT TRIAL WILL OCCUR PRIOR TO FWD

The projected Final Written Decision ("FWD") for the '029 IPR is not until late February 2027. On the other hand, as the Director acknowledged in the '591 IPR, the median time-to-trial for patent litigation cases in N.D. Cal. supports a district court trial date in December 2026 or January 2027. IPR2025-01066, Paper 13 (Oct. 10, 2025); Ex2002. Discretionary denial is appropriate when, like here, the projected trial date is expected prior to the FWD deadline. *E.g., Tesla, Inc. v. Granite Vehicle Ventures LLC*, IPR2025-00943-944, Paper 17, 2 (Sept. 26, 2025) (exercising discretion to deny institution where FWDs would be due in December 2026, trial was scheduled in August 2026, and statistics suggested trial would begin by October or November 2026); *NVIDIA Corp. v. Neural AI, LLC*, IPR2025-00606, Paper 16, 2 (July 14, 2025) (exercising discretion to deny institution where FWDs would be due in October 2026, trial was scheduled in September 2026, and statistics suggested trial would begin by September 2026); *Amazon.com, Inc. v. Kaifi LLC*, IPR2025-

[1] Patent Owner plans to raise this issue to the Director at the first opportunity in IPR2025-01066 (e.g., in a Request for Director Review if that IPR is instituted).

00624, Paper 16, 2 (July 29, 2025) (exercising discretion to deny institution where FWDs would be due in October 2026, trial was scheduled in March 2026, and statistics suggested trial would begin by September 2026).

The timing difference between the FWDs in this IPR and the '591 IPR is the consequence of Caption Health's dilatory and piecemeal approach to its IPR filings. Caption Health waited an entire year after the original district court complaint against it and GE Healthcare Technologies, Inc. ("GE Healthcare") to file the '591 IPR. Ex2001. Caption Health elected not to file its '029 IPR at around the same time, which was 5 months after that patent had been asserted. Instead, Caption Health waited almost 8 months to file its '029 IPR after that patent was asserted (Ex1011) and almost 3 months after Caption Health had filed its '591 IPR.

Because the district court trial is expected prior to the FWD in this IPR, the Director should discretionarily deny institution.

III. PATENT OWNER'S "SETTLED EXPECTATIONS" FAVOR DENIAL

In considering discretion, the Director may address the "[s]ettled expectations of the parties, such as the length of time the claims have been in force." March 26, 2025 Memorandum Regarding "Interim Processes for PTAB Workload Management." Here, the patent issued on August 25, 2020, so the claims will have been in force for approximately 6 years (~5 years and 6 months) at the time of the

Director's expected institution decision. Ex1001, Cover. Notably, the '029 Patent has been in force for more than a year longer than the '591 Patent.

In addition, Petitioner and its RPI had actual knowledge of the application leading to the '029 Patent before that patent even issued, but Petitioner chose to delay its challenge, solidifying Patent Owner's settled expectations. That application was published on March 5, 2020 as U.S. 2020/0069292 (the "'292 publication"). Ex1001, code (65). GE Healthcare—a defendant in the co-pending litigation and Petitioner's RPI (Pet. 2)—knew about the published application at least as early as June 2, 2020. Specifically, GE Healthcare is the parent company of GE Precision Healthcare LLC (*see* Ex2003, Ex2004), and two of GE Precision Healthcare's patent applications cited the '292 publication on June 2, 2020 and June 4, 2024. *See* Ex2005 at 9; Ex2006 at 26, 29. In other words, Petitioner's RPI knew that the '292 publication was cited just a few months after it was published, but Petitioner and its RPI then delayed filing an IPR for almost six years after that patent's issuance. Allowing an IPR here would be contrary to current policy encouraging early challenges which the Director has repeatedly found favor robust, predictable patent rights. UBC's settled expectations weigh in favor of discretionary denial.

IV. PETITIONER'S INCONSISTENT CLAIM CONSTRUCTION POSITIONS SUPPORT DISCRETIONARY DENIAL

In the Petition, Petitioner states: "the claim terms of the ['029] Patent do not require an express construction." Pet. 10. As an initial matter, this vague statement

does not satisfy Petitioner's obligation under 37 C.F.R. §42.104(b), requiring a petition to state "[h]ow the challenged claim is to be construed."

In addition, Petitioner has taken inconsistent claim construction positions in the co-pending district court proceeding and this IPR. In district court, PO proposed the term "quality assessment value," as recited in certain challenged claims, should have its plain and ordinary meaning, whereas Petitioner proposed that term should have a narrower construction of "score of diagnostic image quality." Ex2007. This inconsistency (no construction for "quality assessment value" in this IPR versus Petitioner's narrow proposed construction in district court) weighs in favor of discretionary denial. *Sun Pharms. Indus. Inc. v. Nivagen Pharms., Inc.*, IPR2025-00893, Paper 18 (Sept. 19, 2025) (discretionarily denying petition where petitioner asserted a term should be giving its plain and ordinary meaning in IPR and asserted in parallel proceeding that term "was narrower than its plain and ordinary meaning").

V. THE *FINTIV* FACTORS OVERALL SUPPORT DISCRETIONARY DENIAL OF THIS IPR.[2]

1. Factor 1: The Chance of a Stay in the District Court Proceeding Is Unlikely

The co-pending litigation is not stayed, and a future stay is unlikely. Defendants already filed a Motion to Stay pending IPR in the co-pending litigation

[2] Factor 2 weighs heavily in favor of discretionary denial as discussed in §II.

(Ex2008), but Judge Lee denied it without prejudice, explaining that the potential for simplification of the case weighed against a stay because any benefits would be speculative. Ex2009, 2-3. In other words, Judge Lee found that having no instituted IPRs for both patents asserted in the co-pending litigation weighs against a stay.

Under this reasoning, it is unlikely that Judge Lee would stay the case pending this IPR because the institution decisions are not expected in the '591 IPR until late December 2025 and in the '029 IPR until late February 2026. By that point, all claim construction briefing will be complete and the *Markman* tutorial will be imminent in district court, so the parties will have invested even more resources in the co-pending litigation. §V.2. Thus, this factor weighs in favor of denial.

2. Factor 3: The Parties and the Court Have Invested Substantial Resources in the District Court Case

The original complaint in the co-pending litigation was filed on May 28, 2024. Ex2001. Since that time, the parties have invested substantial resources in the case. Fact discovery opened on August 6, 2024, over one year ago. Ex2010. Since then, the parties have exchanged mandatory disclosures under Local Patent Rules 3-1, 3-2, 3-3, and 3-4, including amended invalidity contentions and three sets of supplemental amended infringement contentions. Ex2011; Ex2012, ¶7; Ex2013; Ex2014. Both parties have also invested a significant amount of time and resources serving and responding to written discovery requests, as well as searching for and producing multiple sets of documents including technical documents, sales data, and

license agreements. Ex2015; Ex2016; Ex2017. The parties have supplemented these discovery responses multiple times. Ex2012, ¶5. UBC has produced over 3,500 pages of documents and continues to produce more on a rolling basis. UBC has retained two experts on the technical issues and on damages. *Id*. UBC's technical expert traveled to Petitioner's counsel's office in Cleveland, Ohio on January 27-28, 2025 to conduct a source code review. *Id*. UBC plans to take depositions soon.

In addition, the parties have briefed and/or argued several motions in the co-pending litigation, including (1) a motion to strike UBC's doctrine of equivalents contentions (Ex2018), (2) a motion for leave to amend UBC's infringement contentions (Ex2020), (3) an administrative motion regarding the case schedule (Ex2019), and (4) a motion to stay the case pending *inter partes* review (Ex2008).

The Court considered and later granted UBC's motion for leave to amend its infringement contentions on July 2, 2025. Ex2021. Following the Court's grant, Defendants are required to respond to UBC's Third Set of Requests for Production and Interrogatory No. 9, which concern subject matter added in amendments. Ex2022. The parties' counsel also traveled to San Jose, CA to argue the motion to stay on August 6, 2025, after which Judge Lee denied the motion. Ex2009; Ex2022.

Further, the parties have made meaningful investments in claim construction, including exchanging or submitting mandatory disclosures under Patent Local Rules 4-1, 4-2, and 4-3. For example, the parties exchanged their original lists of claim

terms for construction on April 11, 2025 and their proposed constructions of those terms on May 2, 2025. Ex2023; Ex2024. The parties filed their original Joint Claim Construction and Prehearing Statement on May 30, 2025. Ex2025. The current claim construction schedule was entered on August 13, 2025. Ex2026. The parties exchanged additional claim terms for construction on September 5, 2025 and their proposed constructions of those terms on September 19, 2025. Ex2027; Ex2028; Ex2029; Ex2030. The parties filed their Joint Amended/Supplemental Claim Construction & Prehearing Statement on October 10, 2025. Ex2031; Ex2007. Under the current claim construction schedule, all claim construction briefing will be completed by the projected institution decision date for this IPR on February 20, 2026, with the *Markman* tutorial and hearing to follow shortly afterwards on February 24 and March 5, respectively. Ex2026.

At the time of the institution decision for this IPR, the parties will have been actively litigating in district court for 21 months and will have already expended significant resources and time in the co-pending litigation. Institution would increase the workload on the parties and in turn duplicate the efforts of the Board and the district court. The parties' significant investment in the co-pending litigation favors discretionary denial.

3. Factor 4: Overlap in the District Court Would Continue Even if This IPR Is Instituted

As discussed in §§II-III, Petitioner was not diligent in filing the '591 IPR, and delayed in bringing this '029 IPR. Petitioner filed a *Sotera* stipulation in this proceeding over three weeks after its initial petition. *See* Paper 6. Because Petitioner chose to stagger the filing of its petitions, Petitioner's '029 stipulation will not materially reduce overlap between the proceedings. Specifically, despite Petitioner's filing of its *Sotera* stipulation for the '029 Patent, issues as to the Krishnan reference will remain in the district court at least during the gap in time between the due dates for institution between the '591 and '029 IPRs.

Additionally, the *Sotera* stipulation fails to eliminate the overlap of issues between the IPR proceedings and the co-pending litigation. For example, that stipulation fails to address system art, including the combination of system art with the IPR references, and Petitioner and GE Healthcare could choose to pursue such combinations in the district court litigation. *See Motorola Sols., Inc., v. Stellar, LLC*, IPR2024-01205, Paper 19, 3-4 (Mar. 28, 2025) (finding that a *Sotera* stipulation was unlikely to moot the petitioner's combination of IPR art with unpublished system prior art in district court proceedings, and therefore could not outweigh other factors favoring denial); *see also Shenzen Tuozhu Tech. Co. v. Stratasys, Inc.*, IPR2025-00354, Paper 11, 2 (June 12, 2025).

Finally, the Amended Invalidity Contentions in the co-pending litigation raise §101 and §112 challenges, requiring the district court to assess validity challenges for claims at issue in this IPR. Ex2011, 23-24.

In sum, Petitioner's '029 *Sotera* stipulation does not reduce meaningful overlap, and "does not ensure that these IPR proceedings would be a 'true alternative' to the district court proceeding." *Motorola Sols., Inc.*, Paper 19, 3-4. This factor favors discretionary denial.

4. Factor 5: Caption Health Is Both the Petitioner Here and a Defendant in the Parallel Proceeding

Because Caption Health is the Petitioner here and a defendant in the parallel proceeding, this weighs in favor of discretionary denial. *E.g., SAP Am., Inc. v. Cyandia, Inc.*, IPR2024-01496, Paper 13, 9 (Apr. 7, 2025).

5. Factor 6: Other Circumstances Favor Denial

In addition to PO's settled expectations discussed in §III, the Petition's weak merits weigh in favor of discretionary denial. Specifically as discussed below in §VI (explaining why the Examiner did not err in allowing the challenged claims) and in the forthcoming POPR, the Petition suffers from numerous deficiencies, including failure of the cited references to disclose all claim limitations and lack of specific explanation regarding motivation to combine.

When the circumstances are weighed holistically here, the district court is the most efficient forum to address invalidity issues, and institution of this IPR should be discretionary denied.

VI. THIS PETITION SHOULD BE DENIED UNDER SECTION 325(D) BECAUSE THE OFFICE ALREADY CONSIDERED THE PRIMARY REFERENCE AS WELL AS CUMULATIVE ART AND DID NOT ERR IN THAT CONSIDERATION

In evaluating discretionary denial under 35 U.S.C. §325(d), the Board applies a framework to determine (1) whether the same or substantially the same art or arguments were presented to the Office during the original prosecution; and (2) whether the Petitioner has demonstrated that the Office erred in a manner material to the patentability of the challenged claims. *Advanced Bionics, LLC v. Med-El Elektromedizinishe Geräte GMBH*, IPR2019-01469, Paper 6, 8, 10 (Feb. 13, 2020) (precedential). "If a condition in the first part of the framework is satisfied and the petitioner fails to make a showing of material error, the Director generally will exercise discretion not to institute inter partes review." *Advanced Bionics*, 8-9; *Ecto World, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13, 4-6 (May 19, 2025) (precedential as to §A) (clarifying Petitioner's burden to show error).

Part one of the *Advanced Bionics* framework is met here because the Petition relies on art that is the same or substantially the same as the art that was previously presented to the Office. With respect to part two, Petitioner has not demonstrated material error by the Office as required, and indeed, the Office did not err.

A. The Petition Relies on References That Are the Same, or Substantially the Same, as Prior Art Previously Presented to the Office

The Petition relies on references that are the same or cumulative to references cited during prosecution and thus provide no more disclosure than what was already considered and rejected by the Examiner. The Petition relies only on Krishnan for independent claims 1, 21, and 30. Pet. 9. Because Krishnan is the same reference that was cited in IDS's and thus considered by the Examiner during prosecution (Ex1004, 302, 398), it was previously presented to the Office under the first step of *Advanced Bionics*. *See Advanced Bionics*, Paper 6, 7–8.

The Petition additionally relies on Chen (Ex1009) and Wu (Ex1010) for independent claim 12. Although Chen and Wu were not presented to the Office during prosecution, they are cumulative of art considered by the Examiner because they substantially reiterate or provide no more than what was already taught by previously cited or considered prior art. *See Helena Labs. Corp. v. Sebia*, IPR2024-00801, Paper 10, 13-15 (Oct. 23, 2024) (finding a newly cited reference was cumulative because the references disclosed the same teachings); *Parse Biosciences, Inc. v. 10X Genomics, Inc.*, IPR2023-01033, Paper 8, 14 (Dec. 19, 2023).

Specifically, the Petition relies on Chen and Wu for "methods for training a view category neural network classifier and a quality assessment neural network classifier, respectively" and their descriptions of "techniques for training [neural

network] classifiers." Pet., 71-72. Wu is substantially similar to U.S. 2019/0266716 (Ex2032, "Rothberg"), which was cited in an IDS during prosecution and thus considered by the Examiner. Ex1004, 108. Like Wu, Rothberg describes methods for determining the quality of images using neural networks. Ex2032, Abstract, [0040], FIG. 24. Rothberg also describes methods for training said neural networks. *Id.*, [0119]-[0122]. Additionally, Chen is substantially similar to U.S. 2009/0088640 (Ex2033, "Park"), which was cited in an IDS during prosecution and thus considered by the Examiner. Ex1004, 108. Like Chen, Park is directed to methods of view classification using classifiers that can be neural networks. Ex2033, Abstract, [0038], [0049]. Park also discusses methods for training such classifiers. *E.g., id*., [0038]-[0041], [0050]-[0056].

Accordingly, since Krishnan was cited in IDS's during prosecution, and Chen and Wu are cumulative to references that were cited in IDS's during prosecution, the first step of the *Advanced Bionics* framework is met.

B. Petitioner Has Not Shown That the Office Erred Materially

Petitioner has the burden to show material error. *Ecto World, LLC*, Paper 13, 4-6; *Advanced Bionics,* Paper 6, 8-9. Because Petitioner has failed to meet its burden with respect to material error, discretionary denial is appropriate.

If Petitioner attempts to address material error for the first time in its opposition to the Discretionary Denial Request, that argument should be rejected.

Here, Petitioner knew §325(d) would be at issue because the Petition's *only* primary reference was before the Office during prosecution. Thus, it was incumbent on Petitioner to address §325(d). To find otherwise would effectively render the recent decision in *Ecto World* meaningless.

Regardless, the Examiner did not materially err. Krishnan was cited in IDS's during prosecution and the Examiner allowed the claims. The Examiner's allowance with respect to independent claims 1, 21, and 30 and their dependent claims was not in material error at least because as discussed below, Krishnan does not disclose deriving extracted feature representations. Additionally, the Examiner appropriately considered Rothberg and Park, and did not err in allowing claim 12 and its dependent claims. Like Chen and Wu, Rothberg and Park fail to make up for the deficiencies of Krishnan and thus, even in combination with Krishnan, would not render obvious these claims. The Examiner therefore considered similar combinations of references and properly found the claims patentable. As discussed below, Petitioner cannot carry its burden under the second step of the *Advanced Bionics* framework.

1. Independent Claims 1, 21, and 30

Krishnan fails to disclose at least "deriv[ing] one or more extracted feature representations from the set of ultrasound images," as recited in independent claims 1, 21, and 30. Ex1001, 23:37-38, 25:46-47, 26:47-48. The '029 Patent specification supports UBC's construction for "extracted feature representations" as "[f]eature

representations that are learned using a neural network." Ex2007, 7; *see also* Ex1001, Abstract, 1:51-2:7, 2:51-57, 2:67-3:23, 4:9-30, 4:40-46, 6:33-41, 9:64-12:51, 16:1-8, Figs. 1-7, 11-12.

For example, the '029 specification's figures and descriptions show the extracted feature representations are learned using a neural network. *See e.g.*, Ex1001, FIG. 2, 8:43-45 (depicting "location 154 for storing first feature extracting neural network parameter data, location 156 for storing second feature extracting neural network parameter data"); *id*., FIG. 4, 11:30-32 (depicting feature extractor neural networks 304, 306, and 308); *id*., FIG. 5, 11:28-29 (depicting feature extractor neural network 310); *id*., FIG. 6 (depicting feature extractor neural network 312); *id*., FIG. 6, 11:28-29 (depicting feature extractor neural network 314); *id*., FIG. 11, 16:3-5 (depicting "location 642 for storing first feature extracting neural network data, location 644 for storing second feature extracting neural network"); *id*., FIG. 13, 22:33-34 (depicting "three first feature extracting neural network or CNN threads").

As properly construed, Krishnan fails to disclose this limitation, and Petitioner provides no evidence that Krishnan relies on any learning for its feature extractions step. For example, the Petition points to nothing in Krishnan that indicates feature representations are learned using a neural network. The Petition relies on Krishnan's "Automatic Feature Analysis" module 102 and corresponding description. Pet. 24-

26. However, Krishnan discloses this module is separate from the "Learning Engine." Krishnan makes clear that Learning Engine 109 is only associated with the classification module 108, which includes classification models/parameters 110. *See* Ex1005, Fig. 1. Learning Engine 109—or any other type of learning module—is not associated with Automatic Feature Analysis module 102 that implements extraction of features. *See id*. (showing Automatic Feature Analysis 102 as separate from Learning Engine 109 and reliance on templates 107); *see also id*., [0017] (describing feature analysis module 102 without any learning step).

For at least the reasons above, Krishnan fails to disclose all limitations of independent claims 1, 21, and 30, as well as their dependent claims, and the Examiner did not err in allowing those claims over Krishnan.

2. Independent Claim 12

Additionally, Krishnan does not disclose at least limitation [12(d)] "training a neural network...using the set of ultrasound training images as an input to the neural network and using the quality assessment values and the image properties associated with the set of ultrasound training images as desired outputs of the neural network." Pet. 78. For this limitation, the Petition provides only a generalized statement that Krishnan conducts training of neural network classifiers using training data in conjunction with learning engine 109. *Id.* ("Krishnan trains one or more neural network classifiers to perform view identification and quality assessment 'using

training data … from the database (106) of previously diagnosed/labeled cases.' Ex1005, [0023], [0044]. This 'training data' is used in conjunction with 'a learning engine (109)' that 'includes methods for training/building one [or] more classifiers using training data that is learned from database (106).' *Id.*"). However, the Petition fails to cite any disclosure in Krishnan regarding a neural network that takes ultrasound training images as an input to the neural network and outputs quality assessment values and image properties, as claimed.

No neural network in Krishnan takes ultrasound training images as an input to the neural network and outputs quality assessment values and image properties, and thus there are no neural networks trained in that manner either. In Figure 5, Krishnan discloses assessing image quality using "classifiers." Ex1005, [0042].

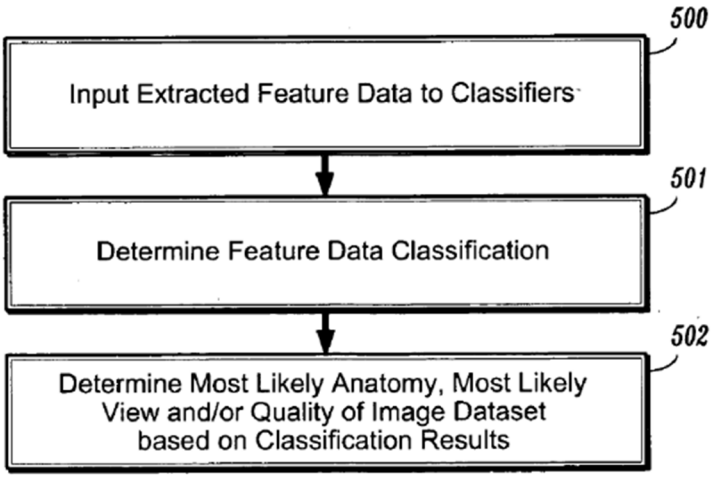

FIG. 5

In this embodiment, "feature data extracted from the image dataset would be input

to classifiers (step 500) that are trained or designed to process the feature data to classify the image data (step 501)." *Id.*, [0042].[3] "The classification results would be used to determine the most likely anatomy or view, or assess image quality (step 502)." *Id.* "For example, a bank of classifiers could be constructed to classify the images based on the features extracted." *Id.*, [0043]. "These classifiers would use the set of features as an input, and classify the image as belonging to a particular anatomy, view, or level or quality." *Id.* Krishnan discloses that these classifiers could be built "using neural networks." *Id.*, [0044]. Although the Figure 5 embodiment discloses "classifiers" that may be built "using neural networks," Krishnan does not disclose that the classifiers take images as input and output quality assessment values—instead, the classifiers take extracted features from the images as inputs and output quality assessment values. Similarly, such classifiers would not be trained by taking images as input and outputting quality assessment values or image properties.

Petitioner's further reliance on Chen and Wu fails to make up for Krishnan's deficiencies. Neither the Petition nor Dr. Deo's declaration provide any specific citations to Chen and Wu for limitation [12(d)]. Pet. 78-79; Ex1002, ¶¶272-73. Additionally, with respect to rationale to combine and reasonable expectation of success, the Petition relies on general statements by Chen and Wu that their

[3] All emphases added unless otherwise noted.

implementations can be extended or generalized to other contexts without any specific explanation about how Krishnan would be modified with the implementations of Chen and Wu. *See* Pet. 72-73. Thus, the Petition fails to provide sufficient evidence regarding a POSITA's alleged motivation to combine. *See ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012) (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)) (finding generic statements regarding motivation to combine to be deficient because they "fail[ed] to explain why a [POSITA] would have combined elements from specific references *in the way the claimed invention does*.") (emphasis in original).

For at least the reasons above, the cited references fail to disclose all limitations of independent claim 12, as well as any dependent claims therefrom, and the Examiner did not err in allowing those claims over Krishnan as well as over Krishman in combination with Chen and Wu. Thus, the Director should discretionarily deny institution under §325(d).

VII. ECONOMIC AND PUBLIC HEALTH INTERESTS FAVOR DISCRETIONARY DENIAL

Here, there are compelling economic and public health interests in denying institution to avoid waste with respect to the economic and research investments made for the '029 Patent. UBC is one of the top research universities in the world and has invested over $890 million (CAD) in research funding for thousands of research projects, including for medical health research using AI like that of the '029

Patent. Ex2034. As is typical of university research projects, significant effort is placed into formulating research plans and drafting and applying for grants. As such, there is a barrier to entry to realization of a research project, including continuing the research long enough to lead to a patentable invention.

The research leading to the ’029 Patent is no exception. Overall, the grant funding related to the ’029 Patent totaled approximately $2.5 million (CAD) spanning across six grants. *Id*. (listing grants F12-05076, F17-05084, F17-02296, F15-04438, F14-04888, F11-00019, F15-04438). Denying institution would avoid waste with respect to the economic and research investments made for the ’029 Patent, and allow those investments to come to fruition, for example, through future licensing of the ’029 Patent and implementation of the technology in devices to help medical professionals and patients. Failing to deny institution would stifle incentives for universities to invest in long-term research projects that contribute to society. Thus, this factor weighs in favor of denial.

VIII. CONCLUSION

The factors discussed herein weigh heavily in favor of the Director exercising discretion to deny institution.

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CERTIFICATE OF SERVICE

The undersigned certifies that true and correct copies of **PATENT OWNER'S BRIEF FOR DISCRETIONARY DENIAL** and **EXHIBITS 2001-2034** were served electronically on October 20, 2025, in their entirety on the following counsel of record for Petitioner:

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