

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner

v.

CLEAR IMAGING RESEARCH LLC,
Patent Owner.

IPR2026-00181

U.S. Patent No. 9,860,450

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

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1002	Prosecution History of the ’450 Patent (“’450FH”)
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1007	U.S. Patent Pub. 2003/0076408 (“Dutta”)
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1009	Certified Translation and Original Application of Japanese Patent Application No. 2000-023024 (“Akifumi”)
1010	U.S. Patent No. 5,881,272 (“Balmer”)
1011	Certified Translation and Original Application of Japanese Patent Application No. 2000-224462 (“Hara”)
1012	U.S. Patent No. 4,717,958 (“Gal”)
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1014	Oshima et al., <i>History of World’s First Commercialization of Image Stabilizers for Handheld Cameras</i> , 2023 8th IEEE History of Electrotechnology Conference (HISTELCON), 2023 (“Oshima1”)
1015	<i>Camera feature search</i> , DP Review
1016	Kinugasa et al., <i>Electronic Image Stabilizer for Video Camera Use</i> , IEEE Transactions on Consumer Electronics, Vol. 36, No. 3, August 1990 (“Kinugasa1”)
1017	U.S. Pat. No. 7,286,163
1018	US Patent Pub. 2001/0041012
1019	US Patent No. 7,274,390

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1020	Paik et al., <i>An Edge Detection Approach to Digital Image Stabilization Based on Tri-State Adaptive Linear Neurons</i> , IEEE Transactions on Consumer Electronics, Vol. 37, No. 3, August 1991 (“Paik”)
1021	U.S. Patent 7,619,656
1022	U.S. Pat No. 6,263,162
1023	Kinugasa et al., <i>A Video Pre/Post-Processing LSI for Video Capture</i> , IEEE Transactions on Consumer Electronics, Vol. 42, No. 3, August 1996 (“Kinugasa2”)
1024	Oshima et al., <i>VHS Camcorder with Electronic Image Stabilizer</i> , IEEE Transactions on Consumer Electronics, Vol. 35, No. 4, November 1989 (“Oshima2”)
1025	Morimura et al., <i>A Digital Video Camera System</i> , IEEE Transactions on Consumer Electronics, Vol. 36, No. 4, November 1990 (“Morimura”)
1026	<i>Clear Imaging Rsch. LLC v. Google LLC</i> , No. 3:25-cv-00221 (S.D. Cal. Dec. 17, 2025) (Google’s Responsive Claim Constructions)
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1033	<i>Clear Imaging Rsch., LLC v. Lenovo Grp. Ltd.</i> , No. 2:25-cv-00240 (E.D. Tex.) (Docket)
1034	John R. Ragazzini & Gene F. Franklin, <i>Sampled-Data Control</i>

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1035	M. Brain, <i>How Microprocessors Work</i> , HowStuffWorks, https://web.archive.org/web/20030405084757/http://computer.howstuffworks.com/microprocessor2.htm
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1040	<i>Camera feature search</i> , DP Review, https://www.dpreview.com/products/search/cameras#criteria=SpecsImageStabilizationNew&sort=oldestFirst&paramSpecsImageStabilizationNew=optical
1041	<i>Minolta DiMAGE A1 Review</i> , DP Review (Nov. 11, 2003), https://www.dpreview.com/reviews/minoltadimagea1
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1043	CIPA DC-002-Translation-2003, <i>Standard Procedure for Measuring Digital Still Camera Battery Consumption</i> , Standard of the Camera & Imaging Products Association (Dec. 17, 2003), https://www.cipa.jp/std/documents/download_e.html?DC-002_e
1044	CIPA Standards, Camera & Imaging Products Association, https://www.cipa.jp/e/std/std-sec.html
1045	<i>Clear Imaging Rsch. LLC v. Google LLC</i> , No. 3:25-cv-00221, Dkt. 10 (S.D. Cal. Feb. 3, 2025) (Summons Returned Executed)
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1047	Declaration of June Ann Munford Regarding Public Availability of Creative Camcorder
1048	<i>Clear Imaging Rsch., LLC v. Lenovo Grp. Ltd.</i> , No. 2:25-cv-00240, Dkt. 63 (E.D. Tex. May 5, 2026) (Order Granting Motion to Stay Pending Settlement)
1049	<i>Samsung Elecs. Co. v. Clear Imaging Rsch., LLC</i> , IPR2020-01394, Paper 2 (July 31, 2020)
1050	<i>Samsung Elecs. Co. v. Clear Imaging Rsch., LLC</i> , IPR2020-01394, Paper 7 (Nov. 20, 2020)
1051	<i>Samsung Elecs. Co. v. Clear Imaging Rsch., LLC</i> , IPR2020-01394, Paper 13 (Feb. 12, 2021)
1052	<i>Ericsson Inc. v. Procomm Int'l Pte. Ltd.</i> , IPR2024-01453, Paper 11 (Apr. 28, 2025)
1053	<i>Ericsson Inc. v. Procomm Int'l Pte. Ltd.</i> , IPR2024-01453, Paper 12 (May 28, 2025)
1054	<i>Ericsson Inc. v. Procomm Int'l Pte. Ltd.</i> , IPR2024-01453, Paper 13 (June 12, 2025)
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1056	<i>Ericsson Inc. v. Procomm Int'l Pte. Ltd.</i> , IPR2024-01453, Paper 15 (June 25, 2025)
1057	Docket Navigator Litigation History for U.S. 7,103,377 invented by Bauman
1058	U.S. 2025/0056121 (Publication of App. No. 18/929,275)
1059	App. No. 18/929,275 (Non-Final Office Action Dated 02-23-2026)

I. INTRODUCTION

The Office should reach the merits of this IPR challenging U.S. Patent No. 9,860,450 (“’450 patent,” Ex1001). This IPR is an important use of Office resources because it will allow the Office to correct a material error in issuing the challenged claims. Further, a final written decision determining that the challenged claims are unpatentable will prevent Patent Owner Clear Imaging Research, LLC (“PO”) from attempting to obtain past damages—including from others based on Android functionality—for an expired patent that never should have issued.

None of PO’s arguments show that discretionary denial would be appropriate here. PO has no settled expectations in the expired ’450 patent, and PO does not even attempt to rebut the Petition’s showing that the patent issued in error. PO also fails to acknowledge the Office’s strong interest in correcting its error in view of PO’s history of repeatedly asserting the ’450 patent, even though PO previously told the Office in 2020 that future assertions were speculative.

II. BACKGROUND

A. The Expired ’450 Patent

The ’450 patent relates generally to correcting digital images/video to counteract the effect of camera shake. Paper 1 (“Petition”), 3-5. The ’450 patent claims priority to an application filed 3/24/2005, issued in 2018 with 0 days of patent term adjustment, and expired on 3/24/2025. Ex1001, Cover.

B. Clear Imaging Research, LLC and Litigation History

PO is a serial plaintiff that does not allege it makes any products in the United States or elsewhere. PO has filed four litigations asserting the '450 patent: a 2019 case against Samsung (Ex1028), a 2023 case against Apple (Ex1031), and two 2025 cases against Google (Ex1032) and Lenovo (Ex1033).¹

When PO asserted the '450 patent against Google on 1/30/2025, it was just weeks away from expiration. Then, on 1/28/2026—more than ten months after the patent expired—the parties filed a joint motion to dismiss with prejudice PO's claims for infringement of the '450 patent as well as to dismiss Google's counterclaims for declaratory judgment of non-infringement and invalidity of the '450 patent without prejudice. Ex1046. The Court granted that motion on 1/30/2026. Ex2001.

C. Prior Samsung IPR (IPR2020-01394)

In 2020, Samsung filed a petition for IPR of all claims. *Samsung Elecs. Co. v. Clear Imaging Rsch., LLC*, IPR2020-01394, Paper 2 (July 31, 2020) (Ex1049).

Samsung's grounds asserted U.S. 5,430,480 ("Allen") and U.S. 4,717,958 ("Gal") as primary references and the following secondary references: Japanese

¹ The Lenovo case is currently stayed pending settlement. Ex1048.

App. No. 2000-023024 (“Akifumi”), Creative Camcorder,² and U.S. 5,881,272 (“Balmer”). Ex1049, 1.

Ground		Claims	§103(a) References
1	1(A)	1-12, 14-25, 27-31	Allen (or Allen and Akifumi)
	1(B)	13, 26, 32	Allen (or Allen and Akifumi) and Creative Camcorder
	1(C)	27	Allen (or Allen and Akifumi) and Balmer
2	2(A)	1-12, 14-25, 27-31	Gal (or Gal and Akifumi)
	2(B)	13, 26, 32	Gal (or Gal and Akifumi) and Creative Camcorder
	2(C)	27	Gal (or Gal and Akifumi) and Balmer

Ex1049, 1.

The Samsung IPR did not assert unpatentability based on U.S. Patent Pub. 2003/0076408 (“Dutta”), which is the primary reference asserted in the grounds in this Petition.

Notably, in opposing institution in the Samsung IPR, PO refuted Samsung’s argument that the IPR was potentially helpful to future litigants who may be accused of infringing the ’450 patent, calling that assertion “entirely speculative.” Ex1050, 38 (“Samsung argues that the Petition ‘is potentially helpful to future defendants,’ but it cites no case in which the Board has found that argument relevant to its

² Article titled “Creative Camcorder,” included in Popular Magazine, March 1996 issue.

analysis. Moreover, Samsung’s concern that Clear Imaging ‘might otherwise later assert’ its patents against unidentified ‘others’ is entirely speculative and therefore deserves no weight.”). PO then filed three lawsuits asserting infringement of the ’450 patent between 2023 and 2025. Ex1031-33.

The Board denied institution of the Samsung IPR under *Fintiv*. The Board did not comment on the prior art disclosures or combinations and simply stated that the merits did not outweigh the other *Fintiv* factors. Ex1051, 23.

D. This IPR

On 1/29/2026, Petitioner Google LLC (“Google”) filed this Petition. At the time Google filed this Petition, the ’450 patent had been expired for more than ten months and PO had agreed to dismiss its infringement claims with prejudice. Although the infringement claims against Google have been dismissed with prejudice, Google still has a strong interest in an unpatentability determination so that the ’450 patent’s invalid claims cannot be used to seek past damages from others based on Android functionality. §III.B, *infra*.

The Petition asserts the following grounds, none of which were considered by the Examiner during prosecution or by the Board in the Samsung IPR: Dutta-Akifumi (claims 1-26, 28-32) (Ground 1A); Dutta-Akifumi-Creative Camcorder (claims 13, 26, 32) (Ground 1B); and Dutta-Akifumi-Balmer (claim 27) (Ground 1C). Petition, 2.

III. THE OFFICE SHOULD REJECT PO'S DISCRETIONARY DENIAL REQUEST

A. This IPR Will Allow the Office to Correct the Examiner's Material Error During Prosecution

This IPR challenges, *inter alia*, independent claims 1/14/28/29 based on Dutta in view of Akifumi.³ As explained below, during prosecution, the Examiner determined that Dutta taught every limitation of these claims except for synchronous storage of images/motion information in memory (claims 1/14) and video compression (claims 28/29). The Examiner, however, committed material error by overlooking that Dutta in combination with the prior art's teachings teaches claims 1/14/28/29.

1. '450 Patent Prosecution History

The '450 application was filed with 29 claims, with independent claims 1 and 15 corresponding to issued claims 1 and 14, respectively. Ex1002, 20, 22. Original claims 1 and 15 were substantially similar to issued claims 1 and 14, except that the

³ Akifumi was not before the Examiner, but it should have been. It was published in 1/2000 (Ex1009, (43)), which was years before the '450 application's 2/2017 filing (Ex1001, (22)). And Akifumi is directly relevant to the '450 patent's subject matter. Petition, 22 ("Akifumi 'relates to an image inputting device that uses a solid-state imaging element, and, in particular, relates to shaking correction.' Akifumi, ¶1.").

original claims did not recite storing the captured images in memory (as [1.1]/[14.1] require) and storing motion information in the memory synchronously with the storing of the images (as [1.2]/[14.2] require).

<p>1. A method for use in an imaging device comprising an image sensor, a processor, a memory, and one or more motion sensors, the method comprising:</p> <p>capturing a sequence of images with the image sensor, wherein the sequence of images comprise a video;</p> <p>detecting, by the one or more motion sensors, motion information for one or more images of the sequence of images, wherein the motion information represents motion of the device during capturing of the one or more images of the sequence of images;</p> <p>determining, by the processor, a vertical shift value and a horizontal shift value for one or more images of the sequence of images based at least in part on the motion information;</p> <p>modifying, by the processor, one or more images of the sequence of images based at least in part on the vertical and the horizontal shift values;</p> <p>combining, by the processor, the modified images to obtain a final video; and</p> <p>storing the final video in the memory.</p>	<p>15. An imaging device, comprising:</p> <p>an image sensor configured to capture a sequence of images, wherein the sequence of images comprise a video;</p> <p>one or more motion sensors configured to detect motion information for one or more images of the sequence of images, wherein the motion information represents motion of the imaging device during capturing of the one or more images of the sequence of images;</p> <p>a processor configured to:</p> <p>determine a vertical shift value and a horizontal shift value for one or more images of the sequence of images based at least in part on the motion information;</p> <p>modify one or more images of the sequence of images based at least in part on the vertical and the horizontal shift values; and</p> <p>combine the modified images to obtain a final video; and</p> <p>a memory configured to store the final video.</p>
Ex1002, 20.	Ex1002, 22.

The original claims included claims depending from claims 1 and 15 that recited modifying the sequence of images using a video compression technique (claims 11 and 25) and storing motion information in memory synchronously with a stored image (claims 12 and 26). Ex1002, 21-22, 24.

The Examiner issued a non-final office action rejecting every claim over Dutta except for dependent claims 11/25 (reciting video compression) and 12/26 (reciting synchronous storage). *Id.*, 144-50. The Examiner indicated that claims 11, 12, 25, and 26 “would be allowable if rewritten in independent form...” Ex1002, 150.

The Applicant then conducted a telephonic interview with the Examiner (*id.*, 166) and filed an amendment canceling claims 12/26 and amending claims 1/15 to require storing the captured images in memory (as issued [1.1]/[14.1] require) and

storing motion information in the memory synchronously with the storing of the images (as issued [1.2]/[14.2] require). *Id.*, 183-89, 193-94. The images below reproduce claims 1 and 15 (which ultimately issued as claims 1 and 14) as amended and as ultimately issued.

<p>1[pre] 1. (Currently Amended) A method for use in an imaging device comprising an image sensor, a processor, a memory, and one or more motion sensors, the method comprising:</p> <p>[1.1] capturing a sequence of images with the image sensor, wherein the sequence of images comprise a video, <u>and storing the images in the memory;</u></p> <p>[1.2] detecting, by the one or more motion sensors, motion information for one or more images of the sequence of images, wherein the motion information represents motion of the device during capturing of the one or more images of the sequence of images, <u>and storing the motion information in the memory synchronously with the storing of the one or more images;</u></p> <p>[1.3] determining, by the processor, a vertical shift value and a horizontal shift value for one or more images of the sequence of images based at least in part on the motion information;</p> <p>[1.4] modifying, by the processor, one or more images of the sequence of images based at least in part on the vertical and the horizontal shift values;</p> <p>[1.5] combining, by the processor, the modified images to obtain a final video; and</p> <p>[1.6] storing the final video in the memory.</p>	<p>14[pre] 15. (Currently Amended) An imaging device, comprising:</p> <p>[14.1] an image sensor configured to capture a sequence of images, wherein the sequence of images comprise a video, <u>and store the images in a memory;</u></p> <p>[14.2] one or more motion sensors configured to detect motion information for one or more images of the sequence of images, wherein the motion information represents motion of the imaging device during capturing of the one or more images of the sequence of images, <u>and store the motion information in the memory synchronously with the storing of the one or more images; and</u></p> <p>[14.3] a processor configured to:</p> <p style="padding-left: 40px;">determine a vertical shift value and a horizontal shift value for one or more images of the sequence of images based at least in part on the motion information;</p> <p>[14.4] modify one or more images of the sequence of images based at least in part on the vertical and the horizontal shift values; and</p> <p>[14.5] combine the modified images to obtain a final video; and</p> <p>[14.6] <u>[[a]] wherein the memory is further configured to store the final video.</u></p>
Ex1002, 183 (annotated).	Ex1002, 186-87 (annotated).

The Applicant also added independent claims 30/31 (corresponding to issued claims 28/29), which were identical to original claims 1/15, except that they recited applying a video compression technique. *Id.*, 190-91, 193.

<p>28[pre] 30. (New) A method for use in an imaging device comprising an image sensor, a processor, a memory, and one or more motion sensors, the method comprising:</p> <p>[28.1] capturing a sequence of images with the image sensor, wherein the sequence of images comprise a video;</p> <p>[28.2] detecting, by the one or more motion sensors, motion information for one or more images of the sequence of images, wherein the motion information represents motion of the device during capturing of the one or more images of the sequence of images;</p> <p>[28.3] determining, by the processor, a vertical shift value and a horizontal shift value for one or more images of the sequence of images based at least in part on the motion information;</p> <p>[28.4] modifying, by the processor, one or more images of the sequence of images based at least in part on the vertical and the horizontal shift values;</p> <p>[28.5] combining, by the processor, the modified images, <u>and applying a video compression technique to obtain a final video</u>; and</p> <p>[28.6] storing the final video in the memory.</p>	<p>29[pre] 31. (New) An imaging device, comprising:</p> <p>[29.1] an image sensor configured to capture a sequence of images, wherein the sequence of images comprise a video;</p> <p>[29.2] one or more motion sensors configured to detect motion information for one or more images of the sequence of images, wherein the motion information represents motion of the imaging device during capturing of the one or more images of the sequence of images;</p> <p>[29.3] a processor configured to:</p> <p style="padding-left: 40px;">determine a vertical shift value and a horizontal shift value for one or more images of the sequence of images based at least in part on the motion information;</p> <p>[29.4] modify one or more images of the sequence of images based at least in part on the vertical and the horizontal shift values; and</p> <p>[29.5] combine the modified images, <u>and apply a video compression technique to obtain a final video</u>; and</p> <p>[29.6] a memory configured to store the final video.</p>
Ex1002, 190-91 (annotated).	Ex1002, 191 (annotated).

The Examiner subsequently allowed all pending claims without explaining the reasons for allowance. *Id.*, 207 (“Claims 1-11, 13-25[,] and 27-34 are allowed.”).

2. The Examiner Materially Erred in Allowing the Challenged Claims to Issue

Although the Examiner did not explain the reasons for allowance, the inference is clear based on the Examiner rejecting the original independent claims and then allowing independent claims 1/14/28/29 once they recited: (a) storing images/motion information synchronously in memory ([1.1]/[1.2]/[14.1]/[14.2]); and (b) applying a video compression technique to obtain a final video ([28.5]/[29.5]). The Examiner concluded that all other limitations except for (a) and (b) were in the prior art.

As the Petition demonstrates and as explained below, however, the Examiner

committed material error by overlooking Dutta's teachings, both on their own and in combination with Akifumi. Indeed, storing images/motion information in memory synchronously did not distinguish the prior art—it is what allowed the prior art to perform the motion correction that the prior art plainly teaches. Further, applying video compression was likewise well known in the prior art.

(a) Claims 1/14: The Prior Art Teaches Synchronous Storage of Images/Motion Information in Memory

The Examiner materially erred in allowing independent claims 1 and 14 to issue because Dutta (and the Dutta-Akifumi combination) plainly teaches and renders obvious synchronous storage of motion information and images in memory. Petition, 30-51. As the Petition explains, Dutta-Akifumi teaches capturing multiple images with Dutta's image sensor 310, storing each image in memory 306, and storing each image in processing engine 304's CPU registers for correction ([1.1]/[14.1]). *Id.*, 33-45 (citing Dutta, ¶¶15-18, 20-29, Figs. 3-6; Akifumi, ¶59, Fig. 11(b); Hara, ¶¶102-04, Fig. 16; Ex1034-39; Ex1002, 146-50 (Examiner finding that Dutta discloses video-related limitations); Ex1001, 11:54-62; Wolfe, ¶¶181-206). Dutta-Akifumi further teaches that Dutta's motion sensor assembly includes motion sensors 314X/Y/Z that detect motion information of the imaging device during image capture, the outputs of which are inputs to processing engine 304 and stored synchronously with the images in processing engine 304's CPU registers and

memory 306 ([1.2]/[14.2]). Petition, 45-51 (citing Dutta, ¶¶20-29, Figs. 3-6; Hara, ¶¶102-04, Fig. 16; Ex1034-1039; Wolfe, ¶¶207-22); Wolfe, ¶219 (citing Dutta, ¶¶23-24 and explaining that motion sensor outputs would be received/stored either just before or “in parallel” with capturing/storing the image); Petition, 49 (“Storing the motion sensor outputs in memory 306 at substantially the same time as an image to be corrected is captured and stored in memory 306 would advantageously avoid losing the motion information before the image was corrected. Further, storing motion sensor outputs related to device motion when an image was captured in processing engine 304’s memory elements at substantially the same time the image was stored in the memory elements is what would allow processing engine 304 to ‘process[] the images obtained in accordance with measurements taken by the motion sensors 314X, 314Y, 314Z.’”) (citing Dutta, ¶¶21, 23, 27, 28 and Wolfe, ¶220).

(b) Claims 28/29: The Prior Art Teaches Applying Video Compression to Obtain a Final Video

The Examiner also materially erred in allowing independent claims 28 and 29 to issue because the prior art plainly teaches and renders obvious applying a video compression technique to obtain a final video. Indeed, the ’450 patent admits that compressing videos was known. Ex1001, 11:54-60 (“[N]o distinction has been made between an imager that captures images one at a time, such as a digital camera, and

one that captures sequence of images, such as digital or analog video recorders. A digital video recorder or similar device operates substantially the same way as a digital camera, with the addition of video compression techniques...").

And as the Petition demonstrates, Dutta-Akifumi plainly teaches applying a video compression technique to obtain a final video ([28.5]/[29.5]). Petition, 30-33, 56-58 (citing Dutta, ¶¶15, 23, 27, 28; Akifumi, ¶¶28, 59, Fig. 11(b); Wolfe, ¶¶238-46). Specifically, Dutta discloses that corrected images are combined into a final image, and Akifumi discloses that as images are corrected, they are assembled into a final video that is then compressed and recorded. Petition, 56-58. Thus, in view of Akifumi, a person having ordinary skill in the art would have been motivated to use processing engine 304 to combine motion corrected images into a final video and apply video compression so that the resulting video could be stored/played back on Dutta's handheld device. *Id.*, 56, 30-33 (motivation to combine).

**(c) The Examiner's Material Error During Prosecution
Supports Reaching This IPR's Merits**

As discussed, the Examiner determined the prior art taught every limitation of independent claims 1/14/28/29 except for synchronous storage of motion information/images and video compression. However, the teachings of Dutta (and the Dutta-Akifumi combination) directly contradict the Examiner's conclusion that the prior art did not teach these limitations. §§III.A.2(a), III.A.2(b), *supra*.

Importantly, the Examiner never considered the combined teachings of Dutta and Akifumi because Akifumi was not before him. The Examiner erred by overlooking the prior art's teachings, and this error tainted the Examiner's analysis of the remaining challenged claims (which were allowed solely because they depend from the independent claims). Thus, this IPR is an important use of Office resources because it will allow the Office to correct this material error. *Microsoft Corp. v. Partec Cluster Competence Ctr. GmbH*, IPR2025-00318, Paper 9, 2-3 (June 12, 2025) (referring petition and determining it was material error to overlook teachings of cited references and combined teachings with references not previously presented); *Eunsung Glob. Corp. v. Hydrafacial LLC*, IPR2025-00445 et al., Paper 14, 2-3 (July 10, 2025) (referring petition where the "examiner identified a feature that was missing from the prior art[,] but the petitioner demonstrated that the examiner "overlooked certain teachings" in a cited reference "that appear to disclose the allowable features of the claims"); *UATP IP LLC v. Slick Slide LLC*, PGR2024-00054, Paper 8, 38-39 (Apr. 8, 2025) (determining failure to combine a reference before the examiner with other pertinent references not before the examiner that taught the purported point of novelty constituted material error); *Padagis US LLC v. Neurelis, Inc.*, IPR2025-00464-466, Paper 12, 3 (July 16, 2025) (informative) (referring petition where examiner's conclusion directly contradicted prior Board determination, raising concerns of material error such that review is an appropriate

use of Office resources).

B. An Unpatentability Finding in This IPR Will Prevent PO From Asserting the '450 Patent Against Others

The Office's interest in correcting its material error is reason alone to consider the merits of the Petition. But that is not the only reason the Office should reach this IPR's merits. Although the '450 patent is expired and PO has dismissed its infringement claims against Google with prejudice, nothing prevents PO from asserting the '450 patent against third parties for pre-expiration damages. This is not mere speculation. PO previously told the Office in the Samsung IPR that "Samsung's concern that [PO] 'might otherwise later assert' its patents against unidentified 'others' is entirely speculative and therefore deserves no weight." Ex1050, 38. PO then filed three additional cases between 2023 and 2025. Ex1031 (suit against Apple in 2023); Ex1032 (suit against Google in 2025, which was filed just weeks before the '450 patent expired); Ex1033 (suit against Lenovo in 2025).

Moreover, Google is a supplier of Android software to third parties. Thus, Google has an interest in an unpatentability determination as to the '450 patent so that its invalid claims cannot be used to seek past damages from others based on Android functionality. And critically, Google cannot wait to file an IPR if and when that occurs because Google would be time barred under §315(b).

Accordingly, considering this IPR's merits and correcting the Office's error

in allowing the challenged claims to issue is not “a free-standing invalidity challenge” as PO alleges (Paper 6, 4); rather, it is an important use of Office resources⁴ that has the potential to prevent PO from suing on an invalid patent for alleged damages that accrued during its term.

In this regard, PO’s reliance on *Ericsson Inc. v. Procomm Int’l Pte. Ltd.*, IPR2024-01453, Paper 15, 2-3 (June 25, 2025) is misplaced. Paper 6, 2-3. There, the Acting Director determined that a dismissal with prejudice—among other factors—favored discretionary denial. *Ericsson*, IPR2024-01453, Paper 15, 2-3 (Ex1056). There was no allegation that the Office committed a material error during prosecution, and the challenged patent had only been asserted in one litigation. Ex1052-55 (discretion briefs); Ex1057 (litigation history for challenged patent). Here, the Office has an interest in correcting its material error, and PO has previously asserted this patent in litigation four times. Ex1028; Ex1031-33.

⁴ PO’s “inefficiency” claims ring hollow given its own use of Office resources. Paper 6, 3-4. PO is prosecuting App. No. 18/929,275, which claims priority to the ’450 application. Ex1058, Cover; Ex1059, 2-6 (2/2026 office action rejecting pending claim). Even if a patent could issue, it would have already expired.

C. PO Has No “Settled Expectations” That Would Support Denial

PO incorrectly alleges it has settled expectations in the ’450 patent.⁵ Paper 6, 6-7. Despite sending Google a letter identifying the ’450 patent in 2/2021, PO waited nearly four years—and until weeks before its 3/2025 expiration—to assert it. Google then filed the Petition in 1/2026,⁶ which was more than ten months after the ’450 patent expired. Accordingly, when Google filed its Petition, PO had no settled expectations in the expired ’450 patent. *See, e.g., Apple Inc. v. Ferid Allani*, IPR2025-00856, Paper 11, 3 (Sept. 5, 2025) (informative) (“Patent Owner did not assert the challenged patents against Petitioner until after they expired. Under these circumstances, discretionary denial is not appropriate.”); *Globus Med., Inc. v. Spinelogik, Inc.*, IPR2025-00225-226, Paper 8, 2 (June 12, 2025) (“Petitioner...persuasively argues that the challenged patent expired almost four

⁵ The cited *Dabico* and *iRhythm* decisions (Paper 6, 6-7) are inapposite at least because the challenged patents were not expired and the decisions do not address material error. *Dabico Airport Sols. Inc. v. AXA Power ApS*, IPR2025-00408, Paper 21, 2-3 (June 18, 2025) (informative); *iRhythm Techs., Inc. v. Welch Allyn, Inc.*, IPR2025-00363 et al., Paper 10, 2-3 (June 6, 2025).

⁶ Although PO has dismissed the infringement claims against Google with prejudice, PO may still seek past damages from others in the Android ecosystem. §III.B, *supra*.

years ago due to non-payment of maintenance fees, and, accordingly, it expected non-enforcement of the challenged patent.”).

But even if PO could establish some settled expectations in an expired patent, the Office’s material error would overcome them. *See, e.g., Anthony Inc. v. Controltec, LLC*, IPR2025-00559 et al., Paper 12, 2 (July 16, 2025) (referring petitions based on a material error even though challenged patents were in force 17 and 18 years); *Skullcandy, Inc. v. Earin AB*, IPR2025-00690, Paper 9, 2 (July 31, 2025) (referring petition based on material error despite “settled expectations”).

D. PO’s Remaining Arguments Do Not Support Discretionary Denial

1. §§325(d)/314(a) Do Not Support Denial

PO argues that the Petition repackages prior arguments and raises concerns of road mapping based on the Samsung IPR. Paper 6, 7-10. Neither argument is correct.

There is no “repackaging.” The Office has never considered Dutta in combination with the secondary references in the Petition. During prosecution, the Examiner considered Dutta but not Akifumi. In the Samsung IPR, the Board considered Allen and Gal as primary references in combination with Akifumi, Creative Camcorder, and Balmer. The Board did not consider Dutta or any Dutta-based combination.

Because the Office has not considered Dutta in combination with the secondary references in the Petition, the first part of *Advanced Bionics* is not

satisfied, and §325(d) does not apply. *Plr Worldwide Sales Ltd. v. Flip Phone Games Inc.*, IPR2024-00133, Paper 14, 24 (Nov. 29, 2024) (“There is no dispute that Patent Owner [did] not show that either the [secondary reference] or a reference substantially the same as [the secondary reference] was considered during prosecution...Therefore, the office never previously considered the combination [of two references with the secondary reference,] and section 325(d) is not implicated for the grounds based in part on [the secondary reference].”); *Ceva Sante Animale S.A. v. Targan, Inc.*, IPR2024-00595, Paper 9, 11 (Aug. 5, 2024) (“The Examiner did not consider any combination involving Pierre because Pierre is not of record in the prosecution history. In its combination of [a reference before the Office] and Pierre, Petitioner asserts new, non-cumulative arguments...”).

But even if the Office reaches *Advanced Bionics* part two, the Petition demonstrates that the Office committed material error by overlooking Dutta’s teachings alone and in combination with the secondary references. §III.A, *supra*. PO does not engage with this showing. Instead, PO asserts in conclusory fashion that the “material-error theory is not strong enough to overcome the overlap.” Paper 6, 10. The Petition’s strong showing of material error stands unrebutted.

There is no road mapping. PO argues that “Samsung...assembled and briefed the same recurring reference combinations against the same patent.” Paper 6, 8. That is wrong. The Samsung IPR used Allen and Gal as primary references. This Petition

uses Dutta. Although there are overlapping secondary references, the Petition does not present “the same recurring reference combinations” because the primary references are not the same. But even if overlapping secondary references were relevant, there is no road mapping concern here. Road mapping concerns may be raised when a petitioner attempts to cure deficiencies that resulted in a prior merits denial. *See, e.g., All. Laundry Sys., LLC v. PayRange LLC*, IPR2025-00950, Paper 11, 2 (Sept. 19, 2025) (determining there were road mapping concerns where petitioner admitted it addressed and cured deficiencies as to a prior petition that was denied on the merits). Here, the Board in the Samsung IPR never evaluated the Samsung IPR’s merits—it denied solely based on *Fintiv*. Ex1051, 23. It follows that there is no road mapping concern because the Board did not identify any deficiencies for this Petition to cure.

PO also argues that “[t]he Samsung petition itself underscored that its challenge would be useful to future defendants. Samsung argued that its petition was potentially helpful to future defendants and would enable invalidity of claims that Patent Owner might later reassert.” Paper 6, 8. PO misconstrues Samsung’s argument. Samsung argued under *Fintiv* factor 5 that instituting its petition and determining the claims were unpatentable would benefit future defendants by preventing PO from asserting the ’450 patent against them. Ex1049, 87 (“The Petition Enables Invalidity of Claims that Might be Reasserted...Samsung’s Petition

is potentially helpful to future defendants. For at least this reason, Samsung’s status as both Petitioner and defendant is, at worst, a neutral factor. Taking relevant circumstances into account, institution would serve overall efficiency and integrity, enabling the Board to determine invalidity of claims that Patent Owner might otherwise later assert against others.”).

When PO filed its preliminary response in the Samsung IPR in 2020, PO argued that “Samsung’s concern that Clear Imaging ‘might otherwise later assert’ its patents against unidentified ‘others’ is entirely speculative and therefore deserves no weight.” Ex1050, 38. Thus, at that time, PO apparently understood that Samsung was arguing its petition promoted efficiency—not that future defendants could use Samsung’s petition as a roadmap.

2. The Timing of Google’s Petition Does Not Support Denial

PO argues that Google waited to file its Petition “until the last possible day.” Paper 6, 5. That is wrong. Google filed its Petition on 1/29/2026. The complaint was served 1/31/2025 (Ex1045), and—because 1/31/2026 was a Saturday—Google’s statutory bar date was Monday, 2/2/2026. *Commc’ns Test Design, Inc. v. Contec, LLC*, IPR2019-01669, Paper 9, 12-17 (Mar. 26, 2020) (determining that when the statutory bar date falls on a weekend, the bar date extends to the next business day). And PO does not allege that the Petition timing raises a *Fintiv* concern or otherwise explain why the timing prejudices PO. Indeed, after PO served Google with a

complaint alleging infringement, PO should have expected that Google may file an IPR within the time period Congress prescribed. *Id.*, 17 (determining that a patent owner defending its patent in IPR did “not result in any undue prejudice...because the filing of the Petition” was “a direct consequence” of the patent owner serving petitioner with a complaint). But even if the Office were to determine that the Petition timing weighed against denial, the Office has a strong interest in correcting its material error and in preventing PO from asserting the ’450 patent against others. *See* §§III.A, III.B, *supra*.

3. Manufacturing Considerations Do Not Support Denial

PO attempts to argue that the Office’s 3/11/2026 memorandum creates a presumption against institution because Google’s Pixel smartphones are allegedly manufactured in Vietnam. Paper 6, 10-11. It cannot be disputed, however, that Google is one of the largest U.S. companies with employees and offices throughout the U.S. PO, on the other hand, does not allege it makes any U.S. investments. In these circumstances, the Office should find this factor supports institution or is at worst neutral. And regardless, the Office should determine that it has a strong interest in considering this IPR’s merits. *See* §§III.A, III.B, *supra*.

IV. CONCLUSION

There are persuasive reasons to reach the merits of this IPR, and PO’s request for discretionary denial should be denied.

Date: May 11, 2026

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that true copies of Petitioner's Brief Opposing Discretionary Denial and EXHIBITS 1048–1059 were served upon the below listed counsel by electronic mail:

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