

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARASHI VISION (U.S.) LLC D/B/A INSTA360,
Petitioner,

v.

GOPRO, INC.,
Patent Owner.

IPR2025-00017
Patent 10,529,052 B2

Before KIMBERLY MCGRAW, ROBERT L. KINDER, and
NABEEL U. KHAN, *Administrative Patent Judges*.

KHAN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

Arashi Vision (U.S.) LLC (d/b/a Insta360) (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1–20 (“the challenged claims”) of U.S. Patent No. 10,529,052 B2 (“the ’052 patent,” Ex. 1001). GoPro, Inc. (“Patent Owner”) timely filed a Preliminary Response (Paper 7, “Prelim. Resp.”). With our authorization, Patent Owner filed a supplemental brief in support of discretionary denial (“PO Supp. Br.”). Paper 9. Petitioner timely filed a reply (“Pet. Reply”). Paper 10.

An *inter partes* review may not be instituted “unless . . . the information presented in the petition . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). The Board, however, has discretion to deny institution even when a petition meets that threshold. *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 273 (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”). Having considered the arguments and record before us, we determine it is appropriate to exercise our discretion and decline to institute an *inter partes* review in this case.

B. *Related Proceedings*

The parties identify the following pending matters as involving the ’052 patent: *In the Matter of Certain Cameras, Camera Systems, and Accessories Used Therewith*, Inv. No. 337-TA-1400 (USITC) (“parallel ITC investigation”); and *GoPro, Inc. v. Arashi Vision Inc. et al.*, No. 8:24-cv-00681-HDE-JCV (C.D. Cal.) (“parallel district court litigation”). Pet. 99; Paper 4, 2.

C. The '052 Patent (Ex. 1001)

The '052 patent, titled “Virtual Lens Simulation for Video and Photo Cropping,” relates to a virtual lens simulated when applying a crop or zoom effect to an input video. Ex. 1001, codes (54), (57). The '052 patent notes that “for wide angle or spherical images or video, subjects in the originally captured content may appear very small,” and further “much of the captured field of view may be of little interest to a given viewer.” *Id.* at 1:16–20.

The '052 patent states that “cropping or zooming the content can beneficially obtain an image or video with the subject more suitably framed.” Ex. 1001, 1:20–22. The '052 patent notes, however, that “cropping an image to extract a sub-frame near an edge or corner of a wide angle image capture may result in an image having significantly different distortion than a sub-frame extracted from a center of the image,” which may be “undesirable particularly when combining cropped sub-frames corresponding to different regions of a video (e.g., to track movement of a subject of interest), or combining cropped sub-frames with uncropped frames (e.g., to produce in zoom effect).” *Id.* at 1:27–37.

To address this, the '052 patent employs a virtual lens model applied to each of the extracted sub-frames to produce consistent lens characteristics across each output image, including lens characteristics in the output images that match the characteristics naturally appearing in the original images. Ex. 1001, 3:22–32. According to the '052 patent, “the output images may simulate the same effect that would have been achieved by a camera operator manually reorienting and/or physically moving the camera to produce . . . panning , re-pointing, cropping, and/or zooming effects.” *Id.* at 3:25–28.

According to the '052 patent, a system that simulates image distortion of a virtual lens “access[es] input images . . . including fields of view of a scene captured through a lens of a camera, the input images depicting the scene with an input lens distortion centered in the fields of view.” Ex. 1001, 13:22–31. The system further “select[s] sub-frames representing portions of the input images, the sub-frames including reduced fields of view of the scene smaller than the fields of view of the input images.” *Id.* at 13:32–35. The sub-frames include “different lens distortion effects as a function of the input lens distortion present in the input images, different positions of areas of the input images . . . and a size of the areas of the input images.” *Id.* at 13:35–40. The system further generates output images including the sub-frames remapped “to the desired lens distortion centered in the reduced fields of view.” *Id.* at 13:42–50.

D. Illustrative Claims

Claims 1 and 11, the independent claims of the '052 patent, are reproduced below with limitation identifiers in brackets corresponding to claim analysis headings in the Petition. *See, e.g.*, Pet. 12–35, 48–49.

1. [Preamble] A system that simulates image distortion of a virtual lens in a video, the system comprising:

[1A] one or more processors; and

[1B] a non-transitory computer-readable storage medium storing instructions that when executed cause the one or more processors to perform steps including:

[1C] accessing input images, the input images including fields of view of a scene captured through a lens of a camera, the input images depicting the scene with an input lens distortion centered in the fields of view;

[1D] selecting sub-frames representing portions of the input images, the sub-frames including reduced fields of view of the scene smaller than the fields of view of the input images,

[1E] the sub-frames including different lens distortion effects as a function of the input lens distortion present in the input images, different positions of areas of the input images included within the reduced fields of view, and a size of the areas of the input images included within the reduced fields of view; and

[1F] generating output images based on a desired lens distortion and the different lens distortion effects in the sub-frames, the desired lens distortion and the input lens distortion exhibiting consistent lens characteristics,

[1G] wherein the output images include the sub-frames remapped from the input lens distortion centered in the fields of view of the input images to the desired lens distortion centered in the reduced fields of view to transform the different lens distortion effects present in the sub-frames to the desired lens distortion such that portions of the scene depicted in the sub-frames appear to have been captured using the reduced fields of view.

Ex. 1001, 13:22–54.

11. [Preamble] A method for simulating image distortion of a virtual lens in a video, the method comprising:

[11A] accessing input images, the input images including fields of view of a scene captured through a lens of a camera, the input images depicting the scene with an input lens distortion centered in the fields of view;

[11B] selecting sub-frames representing portions of the input images, the sub-frames including reduced fields of view of the scene smaller than the fields of view of the input images,

[11C] the sub-frames including different lens distortion effects as a function of the input lens distortion present in the input images, different positions of areas of the input images included within the reduced fields of view, and a size of the areas of the input images included within the reduced fields of view; and

[11D] generating output images based on a desired lens distortion and the different lens distortion effects in the sub-frames, the desired lens distortion and the input lens distortion exhibiting consistent lens characteristics,

[11E] wherein the output images include the sub-frames remapped from the input lens distortion centered in the fields of view of the input images to the desired lens distortion centered in the reduced fields of view to transform the different lens distortion effects present in the sub-frames to the desired lens distortion such that portions of the scene depicted in the sub-frames appear to have been captured using the reduced fields of view.

Id. at 14:15–43.

E. Evidence

The Petition relies on the following references:

Reference	Exhibit No.
US 2006/0017817 A1; filed July 18, 2005; published Jan. 26, 2006 (“Okubo”)	1004
US 8,994,838 B2; filed Apr. 16, 2013; issued Mar. 31, 2015 (“Sokeila”)	1005
US 9,238,434 B2; filed Apr. 19, 2011; issued Jan. 19, 2016 (“Eder”)	1009

Petitioner also relies on the Declaration of Dr. Aggelos Katsaggelos (Ex. 1002) in support of its arguments, and Patent Owner relies on the Declaration of Hassan Foroosh, Ph.D. (Ex. 2001).

F. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–20 would have been unpatentable on the following grounds:

Ground	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1	1–20	103	Okubo
2	1–20	103	Okubo, Sokeila
3	1–20	103	Eder

II. DISCRETIONARY DENIAL

The Board has held that the advanced state of a parallel district court action is a factor that may weigh in favor of denying a petition under § 314(a). *See NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Consolidated Trial Practice Guide¹, 58 & n.2. We consider the following factors to assess “whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding”:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). In evaluating these factors, we “take[] a

¹ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6.

On February 28, 2025, the U.S. Patent and Trademark Office rescinded a prior memorandum, issued June 21, 2022, titled “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” (“the June 2022 Memo”).² On March 24, 2025, the Office issued a memorandum with guidance on the rescission of the June 2022 Memorandum. *See* Memorandum from Scott R. Boalick, Chief Administrative Patent Judge to Members of the Patent Trial and Appeal Board (March 24, 2025) (“Memo on Rescission”).³ The recent Memo on Rescission provided, among other guidance, that “the Board will apply the *Fintiv* factors when there is a parallel proceeding at the International Trade Commission (‘ITC’).” *Id.* at 2.

Patent Owner argues that the “ITC will decide the ***identical grounds of invalidity*** raised in the Petition” and that the “ITC’s initial determination is expected on May 8, 2025, and the target date for completion of the investigation is September 8, 2025, more than seven months before the expected due date for the Board’s final written decision.” PO Supp. Br. 1. Based on these facts, Patent Owner argues that all six *Fintiv* factors support discretionary denial. *Id.* Below, we analyze all six *Fintiv* factors.

² *See* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

³ *See* https://www.uspto.gov/sites/default/files/documents/guidance_memo_on_interim_procedure_recission_20250324.pdf (providing guidance on the rescission of the June 2022 Memorandum).

1. *Factor 1 – Whether the court granted stay or evidence exists that one may be granted if a proceeding is instituted*

Patent Owner argues that the parallel ITC proceeding is not stayed but that the parallel district court litigation has been automatically stayed pursuant to 28 U.S.C. § 1659. PO Supp. Br. 4. Petitioner argues that the district court action is stayed and “not bound to any ITC decision.” Pet. Reply 2.

“A district court stay of the litigation pending resolution of the PTAB trial allays concerns about inefficiency and duplication of efforts.” *Fintiv*, 6. However, when there is a parallel district court litigation and an ITC investigation, “district court litigation is often stayed under 28 U.S.C. § 1659 pending resolution of the ITC investigation.” *Id.* at 7. The fact that the parallel district court litigation is stayed is, therefore, not the focus of this *Fintiv* factor under these circumstances. Instead, *Fintiv* counsels that “the parties should indicate whether the patentability disputes before the ITC will resolve all or substantially all of the patentability disputes between the parties, regardless of the stay.” *Id.* at 9. Here, the parallel ITC investigation is not stayed and, as we explain below in our analysis of Factor 4, there is some overlap between the patentability disputes presented here and those presented at the ITC.

Petitioner argues that the district court is “not bound to any ITC decision” (Pet. Reply 2), but as *Fintiv* reminds us, “even though the Office and the district court would not be bound by the ITC’s decision, an earlier ITC trial date may favor exercising authority to deny institution under *NHK* if the ITC is going to decide the same or substantially similar issues to those presented in the petition.” *Fintiv*, 8.

Because there is some overlap in the patentability disputes presented here and before the ITC, this factor, therefore, weighs slightly in favor of discretionary denial.

2. *Factor 2 – Proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision*

Patent Owner argues that this factor weighs strongly in favor of discretionary denial because the “initial determination is expected on May 8, 2025, and the target date for completion of the investigation is September 8, 2025—seven months before the PTAB’s expected final written decision in April 2026.” PO Supp. Br. 4. Petitioner does not address this factor.

The proximity factor in *Fintiv* asks us to evaluate our discretion in light of a trial date that has been set in a parallel litigation. *See Fintiv*, 3 (“*NHK* applies to the situation where the district court has set a trial date to occur earlier than the Board’s deadline to issue a final written decision in an instituted proceeding.”), 5 (“When the patent owner raises an argument for discretionary denial under *NHK* due to an earlier trial date, the Board’s decisions have balanced the following factors”). Here, the parallel ITC investigation is expected to be completed seven months before the expected date of our final written decision. We, therefore, agree with Patent Owner that this factor favors discretionary denial.

3. *Factor 3 – Investment in the parallel proceeding by the court and the parties*

Patent Owner argues this factor strongly favors discretionary denial because “[b]oth parties and the ITC have invested substantial resources” and that the “record includes expert testimony, claim construction, post-hearing briefing, and fully developed invalidity positions.” PO Supp. Br. 4. Petitioner does not address this factor.

If, at the time of the institution decision, the ITC has issued substantive orders related to the challenged patent, such as a claim construction order, this fact weighs in favor of denial. *See Fintiv*, 9–10. On the other hand, if the ITC has not issued such orders, this fact weighs against discretionary denial. *Id.* at 10.

Because the hearing in the parallel ITC investigation has already taken place, claim construction is complete and invalidity positions have been fully developed, we agree that this factor weighs heavily in favor of discretionary denial.

4. *Factor 4 – Overlap between issues raised in the petition and in the parallel proceeding*

Patent Owner argues that this factor weighs strongly in favor of discretionary denial because the “Petitioner raises the ***identical grounds*** to challenge the ’052 Patent in both proceedings: Okubo, Okubo with Sokeila, and Eder.” PO Supp. Br. 4. These grounds, according to Patent Owner, are asserted against claims 1, 2, 5, and 6 in both proceedings. PO Supp. Br. 4–5.

Petitioner argues that “[i]n the ITC action, three grounds were presented at trial, but each challenged only four asserted claims (claims 1, 2, 5, and 6). The Petition thus presents 16 claims (3, 4, and 7–20), of the patent’s 20 total claims that will ***not*** be adjudicated by the ITC.” Pet. Reply 2.⁴ In arguing that the Petition should not be denied, Petitioner analogizes the circumstances here to those in the Board’s recent non-

⁴ Petitioner notes that “there will be no overlap between this proceeding and the district court action, because Petitioner hereby stipulates to a *Sotera* stipulation for that action.” Pet. Reply 2. We do not weigh the *Sotera* stipulation in our analysis because the stipulation does not apply to the parallel ITC investigation. *See* Memo on Rescission, 2 (making clear that the Board must apply the *Fintiv* factors to the parallel ITC investigation).

precedential institution decisions in *Klein Tools, Inc., v. Milwaukee Electrical Tool Corp. & Keter Home and Garden Products, Ltd.*, IPR2024-01401, Paper 16 (PTAB April 8, 2025) and in *POSCO Co. Ltd. v. Arcelormittal*, IPR2024-01377, Paper 11 (PTAB March 18, 2025), in which the Board instituted trial. Pet. Reply 1–2.

The fourth *Fintiv* factor requires consideration of “inefficiency and the possibility of conflicting decisions.” See *Fintiv*, 12. “[I]f the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding, this fact has favored denial.” *Id.* “Conversely, if the petition includes materially different grounds, arguments, and/or evidence than those presented in the district court, this fact has tended to weigh against exercising discretion to deny institution under *NHK*.” *Id.* at 12–13.

It is undisputed that for at least four of the claims challenged in this Petition—claims 1, 2, 5 and 6—the grounds are the same as those in the parallel ITC investigation. Additionally, four more claims—claims 11, 12, 15, and 16—are substantially similar to claims 1, 2, 5, and 6, and the grounds for these claims are also the same as those for the claims at issue at the parallel ITC investigation. This is evident not only from a review of the claims but is also confirmed by Petitioner’s contentions for claims 11, 12, 15, and 16, which rely completely on contentions for claims 1, 2, 5, and 6. See Pet. 48–52, 66–68, 95–97. Thus, eight of the twenty claims of the ’052 patent are implicated by the parallel ITC investigation, including both independent claims 1 and 11. Petitioner implicitly acknowledges this when it lists only twelve dependent claims as “includ[ing] claim limitations **not** at issue in the ITC proceeding.” Pet. Reply 2 (listing “dependent claims 3, 4,

7–10, 13, 14, and 17–20” as including limitations not at issue at the parallel ITC investigation).

For these reasons, the circumstances here are distinguishable from those in *Klein Tools* and *POSCO*. For example, in *Klein Tools*, a prior art reference that was not at issue in the ITC proceeding was relied upon for each ground in the Petition and, accordingly, the Board determined that “the grounds in this proceeding were not ‘presented in’ the trial hearing in the ITC Litigation and, thus, the ITC will not adjudicate the patentability grounds raise here.” *Klein Tools*, Paper 16 at 18. Similarly, in *POSCO*, the Board found “the record does not support that the Petition’s invalidity grounds were presented to the ITC for consideration on the merits, and the record does not support that the ITC will ever adjudicate the invalidity grounds raised here.” *POSCO*, Paper 11 at 15. As explained above, in our case the same grounds were presented to and will be adjudicated by the ITC. The ITC’s determination may duplicate, and raise concerns of inconsistencies with, our determination with respect to at least eight of the claims challenged here. There is, simply put, a materially greater amount of overlap here than in *Klein Tools* or *POSCO*.

Because the grounds for eight out of twenty claims, including both independent claims, overlap with the parallel ITC investigation, while the grounds for twelve dependent claims do not, this factor weighs slightly in favor of discretionary denial.

5. *Factor 5 – Whether the petitioner and the defendant in the parallel proceeding are the same party*

Patent Owner argues that the parties are the same in both proceedings. PO Supp. Br. 5. Petitioner does not address this factor. Because the

Petitioner here is the respondent in the parallel ITC investigation, this factor weighs in favor of discretionary denial.

6. *Factor 6 – Other circumstances that impact the Board’s exercise of discretion, including the merits*

Petitioner argues that it acted in reliance on the now rescinded June 2022 Memo, which directed the Board not to discretionarily deny based on a parallel ITC proceeding. Pet. Reply 4 (citing June 2020 Memo, 6–7).

Denying the Petition based on the rescission of the June 2022 Memo would, according to Petitioner, be “manifestly unfair” because the rescission occurred after the conclusion of the ITC trial and just six weeks before the deadline for this Decision. *Id.* Petitioner argues that denial here “would signal to patent challengers, patent owners, and the public that unambiguous USPTO directives—even those expressly promulgated ‘to benefit the patent system and the public good’—cannot be relied upon in such circumstances.” *Id.* (citing June 22 Memo, 2). Nonetheless, we follow Board guidance on the matter, which specifically states that the “recission applies to any case in which the Board has not issued an institution decision.” Memo on Rescission, 2. Such is the case here, and we therefore apply the *Fintiv* factors to the parallel ITC investigation even though Petitioner relied on previous guidance when it filed this Petition.

Petitioner also argues that because the Board has instituted on five previous *inter partes* review proceedings that “relate to the same general subject matter . . . [d]enying this Petition would only minimally address concerns about ‘increas[ing] duplication and expenses.’” Pet. Reply 5. We disagree. The five previously instituted proceedings challenge different patents than the one challenged here, and neither of the two primary references relied upon here—Okubo and Eder—are relied upon in any of the

previously instituted proceedings. Only Sokeila was relied upon previously in two proceedings and only for one challenged claim.⁵ This proceeding does not overlap with the previous proceedings sufficiently enough to provide the efficiencies claimed by Petitioner.

Finally, with respect to the merits of the Petition, Patent Owner argues the Petition suffers from significant substantive flaws and that this factor, therefore, supports denial. PO Supp. Br. 5. Petitioner argues, on the other hand, that the “merits are compelling and thus weigh against discretionary denial.” Pet. Reply 2.

While Petitioner addresses all limitations of the challenged claims in its Petition, Patent Owner presents arguments under all three grounds raising issues with Petitioner’s challenges. For example, regarding the first ground, Patent Owner argues Okubo’s image cutout “does not represent a portion of a larger input image, but rather is the size of the image that is ‘picked up’ and recorded in the first instance.” Prelim. Resp. 12. Thus, according to Patent Owner, Okubo does not disclose “selecting sub-frames” as recited by limitation 1[D] of claim 1. *Id.* Regarding the second ground, Patent Owner argues that Okubo’s two-stage lens distortion correction process is limited to still images while Sokeila’s teachings relate to video images. *Id.* at 18–19. Regarding the third ground, Patent Owner argues that “Eder does not disclose selecting sub-frames representing portions of the input images, where the input images include fields of view captured through a lens of the camera.” *Id.* at 21. Even if we were to determine that Petitioner has demonstrated a reasonable likelihood of prevailing, the arguments presented

⁵ Sokeila is relied upon as a secondary reference to challenge claim 12 of U.S. Patent No. 10,958,840 B2 in IPR2024-01164 and IPR2024-01165.

by Patent Owner raise issues and concerns that warrant further development if trial were to be instituted. Accordingly, at this stage of the proceeding, based on the arguments and evidence set forth, we disagree that the merits of the Petition are compelling or particularly strong.

We determine the Factor 6 weighs neither for nor against discretionary denial.

7. Conclusion

We take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review” when considering the six *Fintiv* factors. *Fintiv*, 6. Because the parallel ITC investigation is at a very advanced state with nearly all work complete and because there is sufficient overlap in the issues in both proceedings, the *Fintiv* factors weigh in favor of exercising our discretion to deny institution.

III. CONCLUSION

After considering all the arguments and evidence before us, we determine that exercising our discretion under 35 U.S.C. § 314(a) to not institute trial is warranted. Accordingly, we do not institute *inter partes* review.

IV. ORDER

For the foregoing reasons, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), the Petition is denied and *inter partes* review is not instituted.

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