

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA SOLUTIONS, INC.,
Petitioner,

v.

STELLAR, LLC,
Patent Owner.

IPR2024-01285
Patent 8,928,752 B2

Before BRIAN J. McNAMARA, NABEEL U. KHAN, and
BRIAN P. MURPHY, *Administrative Patent Judges*.

KHAN, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background and Summary*

Motorola Solutions, Inc. (“Petitioner”)¹ filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–18 (“the challenged claims”) of U.S. Patent No. 8,928,752 B2 (“the ’752 patent,” Ex. 1004). Stella, LLC (“Patent Owner”)² timely filed a Preliminary Response (Paper 8, “Prelim. Resp.”).

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). “When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a). Having considered the arguments and evidence presented by Petitioner and Patent Owner, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on at least one of the challenged claims of the ’752 patent. We exercise our discretion to institute *inter partes* review and, as required, we do so as to all the challenged claims of the ’752 patent on all the grounds of unpatentability set forth in the Petition.

B. *Related Proceedings*

The parties identify the following pending matter as involving the ’752 patent: *Stellar, LLC v. Motorola Solutions, Inc. et al.*, Case No. 4:23-

¹ Petitioner identifies Motorola Solutions, Inc. and WatchGuard Video, Inc. as the real parties-in-interest. Pet. 82.

² Patent Owner identifies Stellar, LLC as the real party-in-interest. Paper 4, 1.

cv-750 (E.D. Tex.) (“parallel litigation”). Pet. 82; Paper 4, 1. Patent Owner identifies the following AIA proceedings as involving patents asserted in the parallel litigation that are directly or indirectly related to the ’752 patent:

IPR2024-01205, IPR2024-01206, IPR2024-01207, IPR2024-01208, IPR2024-01284, IPR2024-01313, and IPR2024-01314. Paper 4, 1.

C. The ’752 Patent (Ex. 1004)

The ’752 patent, titled “Recording Device with Pre-Start Signal Storage Capability,” was filed August 28, 2007 and issued January 6, 2015. Ex. 1004, codes (22), (45), (54). The ’752 patent describes itself as follows:

A surveillance system uses a flash or other memory to store multiple data streams, each of which includes pre-start signal and post-start signal data. An area of the memory is preferably utilized as a circular buffer, in which a second data stream can be recorded without overwriting a first data stream. Buffers can have sufficient [] capacity to capture up to an hour or more of image frames. All suitable methods and apparatus for initiating start and stop signals are contemplated, including for example using a button, toggle or other switch, a verbal or other human interface, and using motion, sound, light or other sensors. It is also contemplated that embodiments can include an interface for altering or otherwise designating a pre-signal size of the recently used segment. Cameras according to present invention can be mounted in any desired manner, including for example in camera boxes, on eyeglasses, and on automobiles or other vehicle.

Id. at code (57).

D. Illustrative Claim

Claim 1 is the sole independent claim of the ’752 patent and is reproduced below with limitation identifiers in brackets corresponding to claim analysis headings in the Petition. *See, e.g.*, Pet. 17–35.

1. [Preamble] A surveillance system comprising:

[Element 1] a camera that converts images into first and

second data streams;

[Element 2] a memory; and

[Element 3] hardware that executes an instruction set that utilizes an area of the memory as a circular buffer,

[Element 4] records the first data stream in the buffer;

[Element 5] responds to a first signal by protecting a recently used segment of the buffer storing at least a portion of the first data stream corresponding to a duration of time prior to the first signal, while at the same time continuously recording the first data stream as the second data stream in an unprotected segment of the buffer, without overwriting the protected segment; and

[Element 6] responds to a second signal received after the first signal by increasing the duration of the protected segment of the buffer prior to the first signal.

Ex. 1004, 6:16–31.

E. Evidence

The Petition relies on the following references:

Reference	Exhibit No.
US 7,158,167 B1; filed Sept. 9, 1998; issued Jan. 2, 2007 (“Yerazunis”).	1017
US 5,982,418; issued Nov. 9, 1999 (“Ely”).	1020
US 6,804,638 B2; filed June 20, 2001; published Oct. 12, 2004 (“Fiedler”).	1037
US 6,563,532 B1; filed Apr. 21, 2000; issued May 13, 2003 (“Strub”).	1046

Petitioner also relies on the Declaration of Nabil J. Sarhan, Ph.D. (Ex. 1051) in support of its arguments. The parties rely on other exhibits as discussed below.

F. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–18 would have been unpatentable on the following grounds:

Ground	Claim(s) Challenged	35 U.S.C. § ³	Reference(s)/Basis
1a ⁴	1–11, 14	103(a)	Yerazunis, Fiedler
1b	12, 13, 15–18	103(a)	Yerazunis, Fiedler, Strub
2a	1–11	103(a)	Ely, Fiedler
2b	14	103(a)	Ely, Fiedler, Yerazunis
2c	12, 13, 15–18	103(a)	Ely, Fiedler, Strub

II. EXERCISE OF DISCRETION

In the Preliminary Response, Patent Owner contends that we should exercise our discretion to deny the Petition in favor of the parallel litigation. Prelim. Resp. 5–17. 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. Intrix-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Trial Practice Guide, 58 & n.2. We consider the following factors to assess “whether

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. §§ 102 and 103 and became effective March 16, 2013. Because the ’752 patent was filed before this date, the pre-AIA versions of 35 U.S.C. §§ 102 and 103 apply. *See* Ex. 1004, code (22).

⁴ Because Petitioner describes each ground as obvious over a primary reference “alone or as combined with” other references, each “Ground” includes two grounds of obviousness. However, for purposes of this Decision, we analyze each ground as if it were over all the listed references combined. *See, e.g.*, Pet. 7 (“**Ground 1a**: Claims 1–6, 9, and 11–18 would have been obvious under 35 U.S.C. § 103 over [Yerazunis] *alone or as combined with* [Fiore].” (emphasis added)); *see generally id.* at 7–8.

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 holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6. With these factors and guidance in mind, we consider parties’ contentions.⁵

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

“A district court stay of the litigation pending resolution of the PTAB trial allays concerns about inefficiency and duplication of efforts.” *Fintiv*, 6. *Fintiv* indicated that, in previous Board decisions, the existence of a district court stay pending Board resolution of an *inter partes* review has weighed

⁵ The June 21, 2022 memorandum titled “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” has been rescinded by the Office. *See* <https://www.uspto.gov/about-us/news-updates/uspto-rescinds-memorandum-addressing-discretionary-denial-procedures>

strongly against discretionary denial, while a denial of such a stay request sometimes weighs in favor of discretionary denial. *Id.* at 6–8.

On February 24, 2025, the District Court in the parallel litigation issued an order temporarily staying all deadlines and hearings scheduled in the matter.⁶ Ex. 1058, 1–2. The District Court’s order notes that Patent Owner asserts 8 patents in the litigation, that IPRs have been instituted on 4 of those patents covering 10 of the 14 claims asserted in the litigation, and that further consideration of a stay will depend upon whether IPRs are instituted on patents including the 4 remaining claims. *Id.* at 1, 3. The District Court also ordered the parties to update their positions on a stay within one week of a decision on institution. It is unclear if, and when, a new trial date would be set. In light of this stay, we determine that this factor weighs strongly against discretionary denial.

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

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, 5 (“*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.”; “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”) (citing *NHK*, Paper 8 at 20). As noted above in the discussion of the first factor, *Fintiv* cites concern regarding “inefficiency and duplication of efforts.” *Id.* at 6. In its analysis

⁶ Patent Owner had argued in its Preliminary Response that “Petitioner has not sought a stay in the district court” but this argument was made before the district court’s February 24, 2025 order.

of the proximity factor, *Fintiv* echoes that concern in its guidance that “[i]f the court’s trial date is at or around the same time as the projected statutory deadline or even significantly after the projected statutory deadline, the decision whether to institute will likely implicate other factors discussed herein, such as the resources that have been invested in the parallel proceeding.” *Id.* at 9. Similarly, in *NHK*, the Board expressed the concern that a trial before the deadline for a final written decision addressing the same prior art and arguments would have undermined the Board’s objectives of providing an effective and efficient alternative to district court litigation. *See NHK*, 20 (citing *General Plastic Indus. Co., Ltd. v. Cannon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16–17 (PTAB Sept. 6, 2017 (precedential))).

Patent Owner argues that the trial date is over eight months before the expected date of a Final Written Decision in this proceeding and that this favors denial. *Id.* at 10–11. This argument, however, was made before the district court stayed its deadlines and hearings pending issuance of our institution decisions in this IPR and three related IPR proceedings. In light of the district court’s stay of all deadlines, we determine this factor weighs against exercising discretion to deny institution.

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

If, at the time of the institution decision, the district court 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 district court has not issued such orders, this fact weighs against discretionary denial. *Id.* at 10.

Patent Owner emphasizes that, given the advanced state of the parallel litigation, the District Court and the parties have expended significant time and resources in preparing the parallel litigation for trial. Prelim. Resp. 11–14. Patent Owner advises that the District Court has appointed a technical advisor, considered extensive claim construction briefs, held a hearing and entered a *Markman* ruling on sixteen claim terms, and had yet to decide *Daubert* motions at the time Patent Owner filed its Preliminary Response. *Id.* at 13–14.

Although we are sensitive to the expenditure of time and effort preparing for trial in the parallel litigation, we also recognize that a significant amount of work still remains to be done. For example, Patent Owner points to its infringement contentions containing over 850 pages of claim charts alleging infringement of 14 claims over 8 asserted patents, as well as Petitioner’s invalidity contentions based on over 115 prior art references. *Id.* at 12–13. Moreover, the recently ordered stay of deadlines and hearings indicates that the district court is sensitive to the amount of work still remaining.

In light of the above, we determine this factor weighs against exercising our discretion to deny institution.

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

“[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.” *Fintiv*, 12. “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. A

stipulation as in *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18–19 (PTAB Dec. 1, 2020) (precedential as to § II.A), if one is entered, would be highly relevant.

On December 10, 2024, Petitioner offered a stipulation, stating that, upon institution on this proceeding, Petitioner “will not pursue as to the challenged claims any ground raised or that reasonably could have been raised during the IPR” in the parallel litigation. *See* Ex. 2015 (filed in this proceeding Dec. 20, 2024). Petitioner’s stipulation applies to the following proceedings, which includes this proceeding: IPR2024-01284, challenging claims 1–19 of U.S. Patent No. 8,310,540; IPR2024-01285, challenging claims 1–18 of U.S. Patent No. 8,928,752; IPR2024-01313, challenging claims 1–25 of U.S. Patent No. 10,523,901; and IPR2024-01314, challenging claims 1–20 of U.S. Patent No. 10,965,910. With respect to this proceeding, Petitioner’s stipulation applies to all claims in the ’752 patent.

Petitioner’s stipulation mitigates concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions. *See Sotera*, 19. Moreover, the stay of hearings and deadlines in the parallel litigation also mitigates concerns of duplicative efforts and potentially conflicting decisions. *Fintiv*, 6 (“A district court stay of the litigation pending resolution of the PTAB trial allays concerns about inefficiency and duplication of efforts.”). We determine this factor weighs strongly against discretionary denial.

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

Patent Owner notes that Petitioner and its real party-in-interest (WatchGuard Video, Inc., acquired by Petitioner in 2019) are the only

defendants in the parallel litigation. Prelim. Resp. 15 (citing Ex. 2013). This factor, therefore, weighs in favor of discretionary denial.

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

As discussed below, on this preliminary record, Petitioner has met its burden of demonstrating a reasonable likelihood that it would prevail in showing that claims of the ’752 patent are unpatentable. As discussed in detail below, Petitioner has made a showing, on the record presently before us, that the prior art references cited in the Petition teach or suggest all limitations of at least one challenged claim. *See Fintiv*, 14– 15 (discussing the merits of the Petition as a consideration). We, therefore, determine that this factor neither weighs 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. Based on our holistic review of the *Fintiv* factors, we find that the district court’s stay of proceedings and Petitioner’s *Sotera* stipulation strongly mitigate concerns of duplicative efforts and outweigh the other factors. For these reasons, we decline to exercise our discretion to deny institution under § 314(a). We now address the substantive issues presented in the Petition.

III. ANALYSIS

A. *Principles of Law*

Petitioner bears the burden of persuasion to prove unpatentability of the claims challenged in the Petition, and that burden never shifts to Patent

Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) any objective evidence of obviousness or non-obviousness⁷. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (internal quotation marks and citation omitted).

Petitioner’ declarant, Dr. Sarhan, opines that a person of ordinary skill in the art (“POSITA”) in the field “would have been a person having at least a Bachelor’s Degree in electrical engineering, computer science, or computer engineering, or undergraduate training in an equivalent field and at least two years of relevant experience in electronics technology.” Ex. 1051 ¶ 30. Dr. Sarhan further opines that “[a]dditional graduate education could

⁷ Neither party has introduced any objective evidence of nonobviousness.

substitute for professional experience, and significant work experience could substitute for formal education.” *Id.*

Patent Owner does not contest Petitioner’s proposed level of ordinary skill. *See generally* Prelim. Resp.

For purposes of this Decision, we adopt Petitioner’s proposed level of ordinary skill, which is supported by Dr. Sarhan’s testimony, except that we find that the phrase “at least” in Petitioner’s proposed definition creates a vague, open-ended upper bound for the level of ordinary skill, and we therefore do not adopt that aspect of the proposal.

C. Claim Construction

We apply the same claim construction standard used in district court actions under 35 U.S.C. § 282(b), namely that articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b) (2020).

In applying that standard, claim terms generally are given their ordinary and customary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips*, 415 F.3d at 1312–13. “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). Only claim terms in controversy require express construction, “and only to the extent necessary to resolve the controversy.” *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *see also Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need

be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

Having reviewed the parties’ arguments, we determine no terms require express construction to resolve the disputes at this stage of the proceeding.⁸ A final determination as to claim construction will be made at the close of the proceeding, after any hearing, based on all the evidence of record. The parties are expected to assert all their claim construction arguments and evidence in the Petition, Patent Owner’s Response, Petitioner’s Reply, Patent Owner’s Sur-reply, or otherwise during trial, as permitted by our rules.

D. Obviousness over the Combination of Yerazunis and Fiedler (Ground 1a)

Petitioner argues claims 1–11, and 14 of the ’752 patent would have been obvious over Yerazunis in combination with Fiedler. Pet. 9–48. Below we provide a brief overview of Yerazunis and Fiedler and then analyze Petitioner’s contentions in light of Patent Owner’s arguments.

1. Yerazunis (Ex. 1017)

Yerazunis is titled “Video Recording Device for a Targetable Weapon,” was filed on September 9, 1998 and issued on January 2, 2007. Ex. 1017, codes (54), (22), (45). Yerazunis describes itself as follows:

⁸ Petitioner notes that in the parallel litigation, for the term “hardware that executes an instruction set,” Petitioner and Patent Owner have identified structure and function “if [the term] invoke[s] Section 112 ¶ 6.” Pet. 8. In this proceeding, however, neither party asserts that the term should affirmatively be construed under § 112 ¶ 6. Furthermore, the district court has issued a preliminary construction for the term determining that the term is “[n]ot subject to 112, ¶ 6.” Ex. 2011, 2. For purposes of this Decision we do not treat the term as invoking § 112 ¶ 6.

A compact video image recording device which is mountable to a gun and useful for recording video images before and after the firing of the gun. The recording device includes a camera comprising a lens and a video image sensor. The video recording device is mounted on the gun such that the viewing area of the camera includes the target area of the gun. The video image sensor generates an electronic signal representative of a video image impinging the respective sensor. The output of the image sensor is processed and generally employed to produce frame data which are successively stored in successive frame locations of a semiconductor memory organized as a circular buffer memory while the video recording device is in an active state. Upon the firing of the gun, additional frames are stored in the buffer memory for a short period of time and a portion of the buffer memory is employed to preserve a video record of the shooting both before and after the event. Additional frames are successively stored in the unused portion of the buffer memory. In the event of a further firing of the gun, an additional portion of the buffer memory is dedicated to preserving the image data associated with subsequent firing incident. This process may be repeated until the buffer memory is full in the event the gun is repeatedly fired. A video record is thus generated which documents the circumstances preceding and following the firing of the gun.

Id., code (57).

2. *Fiedler (Ex. 1037)*

Fiedler is titled “Device and Method for Selective Recall and Preservation of Events Prior to Decision to Record the Events” and was filed on June 20, 2001 and issued October 12, 2004. Ex. 1037, codes (54), (22), (45). Fiedler describes itself as follows:

A device process for event-activated recording generally includes the steps of providing an acquisition buffer having at least one finite extent of a recording medium. Events are recorded in the acquisition buffer. Current events in place of earlier events are then recorded within the acquisition buffer. Action by the user or triggering system activates the preservation

of all or part of the record of the most recent events recorded in the acquisition buffer upon the detection of one or more predetermined events. A portion of the record of events selected by the user is preserved by reserving a portion of the record of events from being overwritten by other events, and/or by transferring the selected portions of the record of events to a predetermined permanent location. Portable devices and applications to the recording telephone conversations are also disclosed.

Id., code (57).

3. *Combination of Yerazunis and Fiedler*

Petitioner contends that a “POSITA would have been motivated to implement Yerazunis’ video recording device with Fiedler’s capture functionality to extend the length of a write-protected segment that occurs prior to an event trigger.” Pet. 16 (citing Ex. 1051 ¶ 276). Petitioner argues that Yerazunis teaches that the length of the write-protected segment is a matter of design choice and that the length of the segment can be extended. *Id.* (citing Ex. 1017, 8:26–1, 16:66–17:44). According to Petitioner, “a POSITA would have understood that increasing the duration of the protected segment of the buffer prior to the event trigger in Yerazunis using Fiedler’s capture functionality would have advantageously helped to ensure preservation of important video data.” *Id.* (citing Ex. 1051 ¶ 277). Petitioner points out that both references disclose a user-pressable capture button and that a POSITA would have understood that combining Fiedler’s capture functionality with Yerazunis would have advantageously enabled capture of additional contextual video data for events occurring before write-protection would otherwise begin, thus preserving the events leading up to the firing of a gun that might bear on justification of the firing of the gun. *Id.* at 17 (citing Ex. 1051 ¶¶ 278–279).

Patent Owner argues that Petitioner oversimplifies the analysis of each reference and ignores the particulars of each described system. Prelim. Resp. 33. Patent Owner also argues that Yerazunis is at odds with Fiedler because Yerazunis discloses an automatic preservation mechanism and states that it is undesirable to have an electronic interface to the gun, while Fiedler describes the “manual nature” of its recording device with various buttons and displays. *Id.* at 34–35 (citing Ex. 1037, 7:59–8:20, 8:45–9:27, Fig. 3; Ex. 1017, 15:3–5).

At this stage of the proceeding, we are persuaded that Petitioner has established a reasonable likelihood that a person of ordinary skill would have combined the teachings of Yerazunis and Fiore for the reasons provided by Petitioner. Specifically, we are persuaded at this stage of the proceeding that adding Fiedler’s capture functionality would allow the capture of additional video for context. Patent Owner’s argument that Yerazunis discourages the use of an electronic interface does not undermine the benefits of adding Fiedler’s capture functionality.

4. Analysis of Claim 1

Petitioner contends that the combination of Yerazunis and Fiedler teach each of the limitations of claim 1, supporting its contentions with evidence from the asserted prior art and from the testimony of Dr. Sarhan. Pet. 17–41. Patent Owner disputes Petitioner’s contentions with respect to certain limitations. Prelim. Resp. 25–33. We have reviewed Petitioner’s contentions for the preamble⁹ and undisputed limitations of claim 1 and are

⁹ Because we determine that Petitioner has demonstrated a reasonable likelihood that the combination of Yerazunis and Fiore teaches the preamble, we need not make a determination, at this stage of the proceeding, whether the preamble is limiting.

persuaded Petitioner has established a reasonable likelihood that the combination of Yerazunis and Fiedler teaches these undisputed limitations. We focus our attention on the disputed elements of claim 1 below.

a) Whether Yerazunis and Fiedler Teach “protecting a recently used segment of the buffer . . . without overwriting the protected segment”

Claim 1 recites “protecting a recently used segment of the buffer storing at least a portion of the first data stream . . . while at the same time continuously recording . . . without overwriting the protected segment.” Ex. 1004, 6:23–28 (emphasis added).

Petitioner relies on Yerazunis’ gun camera embodiment which discloses an event sensor generating a gun firing signal which “causes ‘specified frame data associated with [the] firing event both before and after the event’ to be ‘preserved,’ such that it ‘cannot be overwritten as a result of further use of the gun or subsequent firing events.’” Pet. 37 (citing Ex. 1017, 3:25–38, 8:26–30, 15:9–13). Petitioner relies further on Yerazunis’ disclosure that data associated with subsequent firing events are stored within unused portions of the circular buffer memory. *Id.* at 37–38 (citing Ex. 1017, 3:31–33). Petitioner argues that recording happens continuously such that write-protection occurs at the same time as recording. *Id.* at 38 (citing Ex. 1051 ¶ 297; Ex. 1017, 2:1–4, 2:19–23, 4:45–49, 17:45–61). Similarly, Petitioner argues that a second data stream is recorded in a non-protected portion of Yerazunis’ buffer. *Id.* at 39 (citing Ex. 1017, 2:1–8, 2:19–23, 4:45–49, 7:11–14, 9:34–38, 17:45–61).

Patent Owner argues that “Yerazunis discloses a system whereby the entirety of a circular buffer (i.e., all data in the buffer) is preserved in response to a triggering signal by ceasing to record over previously *used* (i.e., recorded) portions of the buffer.” Prelim. Resp. 26. The car

implementation, according to Patent Owner, “is a simple ‘buffer-record-and-stop’ scheme, in which the video data is stored in a circular buffer until a triggering event, at which point the system records a small amount of additional video, and then stops the recording altogether.” *Id.* at 26–27 (citing Ex. 1017, 2:19–25; 8:26–32).

In the gun camera implementation, according to Patent Owner, the system uses only unused blocks of memory for each firing event by recording to one unused portion and then switching to record in a second unused portion and that this “is not ‘protecting a recently used segment of the buffer’ . . . but is instead responding to the signal by recording to one unused portion and then switching (using pointers) to record in a second unused portion.” Prelim. Resp. 27–28 (citing Ex. 1017, 17:9–15, 56–58). Additionally, Patent Owner points out that Yerazunis’s purge button erases the contents of the circular buffer which further indicates that “the entire contents of the buffer are protected and unprotected as a whole.” *Id.* at 31 (citing Ex. 1017, 9:47–51). According to Patent Owner, Yerazunis explains that the video data preservation is a step that occurs after, not as part of, the step of continuing to record for a brief interval. *Id.* at 28–29 (citing Ex. 1017, 14:55–61, 21:11, 21:59–22:5, 22:53–67).

Having reviewed Petitioner’s contentions and Patent Owner’s arguments to the contrary, we are persuaded, at this stage of the proceeding, by Petitioner’s arguments summarized above that the combination of Yerazunis and Fiedler teach “protecting a recently used segment of the buffer storing at least a portion of the first data stream . . . while at the same time continuously recording . . . without overwriting the protected segment.” Specifically, in the gun implementation, Yerazunis teaches that frame data associated with the firing event both before and after the event is preserved

and cannot be overwritten and that data associated with a subsequent firing event is stored in an unused portion of the circular buffer. Ex. 1017, 3:25–38, 8:26–30, 15:9–13.

To the extent Patent Owner argues that preserving data by using unused portions of the circular buffer for subsequent recording does not teach “protecting a recently used segment of the buffer,” we disagree. Yerazunis is explicit that it preserves and prevents overwriting of recorded data (Ex. 1017, 17:48–59) which we determine sufficiently supports Petitioner’s arguments at this stage of the proceeding.

b) Whether the Combination of Yerazunis and Fiedler Teaches “responds to a second signal received after the first signal by increasing the duration of the protected segment of the buffer prior to the first signal”

Petitioner argues that Yerazunis discloses that because multiple firings of the gun are possible, the gun may be refired within the post trigger event time period while the video recording device is still recording as a consequence of a prior firing and that in such an event the recording time may be extended. Pet. 39–40 (citing Ex. 1017, 17:38–44.). Petitioner points out that Yerazunis discloses that the length of the write-protected segment is a matter of design choice and that the length of the segment can be extended. *Id.* at 40 (citing Ex. 1017, 8:26–61, 16:66–17:44). Petitioner argues that it would have been obvious to increase the duration of the protected segment of the buffer prior to the first signal in response to a second signal based on Yerazunis’ disclosure. *Id.* (citing Ex. 1051 ¶ 301).

Additionally, Petitioner relies on Fiedler’s disclosure that “pressing Capture once may capture the most recent minute, pressing it twice in rapid succession may capture the most recent two minutes, and so on.” Pet. 40 (citing Ex. 1037, 9:42–45). Based on this disclosure, Petitioner argues that a

“POSITA would have generally known that the length of recording in a circular buffer could be extended in response to a signal.” *Id.* (citing Ex. 1051 ¶ 301).

Patent Owner argues that Petitioner’s cited material does not indicate “that the subsequent firing of the gun would increase the duration of the protected segment of the buffer *prior to* the first signal, i.e., the duration of the ‘pre-signal’ protected segment.” Prelim. Resp. 30. Instead, according to Patent Owner, it is the post event time period that will be extended, not the duration prior to the receipt of the first signal. *Id.* (quoting Ex. 1017, 17:38–44). Patent Owner argues that Yerazunis’ disclosure that the length of the write-protected segment is a design choice does not teach “a second signal received after the first signal.” *Id.* at 30–31. As to Fiedler, Patent Owner argues that pressing the Capture button twice in Fiedler does not extend the pre-capture duration of a previously triggered event, it merely increases the total time of pre-press capture starting from the moment the button is pressed twice. *Id.* at 32. Patent Owner points out that Fiedler also discloses that a second press of the Capture button release the data block from capture and thus does the opposite of protecting the data. *Id.* at 32–33 (citing Ex. 1037, 9:5–9).

At this stage of the proceeding based on the present record, we are persuaded of a reasonable likelihood that the combination of Yerazunis and Fiedler teaches “responds to a second signal received after the first signal by increasing the duration of the protected segment of the buffer prior to the first signal.” Yerazunis discloses that “the number of frames that are recorded before and after are a matter of design choice.” Ex. 1017, 9:51–53. Dr. Sarhan testifies that, given Yerazunis’ disclosure of the importance of capturing contextual video data sounding the initial firing of the gun, “a

POSITA would have understood the benefits of increasing the duration of the protected segment of the buffer prior to the first signal in the Yerazunis system.” Ex. 1051 ¶ 302; *see also id.* at ¶¶ 301, 277–278. Dr. Sarhan’s testimony is unrebutted at this stage of the proceeding. This motivation combined with Fiedler’s disclosure of pressing the Capture button twice to extend the duration of the video recorded (Ex. 1037, 9:42–45) is sufficient at this stage of the proceeding.

Patent Owner, however, does raise arguments that would benefit from further development during trial. For example, Patent Owner argues that the teachings of Yerazunis and Fiedler do not teach a second signal received after the first signal. Prelim. Resp. 30–31 (citing Ex. 1037, 9:42–45). Patent Owner also argues that Fiedler’s disclosure of pressing the Capture button twice in rapid succession does not extend the pre-capture duration of a previously triggered event and merely increases the total time of pre-press capture starting from the moment the button is pressed twice. *Id.* at 31–32. The parties should address these issues during trial, consistent with our rules.

5. *Conclusion – Claim 1*

For the foregoing reasons, we determine Petitioner has established a reasonable likelihood that the combination of Yerazunis and Fiedler teaches the limitations of claim 1 and a reasonable likelihood that Petitioner will prevail in demonstrating that claim 1 is unpatentable as obvious over Yerazunis and Fiedler.

6. *Analysis of Dependent Claims 2–11 and 14*

Petitioner addresses each of the limitations of dependent claims 2–11 and 14 providing support from Yerazunis, alone or in combination with Fielder, and Dr. Sarhan’s testimony. Pet. 41–48. Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one

claim of the '752 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R. § 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every claim in the ground challenged by Petitioner, especially, as in this case, when Patent Owner does not separately argue those claims. Those challenges, in our view, are best left for trial after full development of the record.

E. Obviousness over the Combination of Ely and Fiedler (Ground 2a)

Petitioner argues claims 1–11 of the '752 patent would have been obvious over Ely, alone or in combination with Fiedler. Pet. 55–77. Below we provide a brief overview of Ely and then analyze Petitioner's contentions in light of Patent Owner's arguments.

1. Ely (Ex. 1020)

Ely is titled "Distributed Video Data Storage in Video Surveillance System," was filed on April 22, 1996 and issued on November 9, 1999. Ex. 1020, codes (54), (22), (45). Ely describes itself as follows:

A video surveillance system includes a central control station and a plurality of video cameras each mounted inside a dome housing unit. A video data buffer memory, storing compressed video data generated by the camera, is mounted with each camera in the respective dome unit. Data buffered at the dome units may be selectively protected from overwriting in response to alarm signals and then retrieved for display or tape-recording by the central control station. Both live and buffered video signals are transmitted in compressed form over a data network that is also used for command, alarm and status messaging.

Id. at code (57).

2. Combination of Ely and Fiedler

Petitioner argues that a person of ordinary skill in the art "would have been motivated to implement Ely's surveillance system with Fiedler's

capture functionality to extend the length of a write-protected segment that occurs prior to an event trigger.” Pet. 57 (citing Ex. 1051 ¶ 327). Petitioner argues that Fiedler’s capture functionality would have advantageously helped to ensure preservation of important video data by extending the duration of the protected segment. *Id.* (citing Ex. 1051 ¶ 327). Petitioner argues that a POSITA would have generally known that the length of recording in a circular buffer could be extended in response to a signal, such that implementation of Fiedler’s capture functionality in Ely’s system would have been routine and well within a POSITA’s skill. *Id.*

Patent Owner argues that a POSITA would not be motivated to turn to Fiedler because Fiedler does not attempt to write-protect data within its buffer and instead transfers the preserved data to a new and different memory location. Prelim. Resp. 42 (citing Ex. 1037, 7:10–17). Patent Owner argues that Ely is incompatible with Fiedler because Fiedler preserves data to a file on hard-disk while Ely’s goal is to permanently record video on video tape. Prelim. Resp. 43 (citing Ex. 1020, 4:63–5:3). According to Patent Owner, Ely’s goal of analog storage on video tape would be thwarted if the serial data in the buffer were transmitted as a file. *Id.*

At this stage of the proceeding, we are persuaded that Petitioner has established a reasonable likelihood that a person of ordinary skill would have combined the teachings of Ely and Fiedler for the reasons provided by Petitioner and summarized above. Patent Owner’s argument that Fiedler does not write-protect data within its buffer does not address Petitioner’s contentions which rely on Ely write-protecting data within its ring buffer. Pet. 61–62 (citing Ex. 1020, 7:34–38, 7:48–55, 10:11–15). Patent Owner’s argument that Ely’s goal of analog storage would be thwarted by Fiedler

storing data as files on hard-disk also does not address Petitioner's contentions which rely on Ely's disclosure that it stores video signals in a ring buffer in digital form. *See* Ex. 1020, 2:55–64, 3:1–5; 6:48–53. Thus, the fact that Ely eventually stores those signals on video tape in analog form, does not undermine the motivation to combine Ely with Fiedler.

3. *Analysis of Claim 1*

Petitioner contends that the combination of Ely and Fiedler teaches each of the limitations of claim 1, supporting its contentions with evidence from the asserted prior art and from the testimony of Dr. Sarhan. Pet. 58–73. Patent Owner disputes certain aspects of Petitioner's contentions. Prelim. Resp. 35–41. We have reviewed Petitioner's contentions for the preamble¹⁰ and undisputed limitations of claim 1 and are persuaded Petitioner has established a reasonable likelihood that the combination of Ely and Fiore teaches these undisputed limitations. We focus our attention on the disputed elements of claim 1 below.

a) *Whether Ely and Fiedler Teach “protecting a recently used segment of the buffer . . . without overwriting the protected segment”*

Patent Owner argues that Ely fails to teach “write-protecting of discrete ‘**segment**[s]’ of first data stream recorded in the buffer” and instead teaches “inhibiting” the overwriting of previously recorded data and that this protection mechanism applies to the entire circular buffer, not to a discrete segment. Prelim. Resp. 36 (citing Ex. 1020, 2:65–3:16, 4:1–8, 7:30–36, 11:67–12:19, 14:24–38).

¹⁰ Because we determine that Petitioner has demonstrated a reasonable likelihood that the combination of Ely, Fiore, and Lewellen teaches the preamble, we need not make a determination, at this stage of the proceeding, whether the preamble is limiting.

At this stage of the proceeding, we are persuaded of a reasonable likelihood that that Ely teaches “protecting a recently used segment of the buffer storing at least a portion of the first data stream . . . while at the same time continuously recording . . . without overwriting the protected segment.” as recited in claim 1. Petitioner relies on Ely’s disclosure describing that when an alarm command is received the “control circuit protects from overwriting compressed digital video data previously stored in the memory 150” and that this protected data “correspond[s] to a time interval beginning at a predetermined time prior to receipt of the alarm command, and continu[es] for a predetermined time after receipt of the alarm command.” Pet. 61–62 (citing Ex. 1020, 7:34–38, 7:48–55, 10:11–15). This data “can be selectively retrieved in response to user instruction either for display (block 180) or directly for taperecording (block 182).” Ex. 1020, 10:17–23. By protecting a specific portion of the memory (pre- and post- alarm) and by allowing for selective retrieval of this protected data, Ely sufficiently supports, at this stage of the proceeding, Petitioner’s argument that Ely designates portions of the circular buffer for write protection.

b) Whether the Combination of Ely and Fiedler Teaches “responds to a second signal received after the first signal by increasing the duration of the protected segment of the buffer prior to the first signal”

Petitioner argues that Ely discloses that the lengths of video data protected before and after an alarm command are predetermined and also discloses a user interface for providing instructions input by users of the system. Pet. 72 (citing Ex. 1020, 5:60–64, 7:45–55, 8:16–27, 10:11–23, 10:60–65, Fig. 2). Petitioner argues that “[i]t would have been obvious to use the control circuit 134 to increase the duration of the protected segment

of the buffer prior to the first signal in response to a second signal in view of Ely's disclosure. *Id.* at 72 (citing Ex. 1051 ¶ 359).

Additionally, Petitioner relies on Fiedler's disclosure that "pressing Capture once may capture the most recent minute, pressing it twice in rapid succession may capture the most recent two minutes, and so on." Pet. 73 (citing Ex. 1037, 9:42–45). Based on this disclosure, Petitioner argues that a "POSITA would have generally known that the length of recording in a circular buffer could be extended in response to a signal." *Id.* (citing Ex. 1051 ¶ 360).

Patent Owner argues that the fact that Ely admittedly describes the lengths of video data protected before an alarm as "predetermined" undercuts Petitioner's argument that Ely "responds to a second signal received after the first signal by increasing the duration of the protected segment of the buffer prior to the first signal." Prelim. Resp. 38. Patent Owner also argues that the cited portions of Ely do not provide any suggestion that Ely's user interface could be used to increase the duration of the protected segment of the buffer prior to the first signal. *Id.* at 39–40 (citing Ex. 1020, 5:60–64, 8:16–27, Fig. 2).

As to Fiedler, Patent Owner argues that pressing the Capture button twice in Fiedler does not extend the pre-capture duration of a previously triggered event, it merely increases the total time of pre-press capture starting from the moment the button is pressed twice. *Id.* at 40. Patent Owner points out that Fiedler also discloses that a second press of the Capture button release the data block from capture and thus does the opposite of protecting the data. *Id.* at 40–41 (citing Ex. 1037, 9:5–9).

At this stage of the proceeding, we are persuaded of a reasonable likelihood that the combination of Ely and Fiedler teaches "responds to a

second signal received after the first signal by increasing the duration of the protected segment of the buffer prior to the first signal.” Fiedler’s disclosure of pressing the Capture button twice to extend the amount of video captured combined with Ely’s disclosure that the respective lengths of video data protected before and after an alarm are predetermined sufficiently supports Petitioner’s contentions at this stage. Dr. Sarhan testifies that, a “POSITA would have understood the benefits of increasing the duration of the protected segment of the buffer prior to the first signal in the Ely system to ensure important video evidence can be preserved.” Ex. 1051 ¶ 360; *see also id.* at ¶ 327. Dr. Sarhan’s testimony, which is unrebutted at this stage of the proceeding, provides sufficient motivation to combine Ely and Fiedler’s teachings.

Patent Owner, however, does raise arguments that would benefit from further development during trial. For example, Patent Owner argues that Fiedler’s disclosure of pressing the Capture button twice in rapid succession does not extend the pre-capture duration of a previously triggered event and merely increases the total time of pre-press capture starting from the moment the button is pressed twice. *Id.* at 40–41. The parties should address these issues during trial, consistent with our rules.

4. *Conclusion – Claim 1*

For the foregoing reasons, we determine Petitioner has established a reasonable likelihood that the combination of Ely and Fiore teaches the limitations of claim 1 and that Petitioner will prevail in demonstrating that claim 1 is unpatentable as obvious over the combination.

5. *Analysis of Dependent Claims 2–7, 9–14, and 18*

Petitioner addresses each of the limitations of dependent claims 2–11 providing support from Ely, alone or in combination with Fiedler, and Dr.

Sarhan's testimony. Pet. 73–78. Because Petitioner demonstrates a reasonable likelihood of success in proving that at least one claim of the '752 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R. § 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every claim in the ground challenged by Petitioner, especially, as in this case, when Patent Owner does not separately argue those claims. Those challenges, in our view, are best left for trial after full development of the record.

F. Remaining Grounds 1b and 2b–2c

Because Petitioner demonstrates a reasonable likelihood of success in showing that at least one claim of the '752 patent is unpatentable, we institute on all grounds and all claims raised in the Petition. *See* 37 C.F.R. § 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every challenge raised by Petitioner, especially, as in this case, when Patent Owner does not separately argue these grounds. Those challenges, in our view, are best left for trial after full development of the record.

IV. CONCLUSION

Petitioner has demonstrated a reasonable likelihood of prevailing in showing the unpatentability of at least one challenged claim of the '752 patent and we institute on all grounds raised and all claims challenged in the Petition. At this stage of the proceeding, however, we have not made a final determination with respect to the patentability of the challenged claims.

V. ORDER

For the foregoing reasons, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–18 of the '752 patent is instituted with respect to all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '752 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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Patent 8,928,752 B2

FOR PETITIONER:

Joshua Nightingale
Hilda Galvan
John Marlott
Christopher Buxton
jrnightingale@jonesday.com
hcgaltan@jonesday.com
jamarlott@jonesday.com
cbuxton@jonesday.com

FOR PATENT OWNER:

Jason Shapiro
Timothy Devlin
James Lennon
jshapiro@devlinlawfirm.com
tdevlin@devlinlawfirm.com
jlennon@devlinlawfirm.com