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Paper 47
Date: September 9, 2021

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX INC. and HULU, LLC,
Petitioner,

v.

DIVX, LLC,
Patent Owner.

IPR2020-00646
Patent 8,472,792 B2

Before BART A. GERSTENBLITH, MONICA S. ULLAGADDI, and IFTIKHAR AHMED, *Administrative Patent Judges*.

AHMED, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
Dismissing Patent Owner's Motion to Exclude
35 U.S.C. § 318(a)

I. INTRODUCTION

This is a Final Written Decision in an *inter partes* review challenging the patentability of claims 1, 5, 8, 9, 13–15, 18, and 21–23 (the "challenged claims") of U.S. Patent No. 8,472,792 B2 (Ex. 1001, "the '792 patent"). We have jurisdiction under 35 U.S.C. § 6.

Petitioner has the burden of proving unpatentability of the challenged claims by a preponderance of the evidence. 35 U.S.C. § 316(e). Having reviewed the parties' arguments and supporting evidence, for the reasons discussed below, we find that Petitioner has not demonstrated by a preponderance of the evidence that the challenged claims are unpatentable. Additionally, for the reasons discussed below, we dismiss Patent Owner's motion to exclude evidence (Paper 39).

II. BACKGROUND

A. Procedural History

Netflix Inc. and Hulu, LLC (collectively "Petitioner") requested an *inter partes* review of the challenged claims of the '792 patent. Paper 3 ("Petition" or "Pet."). In view of the preliminary record, we concluded that Petitioner satisfied the burden, under 35 U.S.C. § 314(a), to show that there was a reasonable likelihood that Petitioner would prevail with respect to at least one of the challenged claims. Accordingly, we instituted an *inter partes* review of all the challenged claims on the asserted grounds. Paper 12 ("Inst. Dec.").

After institution, DivX, LLC ("Patent Owner") filed a Response. Paper 20 ("PO Resp."). Petitioner filed a Reply. Paper 28 ("Pet. Reply"). Patent Owner filed a Sur-reply. Paper 37 ("PO Sur-reply"). On June 14,

2021, we held an oral hearing, the transcript of which is in the record. Paper 46 ("Tr.").

B. Related Proceedings

The '792 patent is asserted in *DivX, LLC v. Netflix, Inc.*, No. 2:19-cv-01602 (C.D. Cal.), and *DivX, LLC v. Hulu, LLC*, No. 2:19-cv-01606 (C.D. Cal.). Pet. 87; Paper 5, 1.

C. The '792 Patent (Ex. 1001)

The '792 patent, titled "Multimedia Distribution System," was filed on October 24, 2005, and is a continuation-in-part of an application filed December 17, 2004, which is a continuation-in-part of another application filed December 8, 2003. Ex. 1001, codes (22), (54), (63). The '792 patent issued on June 25, 2013. *Id.* at code (45).

The '792 patent concerns methods of generating, distributing and using a multimedia file that includes a series of encoded video frames along with two separate indexes to the encoded video frames. *Id.* at code (57). The first index "includes information indicative of the location within the file and characteristics of each encoded video frame," and the separate second index "includes information indicative of the location within the file of a subset of the encoded video frames." *Id.* at 1:48–53.

The '792 patent explains that multimedia files "can be structured to be compliant with the Resource Interchange File Format ('RIFF file format'), defined by Microsoft Corporation," typically comprising a "RIFF header," identifying the file, followed by various "chunks" and "lists." *Id.* at 5:33–50. An Audio-Video Interleave ("AVI") file is a RIFF file that "include[s] various chunks and lists with defined identifiers that contain multimedia data in particular formats." *Id.* at 5:51–55; 6:26–36 (listing a file

header chunk (hdr1), a metadata chunk (DXDT), a junk chunk, a movie chunk ("movi"), and an index chunk ("idx1")). In order to "enable rapid location of a specific video frame," the '792 patent provides a *second* "*index*" chunk that, like *idx1*, can be used to index data in the movi chunk corresponding to specific frames in an encoded video. *Id.* at 15:11–21.

Figure 2.3.2 of the '792 patent is reproduced below.

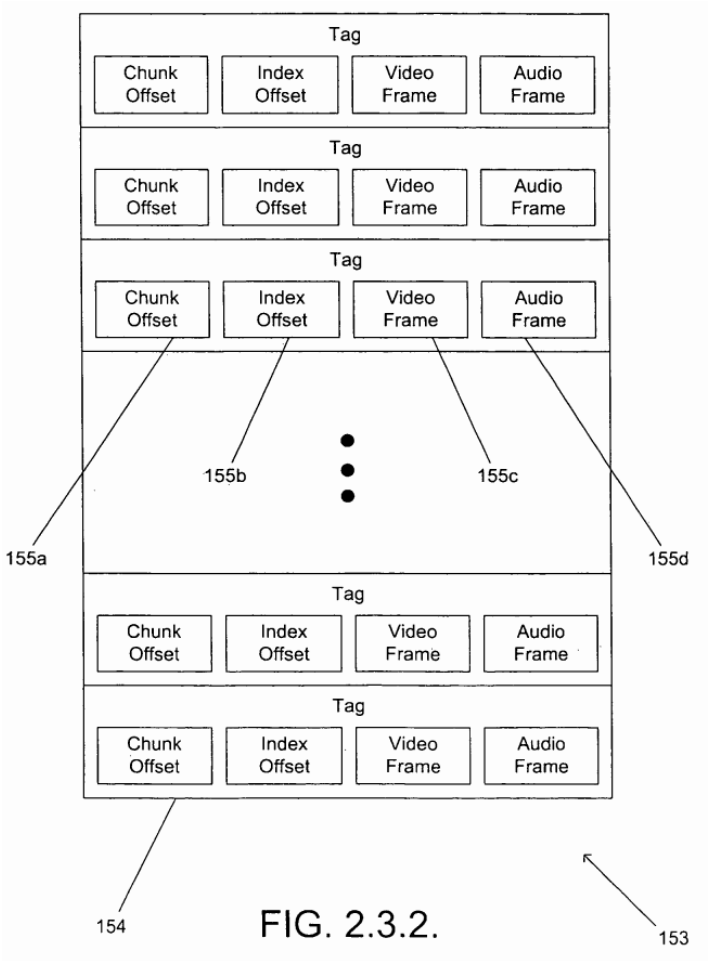


FIG. 2.3.2.

Figure 2.3.2, above, is a conceptual diagram of the *index* chunk, which includes a list of "tag" chunks, each of which "contains information that can be used to locate a particular encoded frame of video within a multimedia file." *Id.* at 15:22–27. These tag chunks can be used to identify frames that

are the start of specific scenes and/or chapters within a sequence of video frames. *Id.* at 15:38–40.

"The 'index' chunk can be differentiated from the 'idx1' chunk on the basis that the 'index' chunk does not include information concerning every 'data' chunk in the 'movi' list chunk," only a subset of the data chunks. *Id.* at 15:15–19. This index chunk can be a separate chunk or can be included in some other chunk *preceding* the movi chunk, e.g., the DXDT chunk or the junk chunk, to allow "a device to start playing and performing other functions, such as fast forward, rewind and scene skipping, prior to the downloading of the 'idxl' chunk," which comes after the movi chunk in the multimedia file. *Id.* at 15:11–15, 16:26–36.

D. Challenged Claims

Petitioner challenges claims 1, 5, 8, 9, 13–15, 18, and 21–23, of which claims 1, 9, and 15 are independent claims. Claim 1 is reproduced below.

> 1. A decoder for decoding a multimedia file comprising at least one video track and at least one audio track, the decoder comprising:
>
> a processor; and
>
> memory having a multimedia file including:
>
> a series of encoded video frames;
>
> a first index that includes information indicative of the location within the file and characteristics of each encoded video frame; and
>
> a separate second index that includes information indicative of the location within the file of a subset of the encoded video frames, the separate second index located prior to the series of encoded video frames and the first index, the first and second indexes enabling trick play functionality.

Ex. 1001, 13:7–22.

E. Prior Art and Instituted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1, 5, 8, 9, 13–15, 18, and 21–23 of the '792 patent on the following grounds:

Claims Challenged	35 U.S.C. §[1]	Reference(s)/Basis
1, 5, 8, 9, 13–15, 18, 21–23	103(a)	Zetts,[2] Kaku[3]
5, 18, 21	103(a)	Zetts, Kaku, Seo[4]

Pet. 16–82. Petitioner supports its challenge with two Declarations by Clifford Reader, Ph.D., executed March 6, 2020 (Ex. 1003) and April 8, 2021 (Ex. 1023).

Patent Owner supports its arguments with a Declaration by Chandrajit Bajaj, Ph.D., dated January 8, 2021 (Ex. 2005).

III. ANALYSIS

A. Principles of Law

"In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify "with particularity . . . the evidence that supports the grounds for the challenge to each claim")). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics,*

[1] Because the effective filing date of the '792 patent is before March 16, 2013, patentability is governed by the versions of 35 U.S.C. §§ 102 and 103 preceding the Leahy-Smith America Invents Act ("AIA"), Pub L. No. 112–29, 125 Stat. 284 (2011).
[2] U.S. Patent No. 7,212,726 B2, issued May 1, 2007 (Ex. 1004, "Zetts").
[3] U.S. Patent No. 6 671,408 B1, issued Dec. 30, 2003 (Ex. 1005, "Kaku").
[4] U.S. Patent No. 8,286,213 B2, issued Oct. 9, 2012 (Ex. 1006, "Seo").

Inc., 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

As set forth in 35 U.S.C. § 103(a),

> [a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter 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 ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). However, Petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). Instead, Petitioner must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive*, 842 F.3d 1376, 1382 (Fed. Cir. 2016). The scope of the prior art includes all analogous art. *Donner Tech., LLC v. Pro Stage Gear, LLC*, 979 F.3d 1353, 1359 (Fed. Cir. 2020).

Petitioner asserts that Zetts in combination with either Kaku alone or with Kaku and Seo would have rendered the subject matter of the challenged

claims of the '792 patent obvious to one of ordinary skill in the art at the time of the invention. Pet. 16–82. We analyze the asserted grounds of unpatentability in accordance with these principles to determine whether Petitioner has met its burden to demonstrate by a preponderance of the evidence that the challenged claims are unpatentable.

B. Level of Ordinary Skill in the Art

Petitioner, supported by Dr. Reader's testimony, proposes that a person of ordinary skill in the art "would have had a bachelor's degree in electrical engineering, computer science, or a similar field with at least two years of experience in video playback and file formats," or "a master's degree in electrical engineering, computer science, or a similar field with a specialization in video playback and file formats." Pet. 21 (citing Ex. 1003 ¶¶ 131–133). Patent Owner does not propose any particular skill level in its Response. *See generally* PO Resp. In our institution decision, we adopted Petitioner's proposed level (Inst. Dec. 8), and do the same for the purposes of this Decision.

C. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2019). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take

into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

Petitioner proposes constructions for three claim terms, including the term "trick play functionality." Pet. 22–23. Patent Owner argues for construction of the related claim term "the first and second indexes enabling trick play functionality." *See* PO Resp. 41–49. We determine that it is not necessary to provide an express interpretation of any of those claim terms because construction of the proposed terms does not impact our determination that Petitioner has not shown that one of the prior art references is analogous to the claimed invention. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co*., 868 F.3d 1013, 1017 (Fed. Cir. 2017); *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.").

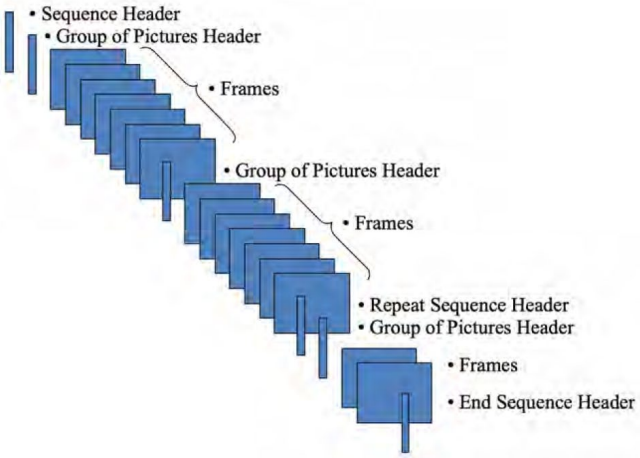
D. Overview of the Asserted Prior Art

1. Zetts (Ex. 1004)

Zetts discloses a method for automatic insertion of an "offset table" within a previously encoded MPEG[5] video file allowing for random access of each individual video frame using a "play-from-offset" mode. Ex. 1004, code (57), 3:29–33. Zetts explains that an end-user using an MPEG player streaming a video file digitized and compressed using the MPEG standard may be provided with "thumbnails" corresponding to major scene transition and may choose to play the video by selecting any thumbnail. *Id.* at 2:3–16.

[5] "MPEG" refers to the Motion Picture Experts Group audiovisual coding standards. *See* Ex. 1003 ¶ 5.

The MPEG player then "begins to play the video from the timecode associated with the thumbnail" by "sending to the streaming video server a play-from-offset request." *Id.* at 2:16–20. Zetts further teaches that the MPEG standard "permits a video to be randomly accessed only at the Group of Pictures (GOP) header level." *Id.* at 2:20–22. Dr. Reader explains the MPEG video standard with the illustration reproduced below.



The above illustration shows the hierarchical structure of MPEG, comprising a "Sequence Layer with a header that provides application-specific information," a "Group of Pictures Layer [that] provides an access point for random access and trick play," as well as a "Picture Layer [that] comprises the coded video frames." Ex. 1003 ¶ 35. GOP is a sequence of frames comprising I-frames (intracoded), P-frames (forward-predicted) and B-frames (bi-directional predicted), with the first picture in a GOP being an I-frame. *Id.* ¶ 28.

Zetts explains that "in order to start playing randomly, within an MPEG file, the player must decode . . . a GOP header to begin decoding on an 'I' frame." Ex. 1004, 2:22–28. Zetts's method "creates a compressed GOP offset table having an entry for each GOP header of every video packet

of the MPEG video file, and modifies the MPEG video file by inserting the compressed GOP offset table before the MPEG video file." *Id.* at 3:28–37; *see also id.* at 4:64–5:10 (explaining, in further detail, how the GOP offset table allows for "precise play-from-offset capability"). Zetts teaches that the embedded GOP offset table becomes a permanent part of the video file, and "[w]hen the file is decoded by the associated MPEG player, the GOP offset table is extracted and stored in memory for the duration of time the file remains the active video." *Id.* at 6:4–6, 6:19–21. "When random jumps in video location are commanded by the user, the player locates the nearest preceding GOP header employing an efficient binary search that references the timecode stored in the GOP offset table," and the video is played from that point. *Id.* at 6:6–16.

2. Kaku (Ex. 1005)

Kaku relates to a "motion reproducing apparatus" that discloses "compressed image data accommodated in a desired AVI file," and also discloses the details of the AVI file format. *See* Ex. 1005, code (57), Fig. 2. Figure 2 of Kaku is reproduced below.

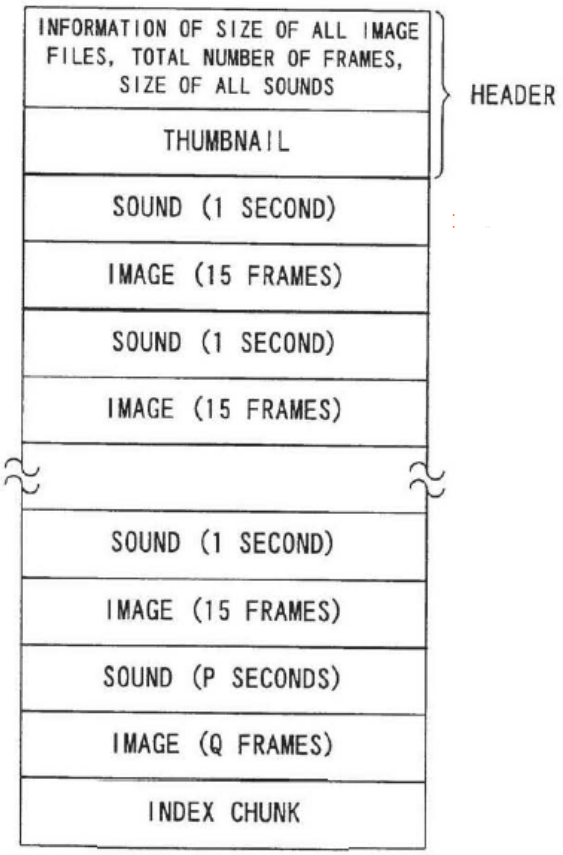


Figure 2, above, shows the structure of an AVI file. *Id.* at 3:41. Kaku discloses that "[t]he AVI file header is written with header information, such as a total file size, total number of frames and total sound sizes," and "an index chunk provided at . . . last is written with beginning addresses of sound chunks and compressed image data beginning addresses of frames, i.e. index information." *Id.* at 5:23–31.

3. Seo (Ex. 1006)

Seo discloses a video streaming method, where streaming "from a random point required by a user can be provided when the streaming has begun, and the random access function can be supported . . . even if the part

required by the user has not yet been transmitted to [a] receiving party." Ex. 1006, code (57). Figure 6 of Seo is reproduced below.

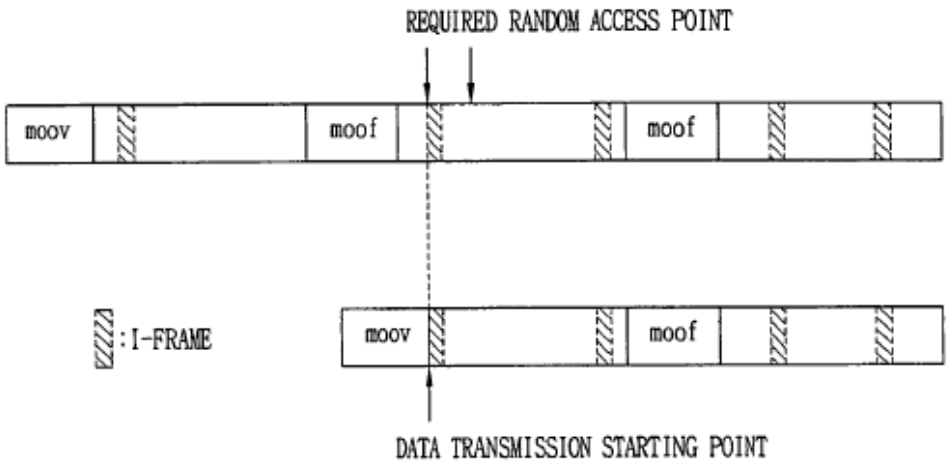


Figure 6 is a diagram showing Seo's video streaming method, where "when the type of the random access point is *not* the I-frame, the transmitting server 20 determines whether or not the user wants to receive the data from an *exact* random access point," and if not, "the transmitting server 20 detects an I-frame *closest* to the requested random access point . . . and then designates [for transmission] the media data sample including the I-frame." *Id.* at 4:4–6, 6:36–48 (referring to Figs. 5–7) (emphases added).

E. Obviousness over Zetts and Kaku

Petitioner contends that claims 1, 5, 8, 9, 13–15, 18, and 21–23 are unpatentable under 35 U.S.C. § 103 as obvious over Zetts and Kaku. Pet. 24–76. For the reasons that follow, we are not persuaded that Petitioner has established by a preponderance of the evidence, including Dr. Reader's testimony, that claims 1, 5, 8, 9, 13–15, 18, and 21–23 are unpatentable under § 103(a) as obvious over Zetts and Kaku.

Patent Owner argues that Petitioner's combination of Zetts and Kaku fails because Petitioner has not shown that Kaku is analogous art to the '792 patent. PO Resp. 1–18; PO Sur-reply 1–6. Because this issue is dispositive, we begin our discussion with the parties' arguments on whether Kaku is analogous prior art to the '792 patent.

1. Patent Owner's Response

Patent Owner argues that "[n]either Petitioner nor Dr. Reader makes any attempt to demonstrate that Kaku is analogous to the '792 patent," and thus, "Petitioner has failed to satisfy its burden of demonstrating that Kaku is analogous." PO Resp. 5 (noting that "the phrases 'analogous art,' 'field of endeavor,' and 'problem' are not even used in the Petition"). Applying the Federal Circuit's two part test, Patent Owner contends, "there is no reason to believe that Kaku is in the same field of endeavor as the '792 patent or reasonably pertinent to the problem with which the ['792 patent's] inventors were involved." *Id.* at 5; *id.* at 3–5 (citing *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992); *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 864–65 (Fed. Cir. 1993); *In re Klein*, 647 F.3d 1343, 1351–52 (Fed. Cir. 2011); *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992)).

Patent Owner contends that Kaku is not in the same field of endeavor as the '792 patent because Kaku "is directed towards digital cameras that can also reproduce motion image data." *Id.* at 5–7 (citing Ex. 1005, 1:6–11, 3:66–67, 8:51–52, Figs. 1, 7; Ex. 2005 ¶ 39). Patent Owner further contends that Kaku is specifically "concerned with digital cameras with a limited internal memory capacity." *Id.* at 7 (citing Ex. 1005, 1:14–27, 1:30–34, 1:65–2:4; Ex. 2005 ¶ 40). Noting that Kaku is assigned to Sanyo Electric

Company Limited, Patent Owner argues that Sanyo's cameras of the time often had a small monitor typically used to view images recorded on the camera. *Id.* at 7–8 (citing Ex. 1005, 1:39; Ex. 2012, 1; Ex. 2013; Ex. 2014). Patent Owner further contends that "Kaku is primarily focused on Motion JPEG files, which were commonly used in cameras with a very limited memory and processing power." *Id.* at 8 (quoting Ex. 2005 ¶ 42).

Patent Owner argues that the '792 patent is not directed towards digital cameras or other motion image recording/reproducing apparatuses. *Id.* at 9. "Rather, the field of endeavor of the '792 patent is facilitating trick play functionality in multimedia content that is streamed or downloaded over the internet." *Id.* at 9–10 (quoting Ex. 2005 ¶ 43; citing Ex. 1001, 1:20–34, 4:61–5:27, 16:26–36; 48:28–49:29, Fig. 1; Ex. 1002, 726–727). Relying on Dr. Bajaj's testimony, Patent Owner contends that a person of ordinary skill in the art would understand Kaku and the '792 patent as having distinct fields of endeavor because "[t]here is . . . no indication that Kaku has anything to do with enabling trick play functionality, streamed content, or dual indexes." *Id.* at 11 (citing Ex. 2005 ¶ 45).

Patent Owner further argues that Petitioner has also failed to show that "Kaku is 'reasonably pertinent to the problem with which the inventors' of the '792 [patent] were involved." *Id.* at 12. Patent Owner contends that "Kaku and the '792 patent are directed towards entirely different problems." *Id.* According to Patent Owner, "the problem that [Kaku] is directed towards is the limited internal memory capacity of motion image reproducing apparatuses (in particular, digital cameras)." *Id.* at 13 (citing Ex. 1005, 1:14–27; Ex. 2005 ¶ 47). Patent Owner further contends that "Kaku's Summary of the Invention confirms it is directed towards the

problem of how to provide a motion image reproducing apparatus 'capable of reproducing images for a long time period regardless of a memory capacity.'" *Id.* at 13–14 (citing Ex. 1005, 1:30–33, 1:65–2:4). Patent Owner argues that "the overwhelming bulk of Kaku's disclosure addresses this problem in the context of a camera utilizing motion JPEG." *Id.* at 14 (citing Ex. 1005, code (57), 1:17–18, 2:26–27, Figs. 1, 3–9, 11–13, claims 5, 10; Ex. 2005 ¶ 48).

In contrast, Patent Owner contends, the '792 patent is concerned with facilitating and "better enabl[ing] trick play functionality, particularly in the context of streaming multimedia." *Id.* at 14–15 (quoting Ex. 2005 ¶¶ 49–50; citing Ex. 1001, 1:20–25, 48:21–49:22). Patent Owner adds that the '792 patent "addresses this problem in significant part through the addition of a second index," which "improves the speed of trick play functionality when utilized in cooperation with the first index." *Id.* at 15 (quoting Ex. 2005 ¶¶ 49–50; citing Ex. 1001, 16:26–29, 48:38–55). Patent Owner also notes that during the prosecution of the '792 patent, applicant explained that "the use of dual indexes can greatly enhance the efficiency of trick play functionality," and that the Examiner's reasons for allowance address trick-play functionality. *Id.* at 16–17 (quoting Ex. 2005 ¶¶ 51–52; citing Ex. 1002, 726–727 (part 6), 1000 (part 7)).

Patent Owner contends that "Petitioner presents no colorable reason why a [person of ordinary skill in the art ("POSITA")] trying to solve the problem with which the '792 [patent] is concerned would turn to Kaku, a reference directed towards allowing a digital camera to continually display a moving image despite a limited memory." *Id.* at 17 (citing Ex. 2005 ¶ 54;

Pet. 19) (noting also that Petitioner relies solely upon Kaku's disclosure of the AVI file format).

2. Petitioner's Reply

Petitioner responds that "[i]t is undisputed that Kaku teaches the AVI file format." Pet. Reply 2 (citing PO Resp. 17, 24, 31). Petitioner contends:

> Under Federal Circuit precedent, Kaku must be considered for its AVI teachings, which cannot be ignored even if Kaku were primarily directed to camera embodiments. Moreover, Kaku is not so limited. Kaku teaches that, "although the embodiments were explained using a digital camera, it is needless to say that the invention is applicable to every electronic appliance to reproduce motion images." Kaku includes embodiments directed to particular implementations of the AVI file format, e.g., the "data file."

Id. at 3 (citing Ex. 1005, 2:28–39, 3:24–32, 11:57–61; Ex. 2006, 131:3–12). Petitioner further contends that "[t]he Federal Circuit has rejected attempts to exclude art when it is referenced in the background of a patent." *Id.* (citing *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010)). Petitioner argues that "the '792 patent refers to AVI as prior art," and "[t]herefore, Kaku is in the same field of endeavor." *Id.* at 3–4 (citing PO Resp. 10; Ex. 1001, 5:33–38, 5:51–6:17, 22:20–22; Ex. 2005 ¶ 26).

Petitioner further argues that "the '792 patent broadly defines its scope as including 'encoding . . . and decoding of multimedia files,'" Kaku teaches encoding (e.g., 'compressed' image data) and decoding (e.g., 'decompression') of image data in AVI files," and "[u]nder Federal Circuit precedent, Kaku is reasonably pertinent." *Id.* at 4 (citing Ex. 1005, 2:19–24; *Wyers*, 616 F.3d at 1238). Petitioner asserts that Dr. Bajaj "disowned the opinions in his declaration regarding analogous art," but "acknowledged that

'everything in the '792 [patent] is encoded using AVI.'" *Id.* (citing Ex. 1022, 145:18–146:18, 51:7–52:10).

3. Patent Owner's Sur-Reply

Patent Owner responds that Petitioner's burden of demonstrating that Kaku is analogous art is not met because, in spite of submitting two expert declarations, Petitioner offers no expert testimony in support of its position. PO Sur-reply 1. Patent Owner asserts that "neither Petitioner nor its expert state what they believe the field of endeavor is for either the '792 [patent] or Kaku, nor does Petitioner dispute Patent Owner's identification of the respective fields of endeavor." *Id.* at 2 (citing PO Resp. 6–11; Ex. 2005 ¶¶ 39–45). Patent Owner contends that Petitioner's argument that the '792 patent's reference to AVI makes Kaku in the same field of endeavor misapprehends the operable legal test. *Id.* at 2–3 (citing *In re Clay*, 966 F.2d at 659).

On the reasonable-pertinence prong, Patent Owner contends Petitioner fails to identify the "particular problem with which the inventor" was involved or explain how Kaku is relevant to that problem. *Id.* at 4. Patent Owner argues that the relevant question on this prong is not about the '792 patent's scope, and that "Kaku does not, in fact, 'teach' encoding and decoding." *Id.* at 5. According to Patent Owner, "[t]hat Kaku may simply use a compressed video in a system that otherwise has nothing to do with compression or decompression and has no bearing upon the problem Kaku is trying to solve." *Id.* at 5–6 (citing Ex. 1005, 2:19–24).

4. Analysis

To prevail in its challenges to the patentability of the claims, Petitioner must establish facts supporting its challenges by a preponderance

of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). The primary dispositive fact Petitioner must establish on this issue is that Kaku is analogous art to the claimed invention. *See In re Klein*, 647 F.3d at 1348; *In re Bigio*, 381 F.3d at 1325; *In re Clay*, 966 F.2d at 658.

A reference is considered analogous prior art: (1) if the reference is from the same field of endeavor as the claimed subject matter, or (2) if "the reference still is reasonably pertinent to the particular problem with which the inventor is involved," even though the reference is not within the field of the inventor's endeavor. *In re Bigio*, 381 F.3d at 1325.

The field of endeavor test asks if the structure and function of the prior art is such that it would be considered by a person of ordinary skill in the art because of the similarity to the structure and function of the claimed invention. *Bigio*, 381 F.3d at 1325–27. A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d at 659.

"In deciding whether a reference is from a relevant art, *it is key to first determine* whether the reference is within the inventor's field of endeavor, and if not, whether the reference is reasonably pertinent to the particular problem confronting the inventor." *Chemours Co. FC, LLC v. Daikin Indus., Ltd.*, 4 F.4th 1370, 1376 (Fed. Cir. 2021) (internal quotations omitted) (emphasis added); *see also Donner*, 979 F.3d at 1359 ("[W]hen addressing whether a reference is analogous art with respect to a claimed invention under a reasonable-pertinence theory, the problems to which both relate *must be identified* and compared." (emphasis added)).

We address Petitioner's and Patent Owner's arguments and evidence directed to each of the two prongs of the analogous art inquiry.

a) Field of Endeavor

We are persuaded that Petitioner and Dr. Reader have failed to identify the field of endeavor for either the '792 patent or Kaku—neither Petitioner's briefs nor either of Dr. Reader's two declarations address this threshold issue. *See generally* Pet.; Pet. Reply 2–4; Exs. 1003, 1023.

Patent Owner raised the issue of analogous art in its Response, arguing that "Petitioner did not attempt to prove that Kaku is in the same field of endeavor as the '792 patent," and that "Petitioner should not be permitted to attempt to make its case for the first time in its reply brief." PO Resp. 5. Relying on Dr. Bajaj's testimony, Patent Owner argued that "the field of endeavor of the '792 patent is facilitating trick play functionality in multimedia content that is streamed or downloaded over the internet." *Id.* at 9 (quoting Ex. 2005 ¶ 43). Yet, Petitioner's Reply failed to meaningfully respond to Patent Owner's arguments by identifying the field of endeavor of the '792 patent and explaining why Kaku belonged to that field. *See* Pet. Reply 2–4. Instead, Petitioner argued merely that "Kaku must be considered for its AVI teachings," and that "Kaku includes embodiments directed to particular implementations of the AVI file format, e.g., the 'data file.'" *Id.* at 3. Petitioner's only Reply argument relating to the field of endeavor prong is that "the '792 patent refers to AVI as prior art," and "Kaku is in the same field of endeavor." *Id.* at 3–4 (citing *Wyers*, 616 F. 3d at 1238).[6]

[6] We agree with Patent Owner that Petitioner offers no expert testimony in support of its arguments relating to analogous art. *See generally* Exs. 1003; 1023.

The use of a common file format *alone*, however, does not say anything about the field of endeavor of either the '792 patent or Kaku. *See In re Clay*, 966 F.2d at 659 (holding that the asserted reference could not be considered to be within the patent's field of endeavor merely because both relate to use of gels in the petroleum industry); *Wang Labs.*, 993 F.2d at 864 ("The Allen–Bradley art is not in the same field of endeavor as the claimed subject matter merely because it relates to memories."). In fact, neither the claimed invention nor Kaku's invention focuses on AVI. *See, e.g.*, Ex. 1001, 51:30–54:21 ('792 patent claims); Ex. 1005, 12:1–14:16 (Kaku's claims). Petitioner's argument that both the '792 patent and Kaku mention AVI therefore does not in any way indicate Petitioner's asserted field of endeavor for either. Nor does Petitioner challenge Patent Owner's definition of the field of endeavor of the '792 patent. *See* Pet. Reply 2–4; Ex. 2005 ¶ 43; PO Resp. 9–10.

Having failed to identify the field of endeavor of either the '792 patent or Kaku, Petitioner cannot demonstrate that Kaku and the claimed invention are in the same field, and therefore fails to meet its burden of establishing analogous art under the field of endeavor test. *See Parrot S.A. v. Drone Techs., Inc.*, IPR2014-00732, Paper 29 at 11 (PTAB Oct. 20, 2015) ("When the analogous-art issue was raised by Patent Owner in its Patent Owner Response, it was incumbent upon Petitioner to demonstrate that Shkolnikov is analogous art."); *see also Dynamic Drinkware*, 800 F.3d at 1380.

At the oral hearing, Petitioner's counsel argued that Dr. Reader's declaration testimony regarding the level of ordinary skill in the art "explains that the field [of endeavor] is video playback and file formats."

Tr. 31:7–9; *see also* Ex. 1026, 53 (citing Ex. 1003 ¶¶132–133; Pet. 21).[7] We find this argument to be forfeited because it was presented for the first time at the oral hearing. Paper 38 ("Order Granting the Parties' Requests for Oral Hearing") at 2 ("The parties . . . may only present arguments that have been made previously in the submitted papers. No new evidence or arguments may be presented at the hearing."); *see* Consolidated Trial Practice Guide ("CTPG") 84–85, *available at* https://www.uspto.gov/TrialPracticeGuideConsolidated (a party "may only present arguments relied upon in the papers previously submitted"); *Dell Inc. v. Acceleron, LLC*, 818 F.3d 1293, 1301 (Fed. Cir. 2016) (vacating the Board's decision where "key factual assertion was not in fact made in [Petitioner's] reply, but only at oral argument" and Patent Owner was not afforded the opportunity to present rebuttal arguments or evidence). As in *Dell*, without knowing Petitioner's position on the field of endeavor of the '792 patent or Kaku, Patent Owner was deprived the opportunity to present rebuttal arguments or evidence.

Nor are we persuaded by Petitioner's argument (Tr. 31:13–18) that *Wyers* requires us to equate, as a matter of law, any field included in the definition for the *level of ordinary skill in the art* to the field of endeavor for the purposes of determining whether a reference is analogous art. *See Wyers*, 616 F.3d at 1238 (basing the field of endeavor on the district court's jury instruction, which neither party had objected to). On the contrary, the Federal Circuit has imposed a requirement—separate from determining the level of ordinary skill in the art—to identify the field of endeavor of the patent and show that the prior art is analogous to the claimed invention. *See*

[7] We sustain Patent Owner's objection to Petitioner's demonstrative slide 53. *See infra* § V.

Donner, 979 F.3d at 1361 (explaining that while the level of skill in the art is relevant to the analogous art inquiry, it does not determine whether a given reference is analogous prior art); *cf. Graham*, 383 U.S. at 17–18 (listing the scope of the prior art and the level of ordinary skill in the art as separate underlying factual determinations to be made in resolving the question of obviousness). We therefore decline to accept Petitioner's argument, presented at the hearing, that Patent Owner should have understood Petitioner's expert's position on the level of skill in the art as also defining the field of endeavor for the purposes of determining analogous art.

At the oral hearing, Petitioner's counsel also pointed to other portions of its Reply as identifying a field of endeavor for the '792 patent. Tr. 91:1–93:22. For example, Petitioner's counsel argued that Petitioner's mention of AVI as prior art to the '792 patent identifies "the field of endeavor being file formats, AVI." *Id.* at 92:7–10 (referring to page three of the Reply). Shortly thereafter, Petitioner's counsel suggested that Petitioner's argument that the '792 patent defines its scope as including encoding and decoding of multimedia files also identifies the field of endeavor. *Id.* at 92:14–25 (referring to page four of the Reply). Petitioner's counsel suggested that even though that argument appears to be directed at whether "Kaku is reasonably pertinent," we should interpret it as being directed to the field of endeavor in light of the case law citation provided on that page.[8] *Id.* at 93:4–22.

[8] The statement on page 4 of Petitioner's Reply that "[u]nder Federal Circuit precedent, Kaku is reasonably pertinent" clearly indicates that the discussion of *Wyers* preceding that statement was intended to support Petitioner's argument that Kaku is reasonably pertinent to the '792 patent's problem. We address that argument below. *See infra* § III.E.4.b.

That Petitioner offers multiple positions on what it believes its own papers offer as the field of endeavor of the '792 patent supports our determination that Petitioner fails to clearly identify a field of endeavor of the '792 patent in its papers. Petitioner, in fact, concedes that it "could have . . . and perhaps . . . should have" identified the field of endeavor of the '792 patent, but did not. Tr. 92:17–18. We cannot, at this stage, adopt arguments on behalf of Petitioner that could have been, but were not, made in the Petition or Reply.[9] "Instead, [we] must base [our] decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond." *Magnum Oil Tools*, 829 F.3d at 1381; *see also Qualcomm Inc. v. Intel Corp.*, 6 F.4th 1256, 1264–65 (Fed. Cir. 2021) (citing *Dell*, 818 F.3d at 1301) (finding that "the Board violated [Patent Owner's] procedural rights under the APA" where Patent Owner "was given no opportunity to supply any evidence, whether expert or documentary, to address why a skilled artisan would have understood" the claim as construed); *EmeraChem Holdings, LLC v. Volkswagen Grp. of Am., Inc.*, 859 F.3d 1341, 1348 (Fed. Cir. 2017); *Oren Techs., LLC v. Proppant Express Investments LLC*, 2021 WL 3120819, at *6 (Fed. Cir. July 23, 2021); *Parrot*, at 12 ("Petitioner cannot rely on the Board to make new findings regarding analogous art in a final written decision."). We are therefore unpersuaded that Petitioner identified a field of endeavor of the '792 patent or of Kaku in its papers. Consequently, we are not persuaded

[9] Patent Owner understands Petitioner's Reply arguments similar to how we interpret them. *See* PO Sur-reply 3 (noting that "Petitioner does not contend that the 'field of endeavor' of either Kaku or the '792 [patent] is 'AVI'"), 5 (interpreting Petitioner's patent scope argument as relevant to the "reasonably pertinent" prong).

Petitioner has demonstrated that Kaku and the claimed invention are in the same field of endeavor.

Additionally, we agree with Patent Owner's position that Kaku is nonanalogous art. Patent Owner relies on Dr. Bajaj's testimony on the field of endeavor of the '792 patent and of Kaku from the perspective of a person of ordinary skill in the art. *See* Ex. 2005 ¶¶ 39–45 (citing Ex. 1001, 1:20–34, 4:61–5:27, 16:26–36; 48:28–49:29, 49:7–23, Figs. 1, 4.0.1; Ex. 1002, 726–27; Ex. 1005, 1:6–11, 1:14–27, 1:30–34, 1:39, 1:65–2:4, 3:66–67, 8:51–52, Figs. 1, 7; Exs. 2012–14; Ex. 2022). We find Dr. Bajaj's testimony supported by the cited disclosures. The '792 patent's Background of the Invention makes clear that the patent relates to encoding, transmission, and decoding of multimedia files, including those with multiple tracks and capable of being transmitted over the internet. Ex. 1001, 1:20–34. The '792 patent claims are each directed to using multiple indexes and enabling trick play functionality in multimedia files. *Id.* at 51:30–54:21. Kaku's Background of the Invention, on the other hand, makes clear that Kaku "relates to motion image recording apparatuses and, more particularly, to a motion image reproducing apparatus which is applicable to a digital camera for reproducing motion image data recorded on a recording medium." Ex. 1005, 1:8–12. "[A] primary object of [Kaku's] invention [is to] provide a motion image reproducing apparatus which is capable of reproducing motion images for a long time period regardless of a memory capacity." *Id.* at 1:30–34. Kaku is therefore about compression of motion image files for recording devices, such as digital cameras, at the time of Kaku's invention, having limited storage. To place Kaku in the same field as the '792 patent would require a very broad definition of field of endeavor, which, as

discussed above, Petitioner has failed to present. We are thus persuaded by Patent Owner's argument and evidence that a person of ordinary skill in the art would not have placed Kaku in the same field of endeavor as that of the '792 patent. PO Resp. 5–11; PO Sur-reply 1–6; Ex. 2005 ¶¶ 39–45.

We therefore find that Petitioner has not demonstrated by a preponderance of evidence that the '792 patent and Kaku are in the same field of endeavor.

b) Reasonably Pertinent

Here too, Petitioner fails to identify the problem addressed by the claimed invention. Petitioner argues that "the '792 patent broadly defines its scope as including 'encoding . . . and decoding of multimedia files,'" Kaku teaches encoding (e.g., 'compressed' image data) and decoding (e.g., 'decompression') of image data in AVI files," and "[u]nder Federal Circuit precedent, Kaku is reasonably pertinent." Pet. Reply 4 (citing Ex. 1005, 2:19–24; *Wyers*, 616 F.3d at 1238). We disagree. The question to be answered is whether Kaku "logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d at 659. More recently, the Federal Circuit has explained that "when addressing whether a reference is analogous art with respect to a claimed invention under a reasonable-pertinence theory, the problems to which both relate must be identified and compared." *Donner*, 979 F.3d at 1359 (faulting the Board for failing to consider Petitioner's argument or evidence comparing the purposes or problems to which the prior art reference and the challenged patent relate).

Petitioner fails to identify the problem solved by the '792 patent, or compare any such problem with those discussed in Kaku. Although

Petitioner points us to "encoding . . . and decoding of multimedia files," (Pet. Reply 4), that has nothing to do with the problem that the '792 patent seeks to solve, which as discussed below, relates to facilitating trick play functionality in streaming media. In *Donner*, for example, the Federal Circuit looked to the discussion of the prior art in the challenged patent to determine the state of the art at the time of the invention and the actual problem that was meant to be solved by the claimed invention. 979 F.3d at 1360 ("As the '023 patent readily discloses, guitar effects *had already been* mounted on a pedalboard. . . . Thus that *could not possibly be* a relevant purpose of the invention.") (emphasis added). Here, encoding and decoding of multimedia files was well-known in the art. *See* Ex. 1001, 1:20–21 ("The present invention relates generally to encoding, transmission and decoding of multimedia files."), 1:28–29 ("Typically, a single multimedia file includes a single video track and a single audio track."). Thus, that could not possibly be a relevant purpose of the invention.

Instead, we agree with Patent Owner and Dr. Bajaj that the problem that the '792 patent seeks to solve is facilitating trick play functionality in streaming media. *See* PO Resp. 14–15 (citing Ex. 2005 ¶¶ 49–50). The '792 patent Specification discusses decoders that are capable of "displaying a multimedia presentation contained within a multimedia file non-sequentially." Ex. 1001, 48:22–25. Non-sequential display refers to "playing the sequence in reverse and/or increasing the apparent speed with which the sequence is displayed by skipping frames in the sequence," or "skipping in an irregular fashion between different portions." *Id.* at 48:25–27. The '792 patent acknowledges that "[t]he development of the internet has prompted the development of file formats for multimedia information to

enable standardized generation, distribution and display of multimedia information," and recognizes existing file formats such as the RIFF and AVI. *Id.* at 1:25–28, 5:33–39, 5:51–56. The '792 patent invention however *adds* a second index, in addition to the index known in the prior art (idx1), which includes a subset of the information of the prior art index to "enable rapid location of a specific video frame." *Id.* at 15:15–21. The Specification explains that including this second index "before the 'movi' list chunk can enable a device to start playing and performing other functions, such as fast forward, rewind and scene skipping, *prior to the downloading* of the 'idx1' chunk." *Id.* at 16:26–29; PO Resp. 15 ("The '792 [patent] addresses this problem in significant part through the addition of a second index." (quoting Ex. 2005 ¶ 50)).

Moreover, as Patent Owner points out, every claim of the '792 patent recites "the first and second indexes enabling trick play functionality." PO Resp. 15; Ex. 1001, 51:31–54:21. The prosecution history also confirms that the Examiner viewed this aspect of the invention as novel over the cited prior art:

> Independent claim 1 identifies the *unique distinct feature* "a *separate second index* that includes information indicative of the location within the file of a subset of the encoded video frames, the separate second index located prior to the series of encoded video frames and the first index the first and second indexes enabling trick play functionality."

Ex. 1002 (part 7), 1000 (explaining that "[t]he closet prior art, Hallberg et al (US 2006/0093320) discloses . . . a first index that includes information indicative of the location within the file and characteristics of each encoded video frame") (citing US Pat. Publ. 2006/0093320 ¶ 107, Fig. 8) (emphasis added); PO Resp. 16–17 (citing Ex. 2005 ¶¶ 53–54). The evidence of

record, including Dr. Bajaj's testimony, demonstrates that the problem that the '792 patent relates to is facilitating trick play functionality for multimedia content downloaded over the internet.[10]

As discussed above, Kaku, in contrast, "relates to motion image recording apparatuses and, more particularly, to a motion image reproducing apparatus which is applicable to *a digital camera* for reproducing motion image data recorded on a recording medium." Ex. 1005, 1:8–12. That is, Kaku concerns storage issues for image reproducing apparatus such as digital cameras and addresses the "necessity to store all the . . . image data to the internal memory, and the problem resulting from limited internal "memory capacity" in such devices. *Id.* at 1:14–27 (explaining that "[i]n the conventional motion image reproducing apparatus of this kind, the reproduced motion image data from the recording medium must [first be] stored in an internal memory"). Kaku's goal is "to provide a motion image reproducing apparatus which is capable of reproducing motion images for a long time period regardless of a memory capacity." *Id.* at 1:30–33; *id.* at 1:65–2:4. That is, Kaku is about compressing motion images to accommodate as lengthy a recording as possible in a camera's internal memory. *See, e.g.*, *id.* at 2:18–27 (explaining that "the image data is compressed data having been compressed according to a predetermined

[10] We do not agree with Petitioner that Dr. Bajaj "disowned the opinions in his declaration regarding analogous art." Pet. Reply 4 (citing Ex. 1022, 145:18–146:18). Dr. Bajaj testified that he understood the law regarding analogous art. *See* PO Sur-reply 4–5 n.5 (citing Ex. 1022, 86:3–9 (referring to Ex. 2005 ¶¶ 36–37)). Moreover, his deposition testimony appears consistent with his declaration testimony that "[t]he fact that Kaku happens to use an AVI file for a problem entirely different from the '792 Patent does not make Kaku analogous art to the '792 Patent." Ex. 2005 ¶ 53.

scheme . . . Here, the predetermined scheme is preferably JPEG."). Patent Owner correctly points out that "the overwhelming bulk of Kaku's disclosure addresses this problem in the context of a camera utilizing motion JPEG." PO Resp. 14 (citing Ex. 1005, Abstract, 1:17–18, 2:26–27, Figs. 1, 3–9, 11–13, claims 5, 10; Ex. 2005 ¶ 48).

Petitioner fails to explain, and we find no basis to determine, how Kaku relates to trick play functionality, or the use of indexes in implementing such functionality, or the use of multimedia downloaded over the internet. Petitioner's cited portions of Kaku (*see* Pet. Reply 4 (citing Ex. 1005, 2:19–24)) disclose merely compressing and decompressing image data per a predetermined scheme, such as JPEG, not reasonably pertinent to the *problems* or *purposes* of the '792 patent.[11] Petitioner is required to show why a person of ordinary skill in the art would have looked to Kaku in considering a problem related to trick play. *See Donner*, 979 F.3d at 1359 (reasonable pertinence "ultimately rests on the extent to which the reference of interest and the claimed invention relate to a similar problem or purpose"); *Cir. Check Inc. v. QXQ Inc.*, 795 F.3d 1331, 1335 (Fed. Cir. 2015) ("Rather, the question is whether an inventor would look to this particular art to solve the particular problem at hand."); *In re Clay*, 966 F.2d at 659 ("If [the reference] is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it."); *Chemours*, 4 F.4th at 1376 (faulting the Board for relying on teachings from

[11] The only other portions of Kaku that Petitioner points us (Pet. Reply at 3 (citing Ex. 1005, 2:28–39, 3:24–32)) show that Kaku's data file includes audio data along with image frame data, which is unrelated to the problem addressed by the '792 patent.

references that were not concerned with the particular problems sought to be solved). We are not persuaded, based on Petitioner's cited support, that Kaku is relevant to the problem of the '792 patent.

Petitioner's reliance on *Wyers* is misplaced because there, "the prior art padlocks were clearly directed toward the *same problem* the inventor was trying to solve in the [patent at issue], namely, preventing the ingress of contaminants into the locking mechanism." *Wyers*, 616 F.3d at 1238. Here, Petitioner fails to explain how Kaku's focus on translating between media formats to more efficiently utilize limited storage on devices such as digital cameras would be helpful in improving trick play functionality for multimedia files. None of Kaku's disclosures that Petitioner relies on relate either to trick play functionality or to the use of indexes in implementing such functionality, and therefore, would not have logically commended Kaku to the attention of the inventor at the time of the invention. *See, e.g.*, *In re Klein*, 647 F.3d at 1350–52 (reversing the Board's determination that references directed to separating solids and those directed to mixing separated fluids were reasonably pertinent to the problem of making a nectar feeder with a movable divider to prepare different ratios of sugar and water).

Fundamentally, "when addressing whether a reference is analogous art with respect to a claimed invention under a reasonable-pertinence theory, the problems to which both relate must be identified and compared." *Donner*, 979 F.3d at 1359 (noting that Petitioner "submitted detailed expert testimony relevant to the [reasonable-pertinence] inquiry"). Petitioner fails to do that here.

On the other hand, Patent Owner offers evidence, including expert testimony, explaining why the problem and purpose of Kaku are very

different than those of the claimed invention. PO Resp. 12–18 (citing Ex. 2005 ¶¶ 47–54). We credit Patent Owner's expert testimony because it is consistent with the teaching of the '792 patent and Kaku. Therefore, we do not find that Petitioner has established by a preponderance of the evidence that Kaku is reasonably pertinent to the problem of the '792 patent, and thus, analogous prior art to the '792 patent.

We are also unpersuaded by Petitioner's remaining arguments as to why Kaku is analogous art to the '792 patent. That *KSR* "directs us to construe the scope of analogous art broadly" (Pet. Reply 4) does not relieve Petitioner of its burden of proving that the prior art at issue is analogous to the claimed invention under the framework adopted by the Federal Circuit. *See, e.g.*, *Smith & Nephew, Inc. v. Hologic, Inc.*, 721 F. App'x 943, 949 (Fed. Cir. 2018) (reversing the Board's decision on analogous art).

To the extent Petitioner argues that it is not its burden to prove that Kaku is analogous art to the '792 patent (Tr. 87:21–88:6), we reject that argument. "The analogous art inquiry is a factual one, requiring inquiry into the similarities of the problems and the closeness of the subject matter as viewed by a person of ordinary skill." *Sci. Plastic Prods., Inc. v. Biotage AB*, 766 F.3d 1355, 1360 (Fed. Cir. 2014). It is indeed Petitioner's burden to prove analogous art by offering evidence as to how a person of ordinary skill in the art would have viewed the closeness of the subject matter of Kaku and the claimed invention. *See, e.g.*, *Schott Gemtron Corp. v. SSW Holding Co.*, IPR2013-00358, Paper 106, 26 (PTAB Aug. 20, 2014) ("Petitioner bears the burden of showing by a preponderance of evidence that the asserted prior art references are analogous art and otherwise combinable.").

At the hearing, Petitioner also argued that "the Petition satisfied its burden of proof" because there is no dispute that Kaku teaches the AVI file format." Tr. 89:19–24. We find Petitioner's argument similar to the one that the Federal Circuit rejected in *Clay* because, as discussed above, file formats alone are neither the field of endeavor nor the problem being solved by the '792 patent or by Kaku. *See In re Clay*, 966 F.2d at 658–60 (determining that the Board's findings on analogous art clearly erroneous even where the reference and the invention both related to the use of the same gel). Moreover, Petitioner's position makes any prior art that undisputedly teaches a claim limitation analogous prior art, rendering the analogous art inquiry meaningless.

Considering the full record before us, we conclude that Petitioner has not demonstrated by a preponderance of the evidence that one of ordinary skill in the art would have understood Kaku to be analogous prior art to the '792 patent.

5. Conclusion on Obviousness of Claims 1, 5, 8, 9, 13–15, 18, and 21–23 over Zetts and Kaku

"Once all relevant facts are found, the ultimate legal determination [of obviousness] involves the weighing of the fact findings to conclude whether the claimed combination would have been obvious to an ordinary artisan." *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1361 (Fed. Cir. 2017). On balance, considering the full record before us, we determine that Petitioner has not established, by a preponderance of the evidence, that Kaku is analogous art to the '792 patent, and therefore that the combination of Zetts and Kaku would have rendered the subject matter of

claims 1, 5, 8, 9, 13–15, 18, and 21–23 obvious to one of ordinary skill in the art at the time of the invention.

F. Obviousness over Zetts, Kaku, and Seo

Petitioner contends that claims 5, 18, and 21 are unpatentable under 35 U.S.C. § 103 as obvious over Zetts, Kaku, and Seo. Pet. 76–82. Patent Owner makes the same analogous art argument with regard to Kaku for this ground as well. PO Resp. 1 (arguing that Petitioner fails to satisfy its burden of demonstrating that Kaku is analogous art to the '792 patent as to both grounds). Accordingly, for the same reasons discussed above in the context of the ground based on Zetts and Kaku, Petitioner has not shown by a preponderance of the evidence that Kaku is analogous art to the '792 patent, and therefore, that the combined teachings of Zetts, Kaku and Seo would have rendered the subject matter of claims 5, 18, and 21 obvious to one of ordinary skill in the art at the time of the invention.

IV. PATENT OWNER'S MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude seeking to exclude Exhibits 1018–1020 as hearsay under Federal Rules of Evidence 801 and 802. Paper 39, 1. Patent Owner, as the "moving party," "has the burden of proof to establish that it is entitled to the requested relief." 37 C.F.R. § 42.20.

Petitioner relies on these exhibits in support of its arguments related to motivation to combine the asserted references. *See* Reply 5.

Under the particular circumstances in this case, we need not assess the merits of Patent Owner's Motion to Exclude. As discussed above, we have determined that Petitioner has not demonstrated by a preponderance that Kaku is analogous prior art to the '792 patent and do not reach Petitioner's

arguments on the motivation to combine Kaku with Zetts or Seo. Accordingly, Patent Owner's Motion to Exclude is *dismissed* as moot.

V. PATENT OWNER'S OBJECTIONS TO PETITIONER'S DEMONSTRATIVES

Patent Owner submitted Objections to Petitioner's Demonstratives (Ex. 3002), objecting to demonstrative slide 53 as containing new arguments that were not previously presented by Patent Owner. Patent Owner argues that slide 53 contains "a statement in connection with analogous art section and newly links Petitioner's POSITA analysis to whether Kaku is analogous art." *Id.* at 1. The parties presented argument on Patent Owner's objections at the oral hearing. *See* Tr. 5:17–10:6.

As discussed above (*supra* § III.E.4.a), Petitioner's papers fail to link Dr. Reader's declaration testimony on the level of ordinary skill in the art to the analogous art inquiry and fail to identify a field of endeavor for the '792 patent. We therefore agree with Patent Owner that Petitioner's demonstrative slide 53 presents improper new arguments that have not been previously made. *See* Paper 38, 2 ("The parties may only rely upon evidence that has been previously submitted in the proceeding and may only present arguments that have been previously made in the submitted papers. No new evidence or arguments may be presented at the hearing."), 5 ("Demonstratives are not a mechanism for making new arguments."). We therefore sustain Patent Owner's objections.

We note, however, that demonstratives are not evidence. *See id.* at 5 ("Demonstrative exhibits used at the hearing are not evidence, nor will they be relied upon as evidence. Rather, demonstratives are visual aids to a party's oral presentation regarding arguments and evidence previously

presented and discussed in the papers"); CTPG 84 ("Demonstrative exhibits used at the final hearing are aids to oral argument and not evidence."). In this Final Written Decision, we rely solely on the arguments properly presented in the parties' briefs and the evidence of record, not on the demonstratives.

VI. PETITIONER'S OBJECTION TO PATENT OWNER'S ORAL HEARING ARGUMENTS

During the oral hearing, Petitioner objected to Patent Owner's claim construction argument as presenting a different position at the oral hearing than the one Patent Owner made in its briefing. *See* Tr. 86:10–87:3. Because we do not reach the claim construction dispute at issue, we need not assess the merits of Petitioner's objection. Accordingly, Petitioner's objection is *dismissed* as moot.

VII. CONCLUSION

For the foregoing reasons, we conclude that Petitioner has not established by a preponderance of the evidence that claims 1, 5, 8, 9, 13–15, 18, and 21–23 of the '792 patent are unpatentable.

In summary:

Claim(s)	**35 U.S.C. §**	**References/Basis**	**Claims Shown Unpatentable**	**Claims Not Shown Unpatentable**
1, 5, 8, 9, 13–15, 18, 21–23	103(a)	Zetts, Kaku		1, 5, 8, 9, 13–15, 18, 21–23
5, 18, 21	103(a)	Zetts, Kaku, Seo		5, 18, 21
Overall Outcome				1, 5, 8, 9, 13–15, 18, 21–23

VIII. ORDER

It is, therefore,

ORDERED that claims 1, 5, 8, 9, 13–15, 18, and 21–23 of the '792 patent have not been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude is *dismissed*;

FURTHER ORDERED that Patent Owner's objections to Petitioner's demonstrative slide 53 are *sustained*;

FURTHER ORDERED that Petitioner's objection to Patent Owner's claim construction arguments at the oral hearing is *dismissed*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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