

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

ROVI GUIDES, INC.,
Patent Owner.

Case IPR2019-00224
Patent 7,827,585 B2

Before: WILLIAM M. FINK, *Vice Chief Administrative Patent Judge*, and
KARL D. EASTHOM and BARBARA A. PARVIS, *Administrative Patent
Judges*.

PARVIS, *Administrative Patent Judge*.

DECISION TO INSTITUTE
35 U.S.C. § 314(a)

I. INTRODUCTION

Comcast Cable Communications, LLC, (“Petitioner”) filed a Petition pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1–28 of U.S. Patent No. 7,827,585 B2 (Ex. 1001, “the ’585 Patent”). Paper 2 (“Pet.”). Rovi Guides, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). Patent Owner also filed a Statutory Disclaimer disclaiming claims 5, 12, 19, and 26. Ex. 2002. Additionally, Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 9, “Pet. Reply”) and Patent Owner filed a Sur-Reply (Paper 11, “PO Sur-Reply”).

We apply the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”¹ Upon consideration of the parties’ contentions and the evidence of record, we conclude Petitioner establishes a reasonable likelihood of prevailing in demonstrating the unpatentability of claims 1–4, 6–11, 13–18, 20–25, 27, and 28 of the ’585 Patent. Accordingly, we grant Petitioner’s request and institute an *inter partes* review of claims 1–4, 6–11, 13–18, 20–25, 27, and 28 of the ’585 Patent and with respect to all grounds set forth in the Petition.²

¹ We have authority under 35 U.S.C. § 314 to determine whether to institute an *inter partes* review. *See* 37 C.F.R. § 42.4(a).

² We do not institute on disclaimed claims 5, 12, 19, and 26. Ex. 2002.

II. BACKGROUND

A. *Real Parties-in-Interest*

Petitioner identifies as the real parties-in-interest the following: Comcast Corp.; Comcast Business Communications, LLC; Comcast Cable Communications Management, LLC; Comcast Cable Communications, LLC; Comcast Financial Agency Corp.; Comcast Holdings Corp.; Comcast Shared Services, LLC; Comcast STB Software I, LLC; Comcast of Santa Maria, LLC; and Comcast of Lompoc, LLC. Pet. 1. Patent Owner names as the real parties-in-interest Rovi Guides, Inc. and Rovi Corp. Paper 3, 1.

B. *Related Matters*

As required by 37 C.F.R. § 42.8(b)(2), each party identifies a judicial matter that would affect, or be affected by, a decision in this proceeding. In particular, the parties inform us that the '585 Patent is asserted in *Rovi Guides, Inc. v. Comcast Corp.*, Case No. 2-18-cv-00253 (C. D. Cal.), filed January 10, 2018, and *Digital Video Receivers and Related Hardware and Software Components*, Inv. No. 337-TA-1103 (ITC), filed February 8, 2018 (“related ITC proceeding”). Pet. 1; Paper 3, 1.

Additionally, Petitioner filed six petitions, each requesting *inter partes* review of claims 1–28 of the '585 Patent, including the instant Petition. The six petitions are identified in an order issued April 3, 2019, which is discussed below in Section III.A with respect to Patent Owner's discretionary denial contentions. Paper 10 (“Case Management Order” or “Case Mgmt. Order”).

C. The '585 Patent

The '585 Patent is directed to interactive television program guide systems. Ex. 1001, 1:16. Figure 2 of the '585 Patent is reproduced below.

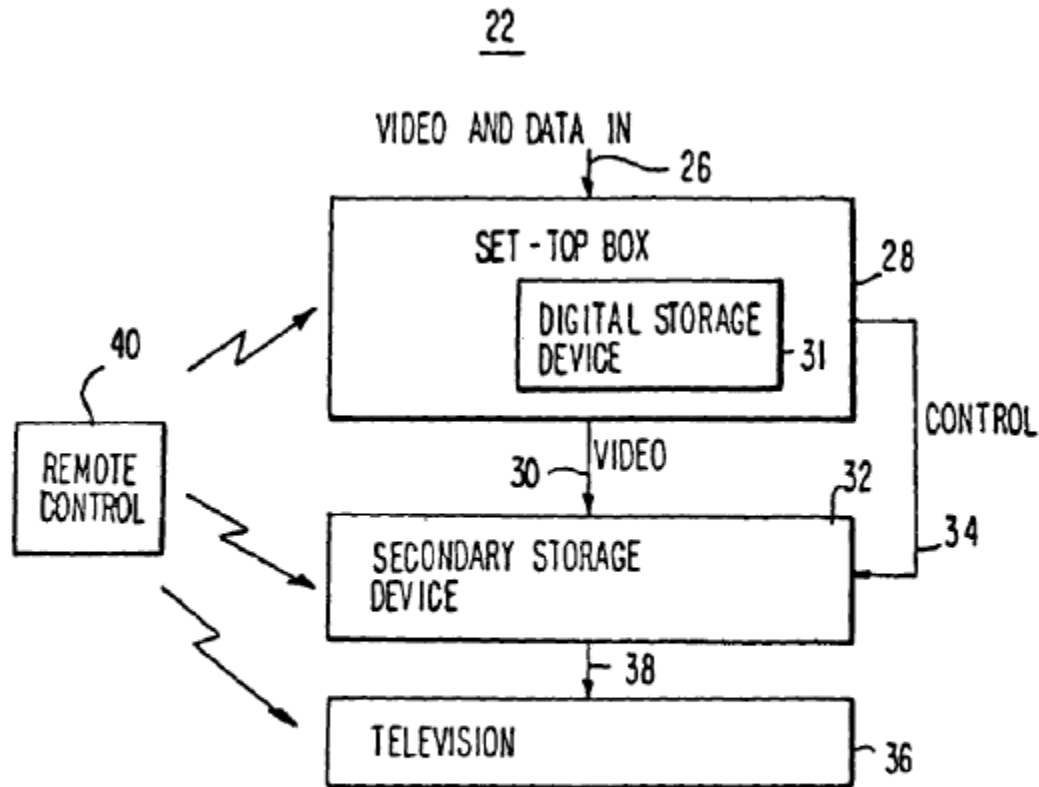


FIG. 2

Figure 2 of the '585 Patent, above, illustrates is a schematic block diagram of user television equipment 22. *Id.* 2:49–50. Television equipment 22 receives video and data from television distribution facility 16 (not shown) at input 26. *Id.* at 3:30–31. During normal television viewing, a user tunes set-top box 28 to a desired television channel. *Id.* 3:31–32. The signal for that television channel is then provided at video output 30 and is received by

optional secondary storage device 32. *Id.* at 3:32–40. Secondary storage device 32 is a program storage device, such as a videocassette recorder or a digital video disc (DVD) player with the ability to record DVD discs. *Id.* at 3:40–43. Remote control 40 is used to control set-top box 28, secondary storage device 32, and television 36. *Id.* at 3:50–52.

D. Illustrative Claim

Petitioner challenges claims 1–28 of the '585 Patent. Pet. 1. After the Petition was filed, Patent Owner filed a Statutory Disclaimer disclaiming claims 5, 12, 19, and 26. Ex. 2002. Claims 1, 8, 15, and 22 are independent claims. Claims 2–4, 6, 7, 9–11, 13, 14, 16–18, 20, 21, 23–25, 27 and 28 depend, directly or indirectly, from claims 1, 8, 15, and 22, respectively. Independent claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for allowing a user to select storage options for storing programs using an interactive television program guide implemented on user television equipment, the method comprising:

providing the user with an opportunity to select at least one storage option for storing a program to be recorded, wherein the at least one storage option relates to at least one storage setting configured to control how programs are to be digitally stored on a random access digital storage device;

in response to a user selection of the at least one storage option, modifying the at least one storage setting;

displaying in the interactive television program guide at least one program listing related to at least one program;

providing the user with an opportunity to select a program listing from the at least one displayed program listing for recording on the random access digital storage device; and

recording the program on the random access digital storage device based on the modification of the at least one storage setting.

Ex. 1001, 18:46–67.

E. Evidence Relied Upon

Petitioner relies on the following references:

U.S. Patent No. 6,177,931 B1, filed July 21, 1998, issued January 23, 2001 (Ex. 1018, “Alexander”);

United Kingdom Patent Application Publication No. GB 2 298 544 A, filed March 3, 1995, published September 4, 1996 (Ex. 1020, “Malik”);

U.S. Patent No. 5,887,115, filed November 16, 1994, issued March 23, 1999 (Ex. 1021, “Boyce”);

U.S. Patent No. 6,252,834 B1, filed January 5, 1998, issued June 26, 2001 (Ex. 1023, “Kumagai”); and

International Application Publication No. WO 92/22983, filed June 9, 1992, published December 23, 1992 (Ex. 1022, “Browne”).

Additionally, Petitioner relies on the Declaration of Mr. Anthony Wechselberger. (Ex. 1025).

F. Grounds Asserted

Petitioner asserts the following grounds of unpatentability (Pet. 9)³:

Claim Challenged	Basis	Reference(s)
1, 8, 15, and 22	§ 102(e)	Alexander

³ Disclaimed claims 5, 12, 19, and 26 have been omitted from the table.

Claim Challenged	Basis	Reference(s)
1, 2, 7–9, 14–16, 21–23, and 28	§ 103(a)	Alexander and Malik
1, 3, 4, 8, 10, 11, 15, 17, 18, 22, 24, and 25	§ 103(a)	Alexander and Boyce
1, 6, 8, 13, 15, 20, 22, and 27	§ 103(a)	Alexander, Kumagai, and Browne
1, 6, 8, 13, 15, 20, 22, and 27	§ 103(a)	Alexander and Browne
1, 2, 7–9, 14–16, 21–23, and 28	§ 103(a)	Alexander, Browne, and Malik
1, 3, 4, 8, 10, 11, 15, 17, 18, 22, 24, and 25	§ 103(a)	Alexander, Browne, and Boyce

III. DISCUSSION

A. *Discretionary Denial Arguments*

Patent Owner asserts we should exercise our discretion to deny the Petition under 35 U.S.C. § 314(a) because, according to Patent Owner, applying the factors enumerated in *General Plastic Industrial Co. v. Canon Kabushiki Kaisha*, Case IPR2016-01357, slip op. at 9–10 (PTAB Sept. 6, 2017) (Paper 19) (“*General Plastic*”) (precedential as to § II.B.4.i) to the six concurrently filed petitions supports exercising discretion to deny all six petitions. Prelim. Resp. 37–43. Patent Owner also asserts that we should exercise our discretion to deny the Petition under 35 U.S.C. § 325(d) as duplicative of other of the petitions challenging claims of the ’585 Patent. *Id.* at 43–47.

On April 3, 2019, we issued a Case Management Order requiring that Petitioner provide a Notice ranking the six petitions in the order in which it wishes the panel to consider the merits in the event that the Board uses its discretion to institute any of the petitions. The Case Management Order also required that Petitioner provide a succinct explanation of the differences between the petitions, why the differences are material, and why the Board should exercise its discretion to consider instituting on more than one petition. Case Mgmt. Order 4. We additionally gave the Patent Owner an opportunity to respond.

Pursuant to our Case Management Order, Petitioner requests we consider the Petition in the instant proceeding first. Paper 12, 1. Patent Owner does not take a position on the relative strength of the petitions beyond what is set forth in the Preliminary Responses. Paper 13, 5. For the reasons given herein, we conclude in the instant proceeding that Petitioner establishes a reasonable likelihood of prevailing in demonstrating the unpatentability of claims 1–4, 6–11, 13–18, 20–25, 27, and 28 of the '585 Patent; claims 5, 12, 19, and 26 have been disclaimed. We address separately Petitioner's less-preferred petitions, IPR2019-00225, IPR2019-00226, IPR2019-00227, IPR2019-00228, and IPR2019-00229.

We find the circumstances in this case do not warrant denying the instant Petition as well, because that would deny Petitioner even one petition. Accordingly, we decline to exercise our discretion to deny institution under 35 U.S.C. § 314(a) or 35 U.S.C. § 325(d).

B. Principles of Law Relating to Anticipation and Obviousness

To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). “To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

A patent claim is unpatentable if the differences between the claimed subject matter 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. 35 U.S.C. § 103(a). 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) objective evidence of nonobviousness, i.e., secondary considerations. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we also “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441, F.3d 977, 988 (Fed. Cir. 2006)). We analyze the ground based on obviousness in accordance with the above-stated principles.

C. Level of Ordinary Skill

Petitioner contends, relying on the testimony of Mr. Wechselberger that a person having ordinary skill in the art would have had a bachelor’s

degree in electrical engineering, computer engineering, computer science, applied mathematics, or a similar discipline, as well as two or more years of relevant industry or research experience, including in electronic content delivery, electronic program guides, television video signal processing, graphical user interfaces, cable or satellite television systems, set-top boxes, multimedia systems, or digital storage devices. Pet. 19 (citing Ex. 1025 ¶¶ 29–31). Patent Owner does not dispute Petitioner’s proposed level of ordinary skill or propose an alternative. *See generally* Prelim. Resp. We adopt Petitioner’s proposed level for the purposes of determining whether to institute an *inter partes* review.

D. Claim Construction

1. Overview

The parties’ contentions are summarized in the table below.

Claim Term	Petitioner’s Proposed Construction	Patent Owner’s Proposed Construction
“using an interactive television program guide” (claims 1 and 8)	The preambles of the independent claims should not be considered to be limiting. Pet. 16.	The preambles of claims 1 and 8 are limiting with respect to “using an interactive television program guide.” Prelim. Resp. 13.
“random access digital storage device” (claims 1, 8, 15, and 22)	“A digital storage device that can access memory locations in a non-sequential manner.” Pet. 13.	Petitioner’s construction is not disputed by Patent Owner. Prelim. Resp. 12–26.
“wherein [the/said] at least one storage option relates to at least one storage setting	“The BRI of ‘storage setting’ includes those settings related to the storage options	“This phrase should be construed to define ‘the way or manner in which the

Claim Term	Petitioner's Proposed Construction	Patent Owner's Proposed Construction
configured to control how [programs are/the program is] to be digitally stored” (claims 1, 8, 15, and 22)	identified in the specification, figures, and claims of the patent: (1) language tracks, (2) subtitles, (3) video formats, (4) parental control features, and (5) automatic erasure of viewed programs.” Pet. 14 (citing, <i>e.g.</i> , Ex. 1001, 15:51-61; FIG. 14).	program(s) will be digitally stored.”” Prelim. Resp. 18.

We determine that, at this stage of the proceeding, to resolve the disputes between the parties we need analyze only the term “storage setting configured to control how programs are to be digitally stored.” *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 1695 (April 30, 2018) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’”) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). Below we discuss the parties’ contentions regarding that term.

2. “wherein [the/said] at least one storage option relates to at least one storage setting configured to control how [programs are/the program is] to be digitally stored”

In this *inter partes* review, we construe claim terms according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b) (2018).⁴

Petitioner contends “[t]he BRI of ‘storage setting’ includes those settings related to the storage options identified in the specification, figures, and claims of the patent: (1) language tracks, (2) subtitles, (3) video formats, (4) parental control features, and (5) automatic erasure of viewed programs.” Pet. 14 (citing, *e.g.*, Ex. 1001, 15:51–61; FIG. 14). Although Petitioner also contends the broadest reasonable interpretation would include “those settings asserted by Patent Owner to infringe,” Petitioner contends “the prior art shows at least those options and settings disclosed in the ’585 patent.” *Id.* at 14–15.⁵

Patent Owner contends

[t]his phrase should be construed to define “the way or manner in which the program(s) will be digitally stored.” Put differently, the claimed “storage setting” does not control *whether* a program is stored, or *which* program is stored, but rather defines “*how*” the program is digitally recorded as part of

⁴ The claim construction standard to be employed in an *inter partes* review has changed. See Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018). At the time of the filing of the Petition, however, the Board employed the “broadest reasonable construction”, as set forth in 37 C.F.R. § 42.100(b) (2018).

⁵ Petitioner also contends “[i]n the ITC, the ALJ declined to construe this term as a means plus function element.” *Id.*

recording operation. This construction is supported by both the intrinsic and extrinsic record.

Prelim. Resp. 18.

Patent Owner asserts its proposed construction is based on the “plain and ordinary meaning” of the word “how,” which Patent Owner contends is “the way or manner in which.” *Id.* at 19 (citing Ex. 2001, 6). Patent Owner also asserts that the intrinsic record supports its proposed construction including the Statutory Disclaimer filed March 4, 2019. *Id.* at 21–26 (citing, *e.g.*, Ex. 2002).

Even using Patent Owner’s plain and ordinary meaning, however, at this preliminary stages in the proceeding, we determine that the language of the independent claims and the specification of the patent in which it appears do not mandate Patent Owner’s proposed limitation. The dispute between the parties centers on “wherein the at least one storage option relates to at least one storage setting configured to control how programs are to be digitally stored on a random access digital storage device” recited in claim 1 and similarly recited in the other independent claims. Ex. 1001, 18:53–56.⁶ Patent Owner’s proposal i.e., “the way or manner in which the program(s) *will be* digitally stored” unnecessarily interjects “will” into the aforementioned phrase.

Importantly, at this juncture of the proceeding, we determine that the ’585 Patent Specification does not support Patent Owner’s interpretation because the parental control is described more broadly than as controlling

⁶ The recitations in claims 8, 15, and 22 are the same, except claims 8 and 22 recite “configured to control how *the program is* to be digitally stored.” *Id.* at 19:35–36, 20:7–9, 20:60–61 (emphasis added).

the formatting of recorded programs and playback of those programs. For example, Patent Owner contends “[t]he parental control option is thus recorded with the program for *later* enforcement options.” Prelim. Resp. 22 (citing Ex. 1001, 15:51–61, Fig. 16) (emphasis added). Patent Owner further contends “[u]pon playback, any parental control is enforced.” PO Sur-Reply 3.

Contrary to Patent Owner’s contentions, the ’585 Patent Specification describes that the parental control storage option “applies to the *recording* of programs,” not to the playback. Ex. 1001, 15:55–56 (emphasis added). Figures 14 and 16 relied upon by Patent Owner (Prelim. Resp. 21, 23) similarly describe “STORAGE OPTIONS” as including “ENFORCE PARENTAL CONTROL *ON STORAGE*” and that the set-up screen allows a user to set whether to “DIGITALLY STORE PROGRAMS AND ASSOCIATED DATA ACCORDING TO ENFORCE PARENTAL CONTROL *ON STORAGE OPTION*.” Ex. 1001, Figs. 14, 16 (emphasis added). Figure 14 further includes no mention of parental control in connection with playback options. *Id.*

Also, contrary to Patent Owner’s contentions, the ’585 Patent Specification describes that data associated and stored with a program are separate and distinct from storage options. *Id.* at 16:31–36 (“If language, video format, enforcement of parental control, *and* auto-erase storage options are provided (FIG. 15), the program guide stores the programs and *associated program data* on digital storage device 49 according to how the *storage options* are defined” (emphases added)). The ’585 Patent Specification describes that parental control pertains to “programs,” not data associated and stored with a particular program, and the auto erase option

pertains to “entries,” not data associated and stored with a particular entry. *Id.* at 15:52–61; *see also id.* at Fig. 14 (describing the auto-erase features as applying to “VIEWED *ENTRIES*” (emphasis added)).

Turning now to the prosecution history of the ’585 Patent, Patent Owner asserts that remarks made during prosecution are consistent with Patent Owner’s proposed construction and, in light of these remarks, Patent Owner filed the Statutory Disclaimer. Prelim. Resp. 24–26. Patent Owner characterizes “patented claims 5, 12, 19, and 26” as “originally directed to storage settings that defined ‘whether’ programs were to be recorded.” *Id.* at 25. Patent Owner asserts “[u]nder settled law, the panel should review the patent as if the statutorily disclaimed claims never existed.” *Id.* at 25 (citing *Vectra Fitness, Inc. v. TNWK Corp.*, 162 F.3d 1379, 1383 (Fed. Cir. 1998); *Facebook, Inc. v. Skky, LLC*, Case CBM2016-00091, slip op. at 9 (PTAB Nov. 23, 2016) (Paper 7) (precedential as to Section II.B.2) (*Facebook*)).

In its Reply to Patent Owner’s Preliminary Response, Petitioner asserts that disclaiming a narrower dependent claim after issuance does not narrow the scope of the corresponding independent claim. Pet. Reply 2–3 (citing *Allergan Sales, LLC v. Sandoz, Inc.*, 2013 WL 4854786, at *6 (E.D. Tex. Sept. 4, 2013); *Ford Motor Co. v. Versata Software, Inc.*, 2017 WL 3485812, at *2–4 (E.D. Mich. 2017)). In its Sur-Reply, Patent Owner responds that it chose to disclaim original dependent claims 5, 12, 19, and 26 because the recitation “at least one storage option . . . for setting at least one parental control criterion that prevents the program from being recorded” recited in those claims “cannot be squared with the patent specification” or “the prosecution history.” PO Sur-Reply 2–3.

At this preliminary juncture, even if we review the patent as if the statutorily disclaimed claims never existed, as Patent Owner proposes (*id.*; Prelim. Resp. 25), we do not agree with Patent Owner that claims 5, 12, 19, and 26 are inconsistent with the '585 Patent Specification because, as discussed above, the parental control and auto erase features are described more broadly. Additionally, Patent Owner's contentions regarding arguments made during prosecution are misplaced because the remarks are broader than Patent Owner's proposed construction. Prelim. Resp. 24 (citing Ex. 1010, 11). In particular, during prosecution, Applicant argued "the modified device would not disclose the provision of a storage option that relates to a storage setting configured to control storage of programs on a random access digital storage device." Ex. 1010, 11. Contrary to Patent Owner's characterization here, these prosecution history arguments attempted to distinguish the prior art based on the type of storage employed *See id.* (Patent Owner also argued "the digital recording mode disclosed in Young, would enable a user to control the recording speed at which programs are stored on digital video tape or other sequential access storage device. The amended independent claims require the digital storage device to be a random access digital storage device.").

As to the statutory disclaimer, we are not persuaded this should affect claim construction. The instant proceeding is distinguishable from the precedential decision in *Facebook* in which the panel concluded that the statutorily disclaimed claims should be treated as though they never existed for purposes of determining CBM patent review eligibility. *Facebook* slip op. at 3–4, 11. Patent Owner's reliance on *Vectra* is misplaced because that decision recognized that the public is entitled to rely on the entire

prosecution history. *Vectra*, 162 F.3d at 1384 (“The public is entitled to rely upon the public record of a patent in determining the scope of the patent’s claims.”). Here, Patent Owner’s recent disclaimer of dependent claims 5, 12, 19, and 26, which issued to further limit independent claims 1, 8, 15, and 22 by reciting storage settings that defined “whether” programs were to be recorded (Prelim. Resp. 25), “cannot be squared with . . . the prosecution history,” according to Patent Owner (PO Sur-Reply 2–3). On the contrary, claims 5, 12, 19, and 26 are part of the prosecution history and serve to inform the breadth of claims 1, 8, 15, and 22. Accordingly, based on the record at this juncture, we decline to limit “storage option” as Patent Owner proposes. Instead, at this preliminary stage in the proceeding, we determine that the broadest reasonable construction encompasses the exemplary storage options described in the ’585 Patent Specification, such as “language tracks,” “video formats,” “parental control” on storage, and automatic erasure of viewed programs. Ex. 1001, 15:51–61, Figs. 14, 16.

Regarding Petitioner’s contentions that “storage option” includes those identified by Patent Owner in the related ITC proceeding, such as, for example, “whether to record only a single program/episode or multiple programs/episodes (frequency option),” at this juncture we need not consider Patent Owner’s assertions in the related ITC proceeding because, for the reasons given above, we agree that the term encompasses the scenario of deciding how many episodes to store as a program (or how many programs to store as a program set). *See* Pet. 15. We further note the ’585 Patent Specification describes an “EPISODE” of a program. *See, e.g.*, Ex. 1001, Figs. 6, 7b. In other words, on this preliminary record, “providing the user with an opportunity to select at least one storage option for storing a

program to be recorded, wherein the at least one storage option relates to at least one storage setting configured to control how programs are to be digitally stored,” as recited in claim 1, includes the option of storing one or more programs or episodes, because this option “control[s] how programs are to be digitally stored”; i.e., as a single or multiple episodes, or as a single program or as a set of programs.

At this juncture and for purposes of institution, we need not provide an express construction for “storage option” or the “wherein” clause and we need not make further determinations, such as with respect to assertions in the related ITC proceeding.

E. Unpatentability—Independent Claims 1, 8, 15, and 22

Petitioner contends each of claims 1, 8, 15, and 22 of the ’585 Patent is unpatentable, under 35 U.S.C. § 102(e), as anticipated by Alexander. Pet. 9, 33–55. Petitioner also contends each of claims 1, 8, 15, and 22 of the ’585 Patent is unpatentable, under 35 U.S.C. § 103(a), as obvious over the following prior art combinations: (1) Alexander and Malik; (2) Alexander and Boyce; (3) Alexander, Kumagai, and Browne; (4) Alexander and Browne; (5) Alexander, Browne, and Malik; (6) Alexander, Browne, and Boyce. *Id.* at 9, 56–74. Patent Owner opposes. *See generally* Prelim. Resp. In our discussion below, we first provide a brief overview of the prior art, and then we address the parties’ contentions in turn.

1. Overview of Alexander

Alexander is directed to an electronic program guide (EPG). Ex. 1018, 1:53–54, 2:3–4. An EPG is shown in Figure 1 of Alexander, which is reproduced below.

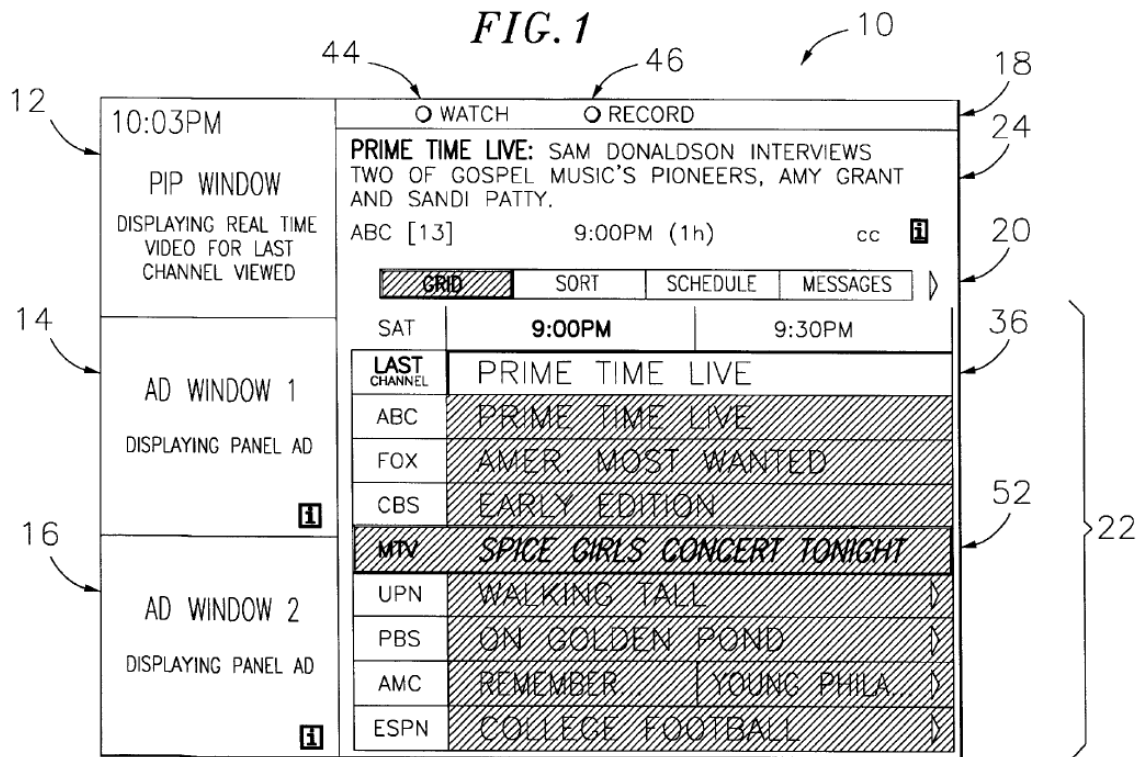


Figure 1 of Alexander, above, illustrates television screen display 10 having Picture in Picture (PIP) window 12, Panel Ad Windows 14 and 16, action key bar 18, navigation bar 20, information box 24, and Grid Guide 22. *Id.* at 3:1–13.

Display 10 is generated by a conventional television receiver. *Id.* at 3:3–4. A real time television program is displayed in PIP window 12. *Id.* at 3:57–58. Advertising messages are displayed in Panel Ad Windows 14 and 16. *Id.* at 3:1–2. Titles and channels are displayed in Grid Guide 22. *Id.* at 3:30. Remote controller 26 is used for activating the functions of display 10. *Id.* at 3:21–23.

2. Overview of Malik

Malik is directed to a television system that records programs with a multiplicity of language tracks. Ex. 1020, 1. Malik's system also records textual messages in different languages, messages such as textual dubbing, scores, results, tables, program headers, and footers. *Id.* at 2. A user chooses the language of interest from a menu displayed on the display unit. *Id.* at 5.

3. Overview of Boyce

Boyce is directed to digital video tape recorders (VTRs) that record high definition television (HDTV) and standard definition television (SDTV). Ex. 1021, 1:19–21. Figure 9 of Boyce is reproduced below.

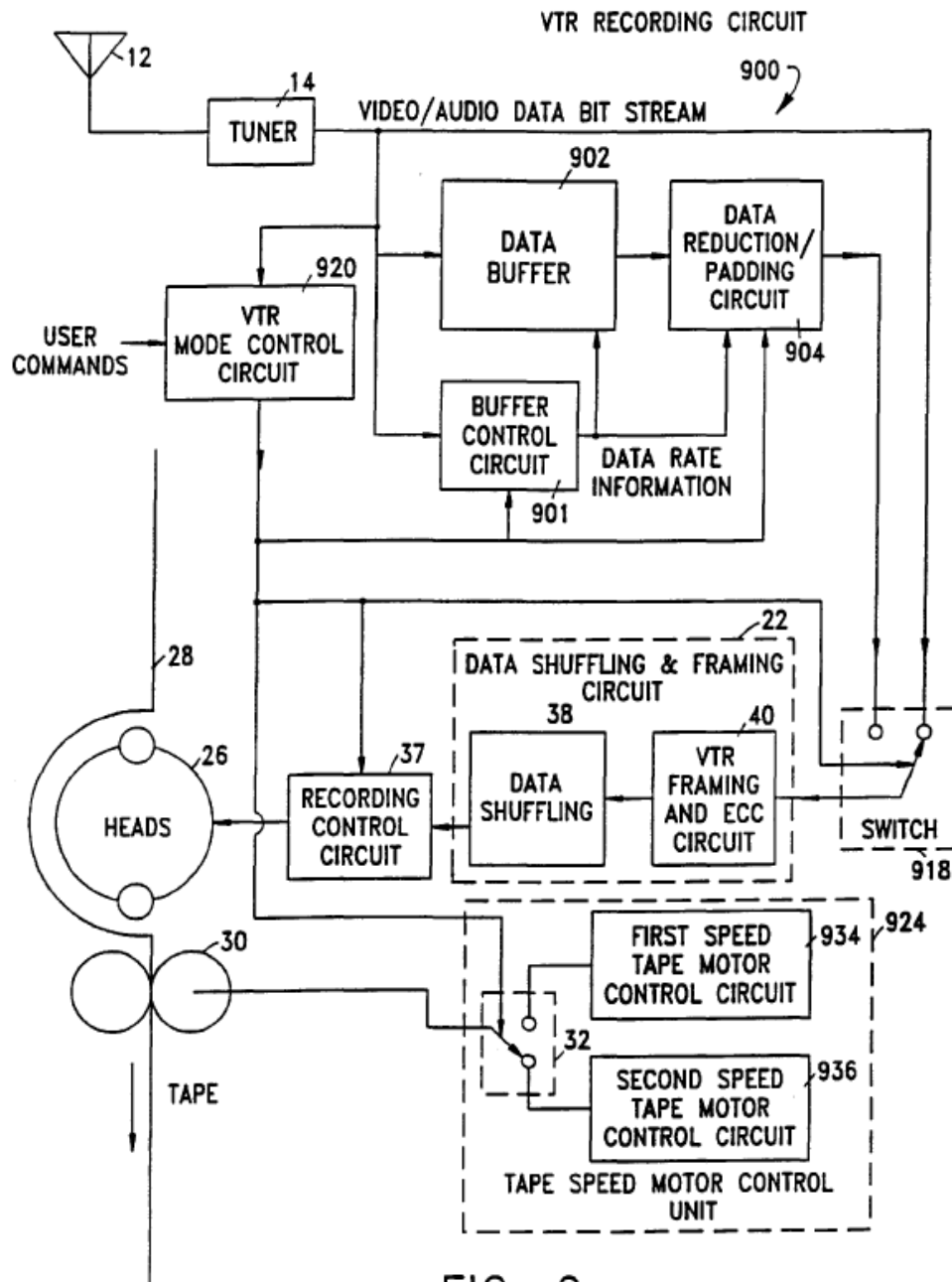


FIG. 9

Figure 9 of Boyce, above, illustrates VTR recording circuit 900 for recording SDTV and HDTV signals. *Id.* at 39:48–51. VTR recording circuit 900 includes VTR mode control circuit 920, which receives user

commands to instruct the VTR to operate in either HDTV or SDTV mode.
Id. at 40:26–31.

4. Overview of Browne

Browne is directed to a large capacity, multi-source video cassette recorder (VCR) player. Ex. 1022, 1. Browne’s VCR player 100 is controlled by controller 105, accessed by a user from control screens. *Id.* at 18:1–6. An exemplary control screen is shown in Figure 3 of Browne, which is reproduced below. *Id.* at 18:29–31.

FIG. 3

300

VIDEO CONTROL DISPLAY ON OUTPUTS 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/>	
AUDIO CONTROL VOICED ON OUTPUTS 1L <input checked="" type="checkbox"/> 1R <input checked="" type="checkbox"/> 2L <input type="checkbox"/> 2R <input type="checkbox"/> 3L <input type="checkbox"/> 3R <input type="checkbox"/>	
PROGRAM ERASURE — 301 <input type="radio"/> ERASE OLDEST PROGRAMS (FIFO) <input type="radio"/> ERASE OLDEST VIEWED PROGRAMS <input type="radio"/> ERASE ONLY SELECTED PROGRAMS	
OUTPUT CONTROL SETUP — 302 OUTPUT 1 TV WIRELESS <input type="button" value="v"/> 312 OUTPUT 2 PANASONIC VHS <input type="button" value="v"/> 322 OUTPUT 3 CONTROL L <input type="button" value="v"/> 332	PROGRAM DISPLAY MODES <input type="radio"/> WINDOWED — 304a SELECT OUTPUT <input type="radio"/> TILED — 304b <input type="radio"/> 1 — 112a <input type="radio"/> FULL SCREEN — 304c <input type="radio"/> 2 — 112b <input type="radio"/> 3 — 112c
SET RECORDING CRITERIA — 303 <input type="checkbox"/> MONITOR VIEWER — 303a <input type="checkbox"/> MONITOR "INTERESTING" + "UNINTERESTING" BUTTONS — 303b <input type="checkbox"/> OFF — 303c	AUTO RECORDING STORAGE ALLOCATION 305 <div style="border: 1px solid black; width: 100%; height: 15px; position: relative;"> <div style="background-color: #cccccc; width: 15%; position: absolute; left: 0;"></div> <div style="position: absolute; right: 0; top: -10px;">305a</div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> 0 50% 100% </div> <div style="display: flex; justify-content: space-between; width: 100%;"> 15% = 305b </div> <div style="border: 1px solid black; padding: 2px; width: fit-content;">2 HOURS ALLOCATED</div>

Figure 3 of Browne, above, illustrates setup page screen 300, which allows the user control options including selection of program erasure section 301. *Id.* at 18:31–33.

Program erasure section 301 allows a user to set how stored programs will be saved in storage section 104 in VCR 100. *Id.* at 18:33–19:2. Programs stored in storage section 104 are erased when storage capacity is reached in a first-in/first-out (FIFO) mode, if selection of FIFO option 301a is made. *Id.* at 19:6–9. In the FIFO mode, if additional storage is required,

then the oldest available program in storage section 104 is erased and a new program is stored in this storage space. *Id.* at 19:9–12. If the locking option described is selected, and if the oldest stored program is locked, the next oldest unlocked program is preferably overwritten when recording occurs. *Id.* at 19:12–15. Thus, the FIFO mode causes the oldest stored program, or oldest stored unlocked program, to be automatically erased when the storage capacity of storage section 104 is reached. *Id.* at 19:15–18. Alternatively, by selecting previously viewed option 301b, only programs which have been viewed will be automatically erased. *Id.* at 19:19–22. The erasure of the stored viewed programs is performed on a FIFO basis. *Id.* at 19:22–24.

5. Overview of Kumagai

Kumagai is directed to an optical disc device. Ex. 1023, 1:7–9. Kumagai describes a rewritable optical disc (DVD-RW). *Id.* at 7:64–67.

6. Discussion of Claim 1

Petitioner contends that claim 1 is unpatentable, under 35 U.S.C. § 102(e), as anticipated by Alexander. Pet. 9, 33–46. Petitioner also contends that claim 1 of the '585 Patent is unpatentable, under 35 U.S.C. § 103(a), as obvious over Alexander in combination with the art summarized above. *Id.* at 9, 56–74.

The dispute between the parties centers on “wherein the at least one storage option relates to at least one storage setting configured to control how programs are to be digitally stored” discussed above in Section III.D.2 with respect to claim construction. Pet. 9, 33–46, 56–74; Prelim. Resp. 26–37. Patent Owner also contends that a person having ordinary skill in the art

could not have combined Alexander and Boyce because they are technically incompatible. Prelim. Resp. 33–35.

Upon review of the evidence in the current record and the parties' contentions at this preliminary stage in the proceeding, we determine that Petitioner has shown sufficiently for purposes of this Decision how Alexander alone describes each limitation of claim 1. We also determine Petitioner has shown sufficiently for purposes of this Decision how Alexander in combination with the asserted art teaches each limitation of claim 1.

Starting with the preamble, i.e., “[a] method for allowing a user to select storage options for storing programs using an interactive television program guide implemented on user television equipment, the method comprising” (Ex. 1001, 18:47–50), which Petitioner refers to as element 1[a], Petitioner points to Alexander’s EPG illustrated, for example, in Figure 1, reproduced and discussed above in the overview of Alexander in Section III.E.1. Pet. 33 (citing, *e.g.*, Ex. 1018, 3:1–7, 3:25–32, 5:20–53, 7:57–8:3, Fig. 1; Ex. 1025 ¶¶ 70–79). A user interfaces with Alexander’s EPG using remote control 26 to highlight, for example, windows 12, 14, or 16 or the titles and channels in Grid Guide 22. Ex. 1018, 3:28–31.

Petitioner also points to recording functions available when a user selects a “Record” button (Pet. 33–36 (citing, *e.g.*, Ex. 1018, 11:13–16, 11:29–43, 11:45–49, 25:39–49)), which we discuss below with respect to element [1b]. Regarding the parties’ dispute as to whether the preamble is limiting, upon consideration of the Petition, the Preliminary Response, and the evidence of record, we determine Petitioner makes sufficient showing, at this stage in the proceeding, that Alexander alone describes element 1[a].

We, therefore, need not determine whether the preamble is limiting for purposes of this Decision.

Turning to the next limitation,
providing the user with an opportunity to select at least one storage option for storing a program to be recorded, *wherein the at least one storage option relates to at least one storage setting configured to control how programs are to be digitally stored* on a random access digital storage device;
(Ex. 1001, 18:51–56 (emphasis added)), which Petitioner refers to as element 1[b] (Pet. 36), the parties’ dispute centers on the highlighted “wherein” clause.

For element [1b], Petitioner points to Alexander’s recording frequency and rerun filter options, as well as Alexander’s parental control function. Pet. 34–37 (citing, *e.g.*, Ex. 1018, 11:9–16, 11:29–43, 11:45–49, 21:55–67, 23:63–24:7, 25:35–49, Fig. 1). Alexander, for example, describes “the option of recording a particular program ‘regularly’” (Ex. 1018, 11:10–11) and “when the viewer selects the ‘Regularly’ record option, the viewer is also given the option of filtering reruns” (*id.* at 11:35–37). Alexander also describes that the viewer can select “a record frequency of once, daily or weekly.” *Id.* at 25:40–41; *see also id.* at 11:48–49 (describing selection of “Once, Daily, Weekly, or Regularly as a record-scheduling option”).

Patent Owner contends that Alexander’s options do not describe the “storage option” recited in claim 1 because Alexander’s options control when and whether a selected program *will be* recorded. Prelim. Resp. 28–29. Patent Owner’s contentions are premised on its claim construction, which we decline to adopt at this preliminary stage in the proceeding for the reasons discussed above in Section III.D.2. Additionally, as discussed above

in Section III.D.2, on this preliminary record, “providing the user with an opportunity to select at least one storage option for storing a program to be recorded, wherein the at least one storage option relates to at least one storage setting configured to control how programs are to be digitally stored,” as recited in claim 1, includes the option of storing one or more programs or episodes, because this option “control[s] how programs are to be digitally stored”; i.e., as a single or multiple episodes, or as a single program or as a set of programs. Alexander’s recording “regularly” option results in “recording *a particular program*” regularly (Ex. 1018, 11:10–11) (emphasis added), but if the EPG determines “the episode is a rerun, and if the viewer has selected the rerun filter option for that program title, then the EPG will not record the episode” (*id.* at 11:39–43).

Petitioner also provides alternative contentions regarding “storage option” if that term is construed more narrowly. In particular, Petitioner points to alternatives as follows: (1) Malik’s “recording programs having ‘a multiplicity of language tracks’ which include ‘sound tracks’ and ‘text messages in different languages’” (Pet. 57 (citing, *e.g.*, Ex. 1020, 5 ¶ 6, 6 ¶¶ 1, 5)); (2) Boyce’s HDTV and SDTV video format options (*id.* at 62–63 (citing, *e.g.*, Ex. 1021, 1:17–21, 3:32–33, 4:14–21, 40:26–31)); and (3) Browne’s program erasure options (*id.* at 67–68 (citing, *e.g.*, Ex. 1022, 19 ¶¶ 2–3, Fig. 3)). Petitioner relies on the testimony of Mr. Wechselberger regarding reasons one having ordinary skill in the art would have had to make the proposed modifications to Alexander. Pet. 58–60, 63–65, 68–72 (citing, *e.g.*, Ex. 1025 ¶¶ 137–142, 150–157, 163–179).

Patent Owner contends in Malik “more than just a selected sound/text track is stored upon recording” and “only upon playback does Malik’s user

interact with the television system to actually select a language of interest.” Prelim. Resp. 32. Mr. Wechselberger, however, testifies a person having ordinary skill in the art would have recognized Malik’s “multi-lingual operation” as a technical improvement and would have combined Malik’s “choice of the language” with Alexander’s EPG resulting in a recording system in which the viewer uses the EPG to select both a program and sound or text track for recording. Ex. 1025 ¶¶ 137–138 (citing, *e.g.*, Ex. 1020, 1 ¶¶ 1, 6). Malik describes “an *improved* television transmission, reception and recording means *incorporating multi-lingual operation*” in which “the choice of the language is open for selection” by the viewer. Ex. 1020, 5 ¶¶ 1, 6 (emphases added). At this stage in the proceeding, we determine Patent Owner’s arguments are based on Malik alone, rather than the proposed combination of teachings set forth by Petitioner. *In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (“[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.”)

Regarding the proposed combination of Alexander and Boyce, Mr. Wechselberger testifies a person having ordinary skill in the art would have combined the teachings to modify Alexander’s EPG and digital recording system to include Boyce’s selection of either an SDTV or HDTV digital recording mode because Boyce’s selection is an improvement that gives the user the format choice of which trade-off to make, *i.e.*, image quality or storage requirements. Ex. 1025 ¶¶ 151–155. Boyce describes “VTR mode control circuit 920 receives user commands” instructing “the VTR to operate in either a HDTV recording mode or a SDTV recording mode of operation.” Ex. 1021, 40:26–31. Boyce describes “it is highly desirable that a VTR be

capable of recording both HDTV signals as well as SDTV signals.” *Id.* at 4:14–15.

We turn to Patent Owner’s contention that a person having ordinary skill in the art could not have combined Alexander and Boyce because Alexander’s DVD would only have supported SDTV format, and not HDTV format. Prelim. Resp. 33–35. Mr. Wechselberger does not suggest that Boyce be bodily incorporated into Alexander’s DVD, but rather testifies a person having ordinary skill in the art “would have recognized that Alexander’s DVDs would have been a suitable storage medium to record a selected program in an HDTV or SDTV video format” and “the improvement of Alexander in light of Boyce with respect to the recording process itself is simply Boyce’s teaching of the trade-offs of HD vs. SD recording.” Ex. 1025 ¶¶ 152–154 (citing, *e.g.*, Ex. 1018, 12:10–12). Alexander teaches “[t]he embodiments of the invention described herein are only considered to be preferred and/or illustrative of the inventive concept; the scope of the invention is not to be restricted to such embodiments.” Ex. 1018, 35:38–41. At this preliminary stage in the proceeding, we are persuaded by the testimony of Mr. Wechselberger, in light of the evidence of record before us at this juncture.

Regarding the proposed combination of Alexander and Browne, Patent Owner contends Browne does not disclose recording the program based on the storage option. Prelim. Resp. 36. At this juncture in the proceeding, we determine Patent Owner’s contentions are based on its proposed construction, discussed in Section III.E.5 and even after consideration of Patent Owner’s contentions, we are persuaded by the Petition and evidence cited therein.

For instance, Mr. Wechselberger testifies a person having ordinary skill in the art would have combined the teachings to present Browne's option to automatically erase previously viewed programs using Alexander's EPG and recording system to reduce attention needed from the viewer to manage the storage capacity. 1025 ¶¶ 165–166. Browne describes “[b]y selecting previously viewed option 301b, only programs which have been viewed will be automatically erased.” Ex. 1022, 19 ¶ 3; *see also id.* at Fig. 3 (“ERASE OLDEST VIEWED PROGRAMS”). Browne further describes that “automatic erasure” in a large capacity recorder player “greatly reduces the need for constant user attention and provides multiple viewing options.” *Id.* at 2 ¶ 2.

Additionally, Petitioner alternatively contends that the combination of Kumagai's rewritable recording medium, Browne's option to automatically erase previously viewed programs, and Alexander's recording system teaches element [1b]. Pet. 65–69 (citing, *e.g.*, Ex. 1025 ¶¶ 159–170). Kumagai teaches a detection system “used for recording/reproducing an optical disc DVD-RW (Rewritable) which is a rewritable recording medium, now being researched, pursuant to the DVD standard.” Ex. 1023, 7:64–67. Mr. Wechselberger testifies a person having ordinary skill in the art would have “found it desirable to include comparable overwriting capabilities in recording systems that use optical disc-based storage media (*e.g.*, DVDs)” and, therefore, would have used Kumagai's rewritable DVD in Alexander's recording system. Ex. 1025 ¶ 162.

As discussed above in Section III.D.2 with respect to claim construction, for purposes of institution, we determine the “wherein” clause includes exemplary storage options described in the '585 Patent

Specification, such as “language tracks,” “video formats,” “parental control” on storage, and automatic erasure of viewed programs. Ex. 1001, 15:51-61, Figs. 14, 16. At this stage in the proceeding, therefore, we are persuaded by each of Petitioner’s alternative contentions regarding “storage option” including Malik’s “recording programs having ‘a multiplicity of language tracks’ which include ‘sound tracks’ and ‘text messages in different languages’” (Ex. 1020, 5 ¶ 6, 6 ¶¶ 1, 5)); Boyce’s HDTV and SDTV video format options (Ex. 1021, 4:14–21, 40:26–31)); and Browne’s program erasure options (Ex. 1022, 19 ¶¶ 2–3, Fig. 3) with or without Kumagai’s rewritable recording medium (Ex. 1023, 7:64–67). At this preliminary stage, we also are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner.

Element [1b] recites storing programs on “a random access digital storage device.” Ex. 1001, 18:55–56. In addition to the contentions above relying on Alexander, Petitioner provides alternative contentions for that recitation pointing to Browne’s random access devices. Pet. 72–74 (citing, e.g., Ex. 1025 ¶¶ 137–141, 150–154, 172–181). Browne describes providing “large capacity multiple source recording with random access.” Ex. 1022, 2; *see also id.* at 10–11 (“The storage section 104 preferably employs high speed, large capacity random access devices which may include optical and magnetic disks, RAM memory, and very high density floppy disks.”) Mr. Wechselberger testifies a person having ordinary skill in the art would have used Browne’s random access digital storage device (e.g., RAM memory) to record the programs selected with Alexander’s EPG because RAM memory

provides faster storage and retrieval times relative to other types of random access digital storage devices. Ex. 1025 ¶¶ 175–176.

Upon consideration of the Petition, the Preliminary Response, and the evidence of record, we determine Petitioner makes sufficient showing, at this stage in the proceeding, that Alexander alone describes element 1[b]. We also determine Petitioner has shown sufficiently for purposes of this Decision how Alexander in combination with the asserted art teaches element 1[b]. Furthermore, at this preliminary stage in the proceeding, we are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner.

Turning next to “in response to a user selection of the at least one storage option, modifying the at least one storage setting” (Ex. 1001, 18:57–58), which Petitioner refers to as element 1[c], Petitioner points to Alexander’s adjustment of storage in accordance with the storage option selected. *See, e.g.*, Pet. 40–42 (citing, *e.g.*, Ex. 1018, 2:42–44, 9:61–62 25:35–49, Fig. 6).

Turning now to “displaying in the interactive television program guide at least one program listing related to at least one program” (Ex. 1001, 18:59–60), which Petitioner refers to as element 1[d], Petitioner points to Alexander’s display of program listings using Grid Guide 22 and, alternatively, using panel ads. Pet. 43 (citing, *e.g.*, Ex. 1018, 4:28–33; 4:52–56, 25:35–49, Figs. 10A–B). Alexander describes displaying an ad for a future telecast program in window 14, which the viewer can record by pressing the green right action button. Ex. 1018, 4:28–33. Alexander also

describes a viewer moving cursor 36 in Grid Guide 22 to highlight one of the titles. *Id.* at 4:52–56.

Turning next to “providing the user with an opportunity to select a program listing from the at least one displayed program listing for recording on the random access digital storage device” (Ex. 1001, 18:61–63), which Petitioner refers to as element 1[e], Petitioner contends Alexander describes selecting a program from the grid guide or from an ad and using a “Record” button or remote to record. Pet. 44–45 (citing, *e.g.*, Ex. 1018, 4:29–33, 4:45–47, 4:52–54, 7:58–8:3, 21:55–67, 23:63–24:7, 25:35–49, Figs. 1–2).

As explained above, Alexander describes a viewer recording a program displayed in window 14 by pressing the green right action button. Ex. 1018, 4:28–33; *see also id.* at 21:55–67 (describing recording by pressing “the Green button, labeled ‘Record’”). Alexander also describes a “Record Selection Function,” also referred to as a “Recording Function,” in which “the viewer instructs the EPG what programs to add to the Record List.” *Id.* at 7:58–60. Alexander describes “[t]he viewer can enter the Recording Function” by pressing the “Record” key on the remote control device or pressing the “Record” action button on the EPG. *Id.* at 7:66–8:3.

Lastly, we turn to “recording the program on the random access digital storage device based on the modification of the at least one storage setting,” which Petitioner refers to as element 1[f]. Pet. 46. Petitioner contends Alexander describes that the selected program is recorded based on the storage option, *e.g.*, selected recording frequency. *Id.* (citing, *e.g.*, Ex. 1018, 7:62–65, 11:13–16, 11:48–49, 12:10–29). Alexander, for example, describes “[v]iewer selection of the ‘regularly’ option instructs the VCR control system to record the particular title on the selected channel at the

selected time slot any day of the week that the program is telecast.” Ex. 1018, 11:13–16. Alexander also describes “the viewer can instruct the EPG to record and index” and “[w]hen the viewer is ready to view the DVD recording, the EPG displays the DVD index on screen” so the viewer can view the entire DVD, or only portions. *Id.* at 12:10–21.

Patent Owner does not address the above contentions with respect to claim elements 1[c]–1[f]. Upon consideration of the Petition, the Preliminary Response, and the evidence of record, we determine Petitioner makes sufficient showing, at this stage in the proceeding, that Alexander alone describes elements 1[c]–1[f].

In summary, based on the record at this preliminary stage, we are persuaded by Petitioner’s showing for all recitations in claim 1. Also, we are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner. Accordingly, for the reasons given and on the record before us at this juncture, we determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that claim 1 is anticipated by Alexander and obvious over each asserted prior art combination.

7. *Discussion of Independent Claims 8, 15, and 22*

Independent claims 8, 15, and 22 of the ’585 Patent are similar to independent claim 1. Petitioner’s showing for anticipation with respect to each of claims 8, 15, and 22 is similar to its showing with respect to claim 1 and, indeed, Petitioner references its contentions for claim 1. *Compare* Pet. 47–55 *with id.* at 33–46. Petitioner’s alternative grounds based on

obviousness are the same for all independent claims, and are discussed above in Section III.E.5 in our analysis pertaining to claim 1.

Petitioner accounts sufficiently for all differences in the claims. For instance, regarding “displaying in a display screen” recited in claim 8 and “a display screen” recited in claims 15 and 22, Petitioner points to Alexander’s disclosure of an “on-screen EPG display.” Pet. 47–48, 50, 53 (citing, *e.g.*, Ex. 1018, 2:32–33, 4:54–55, Fig. 3). Alexander, for example, describes Figure 3 as illustrating “a graphic representation of a sample *on screen EPG display* depicting the EPG’s on-screen Grid Guide in the programming scrolling mode.” Ex. 1018, 2:32–33 (emphasis added).

Regarding “an interactive television program guide implemented at least partially on circuitry” recited in claim 15, Petitioner points to Alexander’s “EPG system hardware” including a “circuit board” and “module for creating an on-screen display.” Pet. 50 (citing, *e.g.*, Ex. 1018, 5:46–47, 5:21, 5:27–28). Alexander, for example, describes

[o]ne embodiment of the hardware for this invention includes a circuit board consisting of a gate array that provides all of the control functions for access by the processor (*e.g.*, Motorola 68000), control of memory (dynamic RAM and external ROM), and some peripheral functions such as infrared (“IR”) input and output, frequency synthesizer for the paging system, and data acquisition from the paging system. Inside there is a module for creating an on-screen display including a programmable DMA (direct memory access) controller, a color lookup table that provides for a field called a color index that can be used to select a more complicated color (more bits than can be expressed in the bit map), first-in-first-out (“FIFO”) memory for ordering the pixels []which allows the system to write the pixels as fast as the system is capable of writing the pixels and then sending the pixels to the display according to a prescribed timing.

Ex. 1018, 5:20–36.

For independent claims 8, 15, and 22, Patent Owner relies on the same arguments discussed above in Section III.E.5 with respect to claim 1. *See generally* Prelim. Resp. For the reasons discussed above in Section III.E.5 with respect to claim 1, based on the record at this preliminary stage, we are persuaded by Petitioner’s showing that Alexander alone describes each element of claims 8, 15, and 22. We also determine Petitioner has shown sufficiently for purposes of this Decision how Alexander in combination with the asserted art teaches each element of claims 8, 15, and 22. Also, we are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner.

Accordingly, for the reasons given and on the record before us at this juncture, we determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that each of claims 8, 15, and 22 of the ’585 Patent is anticipated by Alexander and obvious over each asserted prior art combination.

F. Obviousness—Claims 2, 7, 9, 14, 16, 21, 23, and 28

Petitioner contends each of claims 2, 7, 9, 14, 16, 21, 23, and 28 of the ’585 Patent is unpatentable, under 35 U.S.C. § 103(a), as obvious over (1) Alexander and Malik; and (2) Alexander, Browne, and Malik. Pet. 9, 56–61, 72–73. We address Petitioner’s contentions below.

Claims 2, 9, 16, and 23 depend, directly, on claims 1, 8, 15, and 22, respectively and each of claims 2, 9, 16, and 23 recites “wherein the at least

one storage option is for selecting at least one language track for storing with [programs when a program/the program when the program] is recorded.” Ex. 1001, 19:1–3, 19:44–46, 20:21–23, 21:4–6. Claims 7, 14, 21, and 28 depend, directly, on claims 1, 8, 15, and 22, respectively and each of claims 7, 14, 21, and 28 recites “wherein the at least one storage option is for selecting at least one language of subtitles for storing with [programs when the programs are/the program when the program is] recorded.” Ex. 1001, 19:18–20, 19:61–63, 20:39–41, 22:9–11.

For the further recitations of claims 2, 7, 9, 14, 16, 21, 23, and 28, Petitioner points to Malik’s “recording programs having ‘a multiplicity of language tracks’ which include ‘sound tracks’ and ‘text messages in different languages.’” Pet 57 (citing, *e.g.*, Ex. 1020, 5 ¶ 6, 6 ¶¶ 1, 5). Petitioner relies on the same reasoning to combine and testimony of Mr. Wechselberger discussed above in Section III.E.5 with respect to claim 1.

Regarding the combination of Alexander, Browne, and Malik, as discussed above in Section III.E.5 with respect to element [1b], Petitioner provides alternative contentions for “a random access digital storage device” recited in the independent claims pointing to Browne’s random access devices and provides reasoning to combine relying on Mr. Wechselberger’s testimony. Pet. 72–74 (citing, *e.g.*, Ex. 1025 ¶¶ 137–141, 150–154, 172–181). Browne describes providing “large capacity multiple source recording with random access.” Ex. 1022, 2; *see also id.* at 10–11 (“The storage section 104 preferably employs high speed, large capacity random access devices which may include optical and magnetic disks, RAM memory, and very high density floppy disks”).

Patent Owner does not argue separately Petitioner's contentions for claims 2, 7, 9, 14, 16, 21, 23, and 28. Based on the record at this preliminary stage, we are persuaded by Petitioner's showing that the further recitations in claims 2, 7, 9, 14, 16, 21, 23, and 28 are taught by the asserted art, e.g., Malik's "recording programs having 'a multiplicity of language tracks' which include 'sound tracks' and 'text messages in different languages.'" Ex. 1020, 5 ¶ 6, 6 ¶¶ 1, 5. Also, we are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner.

In summary, for the reasons given and on the record before us at this juncture, we determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that dependent claims 2, 7, 9, 14, 16, 21, 23, and 28 of the '585 Patent are unpatentable, under 35 U.S.C. § 103(a), as obvious over (1) Alexander and Malik; and (2) Alexander, Browne, and Malik.

G. Obviousness—Dependent Claims 3, 4, 10, 11, 17, 18, 24, and 25

Petitioner contends each of claims 3, 4, 10, 11, 17, 18, 24, and 25 of the '585 Patent is unpatentable, under 35 U.S.C. § 103(a), as obvious over (1) Alexander and Boyce; and (2) Alexander, Browne, and Boyce. Pet. 9, 62–65, 73–74. We address Petitioner's contentions below.

Claims 3, 10, 17, and 24 depend, directly, on claims 1, 8, 15, and 22, respectively and each of claims 3, 10, 17, and 24 recites "wherein the at least one storage option is for selecting at least one video format for [recording programs/recording]." Ex. 1001, 19:4–6, 19:47–48, 20:24–26, 21:9–10.

Claims 4, 11, 18, and 25 depend, directly, on claims 3, 10, 17, and 24, respectively and each of claims 4, 11, 18, and 25 recites “wherein the at least one video format comprises at least one of high definition television, normal television and digital format.” Ex. 1001, 19:7–9, 19:49–51, 20:27–29, 21:10–12.

For the further recitations in claims 3, 4, 10, 11, 17, 18, 24, and 25, Petitioner points to Boyce’s HDTV and SDTV video format options. Pet. 62–63 (citing, *e.g.*, Ex. 1021, 1:17–21, 3:32–33, 4:14–21, 40:26–31). Petitioner relies on the same reasoning to combine and testimony of Mr. Wechselberger regarding combining the teachings of Alexander and Boyce to give the user the format choice of which trade-off to make i.e., image quality or storage requirements. Ex. 1025 ¶ 151–155. Boyce describes “VTR mode control circuit 920 receives user commands” instructing “the VTR to operate in either a HDTV recording mode or a SDTV recording mode of operation.” Ex. 1021, 40:26–31. Boyce describes “it is highly desirable that a VTR be capable of recording both HDTV signals as well as SDTV signals.” *Id.* at 4:14–15.

Regarding the combination of Alexander, Browne, and Boyce, for the reasons discussed above in Section III.E.5 with respect to element [1b] and Section III.F with respect to other dependent claims, at this preliminary stage in the proceeding, we are persuaded by Petitioner’s alternative contentions pointing to Browne’s random access devices for teaching “a random access digital storage device” recited in the independent claims, as well as Petitioner’s articulated reasoning to combine the teachings of the asserted prior art. Pet. 72–74 (citing, *e.g.*, Ex. 1025 ¶¶ 137–141, 150–154, 172–181).

Patent Owner does not argue separately Petitioner's contentions for claims 3, 4, 10, 11, 17, 18, 24, and 25. Based on the record at this preliminary stage, we are persuaded by Petitioner's showing that the further recitations in claims 3, 4, 10, 11, 17, 18, 24, and 25 are taught by the asserted art. Also, we are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner.

In summary, for the reasons given and on the record before us at this juncture, we determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that dependent claims 3, 4, 10, 11, 17, 18, 24, and 25 of the '585 Patent are unpatentable, under 35 U.S.C. § 103(a), as obvious over (1) Alexander and Boyce; and (2) Alexander, Browne, and Boyce.

H. Obviousness—Dependent Claims 6, 13, 20, and 27

Petitioner contends each of claims 6, 13, 20, and 27 of the '585 Patent is unpatentable, under 35 U.S.C. § 103(a), as obvious over (1) Alexander and Browne; and (2) Alexander, Kumagai, and Browne. Pet. 9, 65–72. Claims 6, 13, 20, and 27 depend, directly, on claims 1, 8, 15, and 22, respectively and each of claims 6, 13, 20, and 27 recites “wherein the at least one storage option is for automatically erasing programs from the digital storage device once the [programs are viewed by the user/program is viewed by the user].” Ex. 1001, 19:15–17, 19:58–60, 20:36–38, 22:6–8.

For the further recitations of claims 6, 13, 20, and 27, Petitioner points Browne's program erasure options. Pet. 67–68 (citing, *e.g.*, Ex. 1022,

19 ¶¶ 2–3, Fig. 3). Petitioner alternatively contends that the combination of Kumagai’s rewritable recording medium, Browne’s option to automatically erase previously viewed programs, and Alexander’s recording system teaches the further recitations in claims 6, 13, 20, and 27. *Id.* at 65–69 (citing, *e.g.*, Ex. 1025 ¶¶ 159–170). Petitioner again relies on the testimony of Mr. Wechselberger, including that discussed above in Section III.E.5 with respect to claim 1 regarding reasons one having ordinary skill in the art would have had to make the proposed modifications to Alexander. *Id.* at 66–72 (citing, *e.g.*, Ex. 1025 ¶¶ 160–179).

Patent Owner contends Browne discloses erasure “if additional storage is required” and, therefore, does not teach automatically erasing programs “once the programs are viewed by the user” as recited in claims 6, 13, 20, and 27. Prelim. Resp. 35 (citing Ex. 1022, 19 ¶¶ 2–3). Mr. Wechselberger testifies “in Browne, a user can specify which programs should be erased (*e.g.*, the oldest programs) and when (*e.g.*, after viewing).” Ex. 1025 ¶ 168 (citing Ex. 1022, Fig. 3). Browne describes “ERASE OLDEST VIEWED PROGRAMS.” Ex. 1022, Fig. 3.

Based on the record at this preliminary stage, we are persuaded by Petitioner’s showing that the further recitations in claims 6, 13, 20, and 27 are taught by the asserted art. Also, discussed above in Section III.E.5 with respect to claim 1, we are persuaded that Petitioner has offered articulated reasoning with a rational underpinning as to why one of ordinary skill in the art would have modified and combined the teachings of the asserted art in the manner proposed by Petitioner.

In summary, for the reasons given and on the record before us at this juncture, we determine that Petitioner has shown a reasonable likelihood that

it would prevail in establishing that dependent claims 6, 13, 20, and 27 of the '585 Patent are unpatentable, under 35 U.S.C. § 103(a), as obvious over (1) Alexander and Browne, and (2) Alexander, Kumagai, and Browne.

IV. CONCLUSION

Upon consideration of the parties' contentions and the evidence of record, we determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing the unpatentability of claims 1–4, 6–11, 13–18, 20–25, 27, and 28 of the '585 Patent on all grounds presented in the Petition. Claims 5, 12, 19, and 26 have been disclaimed. Ex. 2002. At this preliminary stage, no final determination has yet been made with regard to the patentability of any challenged claim or any underlying factual or legal issues. The final determination will be based on the record as developed during the *inter partes* review.

V. ORDER

In consideration of the foregoing, it is hereby

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–4, 6–11, 13–18, 20–25, 27, and 28 of the '585 Patent is instituted with respect to all grounds 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 '585 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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