

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS INC.,
Petitioner,

v.

CONTEMPORARY DISPLAY LLC,
Patent Owner.

IPR2019-01269
Patent 8,863,219 B2

Before MICHAEL R. ZECHER, SHIELA F. McSHANE, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

CYGAN, *Administrative Patent Judge*.

JUDGMENT

Final Written Decision

Granting Patent Owner's Revised Motion to Amend to Cancel
Claims 1–3 and 5–7

Denying Patent Owner's Revised Motion to Amend to Substitute
Claims 15 and 16
35 U.S.C. § 318(a)

I. BACKGROUND

A. Background and Summary

Unified Patents Inc. (“Petitioner”) filed a Petition for *inter partes* review (“IPR”) of claims 1–3 and 5–7 of U.S. Patent No. 8,863,219 B2 (Ex. 1001, “the ’219 patent”). Paper 2 (“Pet.”). Patent Owner, Contemporary Display LLC (“Patent Owner”), filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Taking into account the arguments presented in Contemporary’s Preliminary Response, we determined that the information presented in the Petition established that there was a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim. Pursuant to 35 U.S.C. § 314, we instituted this *inter partes* review on January 7, 2020, as to all of the challenged claims and all grounds raised in the Petition. Paper 11 (“Dec. on Inst.”).

During the course of trial, Patent Owner filed a Motion to Amend. Paper 15 (“Mot. Amend”). With our authorization (*see* Paper 19), Patent Owner filed a Supplemental Motion to Amend (Paper 22, “Supp. Mot. Amend”) clarifying that its proposed amendment seeks to cancel originally challenged claims 1–3 and 5–7, propose substitute claims 15–17, and the proposed substitution of claims is not contingent on the unpatentability of claims 1–3 and 5–7. Petitioner filed an Opposition to Patent Owner’s Motion to Amend. Paper 24 (“Pet. Opp.”). We issued Preliminary Guidance on the Motion to Amend, determining that, based on the record at that time, there was a reasonable likelihood that proposed substitute claims 15–17 were unpatentable. Paper 26 (“Prelim. Guid.”). Patent Owner filed a Revised Motion to Amend, which included further amendments to proposed substitute claims 15 and 16, and withdrew previously-proposed substitute

claim 17 from consideration. Paper 27 (“Revised Mot.”). Petitioner filed an Opposition to the Revised Motion to Amend. Paper 30 (“Pet. Opp. Rev. Mot.”). Patent Owner filed a Reply to Petitioner’s Opposition to the Revised Motion to Amend (Paper 33, “PO Reply”), and Petitioner filed a Sur-reply (Paper 35, “Pet. Sur-reply”). An oral hearing was held on November 2, 2020, and a transcript of the hearing is included in the record. Paper 37 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the cancellation of claims 1–3 and 5–7 of the ’219 patent and the patentability of proposed substitute claims 15 and 16. For the reasons we identify below, we grant Patent Owner’s Revised Motion to Amend to cancel claims 1–3 and 5–7 and deny Patent Owner’s Revised Motion to Amend to substitute claims 15 and 16 because Petitioner has demonstrated by a preponderance of the evidence that both proposed substitute claims are unpatentable under § 103(a).

B. Related Matters

The parties indicate that the ’219 patent is involved in the following pending litigation: *Contemporary Display LLC v. Cox Communications, Inc.*, No. 1:19-cv-00224 (D. Del., filed Feb. 1, 2019); *Contemporary Display LLC v. Verizon Communications Inc.*, No. 1:19-cv-00225 (D. Del. filed Feb. 1, 2019); and *Contemporary Display LLC v. LG Electronics USA, Inc.*, No. 2:18-cv-00152 (E.D. Tex. filed Apr. 17, 2018). Pet. 1–2; Paper 3, 2.¹

¹ Patent Owner’s Mandatory Notices filed in accordance with 37 C.F.R. § 42.8 does not include page numbers. Paper 3. We consider the Title page as page 1 and then proceed from there in numerical order.

C. The '219 Patent

The '219 patent generally relates to an on-screen television display menu system that allows a user to select from available input sources using a graphical user interface. Ex. 1001, code (57). Figure 6A is illustrative of the graphical user interface display menu.

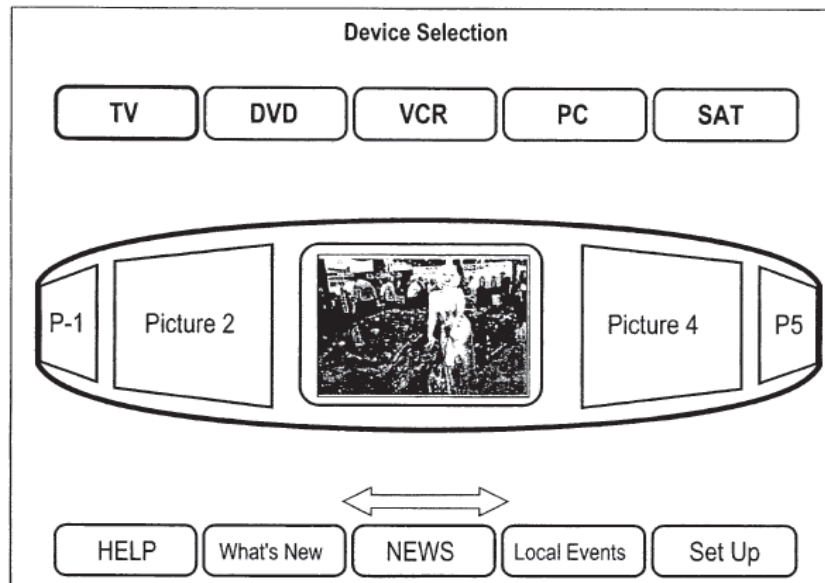


Figure 6A portrays a display having a device selection menu that includes a top icon row of input sources, a center icon row of the content of inputs that includes video of one of the inputs, and a bottom icon row of user options. Ex. 1001, 9:1–41.

Conventional television systems identify the input sources by the television system's fixed connectors, e.g., as HDMI [high definition multimedia interface] or S-Video connectors. Ex. 1001, 1:37–50. However, those connectors may be used to connect entirely different types of devices; for example, a DVD [digital versatile disk] connector may be used to connect a cable box rather than a DVD player, either intentionally or unintentionally. *Id.* at 1:50–58. The television system of the '219 patent can

embed incoming videos into the graphical user interface menu that represent the content of the signal through each connector, thus allowing the user to select the input source that the user would like to see. *Id.* at 4:36–47.

Remote control commands may control the television system through its menu system, and can control other devices in the system either directly or through the television system. *Id.* at 5:35–54. The television system automatically adapts to the type of input signal selected for display; for example, the system may be connected to a personal computer having software that will recognize that a certain device, such as a USB [universal serial bus] cable, is connected. *Id.* at 11:57–64, code (57).

D. Challenged Claims

Petitioner originally challenged claims 1–3 and 5–7 of the '219 patent. *See, e.g.*, Pet. 4–5. Patent Owner sought to cancel those claims in its Motion to Amend, and proposed substitute claims 15–17. Mot. Amend. Patent Owner confirmed that its request in the Motion to Amend sought to cancel all challenged claims in the *inter partes* review, and that the Motion to Amend was not contingent on the patentability of any originally challenged claim. Supp. Mot. Amend 1. After receiving our Preliminary Guidance, Patent Owner filed a Revised Motion to Amend, proposing substitute claims 15 and 16, and withdrawing proposed substitute claim 17 from consideration. Revised Mot.; Ex. 2002. Patent Owner again clarified that only substitute claims 15 and 16 as proposed in the Revised Motion to Amend are before us, and, on a non-contingent basis, Patent Owner seeks to cancel the remaining claims at issue in the proceeding, i.e., claims 1–3 and 5–7. Tr. 6: 19–24.

Petitioner does not oppose Patent Owner's non-contingent request to cancel originally challenged claims 1–3 and 5–7 of the '219 patent. *See generally* Pet. Opp. Rev. Mot. Petitioner, however, presents arguments and evidence that substitute claims 15 and 16, proposed by Patent Owner in its Revised Motion to Amend, are unpatentable. Patent Owner proposes substitution claims 15 and 16 for claims 5 and 6, respectively. Ex. 2002. Claim 15 is reproduced below, with reference letters added in brackets for convenience, mirroring Petitioner's usage in its Opposition to the Revised Motion to Amend:

15. [a] A method for on-screen managing and navigating television system functionality and input source selection, the method comprising:

[b] displaying non-computer based content on a display device of a television system through the television system, [c] wherein the television system is configured to identify an input source of the plurality of input sources based on the input signal from the input source, [d] wherein the display is a video content of the content of the input source, [e] wherein each of the plurality of input signals is unique to each of the plurality of input sources, [f] and the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals, [g] wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals;

[h] receiving a computer related command at the television system;

[i] forwarding the computer command to a computer connected to the television system; [[and]]

[j] transitioning the television system from displaying the non-computer based content to display a computer source content from the computer;

[k] receiving a command from the computer; and

[1] transitioning the television system from displaying the computer source content to display television based content.

Claim 16 is reproduced below:

16. The method of claim [[5]] 15, further comprising:
processing television and computer commands on the television
system while displaying computer source content;²

Ex. 2002, 2–4.

E. Prior Art Relied Upon

Petitioner relies upon the prior art references listed below. Pet. Opp.
Rev. Mot. Amend. 1–5.

U.S. Patent Application Publication 2006/0064719 A1 (filed Sept. 17, 2004; published Mar. 23, 2006) (“Youden,” Ex. 1004);

U.S. Patent Application Publication 2007/0137988 A1 (filed Dec. 2, 2005; published June 21, 2007) (“Yu,” Ex. 1013);

U.S. Patent Application Publication 2002/0051083 A1 (filed May 11, 2001; published May 2, 2002) (“Aratani,” Ex. 1006);

F. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of proposed substitute claims 15 and 16 on the following grounds:

Claims Challenged	35 U.S.C. § ³	References
15, 16	103(a)	Aratani, Youden

² Proposed claim 16 ends in a semicolon rather than a period as required by the Office’s longstanding procedure. *See Fressola v. Manbeck*, 1995 WL 656784 (D.D.C. 1995). Because we do not grant Patent Owner’s motion to amend the claims, this typographical error is moot.

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), revised 35 U.S.C. §§ 103 and 112, effective March 16, 2013. Because the application from which the ’219 patent issued was filed before this date, the pre-AIA versions of §§ 103 and 112 apply. Ex. 1001, codes (21), (22).

15, 16	103(a)	Aratani, Youden, Yu
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II. NON-CONTINGENT MOTION TO AMEND

A. Legal Standards

In an *inter partes* review, amended claims are not added to a patent as of right, but rather must be proposed as a part of a motion to amend.

35 U.S.C. § 316(d). We must assess the patentability of proposed substitute claims “without placing the burden of persuasion on the patent owner.”

Aqua Prods., Inc. v. Matal, 872 F.3d 1290, 1328 (Fed. Cir. 2017) (en banc); *see also Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 15 at 3–4 (PTAB Feb. 25, 2019) (precedential). Subsequent to the issuance of *Aqua Products*, the Federal Circuit issued a decision in *Bosch Automotive Service Solutions, LLC v. Matal*, 878 F.3d 1027, 1040 (Fed. Cir. 2017) (“*Bosch*”), as well as a follow-up order amending that decision on rehearing, that further reiterated that patent owner does not bear the burden of persuasion in demonstrating the patentability of proposed substitute claims. *See Bosch Auto. Serv. Sols., LLC v. Iancu*, No. 2015-1928 (Fed. Cir. Mar. 15, 2018) (Order on Petition for Panel Rehearing).

In accordance with *Aqua Products*, *Bosch*, and *Lectrosonics*, Patent Owner does not bear the burden of persuasion to demonstrate the patentability of the substitute claims presented in the motion to amend. Rather, ordinarily, “the petitioner bears the burden of proving that the proposed amended claims are unpatentable by a preponderance of the evidence.” *Bosch*, 878 F.3d at 1040 (as amended on rehearing); *Lectrosonics*, Paper 15 at 3–4. In determining whether a petitioner has proven unpatentability of the substitute claims, we focus on “arguments and

theories raised by the petitioner in its petition or opposition to the motion to amend.” *Nike, Inc. v. Adidas AG*, 955 F.3d 45, 51 (Fed. Cir. 2020). In limited circumstances, we also may justify any finding of unpatentability by reference to evidence of record in the proceeding. *Compare Lectrosonics*, Paper 15 at 4 (citing *Aqua Products*, 872 F.3d at 1311 (O’Malley, J.)), with *Hunting Titan, Inc. v. DynaEnergetics Europe GmbH*, IPR2018-00600, Paper 67 at 4 (PTAB July 6, 2020) (concluding that the Board may raise a ground of unpatentability that a petitioner did not advance, or insufficiently developed, against substitute claims under certain rare circumstances) (Precedential Opinion Panel decision). “Thus, [we] determine[] whether substitute claims are unpatentable by a preponderance of the evidence based on the entirety of the record, including any opposition made by the petitioner.” *Lectrosonics*, Paper 15 at 4

Notwithstanding the foregoing, Patent Owner’s proposed substitute claims 15 and 16 must meet the statutory requirements of 35 U.S.C. § 316(d) and the procedural requirements of 37 C.F.R. § 42.121. *Lectrosonics*, Paper 15 at 4–8. Accordingly, Patent Owner must demonstrate: (1) the amendment provides a claim listing; (2) the amendment proposes a reasonable number of substitute claims; (3) the amendment responds to a ground of unpatentability involved in the trial; (4) the proposed claims are supported in the original disclosure (and any earlier filed disclosure for which the benefit of filing date is sought); (5) the amendment does not seek to enlarge the scope of the claims of the patent; and (6) the amendment does not seek to introduce new subject matter. *See* 35 U.S.C. § 316(d); 37 C.F.R. § 42.121. We begin our analysis by addressing each requirement in turn,

and then we address whether Petitioner demonstrates by a preponderance of the evidence that proposed substitute claims 15 and 16 are unpatentable.

1. *Claim Listing*

The revised motion to amend includes a claim listing, as required by 37 C.F.R. § 42.121(b). Ex. 2002, 2–4; *Lectrosonics*, Paper 15 at 8.

2. *Reasonable Number of Substitute Claims*

“There is a rebuttable presumption that a reasonable number of substitute claims per challenged claim is one (1) substitute claim.” *Lectrosonics*, Paper 15 at 4–5 (citing 37 C.F.R. § 42.121(a)(3)). The Petition challenges six claims, and the Revised Motion to Amend proposes two substitute claims, which is fewer than one substitute claim per each challenged claim. Rev. Mot. 1. Petitioner has not argued that there is an unreasonable number of substitute claims proposed. We determine that the number of proposed substitute claims is reasonable.

3. *Responsive to Ground of Unpatentability*

We next consider whether the proposed substitute claims respond to a ground of unpatentability involved in this trial. *Lectrosonics*, Paper 15 at 5–6. Patent Owner argues the motion to amend is responsive to the instituted grounds insofar as “the substitute claims incorporate limitations that distinguish over the references upon which this Inter Partes Review was instituted.” Rev. Mot. 1, 10–12. Petitioner has not argued any issues to the contrary. We agree that the amended language, as marked in Exhibit 2002, addresses the references presented in the grounds of unpatentability raised in the Petition, and are thus responsive to a ground of unpatentability involved in this trial.

4. *Scope of Amended Claims*

“A motion to amend may not present substitute claims that enlarge the scope of the claims of the challenged patent.” *Lectrosonics*, Paper 15 at 6–7 (citing 35 U.S.C. § 316(d)(3); 37 C.F.R. § 41.121(a)(2)(ii)). Patent Owner argues that proposed substitute claim 15 is narrower in scope than originally challenged claim 5, which it replaces. Rev. Mot. 3. Specifically, Patent Owner states that proposed substitute claim 15 “has been amended to explicitly recite analyzing each of the plurality of input signals, wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals,” and further, that proposed substitute claim 15 recites the features of originally challenged claim 6. *Id.* Patent Owner further shows proposed substitute claim 16 contains the same language as originally challenged claim 7, amended solely to depend from proposed substitute claim 15. Ex. 2002, 3; Rev. Mot. 12. Petitioner has not argued any issues to the contrary. We agree that Patent Owner has not presented substitute claims that enlarge the scope of the originally challenged claims of the ’219 patent.

5. *New Matter*

“A motion to amend may not present substitute claims that . . . introduce new subject matter.” *Lectrosonics*, Paper 15 at 6–7 (citing 35 U.S.C. § 316(d)(3); 37 C.F.R. § 41.121(a)(2)(ii)). Accordingly, “the Board requires that a motion to amend set forth written description support in the originally filed disclosure of the subject patent for each proposed substitute claim, and also set forth support in an earlier filed disclosure for each claim for which benefit of the filing date of the earlier filed disclosure is sought.” *Id.* at 7 (citing 37 C.F.R. § 42.121(b)(1)–(2)). For this

requirement, Patent Owner must cite “to the original disclosure of the application, as filed, rather than to the patent as issued.” *Id.* at 8.

Patent Owner asserts that the proposed substitute claims are supported by the originally filed disclosure of the '219 patent. Rev. Mot. 4. With respect to the additional language added to proposed substitute claim 15 in the Revised Motion, “wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals,” Patent Owner points to numerous passages in the originally-filed Specification for support. *Id.* at 7 (citing ¶¶ 2, 29, 31, 33, 34, 38, 41, 43, 54, 64, 77).⁴

In its Opposition to Patent Owner’s Revised Motion to Amend, Petitioner does not specifically argue that the added “wherein analyzing . . .” phrase, discussed above, lacks written description. Instead, Petitioner argues that a separate phrase, “the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals” lacks written description support. Pet. Opp. Rev. Mot. 23. Petitioner argues that nearly all of the passages cited by Patent Owner for support, except for paragraphs 30 and 41, with Patent Owner not referencing paragraph 30, are “irrelevant, or at best, describe identification of input source only and do not provide written description support for identification of input signals.” *Id.* at 23–24 (citing Ex. 1015 ¶ 110 (Second Wechselberger Decl.)). Petitioner argues that, because Patent Owner does not rely on paragraph 30 for support of this phrase, Patent Owner thus has not met its burden of production to

⁴ Patent Owner cites to Ex. 1003 for these paragraphs, which appear at Ex. 1003, 1, 8–14, 18, 21–22, 25–26.

make a showing that paragraph 30 provides written description for this phrase. *Id.* at 24.

Petitioner argues that paragraph 41 describes displaying a thumbnail of the content of a DVD in order to identify the DVD as an input source. *Id.* at 23. Petitioner argues that the claims require an identifying of input signals that is distinct from identifying of the input source. *Id.* Petitioner thus concludes that paragraph 41 cannot provide support for both “identifying” acts. *Id.* Petitioner also provides a similar argument for paragraph 30, which Petitioner argues merely describes capturing and displaying images from the incoming video signal for the purpose of identifying and selecting the input source, not for identifying the signal itself. *Id.* at 24–25. For those reasons, Petitioner argues that the originally-filed disclosure that matured into the ’219 Patent lacks written description support for the phrase “the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals.” *Id.* at 25 (emphasis omitted).

In Patent Owner’s Reply to Petitioner’s Opposition, Patent Owner directs our attention to paragraph 42 of the originally-filed application. PO Reply 4–5. Patent Owner argues that paragraph 42 “provides additional support for the recited portions of [proposed] substitute independent Claim 15.” *Id.* at 5.

Petitioner, in its Sur-reply, argues as a threshold matter that Patent Owner fails to satisfy its burden of production in support of its proposed amendment. Pet. Sur-reply 1 (citing *Aqua Prods.*, 872 F.3d at 1341 (Fed. Cir. 2017) (en banc) (Reyna, J., writing for majority) (“There is no disagreement that the patent owner bears a burden of production in

accordance [with] 35 U.S.C. § 316(d).”)). *Id.* Petitioner characterizes Patent Owner’s Reply as consisting entirely of “naked attorney arguments,” which it argues are not a substitute for objective evidence. *Id.* For this reason, Petitioner argues that the Reply and the Revised Motion to Amend should not be accorded any weight as to this issue.

Petitioner further argues that Patent Owner’s reliance on paragraph 42 is presented for the first time in its Reply, and should be disregarded as untimely because the Revised Motion to Amend did not rely on paragraph 42 for written description support of any limitation in proposed substitute claim 15. Pet. Sur-reply 6. Further, Petitioner argues that Patent Owner’s Reply is not responsive to the Opposition because it does not address the limitation that Petitioner identified as lacking written description therein. *Id.* at 7. Petitioner argues that Patent Owner, by not addressing Petitioner’s argument, has waived its arguments against the written description support of that limitation. *Id.*⁵ Petitioner further argues that Patent Owner’s arguments supporting written description conflict with Patent Owner’s arguments contesting Petitioner’s allegation that the Youden reference teaches that limitation, in Petitioner’s obviousness argument against

⁵ Petitioner refers to its own argument regarding the “wherein analyzing” element; however, this appears to be a typographical error as Patent Owner, not Petitioner, has addressed this element. Petitioner, in the prior paragraph and in its Opposition, argues only that the limitation lacking written description is the phrase, “the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals,” and we proceed under that understanding. Pet. Opp. Rev. Mot. 23; Sur-reply 7.

proposed substitute claim 15. *Id.* at 3 (further alleging that under Patent Owner's argument, proposed substitute claim 15 would not be enabled).

We begin with Petitioner's argument that Patent Owner's Reply and its Revised Motion to Amend should not be accorded any weight on this issue because Patent Owner has not produced evidence to support its positions, in accordance with its burden of production under 35 U.S.C. § 316(d).

The burden of production is that of going forward with evidence, which may mean either producing additional evidence or presenting persuasive argument based on new evidence or evidence already of record. *Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008). In the context of a question of written description support, the burdened party is required to produce sufficient evidence and argument to show that all of the claim limitations are supported in the application to which support is required to be shown. *Id.* For example, a patent owner bearing the burden of production to show compliance with the written description requirement may "cite . . . where adequate written description could be found." *Hyatt v. Dudas*, 492 F. 3d 1365, 1371 (Fed. Cir. 2007).

Here, Patent Owner has cited, for each limitation of proposed substitute claims 15 and 16, specific paragraphs in the originally-filed disclosure as showing support for each limitation. Rev. Mot. 4–10. The originally-filed disclosure of the application that matured into the '219 patent, entered in this proceeding as part of Exhibit 1003, is itself evidence that may be relied upon. Patent Owner has not provided mere argument, but instead, has provided evidence through citation to the originally-filed application disclosure. Petitioner has not identified, nor are we aware of,

any additional evidentiary burden required of Patent Owner. At oral hearing, Petitioner was asked whether

we [the Board] could look at the specification and look at the citations that were provided and support for these elements, and ascertain whether or not there's sufficient language in there that would reasonably convey to one with ordinary skill in the art, whether or not the support was there . . . We don't necessarily need an expert from either you telling us it's not there, or them telling it's there, to make that determination.

Tr. 22:19–23:2 (statement of Judge Zecher).

Petitioner responded,

Your Honors, this clearly goes to the weight of the evidence. The Patent Owner has not submitted any evidence to rebut Petitioner's evidence. Therefore, the question is how much weight should be given to Patent Owner's attorney arguments? And other than that, we agree with you, with Your Honors.

Id. at 23:3–7 (statement of Mr. Park).

Accordingly, we are not persuaded by Petitioner's argument that Patent Owner fails to meet its burden of production to show that the proposed substitute claims 15 and 16 satisfy 35 U.S.C. § 316 insofar as Patent Owner has produced evidence to support its position. Accordingly, we decline to accord no weight to the Patent Owner's Reply and Revised Motion to Amend on this issue.

Turning to the merits, the test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to a person of ordinary skill in the art that the inventor had possession of the claimed subject matter at the time of filing, rather than the presence or absence of literal support in the specification for the claim language. *Ariad Pharms., Inc. v. Eli Lilly & Co.*,

598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991); *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983).

We turn first to the claim language itself. Proposed substitute claim 15 sets forth, in relevant part, the following (emphasis in italics added and altered):

wherein the television system is *configured to identify an input source of the plurality of input sources based on the input signal from the input source*, wherein the display is a video content of the content of the input source, wherein each of the plurality of input signals is unique to each of the plurality of input sources, and *the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals, wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals*.

Ex. 2002, 2.

Proposed substitute claim 15 requires identification of the input source and each of the input signals. Identification of the input source is “based on the input signal.” Identification of the input signals are based on “analyzing” each signal, where “analyzing” comprises identifying an image from each signal. We agree with Petitioner that of the sections of the originally-filed application (“the ‘801 application”) that were identified by Patent Owner as providing support, only paragraph 41 provides relevant disclosure. Pet. Opp. Rev. Mot. 23. We further agree with Petitioner that the claim requires an identifying of input signals that is distinct from identifying of the input source. *Id.*

However, we agree with Patent Owner that paragraph 41 of the ‘801 application provides support for the identification of both input source and

input signal, where the input signal identification comprises identifying an image therein. Paragraph 41 states that an input source may be identified “based on . . . identification of the device that is connected by automatic signal sensing.” Ex. 1003, 200 (¶ 41). Paragraph 41 also states that the television can identify the content of the input sources, such as by “an image from the movie on the DVD.” *Id.* Paragraph 41 thereby describes both identifying an input source based on the input signal from the input source (by “automatic signal analysis”) and analyzing the input signal by identifying an image from the input signal (e.g., by “an image from the movie on the DVD”). Accordingly, we determine that paragraph 41 of the ’801 application provides support for an identifying of input signals, by identifying an image, that is separate from identifying the input source.

Based upon the above discussion, and considering the entirety of the record, we find by a preponderance of the evidence that Patent Owner’s proposed substitute claim 15 has adequate support in the original disclosure of the ’801 application that matured into the ’219 patent. We further find that proposed substituted claim 16, depending from that claim, to be supported by the original disclosure of the ’801 application. However, for the reasons set forth in Section III, *infra*, we determine that proposed substitute claims 15 and 16 are not patentable.

III. PATENTABILITY

A. Legal Standards

A claim is unpatentable under § 103(a) 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.

KSR Int’l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007). 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) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations).⁶ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We analyze the asserted grounds based on obviousness with these principles in mind.

B. Level of Skill in the Art

Petitioner offers an assessment as to the level of skill in the art as of the time the ’219 patent was filed. Pet. 18–19. Relying upon a Declaration of Dr. Anthony Wechselberger (hereinafter, the “Wechselberger Declaration”), Petitioner asserts a person of ordinary skill in the art would have possessed a “Bachelor of Science in Electrical Engineering or Computer Engineering, or the equivalent,” as well as “approximately two years of experience with user interfaces as applied in the digital television or TV set-top box related fields.” *Id.* (citing Ex. 1002 ¶¶ 22–26 (Wechselberger Decl.)). Patent Owner does not offer an alternative assessment of the level of skill in the art in its Revised Motion to Amend. *See generally* Revised Mot. Patent Owner has cancelled the originally challenged claims, and proposed substitute claims 15 and 16. *Id.* Neither

⁶ In its Revised Motion to Amend and its Reply to Petitioner’s Opposition to the Revised Motion to Amend, Patent Owner does not present arguments or evidence of secondary considerations. *See generally* Revised Mot.; PO Reply.

party has asserted any differences in the level of skill in the relevant prior art implicated by the Revised Motion to Amend. Accordingly, we adopt the undisputed assessment offered by Petitioner because it is supported by the Wechselberger Declaration and it is consistent with the '219 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (explaining that specific findings regarding ordinary skill level are not required “where the prior art itself reflects an appropriate level and a need for testimony is not shown” (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985))).

C. Claim Construction

Petitioner submits that all terms of the challenged claims should be interpreted according to their plain and ordinary meaning. Pet. 19. In its Revised Motion to Amend, Patent Owner did not specifically address the construction of the claim terms. *See generally* Revised Mot. Patent Owner has cancelled the originally challenged claims, and proposed substitute claims 15 and 16. Neither party has asserted claim construction specific to the proposed substitute claims.

The Petition was filed on June 28, 2019, after the effective date of the rule change that replaced the broadest reasonable interpretation standard. *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, 51,340, 51,358 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b) (2019)).

Accordingly, we apply the federal court claim construction standard that is used to construe a claim in a civil action under 35 U.S.C. § 282(b),

construing the claim in accordance with the ordinary and customary meaning of such claim, as understood by one of ordinary skill in the art in the context of the patent, and the prosecution history pertaining to the patent, as articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). “[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” *Nidec Motor Corp.*, 868 F.3d at 1017 (quoting *Vivid Techs, Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). We determine that no terms require explicit construction.

D. Asserted Obviousness over Aratani and Youden

Petitioner contends that the combination of Aratani and Youden discloses each and every limitation of claims 15 and 16, and provides reasoning as to why a person of ordinary skill in the art would have been prompted to combine the teachings of these references. Pet. Opp. Rev. Mot. 5–19.⁷ Petitioner also relies upon a second Wechselberger Declaration to support its positions. Ex. 1015. We begin our analysis with brief overviews of Aratani and Youden.

1. Overview of Aratani

Aratani generally relates to a television monitor that operates as the monitor for an associated computer. Ex. 1006, code (57), Fig. 1. Figure 1 is reproduced below.

⁷ Although Petitioner does not specify the statute, the applicable obviousness statute for claims of the ’219 patent, including proposed substitute claims, is 35 U.S.C. § 103(a).

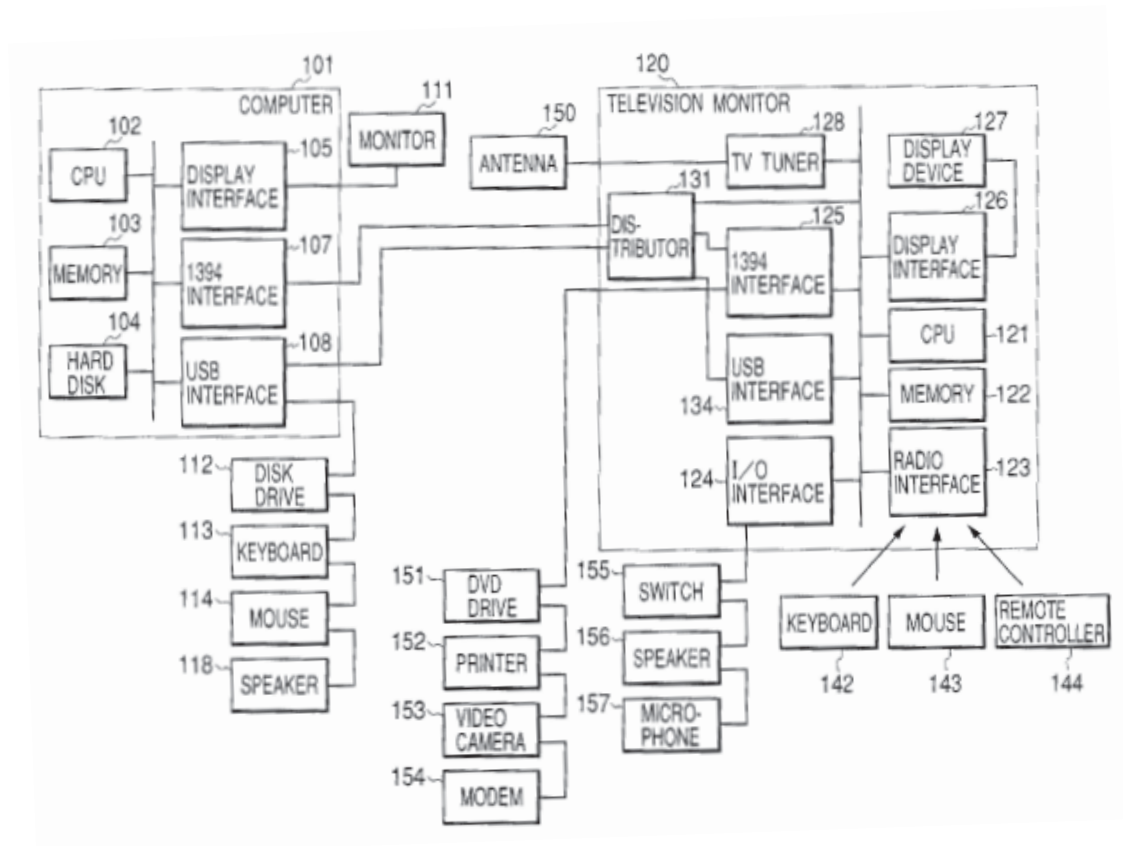


Figure 1 illustrates a computer connected to a television monitor, in which the monitor can receive signals from a keyboard, mouse, and remote controller, and is connected to a television antenna, computer, and additional devices such as a DVD drive, printer, video camera, and modem. *Id.* ¶¶ 12, 22–27.

In Aratani, the television monitor may be operated in either a TV mode or a computer mode. *Id.* ¶ 32. In computer mode, the computer automatically recognizes the TV monitor as a USB hub and display device, and recognizes devices connected to the TV as input/output devices of the computer. *Id.* ¶¶ 32, 42.

2. Overview of Youden

Youden generally relates to a method of selecting video content to be displayed from among a plurality of video inputs. Ex. 1004, code (57). The video content from all video inputs is simultaneously displayed, permitting a user to select from among the inputs. *Id.* Figure 4 is illustrative of the user interface display and reproduced below.

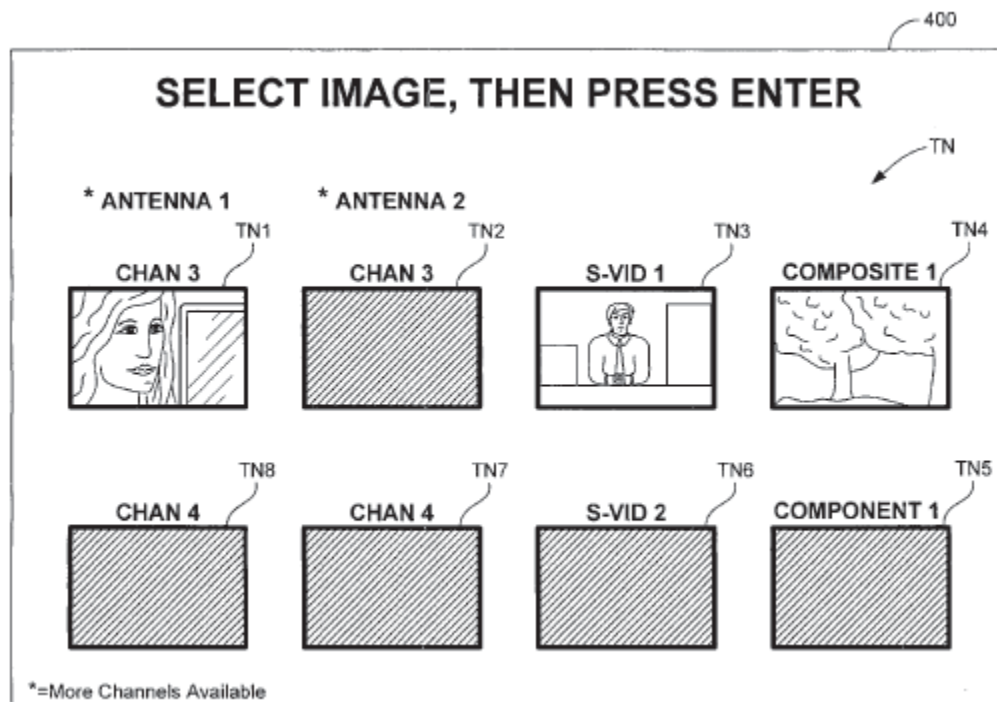


Figure 4 portrays two rows of input sources having content displayed for each input source that is available. *Id.* ¶ 26.

Youden provides an exemplary embodiment in which the video display device has six video inputs and eight video input thumbnails. *Id.* ¶ 26, Fig. 4. The video inputs are: two radiofrequency ("RF") video inputs labeled "ANTENNA 1" and "ANTENNA 2," two S-video inputs labeled "S-VID 1" and "S-VID 2," a composite video input labeled "COMPOSITE 1," and a component video input labeled "COMPONENT 1." *Id.* The video

content of the video inputs are displayed as video thumbnails TN1–TN8, in which each of the S-video, composite video, and component video inputs is assigned a separate thumbnail (TN3–TN6) that displays the content of the input, if any exists. *Id.* ¶¶ 26–27, Fig. 4. The two RF video inputs are displayed as four video input thumbnails, in which the first video input is displayed as TN1 and TN8, showing the content that is being presented on channels 3 and 4, respectively, of the first RF video input. *Id.* ¶ 26, Fig. 4. The second video input is displayed as TN2 and TN7, showing the content that is being presented on channels 3 and 4, respectively, of the second RF video input. *Id.*

3. *Analysis*

Based on the fully developed trial record, we agree with Petitioner that the combination of Aratani and Youden renders proposed substitute claims 15 and 16 obvious. Notably, Petitioner provides claim mappings of each individual limitation of the challenged claims to Aratani or Youden. Pet. Opp. Rev. Mot. 5–19. We discuss below Petitioner’s contentions regarding proposed substitute claims 15 and 16.

a) *Petitioner’s Proffered Obviousness Challenge*

The preamble of proposed substitute claim 15, denoted limitation 15[a], recites “[a] method for on-screen managing and navigating television system functionality and input source selection.” Petitioner contends this claim language, to the extent it is limiting, is met by Aratani’s description of television monitor 120, wherein a user may manage an on-screen display, navigate its functionalities, and select its inputs. Pet. Opp. Rev. Mot. 6 (citing Ex. 1006, Figs. 1, 4, ¶¶ 27, 36, 40–41; Ex. 1015 ¶¶ 18–19).

Limitation 15[b] recites, “displaying non-computer based content on a display device of a television system through the television system.”

Petitioner contends this claim language is met by Aratani’s description of display device 127, wherein the display device displays television broadcasts received through antenna and television tuner. Pet. Opp. Rev. Mot. 6–7 (citing Ex. 1006, Figs. 1–2, ¶¶ 36, 40; Ex. 1015 ¶¶ 22–23).

Limitation 15[c] recites, “wherein the television system is configured to identify an input source of the plurality of input sources based on the input signal from the input source.” Petitioner contends this claim language is met by Youden’s description of a video selection and display device determining whether an input signal is present at an input connector; e.g., by identifying Antenna 1 based on the presence of a signal at Antenna 1’s port. *Id.* at 7 (citing Ex. 1004, Fig. 4, ¶¶ 26–27; Ex. 1015 ¶ 26). Petitioner further contends that Youden, after identifying the presence of input signals at each connector, further analyzes the signals to determine what channel it represents, and indicates the availability of such channels on the screen. *Id.* at 7–8 (citing Ex. 1004, Fig. 4, ¶¶ 26–27; Ex. 1015 ¶¶ 27–28).

Limitation 15[d] recites, “wherein the display is a video content of the content of the input source.” Petitioner contends this claim language is met by Aratani’s description of television monitor 120, displaying the television broadcast received through TV tuner 129, wherein the TV tuner corresponds to the claimed input source and its video output corresponds to the video content of the content of the input source. *Id.* at 8–9 (citing Ex. 1006 ¶ 36; Ex. 1015 ¶¶ 31–32).

Limitation 15[e] recites, “wherein each of the plurality of input signals is unique to each of the plurality of input sources.” Petitioner

contends this claim language is met by Aratani's description of input sources of TV tuner 129 and computer 101, wherein each device provides its own unique input signal. Pet. Opp. Rev. Mot. 9 (citing Ex. 1006, Fig. 1, ¶ 36; Ex. 1015 ¶¶ 34–35).

Limitation 15[f] recites, “the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals.” Petitioner contends this claim language is met by Youden's description of its video selection and display device, which analyzes each of the input signals to determine what channels are available and captures and displays thumbnails of the video content of each channel. *Id.* at 9–10 (citing Ex. 1004, Fig. 4, ¶¶ 26–27; Ex. 1015 ¶¶ 37–39). Petitioner further cites to Youden's description of an asterisk that is displayed to indicate that additional channels are available, and permitting the user to select and display the thumbnail video content of those additional channels. *Id.*

Limitation 15[g] recites, “wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals.” Petitioner contends this claim language is met by Youden's description of analyzing each of the input signals to determine what channels are available, if any, and then capturing thumbnails of the video content of each of the available channels. *Id.* at 10–11 (citing Ex. 1004, Fig. 4, ¶¶ 26–27; Ex. 1015 ¶¶ 41–42).

Limitation 15[h] recites, “receiving a computer related command at the television system.” Petitioner contends this claim language is met by Aratani's description of TV monitor 120 entering a PC mode and displaying content from computer 101 “when a PC key 401 of the remote controller 144 or a PC key 501 of the switch 155 is pressed.” Pet. Opp. Rev. Mot. 11

(citing Ex. 1006, ¶ 34; Ex. 1015 ¶¶ 44). Petitioner further contends that Aratani's TV monitor, when in PC mode, permits the user to "control the computer 101 by using the keyboard 142 and the mouse 143, which are input/output devices of the TV monitor 120," and that a signal "related to control or interaction with a personal computer" is considered by the '219 patent to be a computer command. *Id.* at 12 (citing Ex. 1006 ¶ 52; Ex. 1001, 10:44–46; Ex. 1015 ¶¶ 45–46).

Limitation 15[i] recites, "forwarding the computer command to a computer connected to the television system." Petitioner contends this claim language is met by Aratani's description of a user requesting that the TV monitor transition to the PC mode, by pressing PC key 401 on Remote Controller 144, or Switch 155. *Pet. Opp. Rev. Mot.* 12 (citing Ex. 1006, ¶ 41; Ex. 1015 ¶ 48). Petitioner further contends that Aratani's TV monitor, in response, turns on distributor 131 and forwards this computer command to computer 101 in the form of signals to its interfaces, initiating a handshaking procedure that ultimately allows computer 101 to recognize TV monitor 120 and its various peripherals, and to begin displaying its video content on display device 127. *Id.* at 12–13 (citing Ex. 1006, Fig. 3 (S606, S613); ¶¶ 32, 44, 48; Ex. 1015 ¶ 49). Petitioner contends that either the transmission of signals from TV monitor to computer 101, or the transmission of signals from peripherals to the computer through its USB interface, corresponds to the claimed "forwarding the computer command to a computer connected to the television system." *Id.* at 13 (citing Ex. 1006 ¶¶ 32, 50–51; Ex. 1015 ¶ 49–51).

Limitation 15[j] recites, "transitioning the television system from displaying the non-computer based content to display a computer source

content from the computer.” Petitioner contends this claim language is met by Aratani’s description of the TV monitor transitioning from display of, for example, video content of the TV tuner 128 on its display device 127, to display of the video content from the computer when the TV monitor enters the PC mode. Pet. Opp. Rev. Mot. 13–14 (citing Ex. 1006 ¶¶ 32, 49; Ex. 1015 ¶¶ 53–55).

Limitation 15[k] recites, “receiving a command from the computer.” Petitioner contends this claim language is met by Aratani’s description of a handshaking process initiated when the TV monitor enters the PC mode, allowing the computer to recognize the TV monitor and its peripherals, and begin displaying its video content on display device 127. *Id.* at 14 (citing its discussion of limitation 15[h]). Petitioner further contends that during the handshaking process, TV monitor 120 receives a series of commands, from computer 101, such as “control data indicating that [the computer] has recognized connection of the virtual USB hub.” *Id.* at 14–15 (citing Ex. 1006, Fig. 3, ¶¶ 46 (S607), 48 (S611); Ex. 1015 ¶¶ 58–60).

Limitation 15[l] recites, “transitioning the television system from displaying the computer source content to display television based content.” Petitioner contends this claim language is met by Aratani’s description of the TV monitor transitioning from displaying computer video content to displaying video content from the TV tuner. *Id.* at 15 (citing Ex. 1006 ¶¶ 36, 52; Ex. 1015 ¶¶ 62–64).

Proposed substitute claim 16 depends from proposed substitute claim 15 and further recites comprising “processing television and computer commands on the television system while displaying computer source content.” Petitioner contends this claim language is met by Aratani’s

description of the user controlling the computer using keyboard and mouse (computer command), and the user transitioning the TV monitor to the TV mode using remote controller or switch key (television command), while the TV monitor in PC mode displays video content from the computer. Pet. Opp. Rev. Mot. 17–19 (citing Ex. 1006 ¶¶ 32, 49, 52; Ex. 1015 ¶¶ 72–74).

Turning to rationale to combine, Petitioner contends that Aratani and Youden are analogous art to the '219 patent, because each of Aratani, Youden, and the '219 patent relate to the identification, selection, and display of video content. *Id.* at 15–16. Petitioner further contends that one having ordinary skill in the art would have been motivated to apply “Youden’s feature for analyzing input signals to identify channels embedded in the input signals and capturing thumbnails of the video content for each available channels, and displaying such thumbnails on the display (*see* elements [15c], [15f], and [15g], above)—to Aratani’s television monitor 120.” *Id.* at 16 (emphases omitted). Petitioner contends that one having ordinary skill in the art would recognize such a combination as merely applying known techniques (Youden’s technique of analyzing input signals to identify embedded channels and video thumbnails) to a known device ready for improvement (Aratani’s television monitor). *Id.* (citing Ex. 1015 ¶ 67). Petitioner further contends that Youden provides express teaching, suggestion, and motivation to apply its technique to improve televisions not having such capability, citing Youden’s statement that “the need to tune the television 106 to a predetermined station in order to view video on an RF input” confuses and frustrates viewers, because “[i]f the selected station of the television 106 is not the correct channel, ... all that will be displayed on the television is ‘snow.’” *Id.* (citing Ex. 1004 ¶ 4; Ex. 1015 ¶ 68) (alteration

in original). Petitioner cites Youden as solving such a recognized television problem with its solution of further analyzing the input signal to identify the available channels within and display thumbnails for increased user ease of selecting a desired input and channel, without manually searching for them. *Id.* at 17 (citing Ex. 1004, Fig. 4, ¶¶ 26–27; Ex. 1015 ¶ 68).

The only limitation that Patent Owner disputes that the asserted prior does not teach is limitation 15[g], “wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals,” which we address below. *See* PO Reply 1–3.

b) *Patent Owner’s Reply*

Patent Owner argues that Petitioner errs by relying on Youden to teach “wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals.” PO Reply 1. Patent Owner characterizes Youden as teaching “that a television system may identify an image *after the channel is already identified*.” *Id.* at 3. Patent Owner points to Petitioner’s characterization of Youden as that “Youden ‘first determines whether input signals are present at each connector’ and ‘captures and displays thumbnails of the video content from each channel . . . to *indicate* their availability.’” *Id.* (citing Pet. Opp. Rev. Mot. 10). Patent Owner states that Petitioner “explicitly states that the capture of thumbnails occurs *after* analyzing each signal to determine what channels are available.” *Id.* (citing Pet. Opp. Rev. Mot. 10) (emphasis omitted).

Patent Owner argues, proposed substituted “[c]laim 15 does not say ‘analyze, and then find an image.’” *Id.* Patent Owner emphasizes the requirements of proposed substitute claim 15 as reciting, “the television

system **identifies** each of the plurality of signals **by analyzing** each of the plurality of input signals, *wherein analyzing* each of the plurality of input signals **comprises identifying an image** from one of the plurality of input signals.” *Id.* (citing Mot. Amend 2).

c) *Petitioner’s Sur-Reply*

Petitioner argues that Patent Owner’s argument is inconsistent with our prior characterization of Youden as disclosing “a video selection and display device that ... *analyzes* the input signal to determine which channel it represents, and *further analyzes* the video signal to generate a video image that is displayed as a thumbnail”). Pet. Sur-reply 2–3 (citing Prelim. Guid. 12). Petitioner disputes Patent Owner’s characterization of Petitioner’s Opposition to the Revised Motion to Amend as deviating from our prior characterization, with which Petitioner and its expert agree. *Id.* (citing Pet. Opp. Rev. Mot. 10–11); Ex. 1015 ¶ 38.

Petitioner further argues that Patent Owner’s argument directed to Youden in its Reply is not consistent with its argument on written description in its Revised Motion to Amend. Pet. Sur-reply 3. More specifically, Petitioner argues that, in the Revised Motion to Amend, Patent Owner argued that the ’801 Application’s disclosure, at paragraph 41, “of capturing images of video playback content for thumbnails provides written description support for, and thus corresponds to, the ‘*wherein analyzing*’ element.” *Id.* (citing Rev. Mot. 7). Petitioner argues that Youden’s disclosure of capturing images of video playback for thumbnails would also correspond to the “wherein analyzing” element. *Id.* Petitioner argues that Patent Owner’s assertion in its Reply, that Youden’s disclosure of capturing images of video playback for thumbnails does not correspond to the

“wherein analyzing” element, is in effect, an assertion that the “wherein analyzing” element cannot find written description or enablement from a disclosure of capturing images of video playback for thumbnails in its own originally-filed disclosure. *Id.* at 4–5 (citing Ex. 1015 ¶¶ 91–108).

d) *Determination*

We determine that the proposed combination of Aratani and Youden teaches or suggests proposed substitute claims 15 and 16 in the manner proposed by Petitioner, and we adopt Petitioner’s reasoning as our own, with the following additional explanation regarding limitation 15[g].

Limitation 15[g] recites, “wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals.” Neither Patent Owner nor Petitioner have provided an explicit construction of that phrase. *See supra* Section II.C. However, Patent Owner and Petitioner have proffered interpretations as to what a reference must disclose in order to meet that limitation.

According to Patent Owner, the plain language of the claim requires that “‘identifying an image from one of the plurality of input signals’ is part of the television system *identifying* each of the plurality of input signals.” PO Reply 3. Patent Owner asserts that such language excludes identifying an image “*after the channel is already identified.*” *Id.* Patent Owner relies solely on the claim language, and not on expert testimony or the Specification of the ’219 patent. *Id.*

Proposed substitute claim 15 recites the actions of the television system in limitations 15[c], [f], [g]:

[c] wherein the television system is configured to identify an input source of the plurality of input sources based on the input signal from the input source . . .

[f] and the television system identifies each of the plurality of input signals by analyzing each of the plurality of input signals

[g] wherein analyzing each of the plurality of input signals comprises identifying an image from one of the plurality of input signals

In its Petition, when addressing the limitations of originally challenged claim 1 similar to those of limitations 15[c], [f], Petitioner points to Youden's treatment of a signal connected to the "Antenna 1" connector, wherein the signal may contain multiple potential channels of content. Pet. 27–28 (citing Ex. 1004 ¶ 27, Fig. 4). Petitioner characterizes Youden as analyzing that signal to identify, on the screen, the specific channel that the signal is tuned to. *Id.* at 27. Petitioner contends that Youden identifies the signal with respect to a specific channel of the signal on Antenna 1, and not merely the existence of any signal of Antenna 1, to identify the signal as "Antenna 1." *Id.* In its Opposition to the Revised Motion to Amend, addressing limitation 15[g], Petitioner points to Youden's capture of thumbnails of the video content of each channel. Pet. Opp. Rev. Mot. 11. Petitioner further points to Youden as identifying the input signal by indicating, on the screen, the specific channel next to the thumbnail image. *Id.* at 10.

We determine Petitioner's interpretation of Youden's teaching to be consistent with the language of proposed substitute claim 15 identified above. Under this interpretation, Youden determines an input signal is present, analyzes the signal to determine which channel it represents, then identifies the input signal by indicating that channel on the screen next to an image of the video signal from that channel. Petitioner thus finds Youden to identify the input signal by the simultaneous display of the channel and the

thumbnail image. Such an interpretation is consistent with Patent Owner's reasoning that the claims require identification of the image as part of the identification of the input signal. PO Reply 3.

We further determine that there is no conflict in Petitioner's characterization of Youden for limitation 15[g] considering Patent Owner's indication of support in the originally-filed disclosure. Patent Owner points, *inter alia*, to paragraph 41 as providing support for claim limitations 15 [c], [f], [g]. Rev. Mot. 5–7. In the oral hearing, Patent Owner also characterized the identifying of the signal as requiring that analyzing the input signal includes, but not necessarily being based on, identifying an image.

Tr. 12:14–17 (“the proposed amendment does not require that the input signal is identified based on an image. It just recites that analyzing the input signal includes identifying an image.”) (Statement of Mr. Johnson). We determine Petitioner's characterization is also consistent with Youden's identification of the input signal by indicating the channel next to an image.

Accordingly, based on the record of the proceeding, Petitioner has demonstrated by a preponderance of the evidence that proposed substitute claims 15 and 16 would have been obvious over the combined teachings of Aratani and Youden.

E. Asserted Obviousness over Aratani, Youden and Yu

Petitioner also contends that proposed substitute claims 15 and 16 of the '219 patent are unpatentable as being obvious under 35 U.S.C. § 103(a) over the combined teachings or suggestions of Aratani, Youden, and Yu. Pet. Opp. Rev. Mot. 19–22. Petitioner contends that the combination of Aratani, Youden, and Yu discloses each and every limitation of proposed substitute claims 15 and 16, and provides reasoning as to why a person of

ordinary skill in the art would have been prompted to combine the teachings of these references. *Id.* Petitioner also relies upon the second Wechselberger Declaration to support its positions. Ex. 1015. We begin our analysis with a brief overview of Yu.

1. Overview of Yu

Yu generally relates to a method of controlling a switching mechanism via a computer to match an audio/visual mode selected via the computer system. Ex. 1013 ¶ 6. Figure 2 is reproduced below.

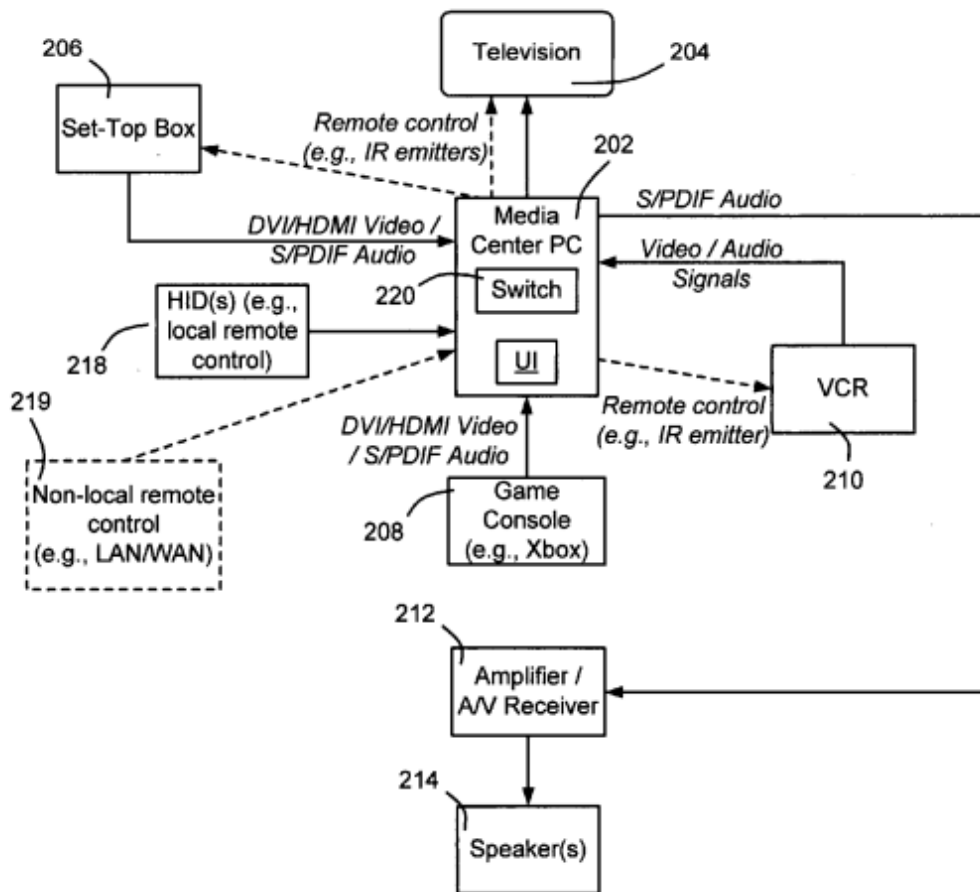


Figure 2 illustrates a configuration of audio/visual devices having connections coupled via a personal computer system-controlled internal switching mechanism. *Id.* ¶ 10. The computer is capable of switching

different output sources to different inputs to match a selected configuration.

Id. ¶ 6.

2. *Analysis*

Based on the fully developed trial record, we agree with Petitioner that the combination of Aratani, Youden, and Yu renders proposed substitute claims 15 and 16 obvious. Notably, Petitioner provides claim mappings of each individual limitation of the challenged claims to Aratani, Youden, or Yu. Pet. Opp. Rev. Mot. 19–21. We discuss below Petitioner’s contentions regarding claims 15 and 16.

a) *Petitioner’s Proffered Combination*

Petitioner relies upon Aratani and Youden for each of the limitations of proposed substituted claims 15 and 16 as presented in the prior ground, except that Petitioner relies upon Yu for the teaching of limitations 15[k], [l]. Pet. Opp. Rev. Mot. 19–21.

With respect to limitation 15[k], “receiving a command from the computer,” Petitioner points to Yu’s description of computer 302 that may emit control signals to automatically turn on a television and change the television’s video mode to the required input. *Id.* at 19–20 (citing Ex. 1013, Fig. 3, ¶ 31; Ex. 1015 ¶¶ 77–78).

With respect to limitation 15[l], “transitioning the television system from displaying the computer source content to display television based content,” Petitioner points to Yu’s description, “[i]f the user decides to watch or record television, the user selects a TV (and/or recording) mode, and the PC switches the video and audio for TV/recording functionality.” *Id.* at 20 (citing Ex. 1013, Fig. 3, ¶ 27; Ex. 1015 ¶¶ 80–81). Petitioner contends that the claim does not require the transitioning to be performed by

the television system, and therefore, Yu's transitioning performed by the computer teaches that limitation. *Id.* at 20–21.

Turning to rationale to combine, Petitioner contends that Aratani and Yu are analogous art to the '219 patent. *Id.* at 21. Petitioner contends that both Aratani's and Yu's systems relate to the identification, selection, and display of video content. *Id.* (citing Ex. 1004, ¶¶ 17–20, 27; Ex 1013, Abstr., Figs. 2–3, ¶¶ 27–33). Petitioner contends that the '219 patent also relates to the identification, selection, and display of video content, and therefore, Aratani and Yu are analogous art. *Id.* at 21–22. Petitioner further contends that one having ordinary skill in the art would have been motivated to apply Yu's cited teachings to Aratani because Yu “expressly states that doing so would provide users with the flexibility of controlling the television display from a computer, which ‘can provide a rich UI experience that is far more sophisticated than on-screen menus and the like those provided by conventional AV devices.’” *Id.* at 22 (citing Ex. 1013 ¶ 43; Ex. 1015 ¶ 85) (emphasis omitted).

b) *Patent Owner's Revised Motion to Amend and Reply*

Patent Owner argues that Yu does not disclose transitioning the television system from displaying the computer source content to display television content, except as performed by Yu's computer. Rev. Mot. Amend. 11–12 (citing Ex. 1013, Fig. 2, ¶¶ 27–31). Patent Owner does not further discuss this element in its Reply.

c) *Petitioner's Sur-Reply*

Petitioner does not further discuss this issue in its Sur-reply.

d) *Determination*

We determine that the proposed combination of Aratani, Youden, and Yu teaches or suggests proposed substitute claims 15 and 16 in the manner proposed by Petitioner, and we adopt Petitioner’s reasoning as our own, with the following additional explanation regarding limitation 15[l]. Patent Owner does not explain why the transitioning recited in limitation 15[l] must be performed by the computer. Patent Owner does not suggest a meaning for that term outside its plain meaning, or provide evidence as to what one having ordinary skill in the art would consider the term to mean, or how the term should be interpreted in light of the Specification of the ’219 patent. Accordingly, we review the term under its plain meaning, in which claim proposed substitute 15 recites a “method comprising . . . transitioning the television system from displaying the computer course content to display television based content.” This claim does not specify the entity that performs the transitioning step, and we agree with Petitioner that the plain language of the claim permits the transitioning to be performed by the computer.

Accordingly, based on the record of the proceeding, Petitioner has shown by a preponderance of the evidence that the subject matter of proposed substitute claims 15 and 16 would have been obvious over the combined teachings of Aratani, Youden, and Yu.

IV. CONCLUSIONS

Pursuant to Patent Owner’s non-contingent request, we cancel claims 1–3 and 5–7. We, however, deny Patent Owner’s request to amend the ’219 patent to add proposed substitute claims 15 and 16 because Petitioner has

demonstrated by a preponderance of the evidence that both claims are unpatentable under § 103(a) as obvious over the combined teachings of Aratani and Youden, and as obvious over the combined teachings of Aratani, Youden, and Yu.⁸ A summary of our conclusions is set forth in the table reproduced below.

Motion to Amend Outcome	Claims
Original Claims Cancelled by Amendment	1–3, 5–7
Substitute Claims Proposed in the Amendment	15, 16
Substitute Claims: Motion to Amend Granted	
Substitute Claims: Motion to Amend Denied	15, 16
Substitute Claims: Not Reached	

V. ORDER

Accordingly, it is

ORDERED Patent Owner’s Revised Motion to Amend is *granted* as to its request to cancel claims 1–3 and 5–7 of the ’219 patent;

⁸ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

FURTHER ORDERED that Patent Owner's Revised Motion to Amend is *denied* as to its request to enter proposed substitute claims 15 and 16; and

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

IPR2019-01269
Patent 8,863,219 B2

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