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Paper 12
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

STRYKER CORPORATION,
Petitioner,

v.

KARL STORZ ENDOSCOPY-AMERICA, INC.,
Patent Owner.

Case IPR2015-00678
Patent 8,069,420 B2

Before BRYAN F. MOORE, BARRY L. GROSSMAN, and MICHELLE N. WORMMEESTER, *Administrative Patent Judges.*

GROSSMAN, *Administrative Patent Judge*.

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Stryker Corporation ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–4, 6, 7, 9, 10, 12–14, 17, 22, 32–35, 37, 39–43, 46–48, 50–55, 57, 68, 72–74, 76, 77, and 79–83 of U.S. Patent No. 8,069,420 B2 ("the '420 patent"). Paper 2 ("Pet."). Karl Storz Endoscopy-America, Inc. ("Patent Owner") filed a Preliminary Response. Paper 8 ("Prelim. Resp."). We review the Petition under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted "unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition."

On the record before us, we are persuaded, for purposes of this Decision, that it is reasonably likely that Petitioner will prevail in establishing that claims 1, 2, 4, 6, 7, 9, 10, 12–14, 17, 22, 32–35, 37, 39–43, 46–48, 50–55, 57, 68, 72–74, 76, 77, 79, 80, 82, and 83 are not patentable.

A. Related Proceedings

Petitioner states that the '420 patent is involved in *Karl Storz Endoscopy-America, Inc. v. Stryker Corp.*, Case No. 14-00876 (N.D. Cal.), filed February 26, 2014. Pet. 1. The '420 patent also is the subject of pending *inter partes* review IPR2015-00677, filed by Petitioner.

B. The '420 Patent

The '420 patent discloses a system for controlling the communication of medical imaging data. Ex. 1101, col. 1, ll. 7–8. It allows a user to manage multiple data inputs and multiple destinations for the data, and to select which data inputs are viewable at which destinations. *Id.* at col. 2, ll. 19–30. Thus, it can provide an operating surgical team with information it needs, and can also provide to others in the surgical suite or located remotely, who may be assisting or observing the surgical procedure, information they need.

The basic components of the disclosed system are shown in Figure 1, which is reproduced below.

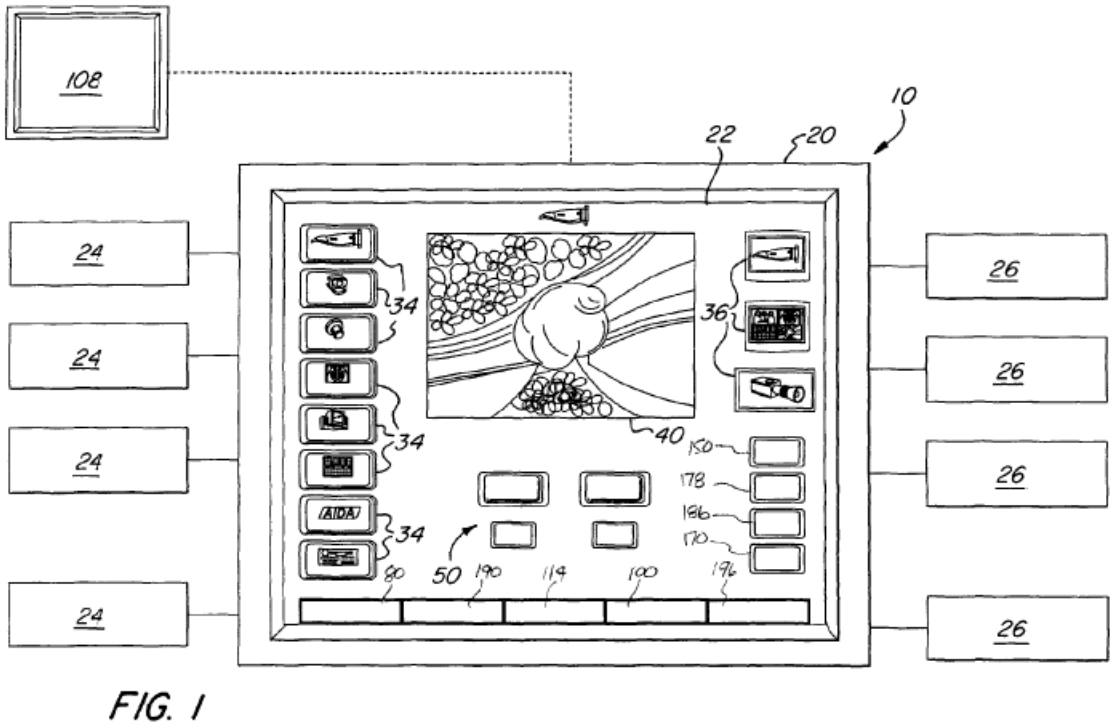

FIG. 1

Figure 1 from the ’420 patent shows a schematic view of the disclosed system for controlling the communication of medical imaging data.

As shown generally in Figure 1, and as described in the written description, the system includes computer 20, touchscreen 22 controlled by computer 20, a plurality of sources 24 of medical imaging data connected to computer 20, and a plurality of destinations 26 for the medical imaging data connected to computer 20. *Id.* at col. 4, ll. 34–38.

Sources 24 may include endoscopic cameras, video endoscopes, room cameras, light cameras, boom cameras, recording, storage, and/or archival devices, image capture devices, a PACS (Picture Archiving and Communication System) computer, or a Hospital Information System, or other devices from which medical imaging data may be received. *Id.* at col. 4, ll. 43–56.

The ’420 patent acknowledges that prior art systems provide medical images from numerous sources to various destinations. *Id.* at col. 1, ll. 17–49. An objective of the disclosed system is to provide a way of interfacing with all of the imaging devices available that is simpler to use and permits quicker execution than known systems. *Id.* at col. 1, ll. 55–67. The emphasis in the disclosure is on the touchscreen interface and its ease of use. *Id.* The fact that 23 of the 24 figures in the patent are screenshots of the touchscreen display in various operating configurations reflects this emphasis.

C. Representative Claim

Claims 1 and 79 are independent claims. Claim 1 is representative and is reproduced below.

> 1. A system for controlling the communication of medical imaging data, comprising:
>
> a computer;
>
> a plurality of sources of medical imaging data in communication with said computer;
>
> a plurality of destinations for the medical imaging data in communication with said computer; and
>
> a touchscreen controlled by said computer for simultaneously displaying a plurality of source icons and a plurality of destination icons;
>
> wherein the plurality of source icons correspond to said plurality of sources in order to allow a user of said system to select a particular source of medical imaging data, and the plurality of destination icons correspond to said plurality of destinations in order to allow the user to select at least one particular destination to receive the medical imaging data supplied by the selected source.

D. References Relied Upon

Petitioner relies upon the following prior art references:

Reference	Date	Exhibit Number
Salandro, U.S. Pat. No. 5,114,548	Iss. Sep. 1, 1992	Ex. 1103
Howell, U.S. Pat. No. 5,767,897	Iss. June 16, 1998	Ex. 1104
Branson, U.S. Pat. Publ. WO 94/23375	Publ. Oct. 13, 1994	Ex. 1105
Allred, U.S. Pat. No. 5,803,905	Iss. Sep. 8, 1998	Ex. 1106
Cooke, U.S. Pat. No. 6,574,629	Iss. June 3, 2003	Ex. 1107
Huber, E.P. 1-306-735	Publ. May 2, 2003	Ex. 1108

Petitioner also relies on the declaration of Harold J. Walbrink (Ex. 1110), proffered as an expert to opine on the patentability of the challenged claims.

E. The Asserted Grounds

Petitioner asserts the following grounds of unpatentability:

Claims Challenged	**References**	**Grounds**
1, 32, 39–41, 43, 46, 47, 50-53, 57, 76, 77, 79	Salandro	35 U.S.C. § 102(b)
2–4, 6, 7, 9, 10, 12–14, 17, 22, 34, 46, 54, 55, 72–74, and 80–83	Salandro and Howell	35 U.S.C. § 103(a)
33, 37, and 48	Salandro and Branson	35 U.S.C. § 103(a)
35	Salandro and Allred	35 U.S.C. § 103(a)

42	Salandro and Cooke	35 U.S.C. § 103(a)
68	Salandro and Huber	35 U.S.C. § 103(a)

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted 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); *In re Cuozzo Speed Technologies LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015) ("Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA," and "the standard was properly adopted by PTO regulation"). Claim terms also are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc*., 504 F.3d 1249, 1257 (Fed. Cir. 2007).

1. Medical Imaging Data

Petitioner proposes a specific construction for the term "medical imaging data," which appears in independent claims 1 and 79. Pet. 5–6. Petitioner proposes that we construe the term to mean "data corresponding to images generated during a medical procedure," thus focusing on *when* the data is generated. *Id.* (citing Ex. 1110 ¶ 30)[1]. Patent Owner asserts that the broadest

[1] We note that paragraph 30 of Mr. Walbrink's declaration (Ex. 1110) is a nearly verbatim repetition of the arguments in the Petition (Pet. 5–6). In order to allow an expert to state an opinion as evidence, we must find that "the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. Repeating verbatim in the declaration of a proposed expert an argument from the Petition is not helpful to a trier of fact. It also does not give that argument enhanced probative value.

reasonable construction of the term "medical imaging data" is "video or still images of a medical procedure," thus focusing on the subject matter of the data. Prelim. Resp. 7–8. Both Petitioner and Patent Owner agree, however, that the claim phrase is limited to a "medical procedure." For purposes of this Decision, we determine that Petitioner's proposed interpretation is too limiting. As explained below, we have not been directed to persuasive evidence to limit medical imaging data to *when* the data is generated, such as "during a medical procedure."

As noted by Petitioner (Pet. 5), the "Background" section of the Specification states that in known prior art medical imaging systems "both still images and live video being acquired *during the surgery* can be output to various different screens or recording devices." Ex. 1101 col. 1, ll. 31–33 (emphasis added). Thus, while the described sources of imaging data in prior art systems are disclosed in the context of images acquired "during surgery," the disclosure of the '420 patent is not so limited. The Specification contains the following extensive listing of the sources of medical imaging data.

> The sources 24 of medical imaging data connected to the computer 20 may include any devices, systems, or networks that generate, acquire, *store*, monitor, or control imaging data for use in generating *medical* images, such as still images or video. For example, the sources 24 may include image acquisition devices, such as endoscopic cameras, video endoscopes, room cameras, light cameras, and boom cameras. Likewise, the sources 24 may include any recording, *storage, and/or archival devices* or systems, such as traditional video cassette recorders or digital video recording devices (such as a linear tape deck or DVD recording device), image capture devices, a PACS (Picture Archiving and Communication System) computer, or *a Hospital Information System*. Finally, the sources 24 may include other devices from which medical imaging data may be received, such as a patient monitor or a central computer for controlling various devices, or may simply be *auxiliary inputs* for connecting

> external devices that may supply medical imaging data to the system.
>
> Additionally, a source 24 may be a source of medical imaging data that receives medical imaging data from yet another source 24. For example, a source 24 may be a linear tape deck that is recording live video as it supplies the video to the computer 20. The linear tape deck, in turn, may receive the live video from an endoscopic camera presently being used on a patient, as is further described below. As another example, a source 24 may be a processor for routing images from multiple other sources 24 to the computer 20 (i.e., a screen splitter), such as a quad image processor.

Id. at col. 4, ll. 39–66 (emphases added). As is clear from this extensive discussion in the Specification, medical imaging data is not limited to data acquired "during a medical procedure," as proposed by Petitioner. Data may come from storage or archival sources or from a hospital information system.

Moreover, the prosecution history cited by Petitioner (Pet. 5–6, citing Ex. 1102) belies Petitioner's proposed construction. During prosecution of the application that matured into the '420 patent, the applicant stated

> [t]he present invention is directed to a system that provides a central point from which a user can control the routing of *medical imaging data*. With the improvement of various audiovisual devices and their increased incorporation into the operating room, it has become *common to have multiple sources of imaging data*, such as, for example, images from different types of cameras or images from different procedures (*such as previously stored diagnostic imaging and current, live video imaging*).

Ex. 1102, p. 114 (emphases added). Applicant referred to "previously stored diagnostic imaging," but did not define the term "diagnostic imaging." Our understanding of the term "diagnostic imaging" is that it is anything that provides images of inside the body, and includes X-rays, CT scans, Nuclear medicine scans,

MRI scans, and Ultrasound. Ex. 3001.[2] It is *not* limited to imaging acquired *during* surgery or a "medical procedure."

Both parties use the phrase "medical procedure" in their respective claim interpretations, thus suggesting their agreement that the phrase "medical imaging data" is limited to something "medical." Neither party, however, directs us to any persuasive evidence that defines the phrase "medical procedure." Patent Owner suggests that the phrase "medical procedure" is limited to "diagnostic and surgical procedures." Prelim. Resp. 8 ("the ['420] patent discusses the need for improved medical imaging systems for performing 'diagnostic and surgical procedures' (i.e. medical procedures)"). Patent Owner, however, does not direct us to any evidence in the '420 patent or elsewhere supporting this proposed interpretation.

The Specification uses the phrase "medical procedure" only once, in the "Background" section of the Specification, to refer generally to "imaging devices potentially useful in a medical procedure." Ex. 1101, col. 1, ll. 63–67. The "Background" section of the Specification uses the word "procedure" or "procedures" several times to refer to diagnostic and surgical procedures. *E.g.*, *id.*, at col. 1, ll. 15–16 ("Today, a wide variety of medical imaging systems are known for performing diagnostic and surgical procedures"); col. 1, ll. 20–22 ("during various types of minimally invasive surgeries – such as endoscopic, arthroscopic, and laparoscopic procedures"); col. 1, ll. 28–31 ("to allow both the surgeon, as well as others in the surgical suite or located remotely therefrom who may be assisting or observing, to better monitor the procedure").

[2] Ex. 3001 is a printout of the Medline Plus website http://www.nlm.nih.gov/medlineplus/diagnosticimaging.html (discussing various types of diagnostic imaging). MedlinePlus is the National Institutes of Health's website produced by the U.S. National Library of Medicine.

A medical dictionary definition of a "procedure is "[a] series of steps taken to accomplish an end;" [a] surgical operation or technique."[3]

As explained above, the '420 patent contains a detailed discussion of what is meant by the phrase "medical imaging data," Thus, the proposed interpretations replace the phrase "medical imaging data" with a new phrase, "medical procedure," of uncertain meaning. It is uncertain from the '420 patent, for example, whether a "medical procedure" is limited to active surgery, whether it also includes diagnostic medical images such as archival X-rays or photographs of a patient "before" and "after" surgery, or whether it is any "series of steps taken to accomplish an end." We see no benefit in substituting an uncertain term, "medical procedure," for the term "medical imaging data" used and described in the Specification.

We agree with the parties, however, that the word "medical" should not be eliminated from the properly construed claim language. Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 389 (1996)). The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction. *Id.* "A claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent." *Id.* "[C]laim terms are construed in light of the specification and prosecution history,

[3] *The American Heritage® Medical Dictionary*. (2007). Retrieved August 21 2015 from http://medical-dictionary.thefreedictionary.com/procedure.

not in isolation." *Pacing Technologies, LLC v. Garmin Int'l, Inc*., 778 F.3d 1021, 1024 (Fed. Cir. 2015).

Independent claims 1 and 79 each recite "[a] system for controlling the communication of *medical* imaging data." The claims refer repeatedly to "medical imaging data." Patent Owner agrees. Prelim. Resp. 9 (independent claims 1 and 79 "require . . . "a system for controlling the communication of medical imaging data.").

The Specification states that "[t]he *present invention* relates to a system for controlling the communication of medical imaging data." Ex. 1101, col. 1, ll. 7–8 (emphasis added). The Specification identifies six objectives "*of the present invention*" all focused on medical imaging data. *Id.* at col. 2, ll. 19–49 (emphasis added). To meet these objectives, the Specification states "*the invention comprises* a system for controlling the communication of medical imaging data," and identifies the medical imaging components of the system. *Id.* at col. 2, ll. 50–65 (emphasis added).

Whether one considers the preamble to be limiting, and the Specification and prosecution history to be a clear disavowal or disclaimer to limit the claims, as found in *Pacing Technologies*, or whether one simply interprets the claims in light of the Specification, as we do here, it is clear that the broadest reasonable interpretation of the claims in light of the Specification is limited to a system for

controlling the communication of medical imaging data. As stated above, both parties asserted a claim construction that limited the claims to *medical* procedures.[4]

Accordingly, for purposes of this Decision, based on the record before us, we determine that the term "medical imaging data" is *not* limited to data acquired during surgery or during a medical procedure. It comprehends all medical imaging information, including previously stored diagnostic imaging information as well as other sources of medical imaging information referred to in the Specification.

We determine, for purposes of this Decision, that specific construction is not required of other terms in the challenged claims.

B. Asserted Grounds of Unpatentability

1. Anticipation by Salandro

Petitioner asserts that claims 1, 32, 39–41, 43, 46, 47, 50–53, 57, 76, 77, and 79 are anticipated under 35 U.S.C. § 102(b) by Salandro. Pet. 8.

"[U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102." *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). *See also Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is

[4] Alternatively, we note that the specific recitation of "medical imaging data" may also be non-functional descriptive material which lacks patentable weight. Whether the recited "imaging data" is related to a medical application does not affect the other limitations of the claim, rather the information is simply routed to a destination. *In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004); *In re Gulack*, 703 F.2d 1381, 1385 (Fed. Cir. 1983) (holding when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability).

found, either expressly or inherently described, in a single prior art reference."). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co*., 868 F.2d 1226, 1236 (Fed. Cir. 1989).

Salandro discloses a "routing switcher." Ex. 1103, col. 1, l. 2. As explained in the Abstract,

> [a] computer routing band switcher is controlled by icons on a display screen which are programmable to represent any one of a number of devices, which can have multiple inputs and outputs, connected to a cross-point switching matrix. Routing is implemented by selection through use of a touch screen or a mouse of an icon representing a desired source device followed by one or more icons representing desired destination devices. In response to inputs through use of the icons, the computer generates control signals for the switching matrix which, instead of cables, utilizes printed circuit boards

Id. at Abstract. Thus, flexible routing of electrical signals is directed through the manipulation of icons on a computer display using either a touchscreen[5] or a mouse input device. *Id.* at col. 1, ll. 29–31; col. 3, ll. 14–18. The disclosed routing switcher has particular application in routing television and audio signals. *Id.* at col. 1, ll. 33–34. Although Salandro discloses generally the use of icons on a computer display, the Salandro disclosure is directed primarily to a routing switcher that includes a printed circuit board arrangement having a plurality of

[5] Salandro refers to a "touch screen" (two words), whereas the '420 patent refers to a "touchscreen" (one word). Both forms appear to be common and acceptable uses. *Compare Dictionary.com Unabridged. Random House, Inc.* http://dictionary.reference.com/browse/touchscreen (accessed: August 31, 2015) with *American Heritage® Dictionary of the English Language, Fifth Edition*. http://www.thefreedictionary.com/touch+screen (accessed August 31 2015). To maintain some consistency, unless we are quoting the Salandro disclosure, we will use the one word style from the '420 patent.

modular cross-point switching units making up the switching matrix. *Id.* at, col. 2, ll. 29–33.

Patent Owner raises only three issues regarding the challenged claims in Ground 1, which we address first.

a. Medical Imaging Data

Petitioner concedes that Salandro "does not expressly disclose a system for controlling the communication of medical imaging data." Pet. 8. Petitioner asserts, however, that the challenged claims are anticipated by Salandro because "the Salandro system could obviously be applied by persons of ordinary skill in the art in an operating room for the communication of medical imaging data. *Id.* (citing Ex. 1110 ¶¶ 49–53).

Patent Owner asserts that Salandro does not disclose a system for communicating "medical imaging data" and "therefore fails to satisfy any claim limitation in the '420 patent that requires "medical imaging data" and as a result does not anticipate any of the challenged claims." Prelim. Resp. 9. According to Patent Owner, Petitioner's contention to the contrary should be rejected because "that contention invokes the issue of obviousness, not anticipation. *Id.* at 10.

There is some flexibility in the strict application of the law concerning anticipation of a patent claim by a single reference.

> "To serve as an anticipation when a reference is silent about an asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."

Continental Can Co. USA v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991). "[T]his modest flexibility in the rule that 'anticipation' requires that every element of the claims appear in a single reference accommodates situations in which the

common knowledge of technologists is not recorded in the reference; that is, where technological facts are known to those in the field of the invention, albeit not known to judges." *Id.* at 1268.[6] Here, we are persuaded based on the extrinsic evidence of the Walbrink Declaration (Ex. 1110) that application of the Salandro system to medical imaging data is inherent in the Salandro disclosure and that it would be so recognized by persons of ordinary skill. A person of ordinary skill would recognize that the video and audio inputs in Salandro, and the electrical circuitry in Salandro for routing electrical signals using icons on a computer display, do not distinguish between medical images or images transmitted for television. Ex. 1110 ¶ 51.

Patent Owner asserts that Salandro could not be adopted for medical imaging because "systems for communicating medical imaging data such as those claimed by the '420 patent are subject to stringent safety standards," and "nothing in Salandro . . . suggests that its systems meet the required safety standards for systems that are used in a medical context." Prelim. Resp. 11. The challenged claims, however, do not recite any safety standards, nor do they recite any unique structure or function for meeting such safety standards. Patent Owner does not direct us to any persuasive evidence in the Specification or elsewhere that such standards should be included in the properly construed claims. Thus, Patent Owner's assertion is irrelevant to the claimed invention.

[6] "*Continental Can* stands for the proposition that inherency, like anticipation itself, requires a determination of the meaning of the prior art. Thus, a court may consult artisans of ordinary skill to ascertain their understanding about subject matter disclosed by the prior art, including features inherent in the prior art. . . . Thus, in *Continental Can*, this court did not require past recognition of the inherent feature, but only allowed recourse to opinions of skilled artisans to determine the scope of the prior art reference." *Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373, 1377-78 (Fed. Cir. 2003)

b. Touchscreen Controlled by Computer

Patent Owner also asserts that Salandro does not disclose "a touchscreen controlled by said computer," as required by the challenged claims. Prelim. Resp. 13–14. According to Patent Owner, in Salandro, it is the touchscreen that controls the computer. *Id.* Salandro discloses that the control signals for operating cross-point switching units 79 on the matrix boards 51 are generated by computer 7. Ex. 1103, col. 8, ll. 7–9. The computer in turn is controlled by an operator through icons generated on the monitor 11 and selected through touchscreen 13, or alternatively a mouse. *Id.* at col. 8, ll. 9–12.

The Specification of the '420 patent discloses, and Figure 1 illustrates, computer 20. As shown in Figure 1, computer 20 is part of touchscreen 22. The Specification states that computer 20 "controls" touchscreen 22. Ex. 1101, col. 4, ll. 34–35. Neither Patent Owner nor Petitioner directs us to evidence further explaining this cursory disclosure in the Specification. We understand from the general disclosure of the '420 patent that computer 20, like all computers, has an operating system and software that is responsive to inputs from a user. *Id.* at col. 5, ll. 11–12. In the '420 patent those inputs are provided by a touchscreen, just as in Salandro. The touchscreen in the '420 patent does not do or control anything unless it is programmed to do so through computer 20. Based on the record before us, and for purposes of this Decision, Solandro operates the same way. Ex. 1103, col. 8, ll. 7–12. Accordingly, based on the record before us, and for purposes of this Decision, we are persuaded that Solandro discloses a touchscreen controlled by a computer, as recited in claims 1 and 79.

c. Digital Video Recorder

Finally, regarding anticipation by Solandro, Patent Owner asserts Salandro does not anticipate dependent claim 39 for the additional reason that Solandro does

not disclose that one of the sources of medical imaging data is "a digital video recorder," as recited in claim 39. Prelim. Resp. 14. It is Petitioner's position that the VCRs and VTRs disclosed in Solandro are analog devices, not digital. *Id.* (citing Ex.2002, which is a definition of "analog" that refers to a VCR as an analog device).

The '420 patent, as discussed above, discloses that "sources 24 may include any recording, storage, and/or archival devices or systems, such as traditional video cassette recorders or digital video recording devices." Ex. 1101, col. 4, ll. 46–48.

Petitioner asserts that Solandro discloses both VCRs and VTRs, which, according to Petitioner, are "digital video recorders." Pet. 13 (citing Ex. 1110 ¶ 56).

Solandro discloses digital control signals provided by digital computer 7. Ex. 1103, col. 7, ll 49–52, col. 8, ll. Ll. 4–6. As shown in Figure 2, Solandro also discloses various inputs and outputs. One input is "VTR 17." Ex. 1103, col. 5, ll. 29–31. One output is "VTR 35." *Id.* at col. 5, ll. 33–35. Salandro states that "a VTR may have four channel video and left and right audio input and output channels." *Id.* at col. 3, ll. 23–24. Our understanding of the term "VTR," as used in Salandro, is that it refers to a video tape recorder. Not all VTRs are analog. Digital VTRs are well-known. *See, e.g.*, John Watkinson, *The Digital Video Tape Recorder* (1994). Patent Owner has not directed us to any persuasive evidence that a person of ordinary skill would interpret the reference to a "VTR" in Salandro as being limited to an analog VTR. Based on the present record, our understanding of the disclosure is that it includes all VTRs, including digital VTRs.

Accordingly, based on the record before us, and for purposes of this Decision, we are persuaded that Salandro discloses that one of the sources of medical imaging data is "a digital video recorder," thus anticipating claim 39.

d. The Remaining Claim Limitations

Regarding Petitioner's assertion that Salandro anticipates claims 1, 32, 39–41, 43, 46, 47, 50–53, 57, 76, 77, and 79, Patent Owner does not address any of the limitations other than the three limitations discussed above. Nonetheless, the burden still remains with Petitioner to establish a reasonable likelihood that the challenged claims are not patentable. 35 U.S.C. § 314(a).

We have considered the arguments and evidence in the Petition asserting anticipation of the challenged claims based on Salandro. Based on the information in the Petition and Preliminary Response, we determine, for purposes of this Decision, that the Petition establishes a reasonable likelihood that Salandro anticipates claims 1, 32, 39–41, 43, 46, 47, 50–53, 57, 76, 77, and 79.

2. Obviousness Based on Salandro and Howell

Petitioner asserts that claims 2–4, 6, 7, 9, 10, 12–14, 17, 22, 34, 46, 54, 55, 72–74, and 80–83 would have been obvious based on Salandro and Howell.

Section 103(a) precludes issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a). In *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the Court set out a framework for applying the statutory language of § 103:

> Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the

> pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Id. at 17–18. "While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls." *KSR Int'l. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007).

The Supreme Court has made clear that we apply "an expansive and flexible approach" to the question of obviousness. *Id.* at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. To reach this conclusion, however, requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim under examination. *Id.* at 418 ("a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art"); *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Rather, obviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention. *Unigene Labs* 655 F.3d at 1360. "A reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect." *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985).

Against this general background, we consider the references, other evidence, and arguments on which the parties rely.

a. Claims 2 and 80

Claims 2 and 80 recite a display for the images generated by a source.

Figures 7 in Salandro illustrates display 123 generated on monitor 11. Ex. 1103, col. 8, ll. 9–14. Display 123 includes a pattern of device icons 125. *Id.* at col. 8, l. 14. We have not been directed to any persuasive evidence that Salandro includes an image display for the images generated by a source, as recited in claims 2 and 8.

Petitioner asserts that based on the Howell disclosure, it would have been obvious to modify Salandro's display 123 to add a display window for displaying medical images generated from the medical imaging data supplied by the selected source, as recited in claims 2 and 80. Pet. 19–23. The rationale for doing so is that a display window on the Salandro touchscreen would allow a user to verify that the selected video source was functioning properly. *Id.* at 20 (citing Ex. 1110 ¶¶ 70–71). Petitioner also asserts that Howell suggests that displaying images from a selected source directly on the touchscreen gives the user more control over the video routing system. *Id.* at 20–21 (citing Ex. 1110 ¶ 72).

Patent Owner asserts that Howell does not disclose system for controlling the communication of "medical imaging data," thus suggesting that Howell is not properly combined with Salandro. Prelim. Resp. 17–18. As discussed above, Petitioner also is relying on Salandro, which we determined above, for purposes of this Decision, includes an inherent disclosure relating to medical imaging data. Moreover, combining patents from different fields does not defeat a determination that an invention would have been obvious. *KSR*, 550 U.S. at 418 ("When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one."). Familiar items may have obvious uses beyond their primary purposes, and "in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 420.

Patent Owner also asserts that Salandro discloses a complete system that does not require a display window on its touchscreen. *Id.*at 19. For purposes of this Decision, we are persuaded that Petitioner has provided a reasonable rationale for modifying Salandro.

Patent Owner asserts that the combined references do not disclose a touchscreen controlled by a computer (Prelim. Resp. 20), an issue we have addressed above.

Accordingly, based on the analysis above and the record before us, and for purposes of this Decision, we are persuaded that the invention recited in each of claims 2 and 80 would have been obvious based on the combined disclosures of Solandro and Howell.

b. Claims 3 and 81

Claims 3 and 81 recite that the display window (claim 3) or medical images (claim 81) are located "between the plurality of source icons and the plurality of destination icons."

Petitioner asserts that Howell teaches that display windows can be placed in multiple, central locations on the touchscreen, which could include "between the plurality of source icons and the plurality of destination icons," as recited by claims 3 and 81. Prelim. Resp. 19–20.

Patent Owner repeats the arguments made for claims 2 and 80. *Id.* at 18–20. Patent Owner also asserts that the displays in Howell are not located "between" the source and destination icons on the touchscreen, as recited in claims 3 and 81. *Id.* at 18–19.

The Specification states simply that "[i]n some embodiments, the display window 40 is located between the source icons 34 and the destination icons 36." Ex. 1101, col. 5, ll. 56–57.

An ordinary and customary meaning of the word "between" is "intermediate to" or "connecting spatially."[7] Petitioner asserts that Figure 3 of Howell discloses "presentation" and "preview" windows on the touchscreen. Pet. 20. Figure 3 from Howell is reproduced below.

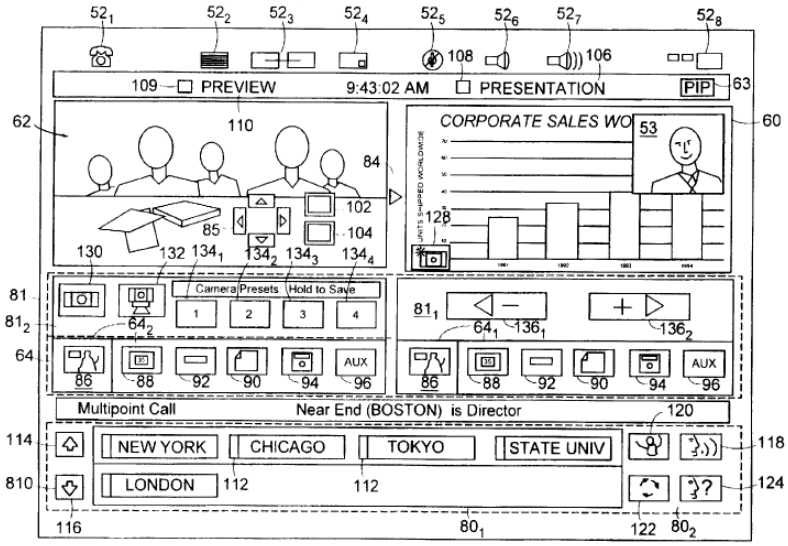

FIG. 3

Figure 3 from Howell showing a touchscreen with a preview window and a presentation window.

Howell discloses video display section 26 arranged to control the distribution of audio and video information signals selectively in accordance with command signals fed to the control section 24. Ex. 1104, col. 3, ll. 34–39. In one disclosed embodiment, video display section 26 is a touchscreen display 27 driven by a microprocessor. *Id.* at col. 5, ll. 10–12. The Howell system operates in one of two primary video display modes, a "Main screen" mode and a "Mark-up" mode, each with a different display. *Id.* at col. 5, ll. 17–20. The "Main screen" mode is shown in Figure 3. *Id.* at col. 6, ll. 6. In the "Main screen" mode, video display touch screen 27 is divided into two half areas; "presentation" display area 60 and

[7] *American Heritage® Dictionary of the English Language, Fifth Edition*. Retrieved August 26 2015 from http://www.thefreedictionary.com/between.

"preview" display area 62. *Id.* at col. 6, ll. 6–14. "Presentation" and "preview" display areas 60, 62 are displayed simultaneously on touch screen display 27 during the "Main-screen" mode. *Id.* at col. 7, ll. 52–55.

As shown in Figure 3 of Howell, the "Main-screen" mode divides display 27 into five basic areas: "preview" display area 62 on the left; "presentation" display area 60 on the right; site selection area 80 (*see id.* at Figure 2) disposed along the bottom of the "presentation" display area 60 and "preview" display area 62; video source selection area 64; a video source control area 81 directly under the "presentation" and "preview" display areas 60, 62. *Id.* at col. 7, ll. 55–63. Also, there are eight "hard button" icons 52_1-52_8 disposed across the top of touch screen display 27. *Id.* at col. 5, ll. 33–38. As shown and described in Howell, "presentation" screen 60 and preview screen 62 are located between "hard button" icons 52_1-52_8 and icons in the site selection area 80, the video source control area 81, and the video source selection area 64. Thus, Howell discloses that the display or image area on the touchscreen is located between various source icons. Petitioner does not direct us to persuasive evidence that Howell discloses a plurality of destination icons.

Petitioner asserts that, based on Howell, a person of ordinary skill would have known how to place these display windows between the source and destination icons, as recited by claims 3 and 81. Pet. 22, 23. This is not the test for obviousness. It does, however, reflect classic hindsight in that it uses the claimed invention as a guide for combining references. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983) ("To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the

insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.").

Petitioner also asserts that Howell suggests the proposed combination of elements because Howell discloses icons representing video *sources* are disposed *in the display section* for easy actuation. Pet. 21 (citing Ex. 1104, col. 2, ll. 5–9). Howell's disclosure does not mention destination icons. Petitioner does not direct us to persuasive evidence that *source icons in the display section* would have suggested to a person of ordinary skill having the display section *between source icons and destination icons*, as recited in claim 3.

Petitioner also asserts that the proposed modification is "entirely a design choice that would serve no technical function whatsoever." *Id.* at 22. Petitioner provides no persuasive evidence to support this conclusion. We recognize that a person of ordinary skill is also a person of ordinary creativity, not an automaton. *KSR*, 550 U.S. at 421. We acknowledge that rearranging icons on a computer screen may seem today like a simple, common sense modification. We do not abandon our common sense when considering the issue of obviousness. *Id.* The mere recitation of the words "common sense" or "design choice," however, without any evidentiary support, adds nothing to the obviousness equation. *Mintz v. Dietz & Watson, Inc.*, 679 F. 3d 1372, 1377 (Fed. Cir. 2012). Here, we lack the evidentiary support required.

The evidence and arguments in the Petition do *not* persuade us that there is a reasonable likelihood that Petitioner would prevail in establishing that claims 3 and 81 are unpatentable. Our determination is that on this record Petitioner did not meet its burden of establishing a reasonable likelihood of unpatentability of claims 3 and 81.

c. The Remaining Ground 2 Dependent Claims

We have considered the arguments and evidence in the Petition and Preliminary response asserting that the remaining claims in Ground 2 would have been obvious based on Salandro and Howell. Petitioner cites evidence that the references disclose the claimed elements and provides a rationale for their proposed combination. Patent Owner disagrees with Petitioner's characterization of the reference disclosures and with the rationales provided. Based on the record before us, and for the purposes of this Decision, we determine that the information in the Petition and Preliminary Response establish a reasonable likelihood that Petitioner will prevail in meeting its burden of proof that claims 2, 4, 6, 7, 9, 10, 12–14, 17, 22, 34, 46, 54, 55, 72–74, and 80, 82, and 83 are unpatentable based on Salandro and Howell.

3. Grounds 3–6

For each of these asserted Grounds, Petitioner cites the disclosures of the references for each limitation in the claim and provides a reasonable rationale for their combination. Patent Owner either disagrees with Petitioner's assertions and/or repeats its position that Salandro does not disclose a touchscreen controlled by a computer. Prelim. Resp. 23 (Ground 3), 24 (Grounds 4 and 5), 25 (Ground 6).

Based on the information in the Petition and Preliminary Response, and for purposes of this Decision, we determine that there is a reasonable likelihood that Petitioner will prevail in establishing that claims 33, 37, and 48 are unpatentable based on Salandro and Branson (Ground 3); that claim 35 is unpatentable based on Salandro and Allred (Ground 4); that claim 42 is unpatentable based on Salandro and Cooke (Ground 5); and that claim 68 is unpatentable based on Salandro and Huber (Ground 6).

III. CONCLUSION

Upon consideration of the Petition and Preliminary Response, we are persuaded, for purposes of this Decision, that the record before us demonstrates a reasonable likelihood that Petitioner will prevail in establishing that claims 1, 2, 4, 6, 7, 9, 10, 12–14, 17, 22, 32–35, 37, 39–43, 46–48, 50–55, 57, 68, 72–74, 76, 77, 79, 80, 82, and 83 are not patentable.

This is a decision to institute an *inter partes* review under 35 U.S.C. § 314. The Board has not made a final determination on the patentability of the challenged claims.

IV. ORDER

For the reasons given, it is:

ORDERED that *inter partes* review is authorized as to whether claims 1, 32, 39–41, 43, 46, 47, 50–53, 57, 76, 77, and 79 are anticipated under 35 U.S.C. § 102(b) by Salandro. ;

FURTHER ORDERED that *inter partes* review is authorized as to whether claims 2, 4, 6, 7, 9, 10, 12–14, 17, 22, 34, 46, 54, 55, 72–74, and 80, 82, and 83 are unpatentable based on Salandro and Howell;

FURTHER ORDERED that *inter partes* review is authorized as to whether claims 33, 37, and 48 are unpatentable under 35 U.S.C. § 103 based on Salandro and Branson;

FURTHER ORDERED that *inter partes* review is authorized as to whether claim 35 is unpatentable under 35 U.S.C. § 103 based on Salandro and Allred;

FURTHER ORDERED that *inter partes* review is authorized as to whether claim 42 is unpatentable under 35 U.S.C. § 103 based on Salandro and Cooke;

FURTHER ORDERED that *inter partes* review is authorized as to whether claim 68 is unpatentable under 35 U.S.C. § 103 based on Salandro and Huber;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the ’420 patent is hereby instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; and

FURTHER ORDERED that no ground other than those specifically granted above is authorized for the *inter partes* review.

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