

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,  
ZTE CORPORATION and ZTE (USA) INC.,  
Petitioners,

v.

e-WATCH, INC.,  
Patent Owner.

Case IPR2015-00412  
Case IPR2015-01366<sup>1</sup>  
Patent 7,365,871 B2

Before JAMESON LEE, GREGG I. ANDERSON, and  
MATTHEW R. CLEMENTS, *Administrative Patent Judges*.

LEE, *Administrative Patent Judge*.

FINAL WRITTEN DECISION  
*35 U.S.C. § 318(a) and 37 C.F.R. § 42.73*

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<sup>1</sup> IPR2015-01366 has been joined with IPR2015-00412. There are two petitioners: (1) Apple Inc. and (2) ZTE Corporation and ZTE (USA) Inc.

## I. BACKGROUND

### A. Introduction

In IPR2015-00412, Apple Inc. (“Apple”) filed a petition (Paper 2, “Pet.”) to institute an *inter partes* review of claims 1–8 and 12–14 of U.S. Patent No. 7,365,871 B2 (Ex. 1001, “the ’871 patent”). eWatch, Inc. (“e-Watch”) filed a Preliminary Response (Paper 11). On May 11, 2015, we issued a Decision (Paper 12 “Inst. Dec.”) instituting trial on claims 1–8 and 12–14 of the ’871 patent. e-Watch filed a Patent Owner Response (Paper 19, “PO Resp.”), and Apple filed a Reply (Paper 30, “Reply”).

After institution of trial in IPR2015-00412, ZTE Corporation and ZTE (USA) Inc. (“ZTE”) filed a petition in IPR2015-01366 to institute an *inter partes* review of claims 1–8 and 12–14 of the ’871 patent on the same ground for which we instituted trial in IPR2015-00412, and also a Motion for Joinder to join IPR2015-01366 with IPR2015-00412. On September 16, 2015, we instituted trial in IPR2015-01366 and granted the Motion for Joinder, on the conditions that (1) Apple Inc. will not rely on ZTE’s petition or ZTE’s witness Tim A. Williams, (2) ZTE has no participation in the joined proceeding except for the opportunity to continue as sole petitioner if Apple settles with e-Watch, and (3) ZTE withdraws reliance on its technical witness as well as all arguments submitted in its own petition, and relies, instead, solely on Apple’s petition and technical witness. IPR2015-01366, Papers 8, 9; IPR2015-00412, Paper 23.

Apple and ZTE collectively will be referred to as “Petitioners.” e-Watch will be referred to as Patent Owner. Hereinafter, all paper numbers refer to entries in IPR2015-00412.

Oral Hearing was held on January 8, 2016. A transcript of the Oral Hearing is included in the record. Paper 49 (“Tr.”).

Petitioners have shown by a preponderance of the evidence that each of claims 12–14 of the ’871 patent is unpatentable. Petitioners, however, have not shown by a preponderance of the evidence that any one of claims 1–8 is unpatentable.

#### B. Related Proceedings

Apple identifies these related cases involving the ’871 patent: (1) *E-Watch, Inc. and E-Watch Corporation v. Apple Inc.*, No. 2:13-CV-1061 (JRG/RSP) (E.D. Tex.), to which the following case numbers in the same tribunal are consolidated: CV-1062, 1063, 1064, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1077, and 1078; (2) IPR2014-00439 (PTAB); (3) IPR2014-00987 (PTAB); (4) IPR2015-00411 (PTAB); (5) IPR2015-00413 (PTAB); (6) IPR2015-00402 (PTAB); (7) IPR2015-00404 (PTAB); (8) IPR2015-00406 (PTAB); (9) IPR2015-00541 (PTAB); (10) IPR2015-00610 (PTAB); and (11) IPR2015-00612 (PTAB). Paper 2, 50–51; Paper 9, 1. Patent Owner e-Watch identifies an additional civil action involving the ’871 patent: *e-Watch, Inc. and e-Watch Corporation v. Huawei Technologies Co., Ltd. and Huawei Technologies USA, Inc.*, No. 2:13-CV-01076 (E.D. Tex.). Paper 4, 3. ZTE did not identify any additional related proceeding.

#### C. The ’871 Patent

The ’871 patent relates generally to “image capture and transmission systems and is specifically directed to an image capture, compression, and transmission system for use in connection with land line and wireless telephone systems.” Ex. 1001, 1:17–20. According to the ’871 patent, the system “is particularly well suited for sending and/or receiving images via a

standard Group III facsimile transmission system and permits capture of the image at a remote location using an analog or digital camera.” *Id.* at 5:3–6.

Figure 1 of the ’871 patent is reproduced below.

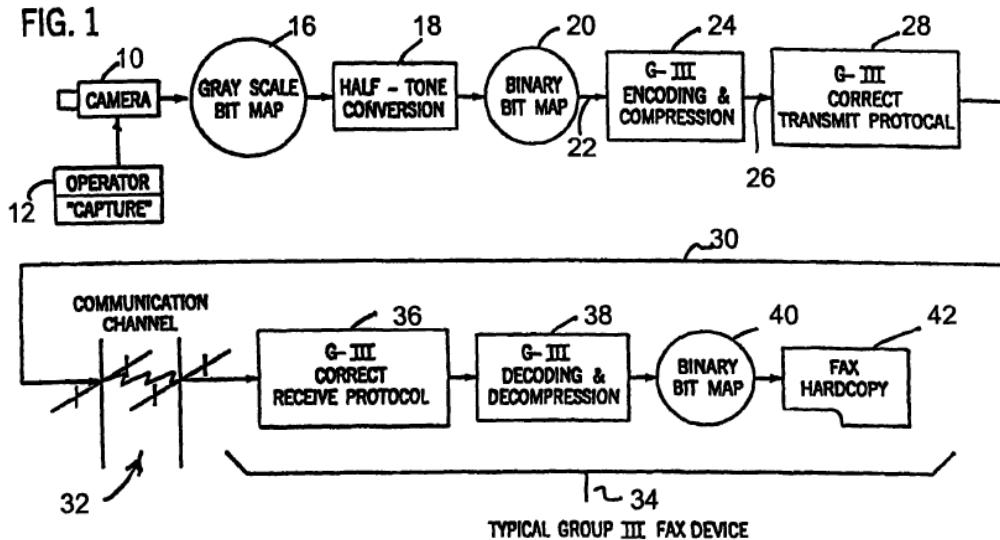


Figure 1 is a block diagram of a basic facsimile camera configuration for capturing an image via a camera and transmitting it via Group III facsimile transmission to a standard hard copy medium. *Id.* at 4:27–30.

Figure 7A of the ’871 patent is reproduced below.

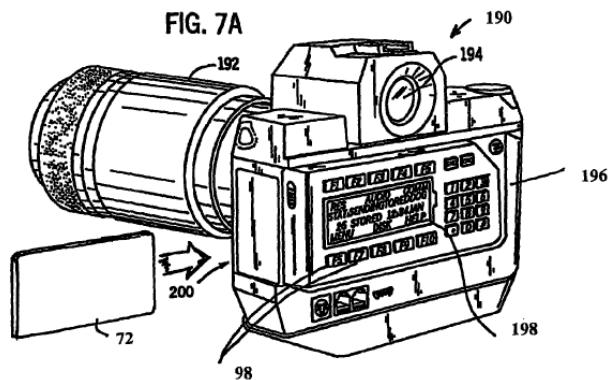


Figure 7A depicts “a hand[-]held device for capturing, storing, and transmitting an image in accordance with the invention.” *Id.* at 4:46–48, 11:3–20.

Of the challenged claims, claims 1, 6, and 12 are independent.

Representative claims 1, 6, and 12 are reproduced below:

1. A handheld self-contained cellular telephone and integrated image processing system for both sending and receiving telephonic audio signals and for capturing a visual image and transmitting it to a compatible remote receiving station of a wireless telephone network, the system comprising:
  - a manually portable housing;
  - an integral image capture device comprising an electronic camera contained within the portable housing;
  - a display for displaying an image framed by the camera, the display being supported by the housing, the display and the electronic camera being commonly movable in the housing when the housing is moved by hand;
  - a processor in the housing for generating an image data signal representing the image framed by the camera;
  - a memory associated with the processor for receiving and storing the digitized framed image, accessible for selectively displaying in the display window and accessible for selectively transmitting over the wireless telephone network the digitized framed image;
  - a user interface for enabling a user to select the image data signal for viewing and transmission;
  - a telephonic system in the housing for sending and receiving digitized audio signals and for sending the image data signal;
  - alphanumeric input keys in the housing for permitting manually input digitized alphanumeric signals to be input to the processor, the telephonic system further used for sending the digitized alphanumeric signals;
  - a wireless communications device adapted for transmitting any of the digitized signals to the compatible remote receiving station; and
  - a power supply for powering the system.

*Id.* at 14:49–15:13.

6. A handheld cellular telephone having an integrated electronic camera for both sending and receiving telephonic audio signals and for capturing a visual image, converting the visual image to a digitized image data signal and transmitting digitized image data signal via a cellular telephone network, the cellular telephone comprising:
  - a manually portable housing supporting the cellular telephone and the integrated electronic camera, the cellular telephone and the integrated electronic camera being movable in common with the housing;
  - a cellular telephone in the housing, the cellular telephone further including a transmitter/receiver for transmitting and receiving audio telephone messages over a cellular telephone network, a keypad for entering manually input alphanumeric signals to be transmitted over the cellular telephone network, and a display window for viewing the manually input alphanumeric signals[;]
  - an integral electronic camera in the housing, the camera for visually framing a visual image to be captured;
  - a processor associated with the electronic camera for capturing and digitizing the framed image in a format for transmission over the cellular telephone network via the cellular telephone;
  - a memory associated with the processor for receiving and storing the digitized framed image, accessible for selectively displaying in the display window and accessible for selectively transmitting over the cellular telephone network the digitized framed image;
  - a user interface for enabling a user to selectively display the digitized framed image in the display window and subsequently transmit the digitized framed image over the cellular telephone network; and
  - an integrated power supply for powering both the cellular telephone and the camera.

*Id.* at 15:33–67.

12. A combination of handheld wireless telephone and digital camera comprising:

- a handheld housing which supports both the wireless telephone and the digital camera, the wireless telephone and the electronic camera being commonly movable with the housing;
- a display supported in the housing for framing an image to be captured and for viewing the image, whereby an operator can view and frame the image prior to capture;
- a processor for processing the image framed by the camera for generating a digitized frame image as displayed in the display;
- a memory associated with the processor for receiving and storing the digitized framed image, for selectively displaying in the display window and for selectively transmitting over a wireless telephone network the digitized framed image;
- the wireless telephone being selectively operable to accept and digitize audio signals to be transmitted, the wireless telephone being selectively operable to convert received digitized audio signals into acoustic audio, the wireless telephone being selectively operable to transmit and receive non-audio digital signals, the non-audio digital signals including a selected digitized framed image;
- a set of input keys supported by the housing to permit alphanumeric signals to be manually input by an operator into the wireless telephone, the alphanumeric signals being presented in the in the display for viewing by the operator;
- a power supply supported by the housing;
- the wireless telephone including a wireless transmitter/receiver for transmitting digital signals sent from and receiving digital signals sent to the wireless telephone; and
- at least one camera control circuit connected to an input device for controlling at least one of the following functions: gain, pedestal, setup, white clip, lens focus, white balance, lens iris, lens zoom.

*Id.* at 16:51–18:2.

**D. Evidence Relied Upon by Petitioners**

Petitioners rely on the following prior art:

Reference		Date	Exhibit No.
McNelley	US Pat. No. 5,550,754	08/27/1996	Ex. 1006
Umezawa	US Pat. No. 5,491,507	02/13/1996	Ex. 1007

Petitioners also rely on the Declarations of Mr. Steven Sasson.<sup>2</sup> Exs. 1008, 1014 (Ex. 1014 was filed in support of Petitioners' Reply).

**E. The Asserted Ground of Unpatentability**

Basis	Reference(s)	Claim(s)
§ 103(a)	McNelley and Umezawa	1–8 and 12–14

**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 Techs., LLC*, 793 F.3d 1268, 1278 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Consistent with the rule of broadest reasonable interpretation, 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

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<sup>2</sup> Patent Owner, in its Patent Owner Response, relies on the Declaration of Dr. Jose Luis Melendez (Ex. 2003).

disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007); *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Although understanding the claim language may be aided by explanations contained in the written description, it is important not to import claim limitations that are not a part of the claim. *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment. *Id.*; see also *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).<sup>3</sup> That is no different even if the patent specification describes only a single embodiment. See *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372–73 (Fed. Cir. 2014); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004); *Liebel-Flarsheim Co. v. Medrad Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004).

If a feature is not necessary to give meaning to what the inventor means by a claim term, it would be “extraneous” and should not be read into the claim. *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 950 (Fed. Cir. 1993); *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988).

If a patentee desires to be his or her own lexicographer, the purported definition must be set forth in either the specification or prosecution history. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002).

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<sup>3</sup> A patent applicant is not required to describe explicitly in the specification every embodiment of the invention. See *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005).

Such a definition must be set forth with reasonable clarity, deliberateness, and precision. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998); *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). “Absent claim language carrying a narrow meaning, the [Patent and Trademark Office] should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition.” *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *see also Liebel-Flarsheim*, 358 F.3d at 906–09.

Only terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011); *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

1. “*an image framed by the camera*” (claim 1) /  
“*framing the image to be captured*” (claims 2, 9, 12) /  
“*visually framing a visual image to be captured*” (claim 6) / “*framing the visual image*” (claim 7)

Claim 1 recites “an image framed by the camera.” Claims 2, 6, 7, 9, and 12 recite similar limitations. Petitioners propose that these terms be construed to mean “obtaining data representing an image as shown on a display.” Pet. 9–10. In our Decision to Institute Trial in IPR2015-00412 (Paper 12), we determined:

[T]he broadest reasonable interpretation of “an image framed by the camera” is “an image having boundaries established by the camera”; the broadest reasonable interpretation of “framing [a/the] image to be captured” (claims 2, 9, 12) is “visually establishing the boundaries of an image to be captured” (claim 6); and the broadest reasonable interpretation of “framing the visual image” (claim 7) is “establishing the boundaries of an image.”

Subsequent to institution of trial in IPR2015-00412 and IPR2015-01366, none of the parties disagreed with our construction. Accordingly, we adopt these same constructions based on the full record for the reasons stated in our Decision to Institute Trial in IPR2015-00412. Inst. Dec. 7 (Paper 12).

2.     *“selectively displaying” / “selectively transmitting”  
and “selected digitized framed image”*

Patent Owner urges that each of the terms “selectively displaying,” “selectively transmitting,” and “selected digitized framed image” should also be construed. PO Resp. 5. Each of the terms “selectively displaying” and “selectively transmitting” is recited in each of independent claims 1, 6, and 12. The term “selected digitized framed image” is recited in independent claim 12. Because Patent Owner makes of record certain portions of the prosecution history of the ’871 patent as shedding light on the meaning of these terms, for clarification purposes we also construe these terms.

Patent Owner contends that during prosecution of the ’871 patent, after certain independent claims were rejected as obvious over a combination of JP 06-268582 (“Kawazu”) and U.S. Patent No. 5,191,601 (“Ida”), Applicant argued that the invention provides “the ability for the user to selectively transmit and display images from memory” and that “Ida teaches transmitting a stored image from memory 24, but it is clearly shown in the same Fig. 4 and Fig. 5 to clearly lack the ability to display stored images on the device display of the apparatus which collects the image.” PO Resp. 6 (quoting Ex. 2005, 60:11–16). Patent Owner further notes that the Applicant further asserted with respect to Ida that “there is no teaching that the ‘prescribed picture’ stored in memory is selectively displayed by the local user so that he can determine whether to transmit it to the remote station” and that “. . . the Ida reference, properly understood, does not

disclose selectively displaying or transmitting a framed image that has been stored in memory . . . .” *Id.* at 6–7 (quoting Ex. 2005, 61:9–11 and 61:18–20).

Patent Owner explains that in response to the above-noted arguments of the Applicant, a personal interview was conducted between the Applicant’s representative and the Examiner, in response to which the Examiner, via an Examiner’s Amendment, added the following underlined language to independent application claims 43 and 51, respectively, which issued as patent claims 1 and 6:

“a memory associated with the processor for receiving and storing the digitized framed image, accessible for selectively displaying in the display window and accessible for selectively transmitting over the wireless telephone network the digitized framed image” [patent claim 1]; and

“a memory associated with the processor for receiving and storing the digitized framed image, accessible for selectively displaying in the display window and accessible for selectively transmitting over the cellular telephone network the digitized framed image.” [patent claim 6]

PO Resp. 7–8 (citing Ex. 2006, 9–11). Patent Owner asserts that the above-noted amendment “was specifically added to reflect the patentably distinguishing functionality of providing the ability for the user to selectively transmit and display images from memory.” *Id.* at 8.

With specific regard to “selectively transmitting,” Patent Owner additionally refers to the following disclosures in the Specification of the ’871 patent:

Two generic configurations are shown and described, the first, where each image is transmitted as it is captured, and the second, **which permits capture, storage, storage, and selective recall of captured images for transmission.**

PO Resp. 8–9 (citing Ex. 1001, 5:6–10 (emphasis added)), and

The memory [can] selectively capture images, as indicated by the operator interface/capture interface 52, or may be programmed to selectively capture periodic images or all images. In the embodiment shown in FIG. 2, an optional viewer device 48 is provided. **This permits the operator to recall and view all or selective images before transmission**, as indicated by the operator interface/recall interface 54. **This permits the operator to review all images retained in the memory 46 and transmit selective images, as desired** [to the Group-III transmission system].

*Id.* at 9 (citing Ex. 1001, 6:34–43 (emphasis added)).

With regard to the term “selected digitized framed image,” Patent owner relies on the same disclosures quoted above in connection with the term “selectively transmitting.” *Id.* at 9–10.

Based on the above-noted contentions, Patent Owner asserts:

“selectively displaying” refers to displaying a digitized framed image that has been selected from among a plurality of digitized framed images that are within memory.

“selectively transmitting” refers to transmitting a digitized framed image that has been selected from a plurality of digitized framed images that are within memory.

“selected digitized framed image” refers to a digitized framed image that has been selected from among a plurality of digitized framed images that are within the memory.

*Id.* at 8–10. Despite the representations made by Patent Owner regarding the exchanges between the Applicant and the Examiner during prosecution, we agree with Petitioners that Patent Owner’s proposed constructions for these terms are excessively narrow under the rule of broadest reasonable interpretation.

The prosecution history recounted by Patent Owner above indicates that the articulated distinction from the Ida reference centers on Ida's failure to describe displaying an image selected from within the memory. Whether Ida's memory stores one image or a plurality of images was not of significance. Under this circumstance, it is not justifiable, under the rule of broadest reasonable interpretation, to require a selection from among a plurality of images stored in memory. The claims are broad enough to encompass storing just one image in memory and having that image selected for displaying and for transmission. The fact that the Specification of the '871 patent discloses embodiments in which more than one images is stored in memory does not justify importing limitations from the Specification into the claims. *See SuperGuide Corp.*, 358 F.3d at 875.

We find no express definition in the Specification of the '871 patent or in any of the prosecution history identified by Patent Owner, for the terms at issue here, much less one set forth with reasonable clarity, deliberateness, and precision. If a patentee desires to be his or her own lexicographer, the purported definition must be set forth in the specification or prosecution history. *CCS Fitness, Inc.*, 288 F.3d at 1366. Such a definition must be set forth with reasonable clarity, deliberateness, and precision. *Renishaw PLC*, 158 F.3d at 1249; *Paulsen*, 30 F.3d at 1480. Patent Owner also identifies nothing in the Specification or prosecution history of the '871 patent that constitutes a disclaimer or disavowal with regard to these terms that is sufficiently specific so as to require the storage of more than one image in the memory.

In patent law, "the name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998). Section 112 of the 1952 Patent Act

requires that the claims themselves set forth the limits of the patent grant.

*Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc).

It is well settled that a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment. *SuperGuide Corp.*, 358 F.3d at 875; *In re Van Geuns*, 988 F.2d at 1184. That is no different even if the patent specification describes only a single embodiment. *See Hill-Rom Servs., Inc.*, 755 F.3d at 1372–73 (“[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction’”); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d at 1369 (“We have cautioned against reading limitations into a claim from the preferred embodiment described in the specification, even if it is the only embodiment described, absent clear disclaimer in the specification.”); *Liebel-Flarsheim Co.*, 358 F.3d at 906. As the U.S. Court of Appeals for the Federal Circuit stated, “[a]bsent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition.” *In re Bigio*, 381 F.3d at 1325. No disclaimer or disavowal, sufficient to limit the claims to storing more than one image in memory, has been identified by Patent Owner.

For the foregoing reasons, we construe these terms as follows:

“selectively displaying” means *displaying a digitized framed image that has been selected from at least one image stored within memory*.

“selectively transmitting” means *transmitting a digitized framed image that has been selected from at least one image stored within memory*.

“selected digitized framed image” means *a digitized framed image that has been selected from at least one image stored within memory.*

B. Obviousness of Claims 1–8  
and 12–14 over McNelley and Umezawa

A patent claim is unpatentable under 35 U.S.C. § 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 ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

With regard to the level of ordinary skill in the art, the Petition itself does not expressly set forth a definition. Patent Owner asserts:

The technical art associated with the '871 Patent relates to the field of integrating a camera together with a mobile phone to create a device capable of both audio and image communications on cellular networks. A person of ordinary skill in the relevant art (“POSITA”) of the '871 Patent would have had at least a bachelor’s degree and/or relevant professional experience in electrical engineering, computer science, or a related field, and at least one year of experience related to the design of both cellular communications devices and digital imaging products.

PO Resp. 3–4. We are not persuaded that one with ordinary skill in the art necessarily would have had experience in designing cellular communications devices. Based on the Specification of the '871 patent, we determine that the invention is not about achieving improvements in cellular

communication technology. Rather, it is necessary for one with ordinary skill in the art only to be familiar with what a cellular communication network required as an input source and what the expected format and/or protocol would be for sending and receiving information to and from the cellular network. It is noted that even Patent Owner's stated definition does not require any actual experience in designing cellular communication devices, but just experience "related to" the design of cellular communication devices. Other than the foregoing, we determine that no express finding is necessary, on this record, and that the level of ordinary skill in the art is reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

*1. McNelley (Exhibit 1006)*

McNelley discloses a combination portable recording video camera and video-conferencing terminal. Ex. 1006, Abstr. McNelley describes its device as a "telecamcorder configured for use as a self-contained teleconferencing terminal as well as a camcorder." *Id.* at 6:35–37. The device includes an integrated phone, camera, microphone, speaker, display, and antenna for transmission/reception of images and sound. *Id.* at Fig. 8, 6:35–58, 7:24–38.

Figures 6–8 of McNelley are reproduced below:

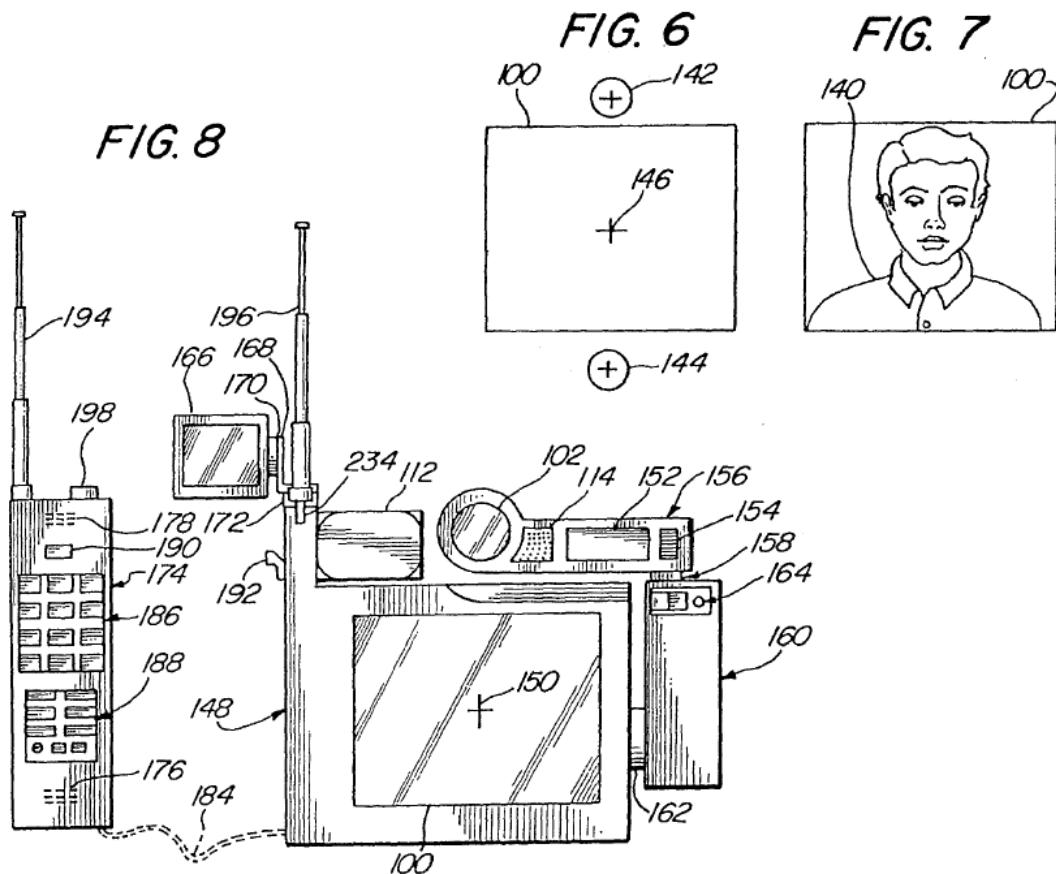


Figure 6 illustrates a preferred placement of the camcorder camera in relation to the teleconferencing display. *Id.* at 3:14–15. Figure 7 illustrates a preferred captured image of a conferee. *Id.* at 3:16–17. Figure 8 illustrates a configuration of a complete telecamcorder terminal. *Id.* at 3:18–19.

Speaker 112 and microphone 114 together serve as a built-in speaker phone. *Id.* at 7:31–32. The provision of handset 174 in addition to or in lieu of built-in speaker phone is optional. *Id.* at 7:39–41. Figure 8 shows the telecamcorder in teleconferencing mode where camera 102 is pointed in the same direction as the viewing side of display 100. *Id.* at 6:37–39. Camera 102 is placed above display 100 along center axis 150, thus permitting

straight-on face-to-face conversation. *Id.* at 43–45. Microphone 114, light 152, and camera 102 are contained in rotatable camera boom 156. *Id.* at 45–48. Optional handset 174, including microphone 176 and speaker 178, functions like a traditional phone and can be connected directly to main housing 148 by line 184 via common phone jacks. *Id.* at 7:41–44. Handset 174 also includes network access controls 186, telecamcorder controls 188, and latch 190 that mates with latch 92 on main housing 148. *Id.* at 7:58–61.

2. *Umezawa (Exhibit 1007)*

Umezawa discloses a video telephone in a casing for holding in one hand, which permits a user to transmit and receive pictures and speech. Ex. 1007, Abstr. The video telephone includes a microphone, a speaker, a display panel, a control panel, and a camera. *Id.* Figure 1 of Umezawa is reproduced below:

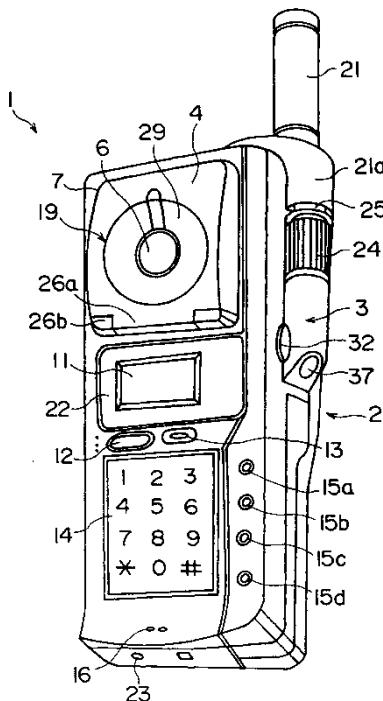


Figure 1 shows a perspective external view of an embodiment of a video telephone according to Umezawa. *Id.* at 4:24–26.

As shown in Figure 1, Umezawa's video telephone 1 has body 2. Ex. 1007, 5:31–34. Mounted on body 2 are camera 3, speaker 6 within ear pad 4, display panel 11, transmission/reception key 12, termination key 13, control panel 14, functional keys 15, and microphone 16. *Id.* at 5:35–49.

Umezawa's Figure 3 is reproduced below.

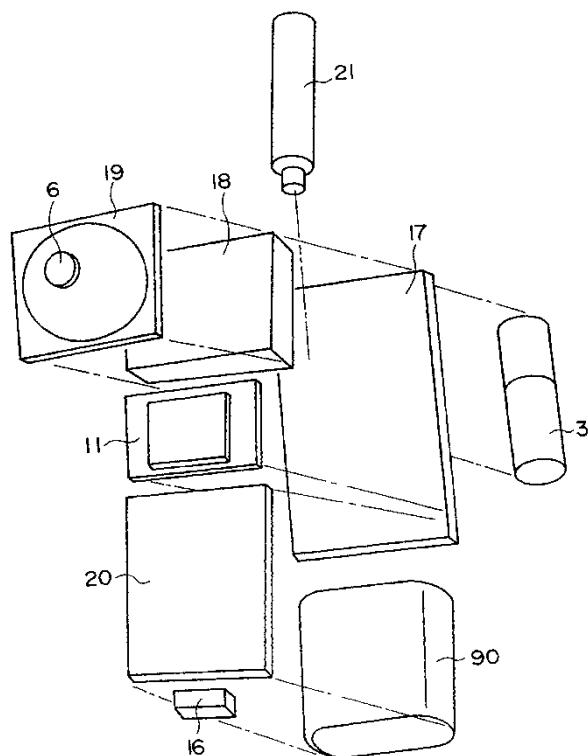


Figure 3 is an exploded view of Umezawa's video telephone, illustrating various components within the video telephone. *Id.* at 4:30–31. The video telephone includes circuit board 17 containing a processor and a memory, communication device 18, speaker 6, liquid crystal display panel 11, control circuit board 20, microphone 16, battery 90, antenna 21, and camera 3. *Id.* at 5:53–62.

3. *Claims 1, 6, and 12*

With respect to claims 1 and 6, as explained below, Petitioner has not established the unpatentability of either claim by a preponderance of the evidence. With respect to claim 12, notwithstanding the arguments and evidence presented by Patent Owner, which are discussed below, we are persuaded by the arguments and evidence presented by Petitioners. Claim 12 has been shown as unpatentable by a preponderance of the evidence.

We specifically discuss only a representative sample of Petitioners' positions with regard to claim 12, because Patent Owner is deemed to have admitted those aspects of the ground of unpatentability that are uncontested by Patent Owner and are material facts. *See* 37 C.F.R. § 42.23(a); *see also* Paper 13, 3 (“The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived.”).

Preamble Recitations

Claim 1, in its preamble, recites: “[a] handheld self-contained cellular telephone and integrated image processing system.” Ex. 1001, 14:49–50. Claim 6, in its preamble, recites: “[a] handheld cellular telephone having an integrated electronic camera.” *Id.* at 15:33–34. Claim 12, in its preamble, recites: “[a] combination of handheld wireless telephone and digital camera.” *Id.* at 16:51–52. As discussed above, McNelley describes its device as a “telecamcorder configured for use as a self-contained teleconferencing terminal as well as a camcorder.” Ex. 1006, 6:35–37. The device includes an integrated phone, camera, microphone, speaker, display, and antenna for transmission/reception of images and sound. *Id.* at Fig. 8, 6:35–58, 7:24–38. Speaker 112 and microphone 114 together serve as a built-in speaker phone. *Id.* at 7:31–32. McNelley describes: “A camcorder

(telecamcorder) of the present invention contains an integral video-phone capable of receiving and sending teleconferencing signals . . . .” *Id.* at 5:1–3. The provision of handset 174, as shown in Figure 8 of McNelley, either additional to or in lieu of built-in speaker phone, is optional. *Id.* at 7:39–41.

With regard to the requirement of claims 1 and 6 that the phone is a cellular phone, and the requirement of claim 12 that the phone is a wireless telephone, McNelley describes: “In the near future, video-phone networks will use one or a combination of phone lines, television cables and wireless networks (i.e., **cellular phone systems**).” *Id.* at 14: 16-18 (emphasis added). McNelley further states: “With a wireless network the telecamcorder can serve as a portable wireless teleconferencing terminal much like a portable cellular telephone.” *Id.* at 14:28–31.

Patent Owner argues that McNelley’s handset 174 is not a cellular phone but operates merely as the handset component of a cordless phone which is in part located in the main housing that is connected to a landline. PO Resp. 25. The argument is unpersuasive. As explained above, McNelley discloses many options for implementing the telephone. Both a traditional phone operating through a landline and a wireless cellular phone are disclosed as suitable implementations. Ex. 1006, 14:16–18. Furthermore, as discussed below in the section pertaining to housing limitations, Petitioners are not relying on McNelley’s embodiment of Figure 8 which shows handset 174 as an attached unit communicating with the remainder of telephone components in the main housing, but on an embodiment that includes a complete built-in telephone within the main housing.

Patent Owner argues:

A POSITA would recognize that due to the inherent limitations of cellular phone technology at the time of McNelley, the telecamcorder of McNelley would not be suitable for use over a cellular network and would understand the disclosure of McNelley to relate only to wired connections such as a landline. *See also* [EXH. 2003] at 31–34.

PO Resp. 25. The argument is unpersuasive. McNelley expressly describes “cellular telephone systems” as an implementation alternative for its telephone, as noted above, and the evidence cited by Patent Owner in the above-quoted argument does not sufficiently demonstrate that cellular telephone technology at the time of invention of the ’871 patent were technically incapable of sending and receiving an image. Patent Owner’s witness, Dr. Melendez, testifies on page 34 of his Declaration (cited to by Patent Owner in the above-quoted text): “It would have been known by a POSITA that cellular networks at the time of Umezawa were not capable of transmitting video as would be required to use Umezawa’s invention.” Ex. 2003 ¶ 74. Umezawa, however, has an effective filing date of October 22, 1992 (Ex. 1007 [22], [30]), many years prior to the earliest possible effective filing date to which the ’871 patent is entitled, i.e., January 12, 1998 (Ex. 1001 [62]).

Furthermore, Patent Owner itself states that “at the time of McNelley (1994),” image transmission and reception were done “using conventional cellular technology.” PO Resp. 15:1–3. The 1994 date of McNelley precedes the earliest effective filing date of the ’871 patent by more than 43 months. In support of the statement that at the time of McNelley, image transmission and reception were done using conventional cellular technology, Patent Owner cites to Hanzo et al., *Adaptive Low-Rate Wireless*

*Videophone Schemes*, 5(4) IEEE Transactions on Circuits and Systems for Video Technology 305, 317 (Aug. 1995) (Ex. 2010). The article states:

Overall, using schemes similar to the proposed ones mobile videotelephony is becoming realistic **over existing mobile speech links**, such as the Pan-European GSM system [59], the Japanese PDC [19], and the American IS-54 [20] as well as IS-95 systems [21] at bit rates between 6.7 and 13 kbps.

Ex. 2010, 317 (emphasis added). We find that conventional cellular technology in 1994 was available and effective to send and receive an image. Because it was possible to transmit and receive an image over “conventional cellular technology” in 1994 (PO Resp. 15) and even “videotelephony [was] becoming realistic over existing mobile speech links” in August 1995 (Ex. 2010, 317), we are not persuaded that a person of ordinary skill in the art would have understood, as of January 12, 1998 (the earliest possible effective filing date to which the ’871 patent is entitled), that McNelley’s telecamcorder was unsuitable for use with a cellular network. Even assuming that it was unsuitable for use to conduct live teleconferencing in January 1998 over a cellular network, it still would have been operative to send and receive an image over a cellular network. The claims at issue do not require teleconferencing.

For the foregoing reasons, we determine that Petitioners have shown by a preponderance of the evidence that McNelley discloses the above-quoted elements from the preambles of claims 1, 6, and 12.

#### Housing Limitations

Claim 1 recites “a manually portable housing,” “an integral image capture device comprising an electronic camera contained within the portable housing,” a display “supported by the housing,” where “the display

and the electronic camera being commonly movable in the housing when the housing is moved by hand,” and “a telephone system in the housing for sending and receiving digitized audio signals and for sending the image data signal.” Ex. 1001, 14:54–15:5. Claim 6 recites “a manually portable housing supporting the cellular telephone and the integrated electronic camera, the cellular telephone and the integrated electronic camera being movable in common with the housing,” “a cellular telephone in the housing,” and “an integral electronic camera in the housing.” *Id.* at 15:39–50. Claim 12 recites “a handheld housing which supports both the wireless telephone and the digital camera, the wireless telephone and electronic camera being commonly movable within the housing,” and “a display supported in the housing for framing an image to be captured and for viewing the image, whereby an operator can view and frame the image prior to capture.” *Id.* at 16:53–59. Notwithstanding Patent Owner’s arguments, which are discussed below, we are persuaded by Petitioners that McNelley discloses these limitations pertaining to the housing.

Figure 8 of McNelley, reproduced above, with the built-in phone without detachable or coupled handset 174, which is optional, shows such a portable housing. As is stated by Petitioners, “McNelley’s telecamcorder is both handheld and manually portable, as shown in Figs. 8 and 9 (housing 148). The operator can hold the entire unit in front of him. Ex. 1006, McNelley, 6:35–37, 10:16–18; Ex. 1008, Sasson Decl., ¶ 37.” Pet. 16 (citing Ex. 1006). Also as stated by Petitioners, “[t]he telecamcorder includes an electronic video camera 102 within portable housing 148 (Figs. 8 and 9) . . . . Ex. 1006, McNelley, 6:37–39.” *Id.* Further as stated by Petitioners, “McNelley’s telecamcorder includes a display 100 for viewing an image,

which is also operable as a view finder for framing an image. Ex. 1006, McNelley, 6:41–43, 7:14–16.” *Id.* at 17. As shown in Figure 8, housing 148 supports display 100, and the display and the camera are commonly movable when housing 148 is moved. Petitioners persuasively note further that McNelley’s camcorder contains an integral video-phone capable of receiving and sending teleconferencing signals. *Id.* at 28 (citing Ex. 1006, 5:1–3). Thus, the phone and the camera are commonly movable with the housing. We already discussed McNelley’s disclosure that its phone can be a cellular phone.

Patent Owner argues that each of claims 1, 6, and 12, “contemplates a singular, “integrated housing” that holds both the cellular telephone and image capture device, referring primarily to the preamble of claim 1. PO Resp. 21–22. Patent Owner, however, has not identified any such “integrated housing” limitation in any of claims 1, 6, and 12. We must be careful not to deviate from the claim language, because, in patent law, “the name of the game is the claim.” *In re Hiniker Co.*, 150 F.3d at 1369. Any rewording of the claim language may lead to different results and should be avoided.

Nevertheless, as discussed above, all three claims 1, 6, and 12 require a housing that contains or supports both the telephone and the image capture device (e.g., camera). The housing that contains or supports the telephone must also contain or support the image capture device. Also, as discussed above, Petitioners have provided persuasive accounting for that limitation in all three claims 1, 6, and 12, by identifying the disclosure in McNelley that in the Figure 9 embodiment, dialing controls 186 and telecamcorder controls

188 are built into the main housing 148 and may serve in lieu of controls on handset 174. Ex. 1006, 8:10–14.

Patent Owner argues:

However, FIG. 9 is depicted and described as a view of FIG. 8 from another angle. “FIG. 9 shows a left side view of the telecamcorder illustrated in FIG. 8.” *Id.* at 8:10–11. FIG. 8 clearly illustrates a telephone handset with a housing and controls separate and apart from the camcorder housing 148. It appears that FIG. 9 merely depicts the separate phone handset 174 attached to the camcorder body 148. *See also* [EXH. 2003] at 31–34.

PO Resp. 24–25. The argument is unpersuasive. Although McNelley does state that Figure 9 shows a left side view of the telecamcorder illustrated in Figure 8 (showing an embodiment with a detached handset having a separate housing), the statement must be read, in context, together with these two sentences which immediately follow the statement:

This figure [Figure 9] shows the dialing controls 186 and the telecamcorder controls 188 built into the main housing 148. Built-in controls may serve in lieu of controls on the handset 174, or both sets of controls may be employed on a single telecamcorder.

Ex. 1006, 8:11–15. Reading the above-noted disclosures about Figure 9 as a whole, it is evident that McNelley discloses a number of alternative embodiments, one of which has the telephone, inclusive of the handset controls, and the image capture device supported by and located within the same housing 148. Patent Owner’s reading of McNelley fails to account for all of McNelley’s pertinent disclosure. The left-side view of the device in the embodiment with the built-in telephone would be similar to that of the device in the embodiment shown in Figure 8, albeit the handset would not be detachable or coupled by wire.

We find that McNelley discloses the above-quoted limitations from claims 1, 6, and 12 relating to the housing.

#### Processor Limitations

Claim 1 recites: “a processor in the housing for generating an image data signal representing the image framed by the camera.” Ex. 1001, 14:61–62. Claim 6 recites: “a processor associated with the electronic camera for capturing and digitizing the framed image in a format for transmission over the cellular telephone network via the cellular telephone. *Id.* at 15:53–56. Claim 12 recites: “a processor for processing the image framed by the camera for generating a digitized framed image as displayed in the display.” *Id.* at 16:60–62.

Petitioners note: (1) that McNelley discloses video camera electronics 404 shown in Figure 30 which processes the output of the camera 406 into a final video signal to be fed to the controller 400 and which are contained in the housing, (2) that McNelley discloses the use of ASIC chips for digital compression, (3) that McNelley discloses digital recording, and (4) that McNelley discloses use of microprocessors for operational functions. Pet. 17. Petitioners further explain:

McNelley’s telecamcorder with integrated video-phone receives and sends teleconferencing signals and “includes a built in display to view an incoming teleconferencing signal and a video pickup device that can produce an image of the operator for transmissions during teleconferencing.” *Id.* at 5:1–7. The unit includes a controller 400 that routes the teleconferencing signal to a network access or communication electronics package 402, which establishes contact with a network and sends and receives audio and video signals to/from the wireless cellular network. *Id.* at 21:30–36; 14:16–18. Thus, McNelley’s processing puts the

digitized framed image data in a format for transmission over the cellular telephone network. Ex. 1008, Sasson Decl., ¶ 85.

Pet. 33. We are persuaded that McNelley discloses the above-quoted limitations of claims 1, 6, and 12 relating to the processor.

### Memory Limitations

Claim 1 recites:

a memory associated with the processor for receiving and storing the digitized framed image, accessible for selectively displaying in the display window and accessible for selectively transmitting over the wireless telephone network the digitized framed image;

Ex. 1001, 14:63–67. Claim 6 recites the same except that “over the wireless telephone network” is changed to “over the cellular telephone network.” *Id.* at 15:57–61. Claim 12 recites the same, except that “accessible for selectively displaying” is changed to “for selectively displaying,” “accessible for selectively transmitting” is changed to “for selectively transmitting,” and “over the wireless telephone network” is changed to “over a wireless telephone network.” *Id.* at 16:63–67. These recitations are essentially the same.

Petitioners explain: “McNelley discloses that, for the telecamcorder with video phone, ‘digital recording’ can be used, and that ‘digital storage may be used.’” Pet. 19 (citing Ex. 1006, 12:36–39; 20:54–66). Petitioners note: “McNelley discloses that the ‘recording electronics processes the signals for storage in memory 422. The memory 422 actually comprises any type of data recording medium ranging from tape and disks to solid state microelectronic memory.’” *Id.* (citing Ex. 1006, 21:23–26; Ex. 1008 ¶ 44). Petitioners further explain, in more detail:

McNelley also discloses the telecamcorder is applicable to any type of network such as a wireless, cellular telephone network. Ex. 1006, McNelley, 14:16–18; 28–31. McNelley discloses that when “the telecamcorder is being used to make a recording, the controller 400 conditions the audio and video signals, if necessary, and . . . the recording electronics 420 processes the signals for storage in memory 422,” and that later “**the message can be played back through the speaker and display 416.**” *Id.* at 21:19–23; 22:1–3. Also, the logic can order “**the recording electronics 420 to play the outgoing message [which was stored in memory] which is sent out [over] connection 104 to a remote terminal.**” *Id.* at 21:64–67. Also, “[m]ultiple greetings may be accessed through a menu system with multiple message ‘boxes’ designated for receiving incoming messages.” *Id.* at 13:49–52. Thus, McNelley discloses the memory being accessible for selectively displaying and transmitting framed images over a wireless telephone network. Ex. 1008, Sasson Decl., ¶ 45.

Pet. 19–20 (emphases added). The description in the above-quoted text with regard to “incoming messages” and “outgoing message” refers to images and voice when the telecamcorder is used as a video answering machine. Ex. 1006, 21:41–44. It is understood that the pre-stored greetings in memory are the outgoing messages. Mr. Sasson also testifies: “Because the digital video (audio and visual) message can be recorded and played back, and the memory stores the messages, the memory is accessible for transmitting and displaying selected messages.” Ex. 1008 ¶ 45.

We are persuaded that McNelley discloses the above-quoted limitations of claims 1, 6, and 12 relating to the memory.

#### Alphanumeric Input Limitations

Claim 1 recites: “alphanumeric input keys in the housing for permitting manually input digitized alphanumeric signals to be input to the

processor, the telephone system further used for sending the digitized alphanumeric signals.” Ex. 1001, 15:6–9. Claim 6 recites: “a keypad for entering manually input alphanumeric signals to be transmitted over the cellular telephone network.” *Id.* at 15:46–48. Claim 12 recites: “a set of input keys supported by the housing to permit alphanumeric signals to be manually input by an operator into the wireless telephone.” *Id.* at 17:9–12.

Petitioners explain:

McNelley discloses (e.g., Figs. 8 and 9) dialing controls 186 and telecamcorder controls 188. McNelley also describes transmission over a wireless cellular telephone network as described above for elements [in the preamble of claim 6]. See Ex. 1006, McNelley, 5:1–3, 6:35–37, 10:16–18, 14:28–31, Abstract. The dialing controls 186, also referred to as network access controls 186 (*Id.* at 7:58–[59], 8:11–12), are conventional alphanumeric keypad buttons with which a POSA would have been well familiar at the time the '871 patent was filed, and in the context of McNelley's wireless cellular network, a POSA would have understood these digitized alphanumeric signals to be sent across the wireless network, e.g., for network access. Ex. 1008, Sasson Decl., ¶ 75.

Pet. 29–30. Petitioners further note: “Figure 9 of McNelley shows dialing controls 186 (also called network access controls) and the telecamcorder controls 188 built into the main housing . . . . Ex. 1006, McNelley, 8:10–13, 6:41–43, 7:58–59, 8:11–12.” Pet. 42. We are persuaded by Petitioners’ explanations.

Claim 6 recites: “a display window for viewing the manually input alphanumeric signals.” Ex. 1001, 15:48–49. Claim 12 recites: “the alphanumeric signals being presented in the display for viewing by the operator.” *Id.* at 17:11–13. In that regard, Petitioners state:

McNelley discloses “Multiple greetings may be accessed through a menu system with multiple message “boxes”

designated for receiving incoming messages.” Ex. 1006, McNelley, 13:49–52. Thus, McNelley’s display is operable to display for viewing alphanumeric messages, *e.g.*, the messages navigated via the menu system. Ex. 1008, Sasson Decl., ¶ 79.

Pet. 31; *see also* Pet. 42–43 (making similar statement). However, we find such explanation inadequate to meet the recited claim limitations about presenting the alphanumeric signals in a display for viewing. Specifically, Petitioners do not adequately explain why the fact that multiple recorded greetings may be accessed via a menu system via alphanumeric inputs means the alphanumeric inputs are displayed. Petitioners have identified no such disclosure and no such assumption can or should be made.

Nevertheless, Petitioners present two alternative contentions with regard to the limitation requiring that the manually input alphanumeric signals be shown on the display: (1) that it was conventional in the art for control input to be displayed when it is entered (Pet. 31 (citing Ex. 1008 ¶ 79 – Sasson Declaration)), and (2) that Umezawa discloses entering telephone numbers, which are alphanumeric, on a user interface for its video telephone, whereby the entered telephone numbers are displayed on display control panel 14 (Pet. 32). Petitioners further explain that in light of Umezawa’s teaching of displaying the manually inputted telephone numbers, it would have been obvious to one of ordinary skill in the art to have displayed, in McNelley’s telecamcorder, inputs manually entered through the user interface, to confirm that the inputs are entered correctly. Pet. 32 (citing Ex. 1008 ¶¶ 80–83).

On page 14 of the Petition, additional reasoning for combining the teachings of McNelley and Umezawa is set forth. For instance, Petitioners explain that it would have been obvious for one with ordinary skill in the art

to incorporate Umezawa’s teachings about its LCD touch control panel, used as a user interface, into McNelley’s device, to provide a more convenient means of user control via the LCD touch control panel as a user interface.

Pet. 14. That assertion is supported by the testimony of Mr. Sasson.

Ex. 1008 ¶ 83.

We are persuaded by each of Petitioners’ two obviousness rationales, one based on McNelley alone and the other based on the combined teachings of McNelley and Umezawa, because both are supported by articulated rational underpinnings. We are persuaded that it would have been obvious to one with ordinary skill in the art to have shown on McNelley’s display the manually inputted alphanumeric inputs. Thus, on the basis of obviousness to one with ordinary skill in the art, and notwithstanding the Patent Owner’s arguments, which we discuss below, this limitation of claims 6 and 12 relating to displaying the alphanumeric input is met by either McNelley alone or by the combined teachings of McNelley and Umezawa.

Patent Owner makes a number of contentions with regard to these limitations. PO Resp. 26–30. We address each, in turn.

Patent Owner argues that “alphanumeric” means “consisting of both letters and numbers and often other symbols,” citing a dictionary definition (Ex. 2009). *Id.* at 26. The Specification of the ’871 patent does not contain any definition for the term “alphanumeric.” Dictionaries are a relevant source of information, but they are not controlling. We also are cognizant that there are numerous dictionaries and their entries for the same term are not necessarily the same. For example, in this instance, Petitioner has submitted two dictionary definitions for “alphanumeric” that are broader than that offered by Patent Owner: (1) “Consisting of letters or digits, or

both, and sometimes including control characters, space characters, and other special characters” (Ex. 1015, 3); and (2) “[a]ny letter of the English alphabet, upper or lower case, or any of the decimal digits, 0 to 9” (Ex. 1016, 3). Reply 5. As discussed above, in this proceeding, we apply the broadest reasonable interpretation, to construe the meaning of claim terms. We note further that, as pointed out by Petitioner (Reply 5), even the definition offered by Patent Owner indicates that an alphanumeric character is a character in an alphanumeric system. Ex. 2009. That would mean although a character cannot be both a letter and a numeral, it still can be an alphanumeric character. Applying the rule of broadest reasonable interpretation, we agree with Petitioner that “alphanumeric” is sufficiently broad to encompass each of these three cases: all numerals, all letters, or a combination of numerals and letters. Patent Owner’s argument to the contrary is unpersuasive, and rejected.

Patent Owner argues that the claims require transmission of the alphanumeric input signals to another end user’s device to be displayed on that device for viewing by that other end user. PO Resp. 29:10–19. The argument is unpersuasive. Patent Owner has not identified any such limitation in any one of claims 1, 6, and 12. None of claims 1, 6, and 12 requires transmission of the alphanumeric input signals all the way to another end user, much less the display of the transmitted alphanumeric inputs on another end user’s device. The closest any claim limitation comes to Petitioners’ assertion, though still falling short of Petitioners’ assertion, is the recitation in claim 1 of: “a wireless communications device adapted for transmitting any of the digitized signals to the compatible remote receiving station.” Ex. 1001, 15:10–12. Even that recitation, however, does not

mention anything about displaying of alphanumeric inputs on another device or viewing of the alphanumeric inputs by another end user.

Patent Owner argues that the claims require transmission of the alphanumeric input signals to the compatible remote receiving station. PO Resp. 27:2–4, 12–13, 28:7–8, 15–18. We disagree. The closest any claim limitation comes to Petitioners’ assertion, though still falling short of Petitioners’ assertion, still is the recitation in claim 1 of: “a wireless communications device adapted for transmitting any of the digitized signals to the compatible remote receiving station.” Ex. 1001, 15:10–12. The recitation does not require the alphanumeric input signals to be transmitted to the remote receiving station. For this argument, the key word in the recitation is “any,” which does not mean “each” or “all.” Under the rule of broadest reasonable interpretation which is applicable to this proceeding, the recitation can be met merely by transmission by the wireless communication device of digitized image data to the compatible receiving station, and the alphanumeric inputs need not be transmitted to the remote receiving station. Also, Petitioners correctly note that even if claim 1’s recitation requires transmission of alphanumeric input signals to a compatible remote receiving station, which it does not, the remote receiving station does not have to be another end user but can be a server on the network. Reply 7–8.

Patent Owner argues that Petitioners failed to explain how Umezawa discloses sending messages “that include alphanumeric signals,” and notes that the only messages discussed in the prior art are video and audio messages as opposed to alphanumeric messages that are inputted at a device. PO Resp. 29:5–9. The argument is not persuasive. Patent Owner has not identified any claim limitation that requires a transmitted message to include

in itself both the digitized image data signal and the alphanumeric inputs. The closest claim limitations are: (1) “the telephonic system further used for sending the digitized alphanumeric signals” (claim 1); and “a keypad for entering manually input alphanumeric signals to be transmitted over the cellular telephone network” (claim 6). Patent Owner does not dispute that McNelley discloses inputting, via manual dialing controls, a telephone number which is then sent across the wireless network to gain network access, as we have already discussed above. The argument about sending a message that includes both the image data signal and the alphanumeric input signal is not based on any limitation actually present in a claim.

Patent Owner argues that McNelley “does not disclose alphanumeric signals being sent along with digital image and/or audio signals.” PO Resp. 28:15–18. This argument essentially is the same as that alleging that a transmitted message must include both the image data signal and the alphanumeric input signals, which is already discussed above. The argument is unconvincing and rejected, because Patent Owner has not identified any claim limitation that requires sending the alphanumeric input signals “along with” the image data signal.

For the foregoing reasons, we determine that the combined teachings of McNelley and Umezawa satisfy the above-quoted limitations of claims 1, 6, and 12 relating to inputting and display of alphanumeric signals.

#### User Interface Limitations

Claim 1 recites: “a user interface for enabling a user to select the image data signal for viewing and transmission.” Ex. 1001, 15:1–2. Claim 6 recites: “a user interface for enabling a user to selectively display the digitized framed image in the display window and subsequently transmit the

digitized framed image over the cellular telephone network.” *Id.* at 15:62–65. Claim 12 does not recite a “user interface.”

With respect to these limitations, Petitioners make two contentions: (1) that McNelley itself discloses each of these limitations, and (2) Umezawa discloses this limitation and it would have been obvious to one with ordinary skill in the art to adopt this feature from Umezawa and implement it in McNelley. Pet. 21–23, 35–37. Neither of these contentions is persuasive. We discuss each below, in turn.

With regard to McNelley alone, Petitioners state:

McNelley discloses a user interface of dialing controls 186 and the telecamcorder controls 188 built into the main housing 148 of the telecamcorder. Ex. 1006, McNelley, 8:10–15, Figs. 8 and 9. McNelley’s display 100 can be used as both a teleconferencing display and viewfinder in both a camcorder mode and a teleconferencing mode. *Id.* at 7:14–23. McNelley discloses the ability to select the image signal for viewing and transmission for reasons explained immediately above in claim element claim 1(i) [i.e., the memory that is accessible for selectively displaying and for selectively transmitting].

*Id.* at 21–22 (emphasis removed). With regard to McNelley alone, Petitioners further state:

McNelley discloses both the user interface (Ex. 1006, McNelley, 8:10–15, 7:14–23, Figs. 8, 9) and the selective displaying and selective/subsequent transmitting. *Id.* at 11:13–28, 14:16–18, 28–31, 21:19–23, 22:1–3, 21:64–67, 13:49–52. McNelley’s functionality disclosed in these sections, for instance, permits a user to display on the display viewfinder a digitized framed image of himself, and then subsequently transmit that digitized framed image as part of the normal teleconferencing mode. Ex. 1008, Sasson Decl., ¶¶ 95–96.

*Id.* at 36. We are unpersuaded that McNelley discloses the limitations at issue. As discussed above, “selectively displaying” means displaying a

digitized framed image that has been selected from at least one image stored within memory, and “selectively transmitting” means transmitting a digitized framed image that has been selected from at least one image stored within memory. In the context of the ’871 patent, “to select the image data signal for viewing and transmission” does not mean something different. It also requires selecting image data that has been stored in memory. Simply taking a picture whereby that picture is *automatically displayed* when taken does not amount to *selecting an image* stored in memory either for viewing or for transmission.

None of McNelley’s disclosure identified by Petitioners conveys using the dialing controls 186 or telecamcorder controls 188 as a user interface to cause transmission of an image that has been selected from at least one image stored in memory, and Petitioners have not adequately explained why there is such disclosure in McNelley. For instance, when the video-phone is used as an answering machine, a recorded greeting is played and transmitted **not** in response to user manipulation of dialing controls 186 or telecamcorder controls 188, but “automatically” when a ring has been detected. Ex. 1006, 21:61–67.

Petitioners’ witness, Mr. Sasson, testifies:

Also, because the digital video (audio and visual) message of McNelley can be recorded and played back (*Id.* at 11:23–28), and the memory stores the message, the user interface is enabled for selectively displaying and then selectively and subsequently transmitting and selected messages, which in McNelley’s teleconferencing context include images as well as audio.

Ex. 1008 ¶ 96. The testimony is unpersuasive because the cited portion of McNelley does not refer to anything about transmitting an image which has

been selected from at least one image stored in memory. The cited portion of McNelley merely states:

Also, the recorder may record or play back a separate signal while the audio and video-phone is in use. Both incoming and outgoing signals may be recorded simultaneously by mixing audio signals and screen splitting or having a picture in a picture, so that the recorded signal will contain both images.

Ex. 1006, 11:23–28. The disclosure is about recording and playback, not selective transmission of a recording.

Mr. Sasson further testifies to the following about McNelley:

A user can selectively choose teleconferencing mode, in which case McNelley’s user interface thereby permits the user to selectively display a framed digitized image, e.g., his own image, on the display as a viewfinder and then subsequently transmit that digitized framed image as part of the normal teleconferencing mode.

Ex. 1008 ¶ 95. The testimony is not persuasive because Mr. Sasson does not identify any disclosure in McNelley that during normal teleconferencing mode, the image transmitted was stored earlier in memory and, thus, has been selected from at least one image stored in memory. In that regard, Mr. Sasson has not provided adequate explanation.

Mr. Sasson additionally testifies:

Also “Other answering machine features may be easily adapted to the telecamcorder by those skilled in the art. Multiple greeting may be accessed through a menu system with multiple message “boxes” designated for receiving incoming messages” [Ex. 1006,] 13:48–51.

*Id.* The testimony is misplaced because, at most, it would support only selectively displaying a recorded greeting through telecamcorder controls, **not** transmitting a recorded greeting in response to user manipulation of dialing controls 186 or telecamcorder controls 188. As discussed above,

McNelley discloses “automatically” transmitting a recorded greeting when a ring has been detected. Ex. 1006, 21:61–64.

The deficiencies relating to the limitation at issue are persuasively noted by Patent Owner. PO Resp. 17–19. For instance, Patent Owner states:

In the first mode, camcorder mode, videos can be taken, stored and presumably retrieved for viewing and playback, but there is no disclosure of transmission of the selected and recalled/displayed video in video camera mode. *Id.* at 11:13–15. In the second mode, teleconferencing mode, the captured images are streamed in real time and no selective display or transmission occurs. *Id.* at 6:35–58.

PO Resp. 17–18. Patent Owner also notes that the video answering machine operation of McNelley involves sending a specially recorded video message upon detection of a ring and that upon detection of a ring, the video answering machine “automatically” transmits the video message from memory. *Id.* at 18. Petitioners note that McNelley discloses that in the answering machine mode the device can display the recorded message while transmitting it. Reply 14. That, however, does not cure the above-noted deficiencies, because the incoming call still is automatically answered and the recorded message still is automatically transmitted independent of whether the message is caused to be displayed as well by the user.

During oral argument, counsel for Petitioners provided additional purported reasoning, i.e., that a user creating a video message recording for McNelley’s device used as an answering machine obviously would have selected the recorded video greeting for viewing to check if it is satisfactory for actual use, and thus any transmission of the recorded message upon actual use would have been a “subsequent” transmission as is required by claim 6. Tr. 73–75. The argument is inappropriate because it is a new

argument raised for the first time at oral argument.<sup>4</sup> It would be unjust to Patent Owner to consider it at this late stage, without Patent Owner having had a fair opportunity to respond. *See Dell Inc. v. Acceleron, LLC*, Nos. 2015-1513, -1514, 2016 WL 1019075, at \*6–7 (Fed. Cir. March 15, 2016); *CBS Interactive Inc. v. Helperich Patent Licensing, LLC*, Case IPR2013-00033, slip op. at 2–3 (PTAB October 23, 2013) (Paper 118) (discussing new argument and demonstrative exhibits at oral hearing). Thus, the argument is not considered. Moreover, the argument does not cure the deficiency that in the answering machine mode, neither dialing controls 186 nor telecamcorder controls 188 is used to cause transmission of the recorded message. During oral argument, counsel for Petitioners presents still another new reasoning, i.e., that if the answering machine answers two calls, then the second transmission would be subsequent to a first display. Tr. 75:16–23. The argument also is belatedly presented, for the first time at oral argument, and thus it is not considered. In any event, like the first new argument mentioned above, this new argument also does not cure the deficiency that in the answering machine mode, neither dialing controls 186 nor telecamcorder controls 188 is used to cause transmission of the recorded message.

With regard to its alternative contention based on the combination of McNelley and Umezawa, Petitioners argue:

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<sup>4</sup> At oral argument, counsel for Petitioners argue that this argument was presented in the Petition at the bottom of page 19. Tr. 74:18–75:11. We disagree. The material at the bottom of page 19 of the Petition only explains that the recorded message can be played back but does not carry the contention that the recorded message would be played back to be viewed by the user prior to its being actually transmitted over the network when the device answers a call.

Umezawa discloses that the video phone equipment has a display panel 11, a transmission/reception key 12, a termination key 13, a control panel 14, and function keys 15, and that the control panel 14 can be a liquid-crystal panel with a touch panel, and which displays ten-keys and several operation keys in a rectangular compartment. Ex. 1007, Umezawa, 5:46–49; 8:23–26. Umezawa’s user interface includes buttons for changing-over picture frames, scrolling the picture frame, inputting telephone numbers, and starting/stopping a video phone transmission. *Id.* at Fig. 7, 8:30–35; 8:6–12; 10:3–22; 10:35–39. Thus, Umezawa discloses the ability to select the image signal for viewing and transmission. Ex. 1008, Sasson Decl., ¶ 52.

A POSA would have found it obvious to include in McNelley’s device Umezawa’s processing functionality operable with memory (as well as Umezawa’s user interface functionality) for reasons of size reduction and convenience of operation as explained previously above. Ex. 1008, Sasson Decl., ¶ 53. This would have amounted to adding well known elements in predictable ways with predictable results, and would allow the combination to continue to operate according to the intended purpose described in those disclosures. *See, e.g., KSR*, 550 U.S. at 415–16; Ex. 1008, Sasson Decl., ¶¶ 50–53.

Pet. 22–23.

The above-quoted contention conveys that the references to “changing-over picture frames” and “scrolling the picture frame” are directed to changing the display to show a different stored image and scrolling the display to show multiple stored images. However, we are not persuaded that that is the case. As pointed out by Patent Owner (PO Resp. 19), the references refer, instead, to changing to a different user-interface screen and scrolling through different user interface screens on the control panel of the device. For instance, Umezawa states:

As best shown in FIG. 1, the function keys 15 consist of a button 15a for changing-over the visual telephone function and vocal telephone function of the equipment 1, a button 15b for

changing-over the picture frames of the control panel, and buttons 15c, 15d for scrolling the picture frame of the control panel 14.

Ex. 1007, 8:30–35. The above-quoted text relates to the functionalities on the displayed control panel and switching among different control panel screens, rather than selective display and transmission of a stored image. Petitioners have not adequately explained why the disclosure is about switching among stored images and transmitting a stored image. The cited portions of Umezawa does not support a finding that Umezawa discloses displaying an image that has been selected from at least one image stored in memory, or transmitting an image that has been selected from at least one image stored within memory. Mr. Sasson testifies with respect to Umezawa: ““Therefore, the user can perform, not only a visual communication which is based on the photographing of his/her face, but also a visual communication during which the third party or a scene is being photographed.”” Ex. 1008 ¶ 52 (quoting Ex. 1007, 10:35–39). That testimony is unhelpful to Petitioners, because it does not explain, much less establish, that Umezawa displays and transmits an image that has been selected from at least one image stored within memory.

In their Reply, Petitioners switch gears and make two new contentions with regard to Umezawa: (1) It would have been obvious to one with ordinary skill in the art, in light of Umezawa’s disclosure of changing over the screen of the control panel to a different look or scrolling through multiple such display screens for the control panel, to scroll through and select among multiple captured images stored in McNelley’s memory for display; and (2) Umezawa discloses a pause button the activation of which

by the user causes a specific picture, such as one “which is blue over the whole area thereof,” to be transmitted (Ex. 1007, 8:15–19). Reply 14–15.

Both contentions, as pointed out by Patent Owner at oral argument (Tr. 38–39, 70), constitute new argument belatedly presented. As such, they are improper and we decline to consider them. The Petition did not mention the pause button in Umezawa, and did not take the approach that changing among different control screens renders obvious selecting for display a captured image that has been stored in memory for display. *See* 37 C.F.R. § 42.23(b) (“A reply may only respond to arguments raised in the corresponding opposition or patent owner response”); Rules of Practice for Trials Before the Patent Trial and Appeal Board and Judicial Review of Patent Trial and Appeal Board Decisions; Final Rule, 77 Fed. Reg. 48,612, 48,620 (Aug. 14, 2012) (“Oppositions and replies may rely upon appropriate evidence to support the positions asserted. Reply evidence, however, must be responsive and not merely new evidence that could have been presented earlier to support the movant’s motion.”). “Respond,” in the context of 37 C.F.R. § 42.23(b), does not mean embark in a new direction with a new approach as compared to the position originally taken in the Petition. Accepting such belatedly presented new arguments would be unjust to the Patent Owner and we decline to do so.

For reasons discussed above, we agree with Patent Owner that Petitioners have failed to show that Umezawa discloses the claimed user interface of claims 1 and 6, respectively. Because Umezawa has not been shown to disclose the claimed user interface, adding Umezawa’s implementation to that of McNelley would not result in a system having the user interface recited in claims 1 and 6, respectively.

This deficiency regarding the user interface limitations, however, does not affect Petitioners' position with regard to claim 12, which does not recite a user interface. Claim 12 does require that the wireless telephone be selectively operable to transmit non-audio digital signals, where the non-audio digital signals include a selected digitized framed image. Ex. 1001, 17:5–8. As discussed above, and as presented by Petitioners, when operating in answering machine mode, McNelley's device transmits a stored video message upon detection of a "ring." Ex. 1006, 21:19–23, 61–67, 22:1–3. The selection of an image to transmit is made automatically. McNelley discloses that there may be multiple stored greetings message boxes designated for receiving incoming messages. *Id.* at 13:48–50.

#### Non-Audio Digital Signal Limitation

Claim 12 recites: "the wireless telephone being selectively operable to transmit and receive non-audio digital signals, the non-audio digital signals including a selected digitized framed image." Ex. 1001, 17:5–8. According to Patent Owner, this limitation "mandates that the wireless telephone be capable of transmitting and receiving the selected digitized framed image *using non-audio digital signals.*" PO Resp. 14. Patent Owner's characterization of the limitation adds a level of indirection that is significant and not otherwise facially appearing in the claim, i.e., using a certain type of signal, e.g., non-audio signal, to perform the transmission or reception of the digitized framed image. That is different from the approach taken by Petitioners, which classifies a signal as audio if the source of input is audio, and as non-audio if the source of input is non-audio, e.g., images.

Under the rule of broadest reasonable interpretation, we agree with Petitioners. Patent Owner's adding another level of indirection is

unnecessary. The claim is readily understandable without the additional requirement and associated confusion of referring to images as audio signal simply because they are transmitted over a traditional telephone line. Patent Owner identifies no usage in the Specification of the '871 patent of the term "non-audio digital signals" that is in accordance with Patent Owner's position. The same is true with respect to the disclosures of McNelley and Umezawa.

Moreover, a review of the Specification of the '871 patent actually indicates the contrary. In the Summary of the Invention portion of the '871 patent, the Specification states that a telephone can be used to transmit and receive "visual image signals" and that there is an embodiment including a desk model that makes a connection to a "standard land line telephonic system." Ex. 1001, 1:64–2:2. Thus, even according to usage in the Specification of the '871 patent, image signals are transmitted and received via a standard telephone land line. That usage reflects defining image signals by content and not by the mode of transmission. It is also uncertain what is disclosed in the Specification of the '871 patent that corresponds to Patent Owner's characterization of "non-audio digital signals" if the classification between audio and non-audio is not based on the content of the input source.

Furthermore, claim 12 also recites: "the wireless telephone being selectively operable to convert received digitized audio signals into acoustic audio." Ex. 1001, 17:2–5. The claim's use of the phrase "digitized audio signal" to refer to a signal whose content, upon reception, is converted to "acoustic audio" undermines Patent Owner's contentions, and, instead,

supports an inference that whether a signal is audio or non-audio is determined by content of the signal being transmitted.

Patent Owner provides no explanation in its Patent Owner Response with regard to the position it has taken with respect to the term “non-audio digital signal.” There are, however, two general citations to pages 17–23 of the Declaration of Dr. Melendez (Ex. 2003), *i.e.*, “*See also* [EXH. 2003] at 17–23,”<sup>5</sup> in Patent Owner’s discussion of why McNelley and Umezawa discloses only an audio means, but not a non-audio means, of transmitting both voice and images. PO Resp. 15, 16. To the extent that those 7 pages of Dr. Melendez’s Declaration contain the underlying basis for Patent Owner’s position on the meaning of “non-audio digital signal,” we decline to consider them. To be considered, such evidence has to be explained in the Patent Owner Response. We cannot add to the Patent Owner Response explanations not made by Patent Owner. Doing so would be unjust to Petitioners. We consider what Patent Owner has explained in the Patent Owner Response, but not beyond. Also, considering those 7 pages of testimony as though they are explanations in the Patent Owner Response for the meaning of “non-audio digital signal” would amount to incorporation of material from one document by reference into another, which is prohibited by 37 C.F.R. § 42.6(a)(3). Specifically, 37 C.F.R. § 42.6(a)(3) states: “*Incorporation by reference; combined documents.* Arguments must not be incorporated by reference from one document into another document.

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<sup>5</sup> The signal *see also* “is commonly used to cite an authority supporting a proposition when authorities that state or directly support *the proposition already have been cited or discussed.*” The Bluebook: A Uniform System of Citation R. 1.2(a) at 59 (Harvard Law Review Ass’n, 20<sup>th</sup> ed. 2015) (emphasis added).

Combined motions, oppositions, replies, or other combined documents are not permitted.” What Patent Owner has done is to incorporate arguments by reference from Dr. Melendez’s Declaration, albeit without expressly stating that it is doing so.

We agree with Petitioners that the meaning of “non-audio digital signals” is sufficiently broad such that whether a transmitted digital signal is deemed an audio signal or a non-audio signal can be determined by the content being transmitted. In other words, a signal for which the input source is speech is reasonably deemed an audio signal, and a signal for which the input source is not audio, such as an image, is reasonably deemed a non-audio signal. Based on the above discussions and our construction of the term “non-audio digital signal,” McNelley discloses this limitation of claim 12: “the wireless telephone being selectively operable to transmit and receive non-audio digital signals, the non-audio digital signals including a selected digitized framed image.” Also, McNelley discloses this limitation of claim 12: “the wireless telephone being selectively operable to convert received digitized audio signals into acoustic audio.” McNelley describes that its device in teleconferencing mode permits straight-on, face-to-face conversation. Ex. 1006, 6:43–45. McNelley’s device also includes speaker 112 which is provided for reproducing an audio signal from the distant conferee while the device is in teleconferencing mode, as shown in Figure 8. *Id.* at 7:24–30.

We note, in the alternative, that considering pages 17–23 of Dr. Melendez’s Declaration would not lead to a different conclusion regarding the scope of “non-audio signals.” The testimony of Dr. Melendez does not address, much less resolve, any of the problems discussed above

about Patent Owner’s position. Dr. Melendez does not identify any example of usage of the term “non-audio signal” that is like what Patent Owner has proposed—not in the ’871 patent itself, not in McNelley, not in Umezawa, not anywhere. Dr. Melendez does not address the implication stemming from the claim limitation that received audio signal is converted into acoustic audio. More importantly, Dr. Melendez does not set forth clearly what means of signal transmission is deemed “non-audio.”

Dr. Melendez testifies that, in his view, signals transmitted over a telephone line are considered audio signals even if the content of the signals is non-audio. Ex. 2003 ¶ 43. Dr. Melendez further testifies that an example of non-audio transmission is by way of “an Ethernet connection to the [I]nternet.” *Id.* But such testimony does not explain the fundamental basis for the distinction drawn that can be applied to determine whether other modes of communication are “audio” or “non-audio.” It is not explained why—although both the telephone line and the Ethernet connection to the Internet transmit content that is audio or video—the telephone line would be regarded as “audio means” of transmission and the Ethernet connection would be regarded as “non-audio means” of transmission. Even Dr. Melendez, on cross-examination, had difficulty in making a distinction. On cross-examination, he first indicated that the Ethernet and “4G systems like LTE” are non-audio transmissions because they transmit packetized data, but later retracted that answer and stated that he disagrees that a packetized transmission is non-audio. Ex. 1013, 152:2–12, 19–25; 153:1–154:7. On this record, it simply is unclear what Patent Owner has asserted

as the basis of distinguishing an “audio digital signal” from a “non-audio digital signal.”

#### Reason to Combine Teachings

Patent Owner argues: “Patent Owner deserves to know specifically which limitations petitioner alleges are lacking in McNelley and must be found in Umezawa to assess whether a POSITA would combine Umezawa with McNelley to cure these specific deficiencies of McNelley and whether the missing disclosure is actually found in Umezawa.” PO Resp. 34. We agree, but Petitioners have made known, clearly, which limitations are at issue insofar as differences between the claimed invention and McNelley are concerned. The dispute arises only because Petitioners argue first that a limitation is disclosed by McNelley, and then in the alternative, assuming that Patent Owner disagrees that McNelley discloses the limitation, that Umezawa discloses the limitation and it would have been obvious to one with ordinary skill in the art to implement Umezawa’s feature in McNelley.

For certain claim elements, Petitioners have made two arguments: (1) that McNelley discloses the claim element, and (2) assuming that McNelley does not disclose the claim element, Umezawa discloses the element and it would have been obvious to incorporate Umezawa’s feature into McNelley’s device. Pet. 17, 20–25, 30–37, 39–44, 46. Patent Owner evidently contends that such an approach is improper. We disagree. Nothing precludes Petitioners from making a second argument in the alternative in that manner, so long as what is conveyed is clear and unambiguous. That is the case here. Accordingly, we reject Patent Owner’s argument that it has not been apprised of differences between the claimed invention and McNelley.

Patent Owner further argues that Petitioners' reasoning to combine teachings is mere boilerplate language and conclusory. Specifically, Patent owner states:

In all instances in which Petitioner suggests Umezawa might be combined with McNelley to disclose certain limitation, Petitioner inserts boilerplate language stating, for example, “[a] POSA would have found it obvious to include Umezawa’s [] functionality in McNelley as this would amount to *adding well known elements in predictable ways with predictable results, and would allow the combination to continue to operate according to the intended purposes described in those disclosures.*” Petition at 18, 21–23, 25, 30–31, 34–35, 37, 39–40, 42–44 and 46. This stock argument does little to clarify why a POSITA would combine the references.

PO Resp. 34 (emphasis added). We see no reason to disparage the above-referenced reasoning of Petitioners as “boilerplate language” that “does little” to clarify why prior art teachings may be combined. To the contrary, the language conveys substantial meaning. The fact that Petitioners use the same reasoning multiple times does not, somehow, diminish its significance.

Furthermore, Patent Owner appears not to have recognized that Petitioners articulated more than the above-referenced reasoning for combining teachings. For instance, the Petition states:

For example, a POSA would have found it obvious to incorporate teachings from Umezawa into the system of McNelley, including inclusion of Umezawa’s processor functionality and LCD touch control panel (user interface), at least for the purposes of providing a smaller and more convenient handheld videoconferencing device that could be held in one hand, for providing a more convenient means of user control via the LCD touch control panel as a user interface, and for providing an ability to view alphanumeric messages on the display, *e.g.*, to confirm the accuracy of the phone number of the other party.

*See, e.g.*, Ex. 1006, McNelley, FIGS. 8, 10–12 and Ex. 1007, Umezawa, FIG. 7, 1:36–40, 8:23–29, 10:3–22.

Pet. 14. The above-quoted basis for combining teachings is neither boilerplate nor merely conclusory. When specifically discussing each limitation, and when relying on McNelley in combination with Umezawa, Petitioners further specifically identify at least one of the above-noted reasons to combine teachings. Accordingly, we find nothing deficient about Petitioners’ articulated reasoning to combine teachings, which are based on rational underpinnings.

#### *4. Dependent Claims 2–5, 7, 8, 13, and 14*

Each of claims 2–5 depends directly from claim 1. Each of claims 7 and 8 depends directly from claim 6. Each of claims 13 and 14 depends from claim 12. Petitioners’ submissions with respect to claims 2–5, 7, and 8 do not make up for the deficiency of its analysis, as discussed above, for claims 1 and 6. Thus, there is no need to address further claims 2–5, 7, and 8, including Patent Owner’s specific argument directed to the limitation added by claim 7 relative to claim 1. With regard to claims 13 and 14, we are persuaded by Petitioners’ arguments, similarly, as we are with respect to claim 12. Patent Owner does not advance any argument for claims 13 and 14 that it has not presented for claim 12. We consider Patent Owner to have admitted those aspects of the ground of unpatentability that are uncontested by Patent Owner and are material facts. *See* 37 C.F.R. § 42.23(a); *see also* Paper 13, 3 (“The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived.”).

### III. THE PARTIES' ADDITIONAL ARGUMENTS

Petitioners assert: “PO’s expert [Dr. Melendez] and his wife have a history of profiting from patent lawsuits against Petitioners—rendering his testimony biased and entitled to little weight.” Reply 24. Petitioners explain the underlying circumstances and then state:

In short, Patent Owner has relied upon the expert testimony from someone who, along with his wife, has made a living being adverse to Petitioners. This repeated and sustained adversity to Petitioners clouds both his objectivity and the reliability of his opinions in this matter.

Reply 24–25. The underlying facts explained by Petitioners with regard to the activities engaged in by Dr. Melendez and his wife, relative to Petitioners, have not been disputed by Patent Owner. We have taken them into account when considering the testimony of Dr. Melendez and the weight that is accorded to his testimony. It is significant to note that the facts presented by Petitioners are insufficient to establish that Dr. Melendez or his wife targeted either one of the two petitioners in this proceeding, to the exclusion of essentially all other entities, in his or her business, as the above-quoted arguments from Petitioners appear to suggest.

Patent Owner notes that 37 C.F.R. § 42.104(b) requires a petitioner to “[p]rovide a statement of the precise relief requested for each claim challenged.” PO Resp. 35. Patent Owner further notes that 37 C.F.R. § 42.104(b)(2) requires that the statement must identify “[t]he specific statutory grounds under 35 U.S.C. 102 or 103 on which the challenge to the claim is based and the patents or printed publications relied upon for each ground.” *Id.* Patent Owner additionally observes that under 37 C.F.R. § 42.104(b)(4), a petitioner must also indicate “[h]ow the construed claim is

unpatentable under the statutory grounds identified in paragraph (b)(2) of this section.” *Id.* Based on the foregoing, Patent Owner argues:

Petitioner has failed to adhere to these 37 CFR § 42.104 guidelines in preparing its Petition. Petitioner conflates two separate grounds of rejection (a 35 U.S.C. § 102 rejection based on McNelley with a 35 U.S.C. § 103 rejection based on McNelley in view of Umezawa) into a single obviousness rejection under 35 U.S.C. § 103. Petitioner’s imprecision is non-trivial and creates substantial problems for both the Patent Owner and the PTAB.

PO Resp. 35–36. Patent Owner then summarizes its contention as follows:

Patent Owner respectfully submits that Petitioner’s attempt to combine an anticipatory ground of rejection with an obviousness ground of rejection is more than confusing. It is manifestly unjust for a Petitioner to force the Patent Owner and PTAB to guess which ground of rejection is being put forward in preparing a response and written opinion to the proposed ground of rejection. This is precisely why the provisions of 35 U.S.C. § 42.104 were enacted. Petitioner’s failure to clearly and precisely present its proposed ground of rejection is fatal pursuant to 37 CFR § 42.104.

*Id.* at 38.

Rule 42.104 should not be read so stringently that a petition is doomed, by application of rule, whenever there is another way in which the petition can be presented that would be more easily understandable to the patent owner or to the Board. The rule should not require a catastrophic result simply for the less than perfect case.

It is true that the Petition would be more easily understandable if it separated from the obviousness ground those claims for which Petitioners regard all of the elements as met by McNelley alone, and presented a separate anticipation ground against those claims under 35 U.S.C. § 102. But, at least in this case, Petitioners’ failure to do that does not make the

Petition so confusing that Rule 42.104 requires its rejection or dismissal. Within the obviousness ground explained by Petitioners, it is readily discernable which element of which claim Petitioners believe is met by McNelley and why that is so. Also, that explanation, on an element by element basis, essentially leads Petitioners' discussion for each claim element. Patent Owner does not allege that the Petition failed to address or omitted a certain element of any claim.

Petitioners' obviousness contentions, based on differences between the claimed invention and the prior art, are alternative contentions in case the Board disagrees with Petitioners' assertion that certain claim elements are disclosed by McNelley. The Petition is clear in identifying a presumed difference and then argues, in the alternative, obviousness despite that difference, and does that for each element with respect to which Petitioners have a specific accounting based on obviousness.

As for Petitioners' including what is essentially an anticipation argument within a ground of unpatentability stated as obviousness over McNelley and Umezawa, that is not a fatal defect. If we determine that Petitioners have shown that McNelley alone discloses all elements of a challenged claim, that claim can be deemed unpatentable as obvious over McNelley and Umezawa. "Though it is never necessary to so hold, a disclosure that anticipates under § 102 also renders the claim invalid under § 103, for 'anticipation is the epitome of obviousness.' *In re Fracalossi*, 681 F.2d 792, 215 USPQ 569 (CCPA 1982)." *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983); *see also In re Paulsen*, 30 F.3d 1475, 1481 (Fed. Cir. 1994); *In re Baxter Travenol Labs*, 952 F.2d 388, 391 (Fed. Cir. 1991); *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d

707, 716 (Fed. Cir. 1984). In any event, the issue is inconsequential here. We have not found that McNelley discloses every element of any claim.

#### IV. UNOPPOSED MOTION TO SEAL

Patent Owner filed an Unopposed Motion to Seal. Paper 32.

There is a strong public policy in favor of making information filed in an *inter partes* review open to the public, especially because the proceeding determines the patentability of claims in an issued patent and, therefore, affects the rights of the public. *See Garmin Int'l v. Garmin Speed Tech's, LLC*, Case IPR2012-00001 (PTAB Mar. 14, 2013) (Paper 34). Under 35 U.S.C. § 316(a)(1) and 37 C.F.R. § 42.14, the default rule is that all papers filed in an *inter partes* review are open and available for access by the public. A party, however, may file a concurrent motion to seal, and the information at issue is sealed pending the outcome of the motion.

It is only “confidential information” that may be protected from disclosure, 35 U.S.C. § 316(a)(7), and, even then, there is a public interest in “maintaining a complete and understandable file history” of the proceeding. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,760 (Aug. 14, 2012). The standard for granting a motion to seal is “for good cause.” 37 C.F.R. § 42.54(a). The party moving to seal bears the burden of proof in showing entitlement to the requested relief. 37 C.F.R. § 42.20(c).

Patent Owner seeks to place under seal various portions of the cross-examination testimony of Dr. Melendez, appearing on these pages of the transcript of the cross-examination (Ex. 1013): 231–235, 237, 238, 243–245, 247–253, and 254. Patent Owner has filed two versions of the cross-examination transcript as Exhibit 1013, a redacted public version, and a

confidential version. The material sought to be sealed has been redacted from the public version of Exhibit 1013.

The motion explains that the information sought to be sealed comprises two types of information: (1) Confidential Commercial Information Related to Clients of Dr. Melendez, *e.g.*, identity of former, current, and potential clients, and (2) Confidential Personal Financial Information of Dr. Melendez and/or his wife, *e.g.*, information relating to the tax filing status of Dr. Melendez and his wife and their potential maintenance of funds in a joint account. Paper 32, 3–7. We have had no need to rely on such material in our substantive analysis on the issue of patentability of claims and have not referred to or discussed such material.

We have balanced Patent Owner’s assertion of confidentiality with the public’s interest in a sufficiently understandable record with respect to the substantive decisions made regarding patentability. We find that the potential harm to Patent Owner outweighs the minimal public interest, if any, for access to the information at issue. Accordingly, Patent Owner’s Unopposed Motion to Seal (Paper 32) is *granted*.

## V. ORDER

For the reasons given, it is:

ORDERED that claims 12–14 of U.S. Patent No. 7,365,871 B2 have been shown by a preponderance of the evidence to be unpatentable, under 35 U.S.C. § 103(a), as obvious over McNelley and Umezawa;

FURTHER ORDERED that claims 1–8 of U.S. Patent No. 7,365,871 B2 have not been shown by a preponderance of the evidence to be unpatentable under any ground;

FURTHER ORDERED that Patent Owner's Unopposed Motion to Seal is *granted*; and

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

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