

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AXON ENTERPRISE, INC.,
Petitioner

v.

DIGITAL ALLY, INC.,
Patent Owner

Case PGR2018-00052
Patent 9,712,730

**PATENT OWNER'S PRELIMINARY RESPONSE
TO PETITION FOR POST-GRANT REVIEW**

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Pursuant to 35 U.S.C. § 323 and 37 C.F.R § 42.207, Patent Owner, Digital Ally, Inc. (“Patent Owner”) submits this Preliminary Response to the Petition for Post-Grant Review of U.S. Patent No. 9,712,730 (“the ’730 Patent”) by Petitioner, Axon Enterprise Inc. (“Petitioner”).

I. INTRODUCTION

The claims of the ’730 Patent are amply supported by written description in the as-filed Specification. Petitioner does not appear to dispute that the claimed functions are disclosed. Nor does Petitioner appear to dispute that the claimed “processing element” is disclosed. As best understood, Petitioner’s sole argument is that the disclosed processor does not perform the disclosed functions. This argument is premised on a fundamental misunderstanding of the law governing written description.

The claims at issue are also not obvious in view of the cited art. Both claims 8 and 15 recite that the video file be wirelessly transmitted to a mobile communications device for viewing on the device. None of the cited art (specifically, Smith and O’Donnell) teaches this claimed feature. Smith does not teach mobile communication devices at all. And O’Donnell does not teach wirelessly transmitting the video file to a mobile communications device.

A. Related Matters

Digital Ally, Inc. is the Patent Owner of the '730 Patent.

Patent Owner is not aware of any pending judicial or administrative matters related to the '730 Patent.

B. Summary of the '730 Patent

The '730 Patent is related to a portable video and imaging system for use in law enforcement. The claimed embodiments of the system include a selectively mountable housing (*e.g.*, on an officer's body or in a law enforcement vehicle) containing a camera for capturing video of an event, a memory for storing the recorded video, an input operable to store a mark in the recorded video indicating a time and allowing the video to be quickly advanced to the indicated time during playback.¹ Certain claims also require the ability of the system to wirelessly transmit the video file to a mobile communications device for viewing.

C. Level of Ordinary Skill in the Art

Patent Owner submits that a POSITA as of September 28, 2012, the earliest priority date of the '730 Patent, would have had (1) a bachelor's degree in electrical engineering, computer engineering, or an equivalent science or engineering field; (2) a working knowledge of digital data recording systems and

¹ Independent claim 22 is instead directed to a computer-readable medium storing the resulting video file.

their associated hardware and software, including portable, wireless digital data recording systems; and (3) at least two years of experience designing wireless digital data recording systems. Additional industry experience or technical training may offset less formal education, while advanced degrees or additional formal education may offset lesser levels of industry experience. (Ex. 2001, ¶ 31).

Petitioner submits that a POSITA would have had a B.S. in Mechanical Engineering or an equivalent field and at least 5 years of professional experience working with, building, or designing portable and mountable electronic devices, including electronic video cameras that can be mounted on a person. (Pet. 13). Patent Owner respectfully disagrees that a mechanical engineering degree is sufficient for a POSITA, as a significant portion of the features claimed in the '730 Patent are directed to issues involving the processing, manipulation, and wireless transmission of digital video files and other digital data. Patent Owner appreciates that Petitioner submits that a POSITA would have an interdisciplinary engineering background, but it is unclear how a mechanical engineering degree suffices to address the wireless digital data recording requirements in the claims. Therefore, Patent Owner submits that a POSITA would have at least a B.S. in electrical engineering, computer engineering, or an equivalent science or engineering field.

II. DISCLAIMER OF CLAIMS

Patent Owner has attended to filing a statutory disclaimer under 35 U.S.C. § 253(a) and 37 CFR § 42.207(e) of claims 1-7, 9-14, and 22-24 of the '730 Patent. The statutory disclaimer is filed with the U.S. Patent Office in the patent file history, pursuant to 37 CFR § 1.321(a). (Ex. 2007). Per 37 C.F.R. § 42.207(e), no post-grant review will be instituted based on disclaimed claims. Therefore, only claims 8 and 15-21 are eligible for post-grant review.

The statutory disclaimer of claims 1-7, 9-14, and 22-24 is made for purposes of narrowing the issues for efficient resolution of this PGR and should not be considered an admission that any feature of any claim, in whole or in part, is taught in the art of record.

III. CLAIM CONSTRUCTION

For purposes of post-grant review of an unexpired patent, a claim is to be given its “broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.200(b); *Cuozzo Speed Techs. v. Lee*, 136 S. Ct. 2131, 2135 (2016). While the Board should apply the broadest reasonable construction, caution should be taken “to not read ‘reasonable’ out of the standard. This is to say that ‘[e]ven under the broadest reasonable interpretation, the Board’s construction cannot be divorced from the specification and the record evidence, and must be consistent with the one that those skilled in

the art would reach.” *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015) (internal citations omitted). The construction must be “consistent with the specification ... and [the] claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010) (internal quotations omitted). Claim terms are “given their ordinary and customary meaning ... that the term would have to a person of ordinary skill in the art.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005).

IV. PETITIONER’S GROUND 1: WRITTEN DESCRIPTION SUPPORT FOR CLAIMS 1-21

Petitioner alleges that the originally filed specification of the application that issued as the ’730 Patent (“the ’730 Specification”) does not include written description support for claims 1-21 of the ’730 Patent. Petitioner asserts that the ’730 Specification lacks written description for a processor that performs several functions of the system. Petitioner does not appear to dispute that a processor is disclosed (*Petition* at 20), and appears to concede that the functions in question, those of “marking video,” are disclosed (*id.*). Petitioner’s sole argument appears to be that a POSITA would not understand that the disclosed processor is involved in performing the disclosed functions. However, “[d]isclosing a microprocessor capable of performing certain functions is sufficient to satisfy the requirement of

section 112, first paragraph, when one skilled in the relevant art would understand what is intended and know how to carry it out.” *In re Hayes Microcomputer Prod., Inc. Patent Litig.*, 982 F.2d 1527, 1534 (Fed. Cir. 1992); *Inphi Corp. v. Netlist, Inc.*, 805 F.3d 1350, 1355 (Fed. Cir. 2015) (“Whether a patent claim satisfies the written description requirement of 35 U.S.C. § 112, paragraph 1 depends on whether the description ‘clearly allow[s] persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.’”) (internal citations omitted).

Here, the functions are disclosed and “[o]ne skilled in the art would know how to program a microprocessor to perform the necessary steps described in the specification.” *Id.*; *see also* Ex. 2001, ¶ 54 (Dr. Madisetti opining that a POSITA would be able to program the claimed “processing element” to carry out the disclosed steps). As such, Petitioner’s position does not hold up in view of the disclosures of the Specification or the relevant case law.

In support of this argument, the Petition repeatedly cites to Dr. Keller’s Declaration from ¶¶ 69-75. However, this testimony merely restates the contents of the seven paragraphs of the Petition’s written-description argument on a nearly verbatim basis. “Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” 37 CFR § 42.65(a). Furthermore, expert testimony that merely recapitulates arguments made

in a petition and adds “in my opinion” is particularly disfavored. *See, Kinetic Technologies, Inc. v. Skyworks Solutions, Inc.*, IPR2014-00529, Paper 8 at 15 (PTAB Sept. 23, 2014) (holding that “merely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value.”); *Infobionic, Inc. v. Braemer Manufacturing, LLC.*, IPR2015-01704, Paper 11 at 6 (PTAB Feb. 16, 2016) (finding expert testimony unpersuasive because it merely repeated arguments set forth in the pleading with the addition of the phrase “in my opinion”). This precisely characterizes Dr. Keller’s testimony, and for this reason, that testimony should be afforded no weight.

A. The Specification of the ’730 Patent provides written description support for a processing element that receives an activation signal

Petitioner alleges that claims 1-21 are invalid under 35 U.S.C. § 112(a) at least because they lack written-description support for a “processing element” that “receives said activation signal” (*i.e.*, the signal generated in response by the claimed input in response to actuation by the user). (Pet. 19). Petitioner does not dispute that the ’730 Specification contains written description for generating and transmitting this activation signal. (Pet. § V). As best understood, Petitioner contends that the ’730 Specification does not explicitly state that the activation signal is sent to recording component 14, and therefore, the disclosed processing element 38 of recording element 14 is not involved in the marking process “in any

way.” (Pet. 20). Petitioner further contends that the provisional applications incorporated by reference fail to provide written description support for a processing element that receives an activation signal from an input. (Pet. § V) (incorporating Pet. § II).

First, the ’730 Specification discloses that the camera component 12 and recording component 14 are “communicatively coupled via cabling 18” or “wirelessly communicatively coupled” and that in the latter case “wireless signals comprising instructions or data” can be communicated between them. (Ex. 1003, ¶ [0046]). A POSITA would understand that these “instructions” include the instruction to record and the instruction to mark the video file generated by second input 34. (Ex. 2001, ¶ 40). As described in Section B below, the disclosed processing element stores both the video file and the marks; thus, the processing element is involved in the marking process at least to that extent. Furthermore, the Specification specifies that actuation of the second input 34 “serves as [...] [an] instruction [...] to mark the captured video.” (Ex. 1003, ¶ [0052]). Because the user instructs marking via the input (which Petitioner does not dispute generates the claimed activation signal), and because processing element 38 performs the marking (as discussed below), a POSITA would understand that the processing element 38 must receive the activation signal or it would not know to store the mark in the file. (Ex. 2001, ¶ 40). Thus, the as-filed Specification of the ’730

Patent includes written description support for “a processing element [...] configured to [...] receive said activation signal.”

Furthermore, the '326 Provisional Application (Ex. 1010), incorporated by reference into the '730 Specification, also provides written description support for this claim element. Petitioner contends that the '326 Provisional Application does not include written description support for a processing element that receives an activation signal. (Pet. § II). This position does not withstand even cursory scrutiny. First, the '326 Provisional Application includes an “electronics module” that “includes components operable to receive and execute instructions stored in internal memory.” (Ex. 1010, 4). A POSITA would understand this disclosure to include a processor or “processing element.” (Ex. 2001, ¶ 38). Figure 1 of the '326 Provisional Application depicts “input buttons” connected to this “electronics module.” (Ex. 1010, 12). The '326 Provisional Application describes these input buttons as including a “flag button” that causes a bookmark to be placed in the video. *Id.* at 5. Petitioner does not dispute that the '326 Provisional Application includes written description support for “an input [...] configured to [...] generate an activation signal.” As shown in FIG. 1, the input buttons are connected exclusively to the electronics module, and as such, any signal generated by the input buttons would be received by the electronics module. As discussed above, this electronics module is a “processing element” and, as it receives the activation

signal from the flag button, it is a “processing element [...] configured to receive said activation signal.” Thus, the ’326 Provisional Application, incorporated by reference into the ’730 Specification, also provides written-description support for this claim element.

B. The Specification of the ’730 Patent provides written description support for a processing element that stores a mark in the video file

Petitioner further alleges that the ’730 Specification lacks written-description support for a processing element that “in response to the activation signal, store[s] a mark in the video file for at least one of the plurality of frames.” (Pet. 19). As described above, Petitioner does not appear to dispute that the ’730 Specification discloses that such a mark is stored in the video file. Instead, Petitioner’s argument is that the ’730 Specification does not disclose that the processor (which is disclosed) does the storing.

The ’730 Specification discloses that the recorded video is stored in memory element 40 of recording component 14: “The camera component 12 is configured to [...] transmit the captured video to the recording component 14 for storage on a memory of the recording component, as further discussed below.” (Ex. 1003, ¶ [0047]). Additionally, the ’730 Specification discloses that marks are stored in or with the video (for example, as metadata): “‘Marking’ of the captured video provides an indication of a point in time [...] The user can then quickly move to

marked locations in the captured video upon viewing of the video using standardized video viewing software.” *Id.* at ¶ [0052]. The marks are thus also stored at recording component 14. (Ex. 2001, ¶ 46).

Next, Petitioner appears to concede that processing element 38 is a processor that can perform functions such as “execut[ing], process[ing], or run[ning] instructions.” (Pet. 20). The ’730 Specification states, “processing element 38 may be in communication with the memory element 40 through address busses, data busses, control lines, and the like.” (Ex. 1003, ¶ [0058]). A POSITA would thus understand that processing element 38 controls the operation of memory element 40, including what data is stored there, via these address busses, data busses, and control lines. (Ex. 2001, ¶ 45). A POSITA would also understand that, because the processing element 38 controls memory element 40, and because memory element 40 stores the claimed mark in the video file, processing element 38, as disclosed, is configured to “store[s] a mark in the video file for at least one of the plurality of frames.” *Id.* at ¶ 45-47.

Finally, the ’730 Specification discloses that these marks are stored in response to the actuation of the second input: “Actuation of the second input 34 thus serves as both an instruction to begin recording and to mark the captured video to identify a time or location in the captured video corresponding to actuation of the second input 34.” (Ex. 1003, ¶ [0052]). Petitioner does not dispute

that there is written description support for the actuation of second input 34 causing the activation signal to be sent. (Pet. § V). Because, as shown above, the processor causes the mark to be stored, and the mark is stored in response to the activation signal, a POSITA would understand that the '730 Specification discloses a processor that “in response to the activation signal, stores a mark in the video file.” As such, the '730 Specification provides written description support for this claim element.

C. The Specification of the '730 Patent provides written description support for a processing element that advances the video file to the mark in the video file

Petitioner's final argument is that the '730 Specification does not disclose “a processing element” that can “upon playback of the video file [and in response to receipt from a user request]² automatically advance the video file to the marked at least one video frame.” (Pet. 19). Initially, Patent Owner notes that there is no requirement that the same processing element can “receive said activation signal,” “store a mark,” and “advance the video file.” “As a general rule, the words ‘a’ or ‘an’ carry the meaning of ‘one or more.’ [...] An exception to this general rule arises *only* where the language of the claims, the specification, or the prosecution history necessitate a departure from the rule.” *01 Communique Lab., Inc. v.*

² The Petition omits the bracketed claim language.

Logmein, Inc. 687 F.3d 1292, 1297 (Fed. Cir. 2012) (*emphasis in original*) (citations omitted). Here, the '730 Specification discloses an embodiment where the captured video is viewed on a separate computing device (which a POSITA would understand contains a separate processing element; *see*, Ex. 2001, ¶ 50) from system 10: “[e]mbodiments of the invention may also include a computer program for viewing the captured video on a mobile communications device, such as via an app, at a website, or using viewing software.” (Ex. 1003, ¶ [0066]). Thus, at least because the '730 Specification contemplated the steps being performed by multiple processors, the claimed “a processing element” is not limited to a single processing element performing all of the recited functions.

Petitioner does not appear to contend that the disclosed function, *i.e.*, quickly moving to a marked location in the recorded video, lacks written description support. (Pet. § V). However, for completeness, as described above the '730 Specification discloses that the video file can be viewed (*i.e.*, played back) on a mobile communications device. The '730 Specification further discloses that “[t]he user can then quickly move to marked locations in the captured video upon viewing of the video using standardized video viewing software.” (Ex. 1003, ¶ [0052]). A POSITA would thus understand that the '730 Specification discloses the function of “upon playback and in response to receipt from a user request,

automatically advancing the video file to the marked at least at least one video frame.” (Ex. 2001, ¶¶ 51-52).

Finally, the ’730 Specification inherently discloses “a processing element configured to” perform this function, by disclosing the mobile communications device on which it is performed. Inherent disclosure can provide written description support. MPEP 2163.05 (“To comply with the written description requirement of 35 U.S.C. 112(a) [...] each claim limitation must be expressly, implicitly, *or inherently* supported in the originally filed disclosure.”) (*emphasis added*). Furthermore, “[t]he ‘written description’ requirement must be applied in the context of the particular invention and the state of the knowledge.” *Capon v. Eshhar*, 418 F.3d 1349, 1357 (Fed. Cir. 2005).

In this case, a POSITA would understand that a personal communication device that can run “apps” or “viewing software” or access video “at a website” necessarily includes a processor for running those apps or software, or for running a web browser for accessing the web. (Ex. 2001, ¶¶ 50-51). As such, the ’730 Specification discloses a “processing element” (inherently, in the form of the processor of the mobile communications device) that is “configured” (by the viewing software) to perform the disclosed function as well. A POSITA would understand that the processing element of the mobile communications device is “associated with the memory element and the input” of the portable video and

imaging system at least because the mobile device is configured to view the captured video stored in the memory and ship to marks recorded using the input. (Ex. 2001, ¶ 50). Thus, the '730 Specification provides written description for this claim element.

D. Conclusion

As shown above, the '730 Specification, as filed, includes written-description support for each of the elements cited by Petitioner. As such, there is no likelihood that claims 1-21 will be found unpatentable as lacking written-description support and Post-Grant Review should not be instituted based on Petitioner's Ground 1.

V. PETITIONER'S GROUND 9: OBVIOUSNESS OF CLAIMS 15, 17, AND 19 OVER SMITH, O'DONNELL, AND HALER

Petitioner contends that claim 15 (and its dependent claims 17 and 20) is obvious under 35 U.S.C. § 103 over Smith in view of O'Donnell and in further view of Haler. Petitioner's Ground 9 does not include individual analyses of claim elements, but rather cites to analyses in Grounds 2, 4, and 5. Similarly, Mr. Keller's Declaration does not include any analysis in the portions related to Ground 9, but instead cites to the sections of the Declaration related to Grounds 2, 4, and 5. As such, Patent Owner's discussion will address (and cite to) Petitioner's substantive analysis as it appears in the sections of the Petition related to Grounds 2, 4, and 5, rather than the sections related to Ground 9.

A. **Smith in view of O'Donnell and in further view of Haler fails to teach or suggest that the processing element is configured to “wirelessly transmit the video file to a mobile communications device configured for viewing the video on the mobile communications device.”**

Claim 15 is not obvious over the combination of Smith, O'Donnell, and Haler at least because the art of record, alone or in combination, fails to teach or suggest the claimed “processing element [...] configured to [...] wirelessly transmit the video file to a mobile communications device configured for viewing the video on the mobile communications device,” as recited in claim 15. In support of the contention that the combination teaches this claim element, the Petition cites to § VIII.C, which addresses dependent claim 8. (Pet. 86, *citing* Pet. 62).

1. **Smith’s “secondary subsystem” is not a mobile communications device configured for viewing the video on the mobile communications device**

Petitioner asserts that Smith’s “secondary subsystem” satisfies the claim limitation of “a mobile communications device configured for viewing the video on the mobile communications device” to which the processing element wirelessly transmits the video file. (Pet. 62). This argument fails for multiple reasons.

As an initial note, both the station hub 110 and the shift hub 120 in Smith are described as secondary subsystems. (Ex. 1012, Smith, ¶ [0054]). In contrast, the incident recorder 208 is described as a primary subsystem. *Id.* at ¶ [0061].

- a) *Smith does not teach wirelessly transmitting the video file to a device where it can be viewed*

Claim 15 requires that the processing element of the “portable video and imaging system” be configured to wirelessly transmit the video file to a device *where it can be viewed*. Smith’s “incident recorder 208” transmits data to the “shift hub 120.” (Ex. 1012, Smith, ¶ [0098]). This set-up in Smith does not teach the recited limitation because (1) the shift hub 120 cannot display for viewing the data received from the incident recorder 208; and (2) Smith’s workstations, which are in communication with station hub 110 and at which the data is viewed, are not in communication with the incident recorder at all.

In more detail, Smith teaches that the wired/wireless interface of the incident recorder 208 “provides communication between 132 and shift hub 120. [...] A wireless interface enables handset 132 to wirelessly communicate with ad hoc transceiver 124 of shift hub 120.” (Ex. 1012, Smith, ¶ [0098]). Thus, Smith teaches that the incident recorder 208 transmits data to the shift hub 120. This shift hub, however, does not include a display for viewing the video, and Petitioner does not assert otherwise. *See*, Ex. 1012, Smith, FIG. 1.

The station hub 110 (as opposed to the shift hub 12) hosts evidence manager 112, which may be accessed at a workstation: “A user of an evidence manager [i.e., evidence manager 112 hosted by station hub 110] may obtain summaries of numerous incident reports using database query and reporting technologies and

may view the results on a workstation.” (Ex. 1012, Smith, ¶¶ [0031], [0055]). Thus, data from the incident recorder is loaded into the database of evidence manager 112. (Ex. 2001, ¶ 61, *citing* Ex. 1012, Smith, ¶ [0031]). Subsequently, a user who wishes to view the video accesses that database from a workstation. *Id.* Accordingly, the workstation on which the user views the video never communicates with the incident recorder *at all*. Thus, Smith fails to teach or suggest any component that (1) wirelessly communicates with the incident recorder, and (2) is configured for viewing the data.

Recognizing that no data is viewable at the shift hub 120, Petitioner asserts that the incident recorder 208 communicates with *station hub* 110 “via the ‘ad hoc transceiver’ of the shift hub.” (Pet. 62). Respectfully, the Petitioner is incorrect. Smith discloses that processor 122 *of shift hub 120* communicates “via ad hoc transceiver 124.” (Ex. 1012, Smith, ¶ [0056]) (*emphasis* added). The Petition mischaracterizes this teaching in Smith, claiming that it is processor 340 (of the handset 132, which is included in the incident recorder 208) that communicates via ad hoc transceiver 124. (Pet. 62; *see also*, Ex. 1012, Smith, FIG. 3 (illustrating incident recorder 208, handset 132, processor 340 (included in handset 132), and wired/wireless interface 349 (also included in handset 132))). However, processor 340 (of the handset 132) communicates via wired/wireless interface 349 (also of the handset), and is disclosed exclusively as communicating with shift hub 120.

(Ex. 1012, Smith, ¶ [0098]). Moreover, because Smith’s “incident recorder 208” includes “wired/wireless interface 349,” a POSITA would not understand that the incident recorder 208 transmits data “via the ‘ad hoc transceiver’ of the shift hub,” as Petitioner suggests. (Ex. 1012, Smith, FIG. 3; Ex. 2001, ¶ 59). Instead, the incident recorder transmits video via its own wired/wireless interface 349, as opposed to the shift hub’s transceiver 124.

Claim 15 requires that a processing element of the “portable video and imaging system” be configured to wirelessly transmit the video file to a device where it can be viewed. Thus, even if Smith’s “shift hub 120” wirelessly transmitted the video file to a device for viewing on the device, it is the shift hub’s processor that transmits data to the device—not the processor 340 of incident recorder 208. That is, shift hub 120 includes its own processor 122 and memory, which would be responsible for any transmission by shift hub 120. *Id.* at ¶ [0060] (“[D]ata transfer may occur via ad hoc transceiver 124 **as controlled by processor 122** for communication with those other components and primary subsystems capable of wireless communication.” (**emphasis** added)). Therefore, Smith does not teach or suggest that processor 340 of incident recorder 208 is configured to transmit data to a device for viewing on the device.

Nor can the processing element 122 of shift hub 120 satisfy this claim limitation. Processing element 122 is not a processing element of the “portable

video and imaging system” at least because it is not portable. (Ex. 2001, ¶ 60). Nor does it transmit wirelessly to another device for viewing, because ad hoc transceiver 124 communicates only with the incident recorder (Ex. 2001, ¶ 59), and because any communication with station hub 110 occurs via secure network 114, which a POSITA would understand to be wired. (Ex. 2001, ¶ 60). As such, Smith fails to teach or suggest a processor of the portable video and imaging system wirelessly transmitting the video file to a device where it can be viewed.

b) Smith does not teach a “mobile communications device”

The “personal computer” disclosed by Smith would not be understood by a POSITA to include a “mobile communications device,” as Petitioner alleges. (Ex. 2001, ¶ 62). Petitioner’s only support for this purported understanding is a single citation to ¶ 168 of Mr. Keller’s Declaration, which is nothing more than the verbatim language of the Petition. *See* Pet. 62 (merely stating that a POSITA would understand a “personal computer” to include a “mobile communications device” without any further explanation). Mr. Keller’s opinion is conclusory without any explanation or bases for the opinion. “Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” 37 CFR § 42.65(a). Mr. Keller’s opinions on what a POSITA would understand Smith’s “personal computer” to include should therefore be disregarded.

Petitioner’s sole textual support for Smith teaching transmitting the video data to a *mobile communications device* is Smith’s teaching of the secondary subsystem including personal computers, servers, and networks of servers. (Ex. 1012, Smith, ¶ [0030]; Pet. 62). Petitioner ignores Smith’s contrary teachings that “[s]econdary subsystems generally are not used at the time and place of the incident” (*i.e.*, in the field as mobile devices). *Id.* at ¶ [0028]. Smith’s examples of secondary subsystems, *e.g.*, “personal computer, server, [or] network of servers,” (*id.* at ¶ [0030]) all share the common feature of *immobility*, meaning they are unsuited for use in the field as peripherals of the claimed “portable video and imaging system.” (Ex. 2001, ¶¶ 60-63). In contrast, Smith’s “primary subsystems” are described as “generally used at the time and place of the incident.” (Ex. 1012, Smith, ¶ [0028]). As such, to read a teaching of a “personal computer” as including a “mobile communications device” is to read the word “mobile” out of the claims. For this reason as well, Smith fails to teach or suggest “wirelessly transmit[ing] the video file to a mobile communications device configured for viewing the video on the mobile communications device,” as recited in claim 15.

2. O'Donnell fails to teach or suggest that the video file is wirelessly transmitted to a mobile communications device configured for viewing the video on the mobile communications device

Petitioner, recognizing the deficiencies of Smith, provides an alternative argument in view of O'Donnell: “[t]o the extent that Smith does not explicitly state that any one of the remote devices is a ‘mobile communications device configured for viewing the video file on the mobile communications device,’ this feature would have been obvious in view of O'Donnell.” (Pet. 62). The system disclosed by O'Donnell implements the Bluetooth wireless connection protocol to allow a mobile device to provide “remote image acquisition control and viewing.” (Ex. 1014, O'Donnell, Abstract). O'Donnell refers to such a device as a “viewer/controller 510.” *Id.* at ¶ [0144].

While the camera 10 and controller 510 communicate wirelessly via Bluetooth, O'Donnell does not teach or suggest a system where a *video file* is wirelessly transmitted to the controller 510 for viewing, as Petitioner contends. (Pet. 62-64). Bluetooth is a comparatively low-bandwidth, short-range “cable-replacement” protocol that would be unsuitable for transmitting O'Donnell's video data. (Ex. 2001, ¶¶ 66-69). O'Donnell makes it clear that the disclosed system is *not* transmitting the *video file*. Instead, and as discussed in detail below, O'Donnell teaches transmitting a limited number of photos in rapid succession via the Bluetooth connection. For example, FIGs. 33-35 shows the camera “tak[ing]

photos in rapid succession (~1/5 sec)” and sending “photos and camera status” to the viewer/controller 510. (Ex. 1014, O’Donnell, FIGs. 33-35).

As the name suggests, the viewer/controller 510 is primarily concerned with physically configuring and calibrating the camera 10 or cameras of O’Donnell’s system using the limited number of transmitted photos:

A launch control/viewer application instruction causes transmission of a fast photo transfer Data Request signal to Bluetooth® data transfer-enabled digital video camera 10, which responds by enabling the taking of photographs in rapid succession (e.g., five photographs each second) of the scene to which camera lens 26 is pointed. [...] *The angle/position mounting adjustment performed by the user* causes the taking of photographs of the scene in rapid succession and transmitting them for near real-time display to the user observing the display screen of viewer/controller 510. Successive iterations of angle/position mounting adjustment, picture taking in rapid succession, and user observation of the displayed scene continue until the user is satisfied *with the position of the scene displayed*

(Ex. 1014, O’Donnell, ¶ [0146]) (*emphases* added). O’Donnell thus contemplates the use of the mobile device to view *still photographs* from a video camera *before recording begins* in order to verify that the camera is *aimed correctly*.

To transfer a video file from the video camera, O’Donnell teaches that the video file is transferred via “USB or SD card reader,” which do not share Bluetooth’s bandwidth limitations. (Ex. 2001, ¶ 70). O’Donnell’s FIG. 40 depicts

video file 560 being transferred from video camera 10 to peripheral computer 570 via SD card 562 (or direct USB connection of camera 10 to peripheral computer 570 via USB). (Ex. 1014, O'Donnell, FIG. 40). The accompanying discussion at ¶ [0166] of O'Donnell confirms that peripheral computer 570 receives the video file directly from SD card 562, as shown below.

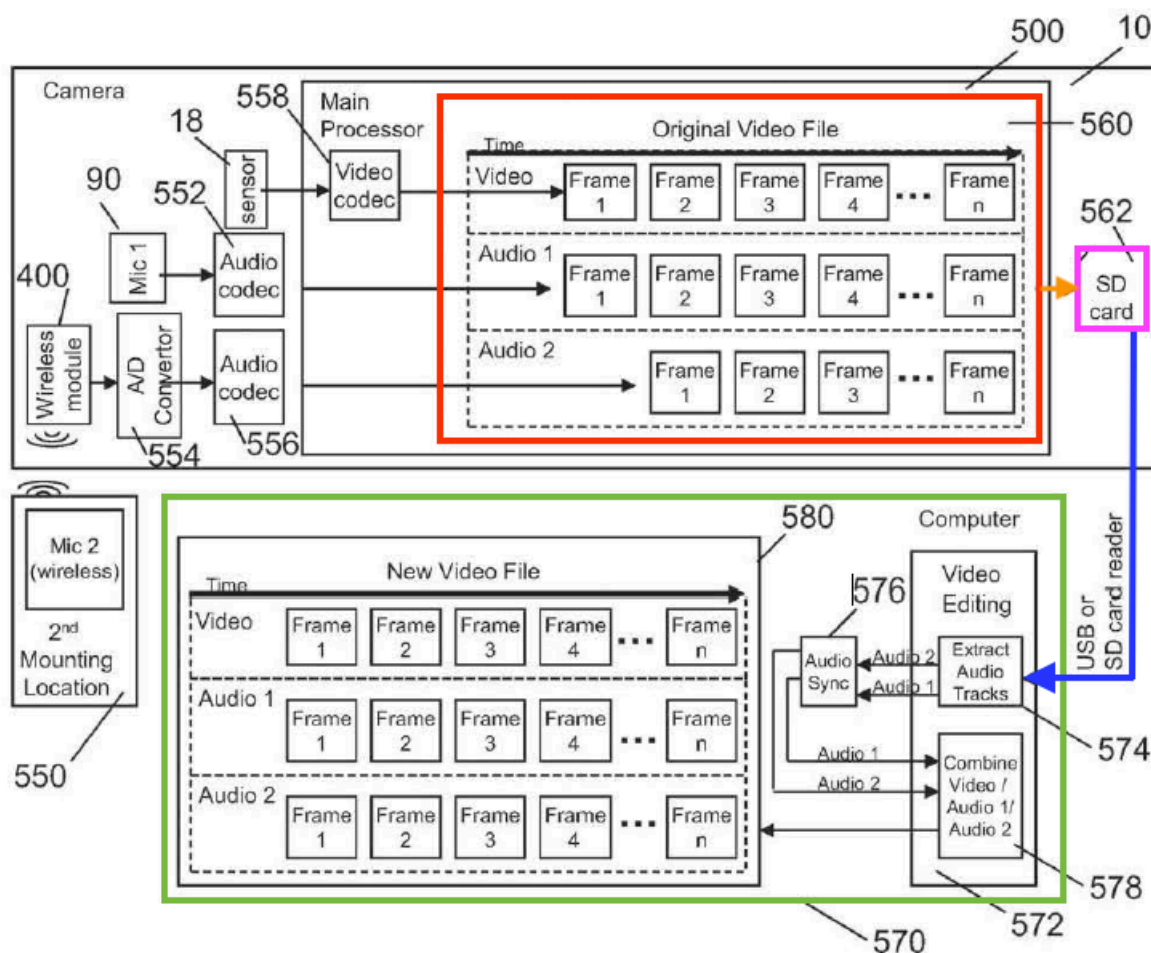


Figure 1: O'Donnell FIG. 40 (color added)

As can be seen in FIG. 40, the video file 560 (red box) is stored (orange arrow) onto SD card 562 (magenta box), which is then transferred via “USB or SD

card reader” (blue arrow) onto a peripheral computer 570 (green box) for “post-processing” by video editor 572. Thus, to transfer any recorded video file, O’Donnell teaches using a USB or SD card, as opposed to wireless transmission, as claimed. A POSITA would understand that a mobile communications device, such as O’Donnell’s viewer/controller 510, is unsuited for video editing. (Ex. 2001, ¶ 70). As such, O’Donnell never teaches or suggests that the claimed video file is transmitted (wirelessly or otherwise) to *any* mobile communications device.

In support of the contention that viewer/controller 510 is “configured for viewing the video file on the mobile communications device,” Petitioner cites O’Donnell at ¶¶ [0146], [0152], [0154] and FIG. 36.³ (Pet. 63 (last sentence of first paragraph)). However, as discussed below, none of this material supports Petitioner’s contention as claimed.

³ The Petition does not cite to Mr. Keller’s Declaration in support of the contention that O’Donnell’s viewer/controller 510 is “configured for viewing the video file on the mobile communications device.” Regardless, the relevant portions of Mr. Keller’s Declaration, ¶¶ 168-171, are taken verbatim from the Petition at pp. 62-64. Therefore, for the reasons discussed above with respect to Mr. Keller’s opinions in support of Petitioner’s written-description arguments, this testimony should be afforded no weight.

Paragraph [0146] (partially quoted above) describes “a preferred camera position adjustment procedure carried out by a helmet wearing user.” (Ex. 1014, O’Donnell, ¶ [0146]). The communication between the camera 10 and the viewer/controller 510 is depicted in FIG. 33, reproduced below. The process begins by pairing the camera with the controller. This process does not transfer any image data (photos or video data), but merely associates the two devices so that they can communicate. (Ex. 2001, ¶ 66).

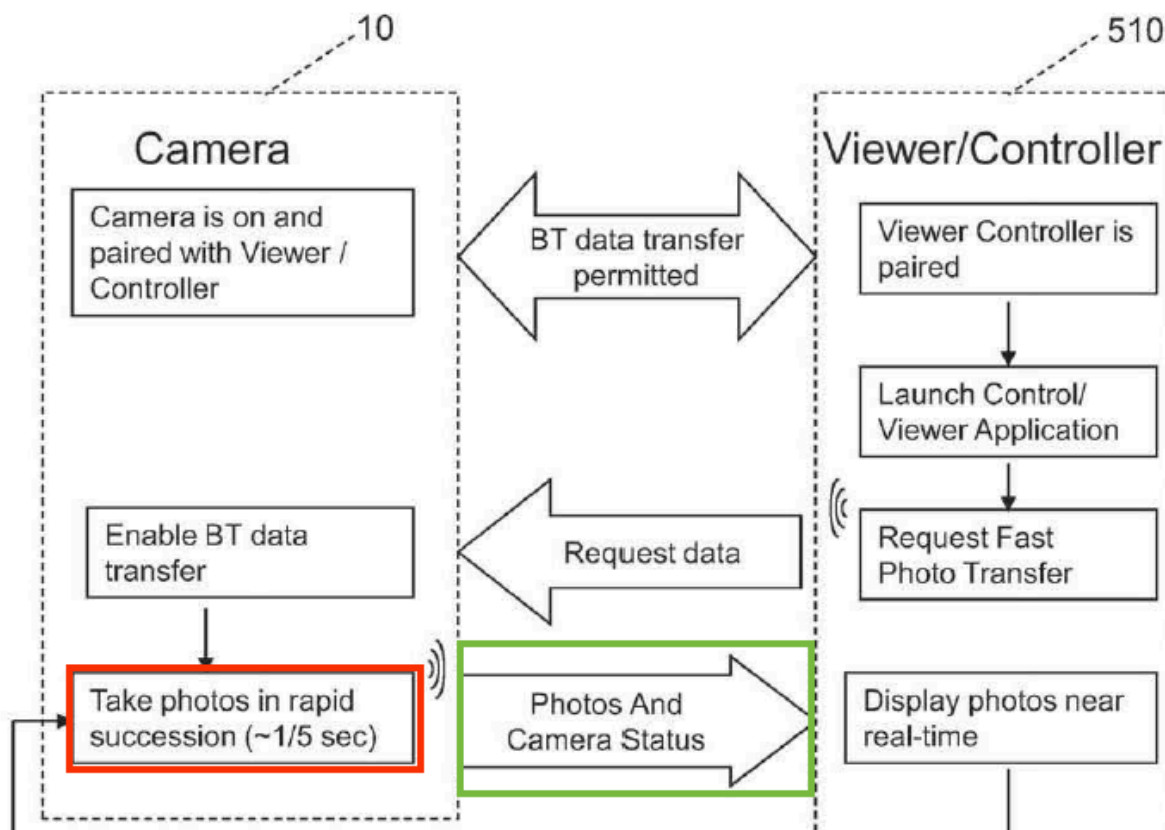


Figure 2: From O’Donnell FIG. 33 (red and green boxes added)

The controller 510 then sends a “fast photo transfer Data Request” (Ex. 1014, O’Donnell, ¶ [0146]) that causes the camera 10 to “take photographs in rapid

succession (e.g., five photographs each second)” (*id.*, see red box above) and send “photos and camera status” (green box above) to the viewer and controller. A POSITA would understand that this is not “wirelessly transmitting a video file to a mobile communications device configured for viewing the video” for multiple reasons.

First, no video file exists to be transferred. As described in O’Donnell’s FIG. 38 and the accompanying text, the camera begins recording (*i.e.*, creating the video file) in response to a “Start Recording Cmd” (or, alternately, a manual activation by a user). A POSITA would understand that the user would mount and adjust the camera prior to the beginning of recording so as to avoid wasting storage space with misaimed and unadjusted video. (Ex. 2001, ¶ 72). Thus the adjustment would take place *before* recording starts and so no video file would exist to be transferred.

Second, “photographs [taken] in rapid succession (e.g., five photographs each second)” is not video. A POSITA would understand that “photograph” and “photo” refer to still images and not to video. (Ex. 2001, ¶ 73). Thus, when O’Donnell, in ¶ [0146] and FIG. 33 uses the phrases “taking of photographs of the scene,” “take photos,” and “photos and camera status,” O’Donnell is teaching still photographs, as opposed to video. Furthermore, a POSITA would understand that “photographs [taken] in rapid succession (e.g., five photographs each second)” is not video because five images per second is not enough for the eye to perceive

motion. (Ex. 2001, ¶ 73). Thus, what the user sees in O'Donnell's camera position adjustment procedure is no more video than a slide show is video. Accordingly, O'Donnell at ¶ [0146] does not support the contention that "[t]he viewer/controller 510 is also 'configured for viewing the video file on the mobile communications device.'"

Next, Petitioner relies upon O'Donnell at ¶ [0152], which together with ¶ [0151] and FIG. 36, depicts an alignment and adjustment process for use when multiple cameras will capture the same scene simultaneously "at multiple angles" or "three-dimensional views." As with the mounting and adjusting process discussed in ¶ [0146], a POSITA would understand that this process would be carried out prior to recording (*i.e.*, prior to creating the video file). (Ex. 2001, ¶ 71). Furthermore, also like the process described in ¶ [0146], this process involves transmitting and analyzing still images. For example, ¶ [0151] states "Master Camera 1 analyzes *photographs* from Slave Camera 2 and adjusts settings to match the alignment and settings of Master Camera 1" (*emphasis added*). A POSITA would further understand that it is simpler and more accurate to perform alignments, such as O'Donnell describes, using a still image rather than video images. (Ex. 2001, ¶ 71). As such, O'Donnell at ¶ [0151] also fails to support the contention that "[t]he viewer/controller 510 is also 'configured for viewing the video file on the mobile communications device.'"

Finally, Petitioner relies upon FIG. 37 and the accompanying text at ¶ [0154]. Much like ¶¶ [0146] and [0152], this material relates to the configuration and adjustment of multiple cameras prior to the start of recording: “FIG. 37 shows an exemplary user application to allow the user to change lighting level and color settings.” (Ex. 1014, O’Donnell, ¶ [0154]). This exemplary application allows the user to “immediately” see the resulting changes using the same “fast photo” mode described with respect to FIG. 33, as shown below.

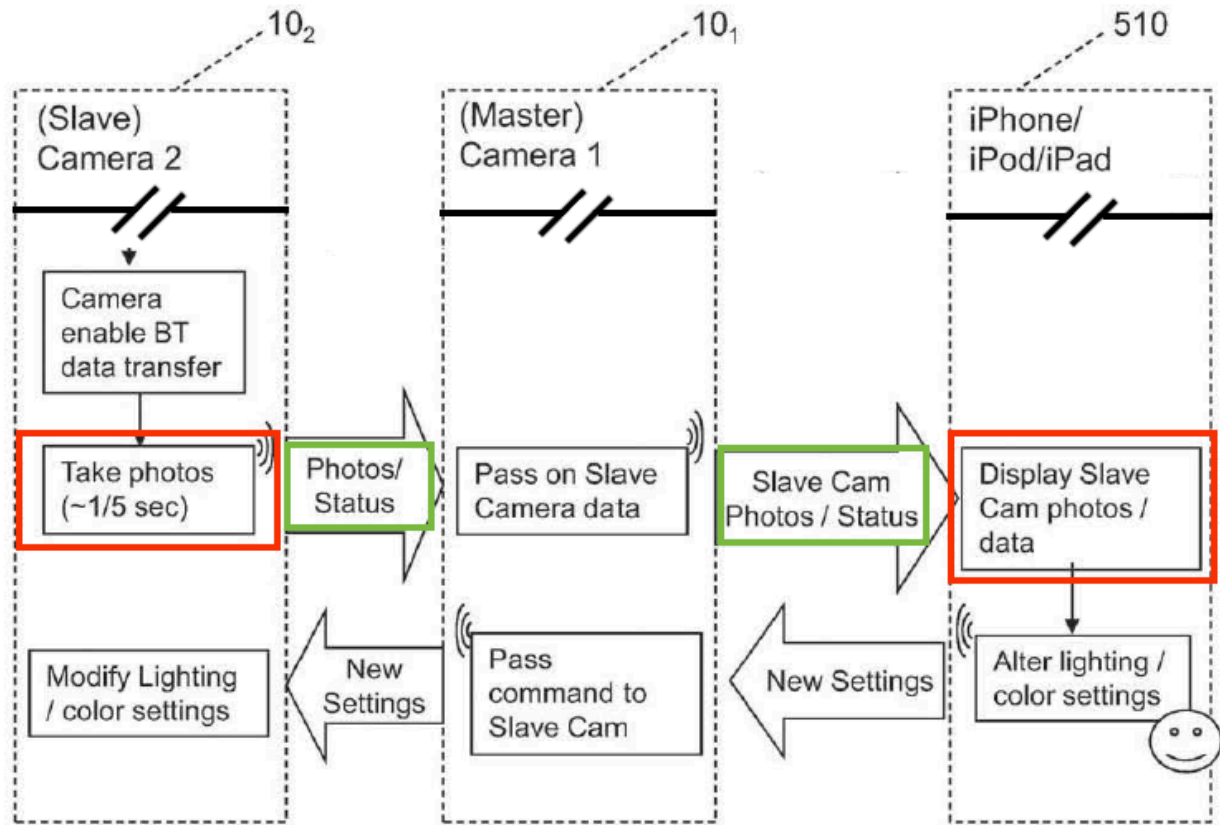


Figure 3: From O'Donnell FIG. 37 (pairing process removed; boxes added)

This section thus describes a forwarding mechanism allowing the user to modify the video settings for the second camera in the same way they can alter the video settings for the first camera, as depicted in FIG. 34, shown below.

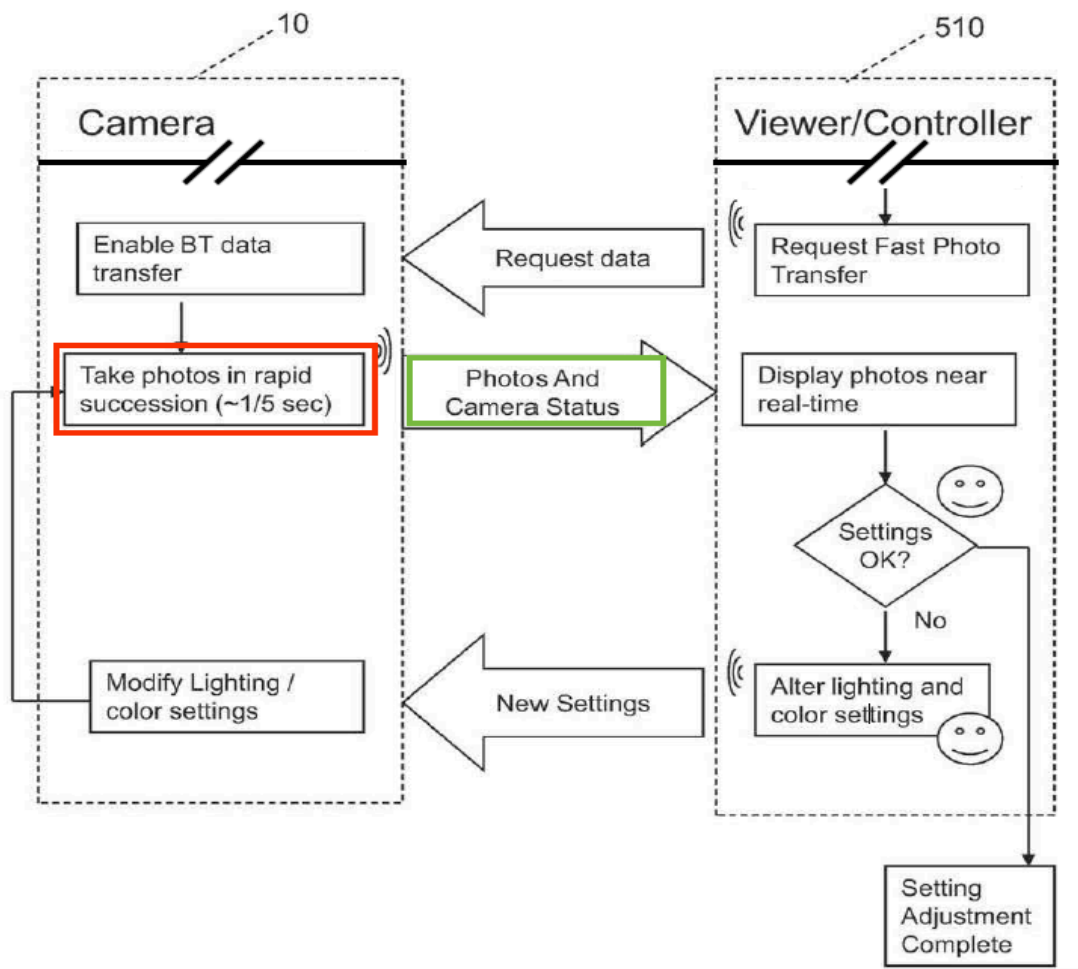


Figure 4: From O'Donnell FIG. 35 (pairing omitted; boxes added)

These figures consistently show the same thing; photos from the cameras 10 are taken at a rate of 5 images per second and transmitted, as photos, to viewer/controller 510, where they are used for “position adjustment” (FIG. 33) and “setting adjustment” (FIGs. 35 and 37). Paragraph [0154] of O'Donnell confirms

this: “Camera 2 responds by taking photos in rapid succession and transmitting them together with status information to Camera 1 for pass-through transmission to device 510 for display as Camera 2 image and data on display screen 532.” This also further confirms that what is shown on display screen 532 in FIG. 36 is individual “photographs” rather than a “video file” as Petitioner contends.

Thus, all of Petitioner’s citations purporting to show that viewer/controller 510 is “configured for viewing the video file on the mobile communications device” merely teach that viewer/controller 51 displays only still images from camera 10. And, as noted above, other sections in O’Donnell, such as FIG. 40 and the accompanying discussion, indicate that the *video file* recorded by cameras 10 is stored on an SD card, which is manually transferred to peripheral computer 570 where the video file can be viewed and edited. As such, O’Donnell (alone or in combination with Smith) fails to teach or suggest a processor configured to “wirelessly transmit the video file to a mobile communications device configured for viewing the video file on the mobile communications device.”

3. Haler fails to teach or suggest that the video file is wirelessly transmitted to a mobile communications device configured for viewing the video on the mobile communications device

The Petition does not contend that Haler teaches or suggests this claim element. *See*, Pet. 86 (discussing this claim element and contending “Smith in view

of O'Donnell thus teaches or suggests this element" without any reference to Haler). Therefore, none of the cited art for Ground 9 teaches the claimed element.

B. A POSITA would not be motivated to combine the teachings of Smith and O'Donnell

Petitioner argues that a POSITA would be motivated to modify Smith with O'Donnell's remote mobile communications device "to eliminate the need for display 730 on Smith's handset 700, making the handset more compact." (Pet. 63). Petitioner thus argues that a POSITA would be motivated to divide the functionality of handset among multiple components out of a desire to make the handset smaller. However, Petitioner earlier argues that a POSITA would be motivated to integrate the camera within the handset's housing "to further decrease the size and weight of the incident recorder." (Pet. 28). Thus, Petitioner is simultaneously arguing that the POSITA would be motivated to integrate the functionality of multiple components into the handset in order to reduce the size of the incident recorder as a whole and to divide the functionality of handset among multiple components out of a desire to make each handset smaller.

These two motivations are, on their face, inconsistent with each other. "[O]bviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed invention." *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015). A POSITA would not be simultaneously motivated to make

the handset smaller by removing the screen and make it larger by adding the camera. Nor would a POSITA be simultaneously motivated to make the incident recorder as a whole smaller by reducing the number of discrete components and make it larger by increasing the number of discrete components. Petitioner's motivation to modify Smith to include O'Donnell's remote mobile communications evidences use of hindsight bias to piece together each limitation, without evaluating the claimed invention as a whole. *10X Genomics, Inv. v. Bio-Rad Labs., Inc.*, IPR2018-00489, Paper 13 at 18 (PTAB Jun. 28, 2018), *citing Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (“[W]e cannot allow hindsight bias to be the thread that stitches together prior art patches into something that is the claimed invention.”).

Petitioner further suggests that a POSITA would be motivated to modify Smith “to facilitate convenient review of recorded video files and easy additions of secondary incident information.” (Pet. 63). However, Smith already allows for this functionality via built-in screen 730, as the material cited by the Petition in support of this assertion confirms: “[w]hile reviewing incident information ... an author-operator may record supplemental information or classify previously recorded information,” “A primary subsystem [*i.e.*, one used in the field], may include ... a user interface for reviewing and managing incident information (*e.g.*, preparing supplemental information, selecting, classifying).” (Pet. 63, *citing* Ex. 1012, Smith,

¶¶ [0033], [0046]). Thus, a POSITA would not be motivated to combine O'Donnell with Smith to provide this “convenient review of recorded video files and easy additions of secondary incident information” at least because Smith already provides this functionality. *See 10X Genomics*, IPR2018-00489, Paper 13 at 18-19 (refusing to adopt a motivation to combine that required the primary reference to abandon its disclosed design in favor of an alternative design from the secondary reference and noting “Petitioner does not adequately explain why one of ordinary skill in the art would have been prompted to abandon the single inlet/single outlet design of [the primary reference] to increase compatibility with certain industry standard equipment or to reduce costs.”).

Finally, Petitioner suggests that a POSITA would be motivated to combine O'Donnell with Smith “to allow law enforcement officers to view and edit video qualities (*e.g.*, color balance brightness and contrast) across variable-lit environments.” (Pet. 63-64). However, Petitioner provides no indication of why a desire to allow a user to change video settings would motivate a user to add a “mobile communications device” to the system of Smith. Assuming *arguendo* that the ability to change the video settings is desirable, it can be done on Smith's integrated display 730 without the need to add a mobile communications device. Indeed, Smith seems to indicate that the video can be configured as the system exists (*see, e.g.*, Smith, ¶ 108 (discussing a log that records all changes to the

configuration of incident recorder 208, including changes to “video resolution”)), obviating any need to modify Smith with the features of O’Donnell. Thus, this reason to modify Smith with the teachings of O’Donnell fails as well.

C. Conclusion

None of the art and evidence cited by Petitioner teaches or suggests a processing element configured to “wirelessly transmit the video file to a mobile communications device configured for viewing the video on the mobile communications device,” as recited in claim 15. Furthermore, a POSITA would not be motivated to incorporate O’Donnell’s viewer/controller into Smith’s incident recorder. As such, Petitioner has not established that it is more likely than not that claims 15, 17, or 20 will be found unpatentable as obvious in view of the cited art. Therefore, Patent Owner requests that Post-Grant Review based on Petitioner’s Ground 9 be denied.

VI. PETITIONER’S GROUND 4: OBVIOUSNESS OF CLAIMS 5, 6, AND 8 OVER SMITH AND O’DONNELL

Petitioner contends that claim 5, 6, and 8 are obvious under 35 U.S.C. § 103 over Smith in view of O’Donnell. (Pet. 49-64). Claims 5 and 6 have been statutorily disclaimed. *See* § II., *supra*. Claim 8 depends from claim 7, which collectively recite that the “processing element is configured to wirelessly transmit the video file to a remote device” (claim 7) and that “the remote device is a mobile communications device configured for viewing the video file on the mobile

communications device” (claim 8). Claim 8 thus requires that “the processing element is configured to wirelessly transmit the video file” to “a mobile communications device configured for viewing the video file on the mobile communications device.” As described above in § V.A, neither Smith nor O’Donnell teaches or suggests this claim limitation. As further described above in § V.B, a POSITA would not be motivated to incorporate O’Donnell’s viewer/controller into Smith’s incident recorder. As such, Petitioner has not established that it is more likely than not that claim 8 will be found unpatentable as obvious in view of the cited art. Therefore, Patent Owner requests that Post-Grant Review based on Petitioner’s Ground 4 be denied.

VII. PETITIONER’S GROUNDS 10-12: OBVIOUSNESS OF CLAIMS 16, 18-19, AND 21

Petitioner contends that claims 16, 18-19, and 21 are obvious in light of the combination of Smith, O’Donnell, Haler, and one of Strub (for claim 16), Guzik (for claims 18-19), and Balerdeta (for claim 21). Each of claims 16, 18-19, and 21 depends from independent claim 15, and thus incorporates claim 15’s requirement of a “processing element [...] configured to [...] wirelessly transmit the video file to a mobile communications device configured for viewing the video on the mobile communications device.” As discussed above, the combination of Smith, O’Donnell, and Haler fails to teach or suggest this claim limitation. § V.A. Also as

discussed above, a POSITA would not be motivated to incorporate O'Donnell's viewer/controller into Smith's incident recorder. § V.B. Petitioner does not contend that any of Strub, Guzik, or Balerdeta teaches or suggests this claim element. *See*, (Pet. §§ XIV, XV, XVI). As such, there is also no likelihood that any of claims 16, 18-19, or 21 will be found unpatentable as obvious in view of the combination Smith, O'Donnell, Haler and any of Strub, Guzik, and Balerdeta, and Post-Grant Review should not be instituted based on Petitioner's Grounds 10-12.

VIII. PETITIONER'S OTHER GROUNDS

Petitioner contends, in Grounds 2-3, 5-8, and 13, that claims 1-4, 7, 9-14, and 22-24 are obvious over Smith in view of various secondary references. Each of these claims has been disclaimed. § II., *supra*. "No post-grant review will be instituted based on disclaimed claims." 37 CFR § 42.207(e). As such, Post-Grant Review should not be instituted based on any of Petitioner's Grounds 2-3, 5-8, and 13.

IX. CONCLUSION

Patent Owner has demonstrated herein that there is no likelihood that any claims of the '730 Patent will be found unpatentable based on any Grounds presented by Petitioner and respectfully requests that institution of Post-Grant Review be denied.

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing MOTION TO AMEND UNDER 37 C.F.R. § 42.121 was served on July 5, 2018, by email on the following counsel of record for Petitioner:

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CERTIFICATE OF COMPLIANCE

This document complies with the type-volume limitation of 37 C.F.R. § 42.24(a)(1)(i). This Preliminary Response contains 8,113 words, excluding the parts of the document exempted by 37 C.F.R. § 42.24(a)(1).

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