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 B2

PETITION FOR POST-GRANT REVIEW

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I. Introduction.

Axon Enterprise, Inc. ("Petitioner") requests post-grant review and cancelation of claims 1-24 of U.S. Patent No. 9,712,730 B2 (Exhibit 1001, "'730 patent"). The '730 patent is PGR eligible because it contains at least one claim that has an effective filing date after March 16, 2013. The '730 patent also contains specific references under 35 U.S.C. § 120 to patents that contain at least one claim that has an effective filing date after March 16, 2013, further demonstrating PGR eligibility.

The '730 patent discloses a body camera for law enforcement personnel and claims a portable video system that: (1) captures video of an event; (2) records a video file in memory; and (3) marks the video file to indicate the time and/or location when a law enforcement officer actuated the input. Portable systems that performed these functions were ubiquitous in the industry long before September 28, 2012, which is the earliest ***possible***[1] effective filing date of the challenged claims. Indeed, the '730 patent itself admits that wearable devices for recording video were known. And U.S. Pub. No. 2009/0276708 to Smith et al. (Exhibit 1012,

[1] As discussed below, the challenged claims are not entitled to the September 28, 2012 filing date.

"Smith") demonstrates that placing a mark in a video file was well known years before the alleged invention.

This Petition, supported by the Declaration of Mr. Kurtis Keller (Exhibit 1027, "Keller"), demonstrates that all challenged claims are unpatentable. Petitioner thus respectfully requests institution of PGR and cancelation of the challenged claims.

II. Grounds For Standing (37 C.F.R. § 42.204(a)).

The undersigned and Petitioner certify that the '730 patent is available for PGR. Petitioner certifies that it is not barred or estopped from requesting this PGR on the grounds identified herein.

The '730 patent is PGR eligible because it contains at least one claim that has an effective filing date after March 16, 2013, and because it contains specific references to patents that contain at least one claim that has an effective filing date after March 16, 2013. The '730 patent issued from a transitional application[2] that claims priority to two provisional applications—61/707,348 (Exhibit 1011, "'348

[2] A transitional application is an application filed on or after March 16, 2013, and claiming the benefit of a filing date before March 16, 2013. *See* 35 U.S.C. §§119, 120, 121, 365.

provisional") and 61/707,326 (Exhibit 1010, "'326 provisional")—filed before March 16, 2013. ('730 patent, (60).) The '730 patent also claims priority to two non-provisional applications—14/040,329 ("'329 application") and 14/575,433 ("'433 application")—filed after March 16, 2013. ('730 patent, (63).)

The '730 patent is PGR eligible because it "contains … at least one claim that was not disclosed in compliance with the written description and enablement requirements of §112(a) in the earlier application[s] for which the benefit of an earlier filing date prior to March 16, 2013 was sought." *Inguran LLC v. Premium Genetics*, PGR2015-00017, Paper 8 at pp. 11-16 (Dec. 22, 2015); *see also* AIA §3(n)(1); 35 U.S.C. §100(i); *U.S. Endodontics, LLC v. Gold Standard Instruments, LLC*, PGR2015-00019, Paper 17 at p. 8 (Jan. 29, 2016). Specifically, neither the '326 provisional nor the '348 provisional provides written-description support for at least independent claims 1, 15, and 22, and dependent claim 6. "[T]he test for sufficiency [of written description] is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharma., Inc. v. Eli Lily and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

Independent claims 1 and 15 require a "*processing element*" that performs the following functions: (1) "*receive said activation signal …*"; (2) "*in response to the activation signal, store a mark in the video file for at least one of the plurality*

of video frames …"; and (3) "*upon playback of the video file … automatically advance the video file to the marked at least one video frame ….*" The provisional applications do not reasonably convey that the inventor had possession of a "*processing element*" that performed all of these functions as of September 28, 2012. (Keller, ¶¶38-42.)

The '326 provisional does not disclose the claimed "*processing element*" and provides very limited disclosure of marking. (Keller, ¶¶39-40.) It describes a "video system" that includes "an electronics module" ('326 provisional, 1, 3), and provides the following description of marking: "A flag button may place a bookmark in the video to mark the location of significant events in a video sequence" (*id*., 5). These disclosures make no mention of, and thus fail to reasonably convey to a POSITA possession of, a processing element that (1) receives an "*activation signal*"; (2) stores a mark "*in [a] video file*" in response to receiving an activation signal; and (3) "*automatically advance[s] the video file*" to the mark during video playback. (Keller, ¶¶39-40.)

The '348 provisional also fails to convey possession of the claimed "*processing element*." (Keller, ¶¶41-42.) It describes a "camera" that includes "an electronic controller" and "a second button … [that] causes the camera to 'bookmark' a video during video recording." ('348 provisional, 5.) The '348 provisional does not disclose that the camera's electronic controller "receive[s] an

activation signal." (Keller, ¶41.) Nor does it disclose that the electronic controller stores a mark "*in [a] video file*." (*Id*.) Regarding playback, the '348 provisional explains that "[t]he bookmark may be useable, for example, by a computer running software that enables a user to view the video ***once transferred to the computer*** from the base portion. Such software would enable the user to jump to a bookmark …." ('348 provisional, 5.) A POSITA would have understood that the camera's electronic controller is separate from the computer. (Keller, ¶42.) And thus the '348 provisional's disclosure of a computer running software that can "jump to a bookmark" does not convey possession of a "processing element" that performs the three functions required in claims 1 and 15. (*Id*.)

Independent claim 22 requires "*metadata*" that includes "*any triggering event that initiated capturing of the video file*." The '326 and '348 provisional applications fail to provide written-description support for this element. (Keller, ¶¶43-44.) The '326 provisional describes placing "a bookmark in the video" ('326 provisional, 5), incorporating "watermarks into the recorded video images" (*id*., 6), and stamping "audiovisual signals" with a camera identifier (*id*., 9). But none of this information represents a "*triggering event that initiated capturing of the video file*." (Keller, ¶43.) The '348 provisional mentions metadata in general and explains that the "bookmark" indicating depression of the bookmark button is stored as metadata. ('348 provisional, 3, 5.) But, again, this information does not

represent a "*triggering event that initiated capturing of the video file*." (Keller, ¶44.)

Regarding dependent claim 6, the provisional applications lack written-description support for the myriad of details about the "*universal mount*" and the first and second mounting assemblies. (Keller, ¶¶46-49.)

For at least these reasons, the challenged claims are not entitled to the pre-March 16, 2013 filing date of the '326 and '348 provisional applications, and thus the '730 patent is PGR eligible. AIA §3(n)(1); 35 U.S.C. §100(i)(1)(a).

The '730 patent is also eligible for post-grant review because the '730 patent contains a specific reference under 35 U.S. C. §120 to patents that contain at least one claim that has an effective filing date after March 16, 2013. *See* AIA §3(n)(1); 35 U.S.C. §100(i). The '730 patent references U.S. Patent Nos. 9,019,431 and 9,237,262, both of which claim subject matter that does not have written-description support in the provisional applications. For example, the '431 patent claims "*a lock mechanism . . . operable to selectively enable access to* [*the*] *memory located within* [*the*] *housing*" (claims 7, 12) and a housing that includes "*a recessed seat*" (claims 1, 8). The '262 patent claims a mating member that is "*a recessed seat*" and first and second mount mating members are each "*a raised seat*" (claims 3, 4, 19); "*a hat mount assembly*" (claims 7, 20); "*a hook-and-loop mount assembly*" with "*adhesively-securable hook-and-loop material*" (claims 7,

16, 17, 19); and "*a saddle bracket for securing the first housing to a barrel of a firearm*" (claim 20). These claims are not supported by the provisional applications. (Keller, ¶¶50-53.) The '730 patent's specific reference to U.S. Patent Nos. 9,237,262 and 9,019,431 is therefore further grounds for PGR standing.

III. Statement of Relief Requested and Identification of the Challenge (37 C.F.R. § 42.204(b)).

A. Citation of prior art.

The '730 patent was filed on January 8, 2016, and claims priority through a chain of continuations to two provisional applications filed on September 28, 2012. ('730 patent, (63), (60).) Petitioner demonstrated in Section II that First-Inventor-To-File provisions of the AIA apply to the '730 patent because, *inter alia*, the '730 patent contains at least one claim that has an effective filing date after March 16, 2013. Petitioner takes no position on the earliest effective filing date of the challenged claims because the following references, cited in support of the grounds of unpatentability presented below, qualify as prior art even if the claims were entitled to the September 28, 2012 filing dates of the provisional applications:

U.S. Pub. No. 2009/0276708 to Smith et al. (Exhibit 1012, "Smith") was filed on April 3, 2009, was published on November 5, 2009, and thus qualifies as prior art under 35 U.S.C. §102(a)(1) and (2).

U.S. Patent No. 6,563,532 to Strub et al. (Exhibit 1013, "Strub") was filed on April 21, 2000, was published on May 13, 2003, and thus qualifies as prior art under 35 U.S.C. §102(a)(1) and (2).

WO 2012/037139 to O'Donnell et al. (Exhibit 1014, "O'Donnell") was published on March 22, 2012, and thus qualifies as prior art under 35 U.S.C. §102(a)(1).

U.S. Pub. No. 2009/0002491 to Haler (Exhibit 1015, "Haler") was filed on August 10, 2008, was published on January 1, 2009, and thus qualifies as prior art under 35 U.S.C. §102(a)(1) and (2).

U.S. Pub. No. 2011/0018998 to Guzik (Exhibit 1016, "Guzik") was filed on September 30, 2010, was published on January 27, 2011, and thus qualifies as prior art under 35 U.S.C. §102(a)(1) and (2).

U.S. Pub. No. 2011/0098924 to Balardeta et al. (Exhibit 1017, "Balardeta") was filed on October 28, 2009, was published on April 28, 2011, and thus qualifies as prior art under 35 U.S.C. §102(a)(1) and (2).

B. Statutory grounds for the challenge.

Petitioner requests post-grant review and cancelation of the challenged claims based on the following grounds.

Ground	Claims	Basis	References
1	1-21	written description (§112)	N/A
2	1, 4, 7, 9	§103	Smith
3	2, 3	§103	Smith, Strub
4	5, 6, 8	§103	Smith, O'Donnell
5	10, 12	§103	Smith, Haler
6	11, 22	§103	Smith, Guzik
7	13, 23	§103	Smith, Haler, Guzik
8	14	§103	Smith, Balardeta
9	15, 17, 20	§103	Smith, O'Donnell, Haler
10	16	§103	Smith, O'Donnell, Haler, Strub
11	18, 19	§103	Smith, O'Donnell, Haler, Guzik
12	21	§103	Smith, O'Donnell, Haler, Balardeta
13	24	§103	Smith, Guzik, Strub

The Board should not deny institution under 35 U.S.C. §325(d). Smith—the primary reference in each of the Petition's obviousness grounds—was neither cited nor applied in a rejection during the '730 patent's original prosecution. The Office thus has not previously considered Smith or the Smith combinations presented in

this Petition. Nor has the Office previously considered Mr. Keller's opinions in support of the Petition.

During prosecution, the examiner asserted U.S. Patent No. 8,077,029 ("Daniel") as the primary reference to reject the pending claims. (*See, e.g.,* Exhibit 1002, 397, 1865.) The then-applicant amended the claims to require storing a mark in a video file (*id*., 313-14, 319, 321), and argued that Daniel failed to teach this limitation (*id*., 305-07 ("the claims expressly recite that the mark is included as part of the video file")). Based on the examiner's underlining in the notice of allowance, it appears this limitation led to allowance of the claims. (*Id*., 22-25.)

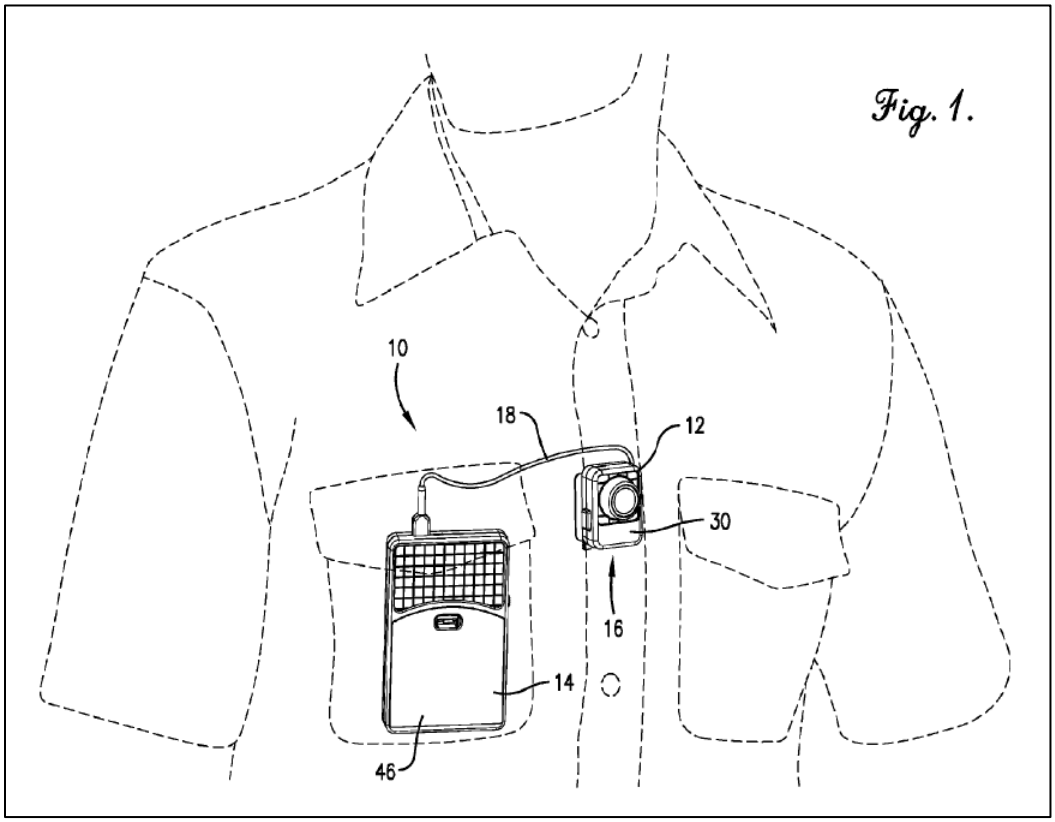
As discussed in more detail below, Smith expressly teaches that "[a] mark may be stored ***within a video or audio stream***" such as the "***same MPEG-4 container***." (Smith, ¶140.) Smith thus teaches the limitation Daniel allegedly lacked, demonstrating that Smith is not cumulative with Daniel and that the same or substantially the same prior art and arguments have not been previously considered by the Office.

Strub, O'Donnell, and Haler were cited but not applied in a rejection during prosecution. Guzik and Balardeta were cited and applied to reject certain dependent claims during prosecution. But again, the Office has not previously considered any of these prior-art references in combination with Smith, as asserted in this Petition and in Mr. Keller's Declaration.

IV. Background.

A. Overview of the ’730 patent.

The ’730 patent discloses a portable video and imaging system mounted on a user. (’730 patent, 2:41-43, Fig. 1.) The recording system 10 comprises a camera component 12, a recording component 14, and a mounting assembly 16. (*Id*., 4:39-42.) The camera component 12 includes a first housing 30. (*Id*., 5:65-66.) The recording component 14 includes a second housing 46. (*Id*., 7:13-15.)



The ’730 patent, when describing the related art, states that “[a]lthough recording devices for recording video and still images are generally known, ***the recording device is commonly housed in a single housing that stores a camera, a***

memory element, and a processing element." (*Id*., 1:40-44.) To distinguish what the '730 patent properly recognized as generally known and common, the '730 patent discloses embodiments where "the camera component is in a first housing, and the recording component is in a second housing." (*Id*., 2:20-22, Figs. 1, 8, 30.) Accordingly, "the housings for the two components ***are physically separate housings***." (*Id*., 2:22-24.)

Separating a camera from a recording component is neither inventive nor commensurate with the scope of the claims. Independent claims 1 and 15 recite a single housing—both the camera component and the memory element are housed within the same housing.[3] Accordingly, the claims recite a well-known system.

The '730 patent also differentiates its system by stating that prior-art systems were not mountable to a user's body. (*Id*., 1:44-45.) This statement is false. (Keller, ¶34.) Many systems were mountable. To name a few, systems disclosed in O'Donnell were mountable to people (O'Donnell, ¶¶100-03, 123); systems disclosed in Woodman were mountable to people (Woodman, ¶¶6, 7, 34, 45); and

[3] Independent claim 22 does not recite the camera system; it is directed to marking a video file and associating metadata with video, which were well known long before the alleged invention. (Keller, ¶¶103-108, 186-197.)

systems disclosed in Smith were mountable to police officers (Smith, Fig. 2). Mounting a video camera to a person—a body cam—was not innovative.

B. Level of Ordinary Skill in the Art.

A POSITA would have had a B.S. degree in Mechanical Engineering, or an equivalent field, as well as 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. (Keller, ¶¶20-22.) In other words, a POSITA would have an interdisciplinary engineering background that includes experience and/or education in areas traditionally considered mechanical engineering and in areas traditionally considered electrical or computer engineering (or a related field such as computer science). (*Id.*, ¶20.) A higher level of education may make up for less experience, and vice versa. (*Id.*, ¶¶20.)

C. Claim Construction.

All claim terms should be given their plain meanings according to the broadest reasonable interpretation in light of the specification. *Cuozzo Speed Technologies, LLC v. Lee*, 136 S. Ct. 2131 (2016). At this stage, it is unnecessary for the Board to expressly construe any terms for the purposes of this PGR. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) ("only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy").

D. Summary of the Asserted Prior Art.

1. Smith discloses a wearable video system for law enforcement officers that records and documents incidents.

Shown below in Figure 2, Smith discloses a wearable system for recording video and documenting information for police incident reports. (Smith, ¶¶29-61, Fig. 2; Keller, ¶¶54-58.)

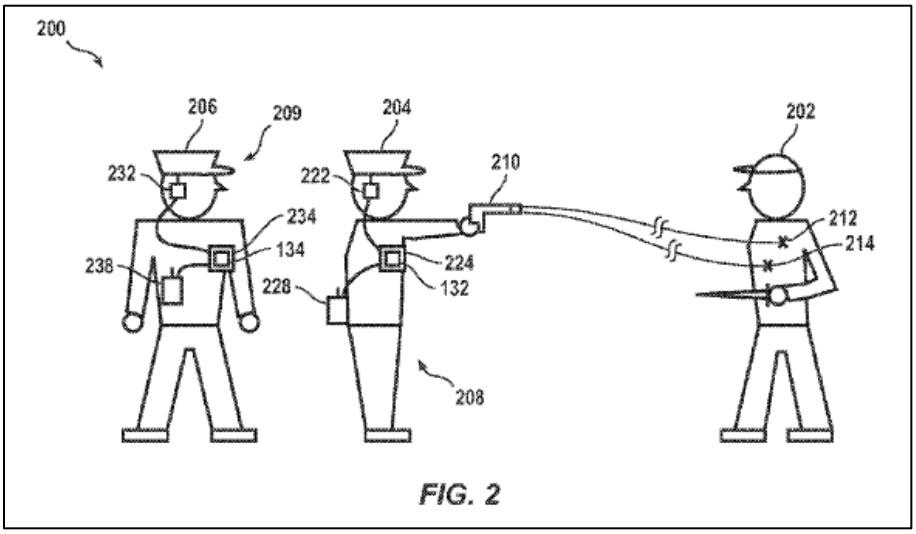


FIG. 2

Each incident recorder "includes a headset 222 (232), personal hub 224 (234), handset 132 (134), and on-duty transceiver 228 (238)." (*Id.*, ¶63.) As shown below, the headset 222 has a camera component 337. (*Id.*, ¶66, Fig. 3.)[4] Personal hub 224 has controls 328. (*Id.*, ¶66, Fig. 3.) And handset 132 has a processor 340,

[4] Figure 3 incorrectly labels headset camera as 328, the same number as the controls of personal hub 224. (Keller, ¶57.)

memory 341, and controls 343 to trigger the video recording. (*Id.*, ¶¶66, 69-70, 105, 135, Fig. 3.) Further, the configuration of handset 132, personal hub 224, and headset 22 and the respective subparts are customizable, so a POSITA would have understood that camera component 337 could be within handset 132. (Keller, ¶58 (citing Smith, ¶70).)

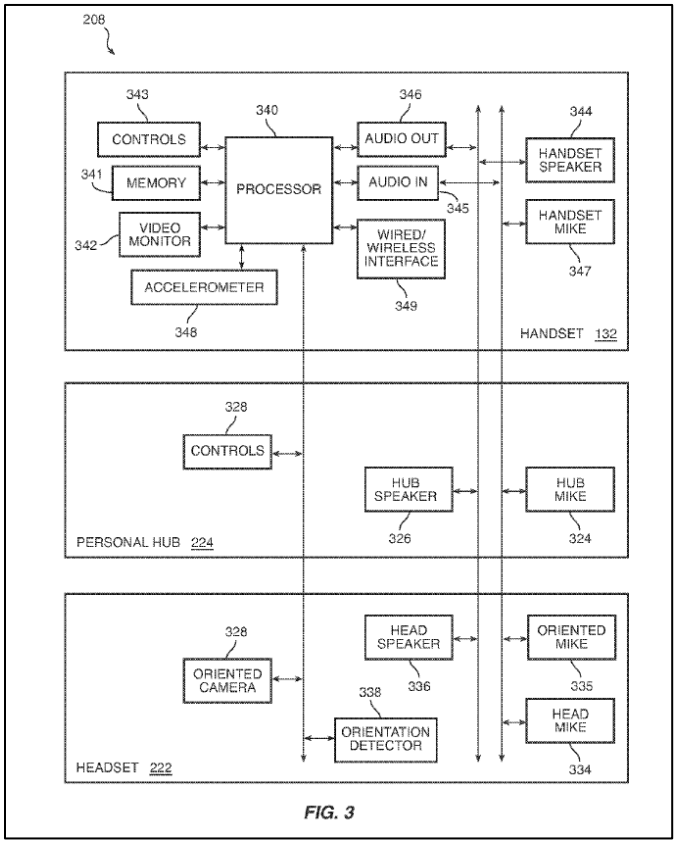


FIG. 3

2. Strub discloses a wearable video system that marks video files with location information.

Strub discloses, and shows in Figure 8A (reproduced below), a wearable system for recording video and documenting information. (Strub, Abstract, 4:18-29, 39:57-59, 66:24-39; Keller, ¶¶59-60.) Strub's system marks video recordings with

information (e.g., timestamp, biometric data, and position data) to facilitate search and display. (Strub, 4:8-11, 4:60-5:7, 8:16-27, 9:8-50, 12:4-10.)

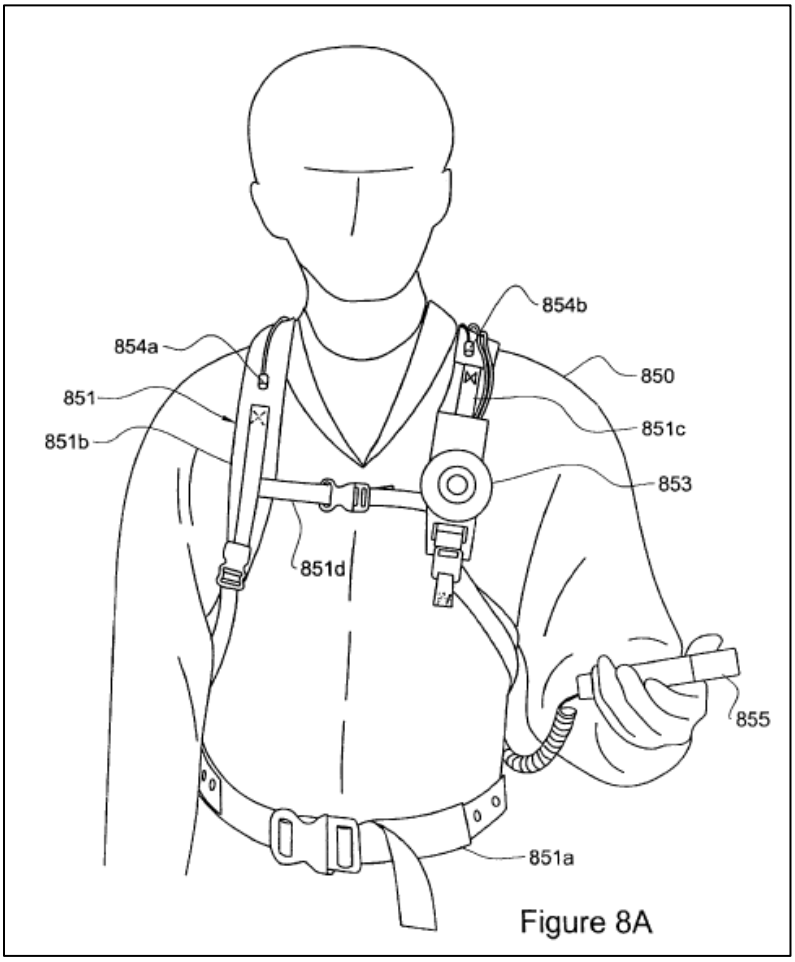


Figure 8A

3. O'Donnell discloses a wearable video system with a versatile mount to secure a camera to various surfaces.

O'Donnell discloses a wearable system for recording video. (O'Donnell, Abstract, ¶123, Figs. 3A, 3B; Keller, ¶¶61-62.) The system includes a "quick-release" mounting system. (*Id.*, ¶15.) As Figures 3A and 10 show (reproduced below), the camera 10 includes rail cavities 122 and housing rails 124 for engaging "a versatile mount." (*Id.*, ¶¶66, 94-95, 98-102, Fig. 3A.)

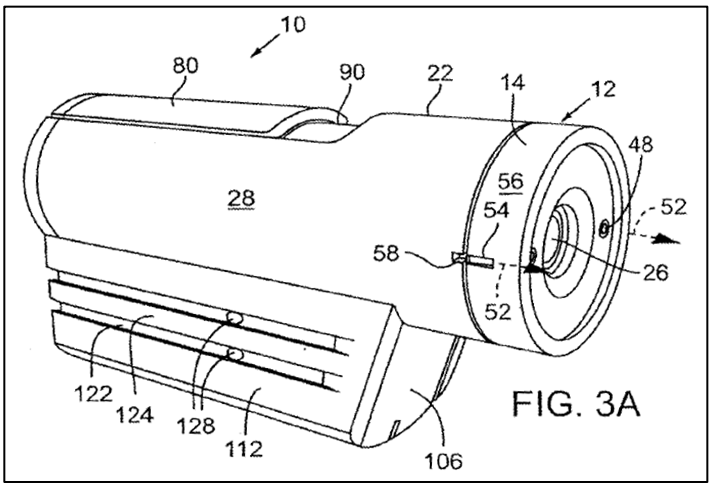


FIG. 3A

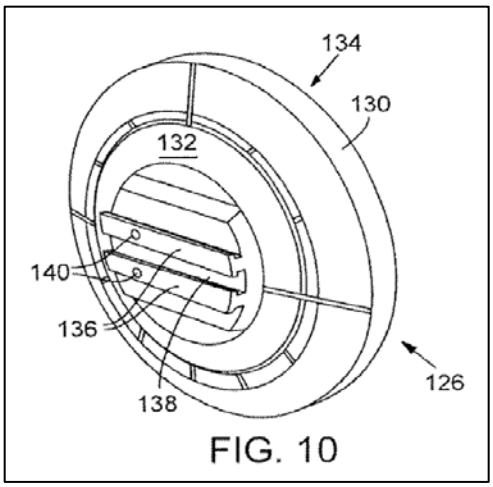


FIG. 10

Using this versatile mounting system, O'Donnell's camera attaches and reattaches to a variety of connectors, mounts, and attachment mechanisms. (*Id.*, ¶¶15, 26, 94, 100-04, 123.)

4. Haler discloses a vehicle-mounted system that triggers a video recording while a police officer is in the vehicle.

Haler describes a vehicle-mounted system for recording video and communicating with external devices. (Haler, ¶¶2, 24-25; Keller, ¶¶63-64.) The system is mounted in or on the rearview mirror of a law enforcement vehicle. (Haler, ¶¶3, 24, 27, 55, 58.) As Figure 4 shows (reproduced below), the system includes a mirror 170, a REC button 180, and a MARK button 190 that marks the video data with the current GPS position. (*Id.*, ¶35.) An officer can trigger a recording when the officer turns on the siren and/or the signal lights. (*Id.*, ¶30.)

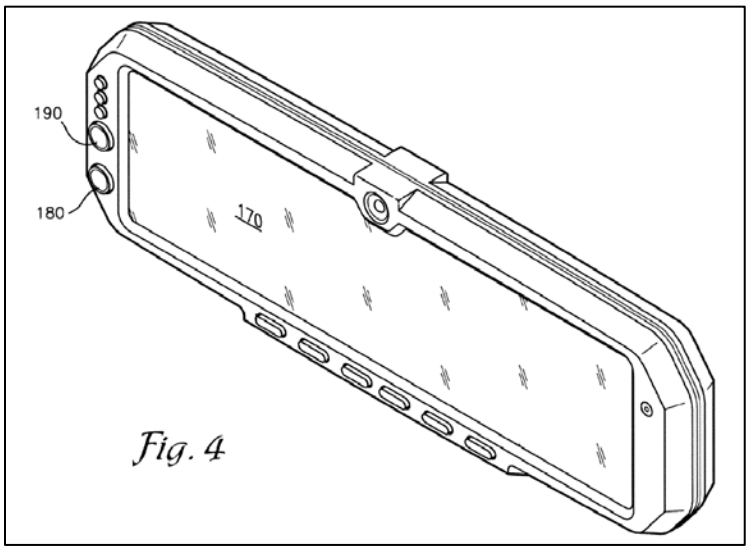


Fig. 4

5. Guzik discloses a wearable video system that marks files with metadata about time, location, and the event.

Guzik discloses a system for law enforcement that associates and stores metadata in video files. (Guzik, ¶¶11, 34, 46, 110-12, 211; Keller, ¶¶65-66.) "Common metadata may includes [sic], but is not limited to, date/time stamp and location metadata." (Guzik, ¶36.) "For example, a video clip may have date/time information stored for each frame . . . ." (*Id.*, ¶37.) For location metadata, the system can use Global Positioning System (GPS) metadata. (*Id.*, ¶110.) The metadata can also include an Officer ID, an Event ID, and text entered by a user. (*Id.*, ¶¶27, 112, 211, 269.)

6. Balardeta discloses that devices with a camera, processor, memory, and GPS components were compact.

In Figures 1A, and 2A-2E (shown below), Balardeta discloses a device 10 that includes a housing 40 containing a camera component 15, a processor 12, a

memory component 20, a battery 28, a GPS component 14, a display component 18, and a user input device 16. (Balardeta, ¶34, Figs. 1A, 2A-E; Keller, ¶67.) The device has a "pocket-sized form factor." (Balardeta, ¶¶11, 14, 46.)

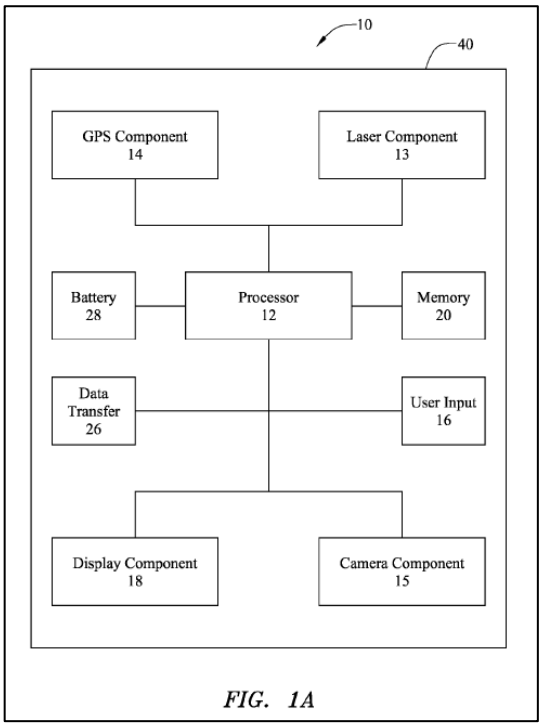


FIG. 1A

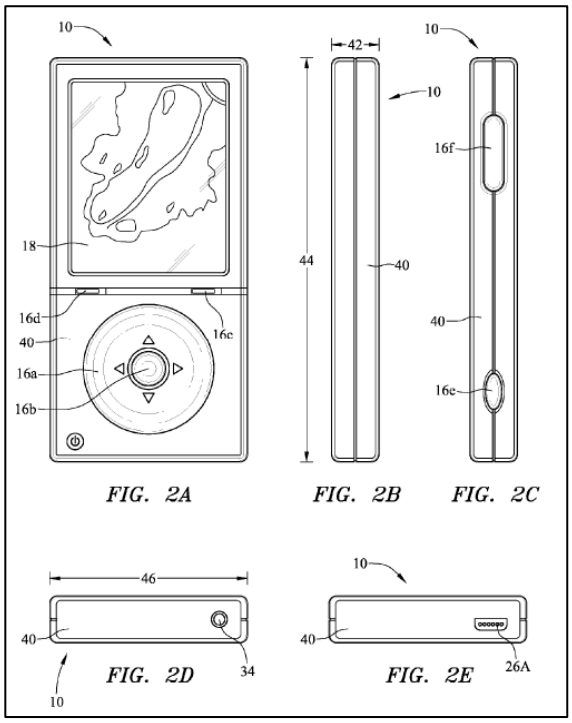


FIG. 2A FIG. 2B FIG. 2C

FIG. 2D FIG. 2E

V. Ground 1: Claims 1-21 lack written-description support.

Independent claims 1 and 15 require a "*processing element*" that performs the following functions: (1) "*receive said activation signal …*"; (2) "*in response to the activation signal, store a mark in the video file for at least one of the plurality of video frames …*"; and (3) "*upon playback of the video file … automatically advance the video file to the marked at least one video frame ….*" As explained in Section II, the '326 and '348 provisional applications lack written-description support for the claimed "*processing element*." The '730 patent, the patents in its

priority chain (i.e., U.S. Patent Nos. 9,237,262 (Exhibit 1004, "'262 patent") and 9,019,431 (Exhibit 1007, "'431 patent")), and the patents and applications that the '730 patent incorporates by reference ('730 patent, 4:18-38) fail to provide written-description support for the claimed "*processing element*." (Keller, ¶¶38-42, 69-75.)

The '730 patent's original disclosure (Exhibit 1003) is substantively the same as that of the '262 and '431 patents. (Keller, ¶70 (citing Exhibits 1006 and 1009, which show comparisons between the '730 and '262 patents, and between the '730 and '431 patents).) Thus, the following discussion regarding the '730 patent applies equally to the'262 and '431 patents.

The '730 original disclosure does not disclose a processing element that performs the claimed functions. (Keller, ¶71.) It describes and illustrates "processing element 38" in paragraphs 56-58 and 60 and Figure 30. This processing element 38 is disposed in a "recording component" that is separate from the camera and user interface elements disposed in housing 30, and performs generic processing functions, such as execute, process, or run instructions. (Ex. 1003, ¶¶56-57, Fig. 30.) But the '730 original disclosure does not disclose that processing element 38 is involved, in any way, with marking video, which is described in paragraphs 52 and 67. (Keller, ¶70.) That is, the '730 original description does not disclose that processing element 38 "*receive[s] said activation signal*," "*store a mark in the video file*" in response to receiving the activation

signal, and "*automatically advance[s] the video file to the marked*" video frame. (Keller, ¶70.) Nor does it show any connection between user interface elements 24 and processing element 38, describe any interaction between second input 34 and processing element 34, or explain whether processing element 38 is involved with storing video. (Keller, ¶70.)

The '730 patent incorporates by reference U.S. App. Nos. 14/040,006 (Exhibit 1021, "'006 application") and 13/967,151 (Exhibit 1023, "'151 application"), and U.S. Patent No. 8,520,069 (Exhibit 1022, "'069 patent"). ('730 patent, 4:18-38.) These patents/applications also fail to provide written-description support for the claimed "*processing element*." (Keller, ¶¶72-75.)

The '006 application describes a "video system" that includes "an electronics module," similar to the '326 provisional. ('006 application, ¶23.) It discloses that "the module 140 may mark recorded video with real-time position data," and further discloses a separate "flag button 240 [that] may place a bookmark in the video to mark the location of significant events in a video sequence." (*Id*., ¶¶32, 34; Keller, ¶73.) But the '006 application fails to disclose that electronics module "*receive[s] an activation signal*" causing it to "*store a mark in [a] video file*." (Keller, ¶73.) Nor does the '006 application disclose that electronics module performs the "*automatically advance[ing]*" function. (*Id*.)

The ’151 application describes a recording device manager and a personal recording device carried by a police officer. (’151 application, ¶18.) The recording device manager can generate timestamps for recorded video, and the recording device can generate metadata associated with the recording. (*Id.*, ¶¶18-19, 28, 33-34.) But the ’151 application does not disclose that either the recording device manager or the recording device includes a processing element. (Keller, ¶74.) At most, the ’151 application states, “The recording device manager 12 may also include other controllers, circuitry, computer hardware, and software for performing algorithms, handling, managing, and sorting data, and generating and interpreting signals.” (’151 application, ¶39.) This limited and generic disclosure of internal components does not reasonably convey possession of the claimed “*processing element*.” (Keller, ¶74.)

The ’069 patent also describes a “video system” that includes “electronics module 50.” (’069 patent, 3:32-40.) It discloses that “module 50 may mark recorded video with real-time position data,” and describes a separate “MARK button 190 [that] sets a place for the current GPS position in the video data.” (*Id*., 4:62-63, 5:33-34.) But the ’069 patent does not disclose that electronics module 50 receives a signal from the MARK button or that it stores a mark in the video file. (Keller, ¶75.) Nor does it disclose that electronics module 50 performs the “*automatically advance[ing]*” function. (*Id*.)

For at least these reasons, claims 1-21 lack written-description support.

VI. Ground 2: Smith renders claims 1, 4, 7, and 9 obvious.

A. Independent claim 1.

1. Smith teaches or suggests "[*a*] *portable video and imaging system for law enforcement.*"

As shown in Figure 2 (reproduced below), Smith discloses systems 208 and 209 for recording incidents (Smith calls each system a primary subsystem or an incident recorder). (Smith, ¶¶61-63.)

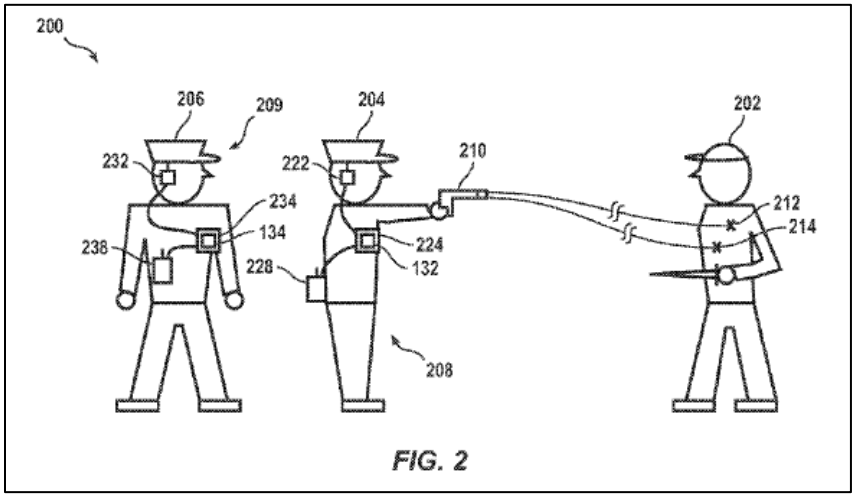


FIG. 2

Each primary subsystem/incident recorder is "*for law enforcement*"[5] and includes a video camera. (Smith, ¶¶23, 42-43, 45-48, 61-64, 66-67, 77, 96, 149, Figs. 2, 3.) For example, Smith states:

> FIG. 2 pictorially represents a hypothetical incident involving two law enforcement officers 206 and 204 apprehending a suspect 202 while each officer operates a respective primary subsystem, herein called a system for incident recording 208 and 209 (herein also called an incident recorder), according to various aspects of the present invention.

(Smith, ¶61.)

Each primary subsystem/incident recorder is "*portable*" because law enforcement officers 204 and 206 wear and transport a primary subsystem/incident recorder during ordinary law enforcement activities (e.g., traffic stop, responding to a burglary, and patrol). (Smith, ¶¶35, 61-62, Fig. 2.) Smith also states that each primary subsystem/incident recorder "records a movie during the confrontation from a different point of view." (Smith, ¶62.) Smith's system is also an "*imaging*

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[5] The recitation of "*for law enforcement*" in the preamble is merely an intended use and should not be given patentable weight. *C.f. Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999).

system" because "[v]ideo images may be cropped, panned, and/or zoomed." (Smith, ¶53.)

Thus, Smith teaches or suggests the preamble. (Keller, ¶¶77-80.)

2. Smith teaches or suggests *"a portable housing configured to be mounted on a body of a law enforcement officer, on a device carried by the law enforcement officer, or in a law enforcement vehicle."*

Each of Smith's primary subsystems/incident recorders 208 and 209 comprises a handset 132, 134—also identified as 700 in Figure 7 (reproduced below). (Smith, ¶¶63, 66, 70, 72, 135, Figs. 3, 7.) A primary subsystem/incident recorder includes "processor 340, memory 341, video monitor 342, controls 343, handset speaker 344, audio in circuit 345, audio out circuit 346, handset mike 347, accelerometer 348, and wired/wireless interface 349." (Smith, ¶66, Fig. 3.) As shown in Figure 7, handset 700 has a "*housing*" that encloses the processor, memory, accelerometer, speaker, etc. (Keller, ¶82.)

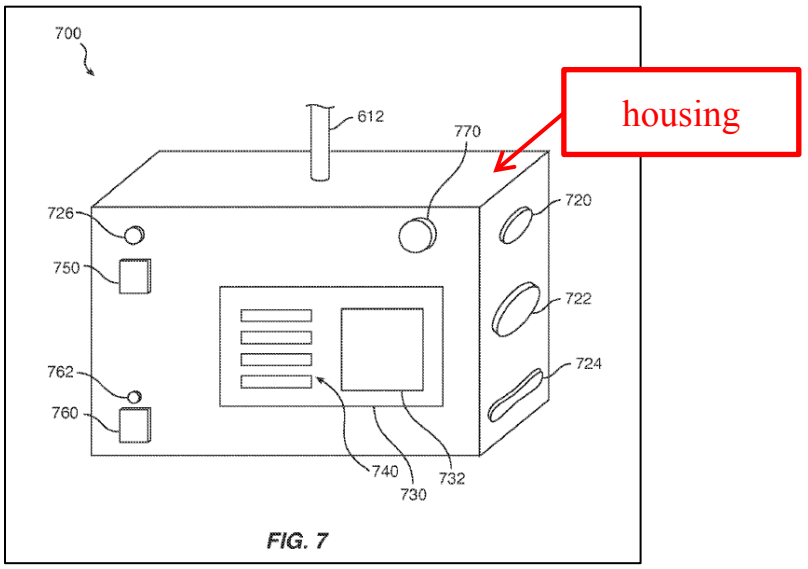


FIG. 7

Each handset's housing is "*portable*" because law enforcement officers 204 and 206 wear and transport the handset during ordinary law enforcement activities (e.g., a traffic stop, responding to a burglary, and patrol). (Smith, ¶¶35, 61-62, Fig. 2.) The handset's housing is "*configured to be mounted … on a device carried by the law enforcement officer*" because, as Figure 2 shows (annotated below), handset 134 is coupled to personal hub 234, which is worn by officer 204. (Smith, ¶¶62, 71, 84, Fig. 2.) The handset's housing is also "*configured to be mounted on a body of a law enforcement officer*" because the incident recorder 209 is worn on the chest of officer 206 and the incident recorder 208 is worn on the chest of officer 204. (Smith, ¶62, Fig. 2; *see also* ¶70 (describing an embodiment where the personal hub 224, 234 (600) is omitted, indicating that the handset's housing is mounted directly on the officer's body).)

housing of handset 134 mounted on both officer 206 and a device (i.e., personal hub 234) carried by the officer 206

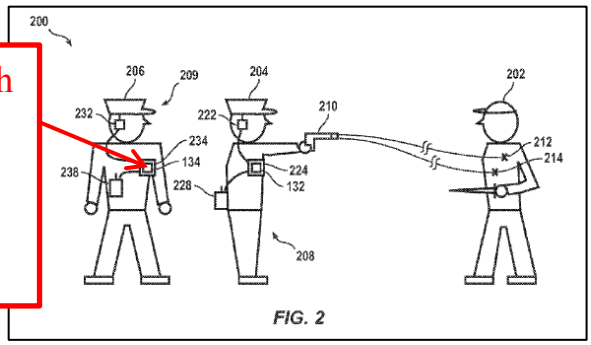


FIG. 2

Thus, Smith teaches or suggests this element. (Keller, ¶¶81-83.)

3. Smith teaches or suggests *"a camera component housed within the housing and configured to capture video of an event."*

Smith discloses "*a camera component*": "Headset 222 (500) includes oriented microphone 335 (520) ***and oriented camera 337 (510)*** for continuously detecting audio and visual (or infrared) information from the direction facing the operator." (Smith, ¶77 (emphasis added); *see also* ¶¶63, 70, Figs. 3 and 5 (also identified as 510 in Fig. 5).) Smith's camera 337 (510) is "*configured to capture video of an event*" because controls 343 on handset 132 includes "event switch 750 (630)" that both starts the recording of incident information and stops the recording of incident information. (Smith, ¶¶84, 105.) As shown in Figure 8A (reproduced below), "[w]hile in event recording state 806, handset 132 (700) captures original audio and video information about an incident." (Smith, ¶138.) "Event recording state 806 captures video information from oriented camera 510." (Smith, ¶138.)

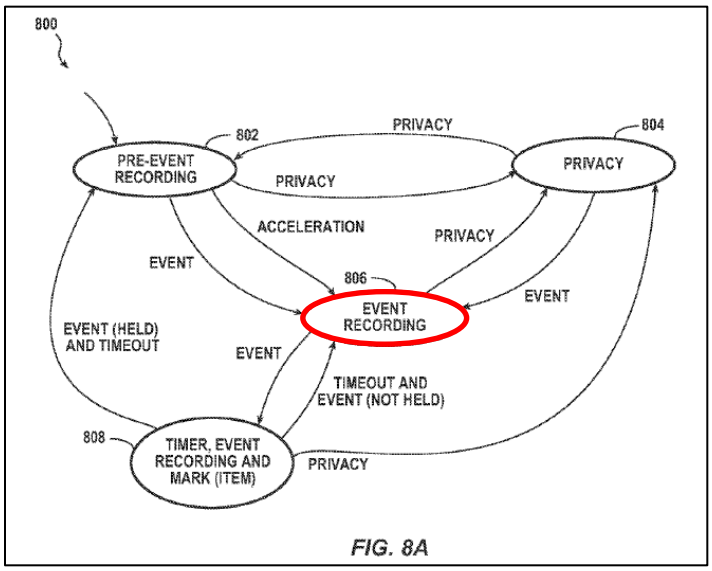


FIG. 8A

Smith discloses a camera component configured to capture video of an event, but Smith does not explicitly disclose a camera component "*housed within the housing*," as recited in independent claim 1. But a POSITA would have found it obvious, in view of Smith's teachings, to enclose camera 337 (510) in the housing of handset 132, 134 (700). Indeed, Smith discloses an embodiment where "headset 222 (500) is omitted and ***handset 132 includes*** a microphone and speaker for use by the author-operator… and ***oriented camera (not shown)*** that are oriented by the author-operator of the handset." (Smith, ¶70 (emphasis added).)

A POSITA would have been motivated to house camera 337 (510) within the handset's housing to further decrease the size and weight of the incident recorder. (Keller, ¶87 (explaining that placement of the camera in the handset would eliminate the need for the headset because Smith's handset also has an audio input and output).) A POSITA would have been motivated to house the camera in

the handset's housing to protect the camera from external forces, particularly in dynamic law enforcement environments. (Keller, ¶¶88-89.) A POSITA would have understood that such a modification would have led to predictable results because, as the '730 patent admits, camera components were commonly housed in the same housing as memory elements. ('730 patent, 1:58-62; Woodman, ¶¶5, 6, 27, 29, 31, 32, 56, Figs. 1a-3, 5a-9b (housing camera components and memory components in a single housing to assist in protecting the components from external forces, to improve manufacturability, to shrink the system for a more compact form factor, and to ruggedize the camera system for fast-paced physical activities); Keller, ¶90.) For at least these reasons, a POSITA would have been motivated to house camera 337 (510) "*within the housing*" of Smith's handset. (Keller, ¶¶87-90.)

Thus, Smith teaches or suggests this element. (Keller, ¶¶84-90.)

4. Smith teaches or suggests *"a memory element housed within the housing and configured to record the captured video of the event, wherein said captured and recorded video comprises a plurality of video frames of a video file."*

Smith discloses "*a memory element housed within the housing*" of handset 132: "Handset 132 includes processor 340, ***memory 341***, video monitor 342, controls 343, handset speaker 344, audio in circuit 345, audio out circuit 346, handset mike 347, accelerometer 348, and wired/wireless interface 349." (Smith, ¶66 (emphasis added); *see also* ¶¶80, 97, Figs. 3, 7.) Memory 341 is "*configured to*

record the captured video of the event" because, while in event recording state 806, processor 340 stores captured information from camera 510 in memory 341. (Smith, ¶138; *see also* ¶¶97, 101, Fig. 4 (showing that video oriented camera streams are stored in memory 341).) A POSITA would have also understood that storing video information in memory 341 "records" the captured video. (Keller, ¶92.) Indeed, Smith states that "a record of an incident is stored" in MPEG-4 file format. (Smith, ¶43.)

Smith teaches that the "*captured and recorded video comprises a plurality of video frames of a video file*." (Keller, ¶93.) Smith discloses, "Handset 132 stores the audio and video information in MPEG-4 format in memory 341." (Smith, ¶¶42-43, 70.) Smith explains that the video comprises frames. (Smith, ¶42 ("one or more frames of video").) A POSITA would have been familiar with the MPEG-4 format, which was a well-known standard by the time of the alleged invention. (Keller, ¶93 (citing Castillo (Exhibit 1019), 2:20-26).) A POSITA would have understood that video information stored in MPEG-4 format comprises a plurality of frames and is stored in the MP4 file format. (Keller, ¶93 (citing MPEG-4 Standard Overview (Exhibit 1020), 11, 48-51)).

Thus, Smith teaches or suggests this element. (Keller, ¶¶91-93.)

5. Smith teaches or suggests "*an input mounted on the housing and configured to be actuated by the law enforcement officer in the field and in response to being actuated, generate an activation signal.*"

As shown in Figure 7 (reproduced below), "*an input* [*is*] *mounted on the housing*" of handset 132, 134 (700): "Handset 700 includes power switch 720, handset speaker 722, volume 724, handset mike 726, display 730, picture-in-picture 732 portion of display 730, legends 740, ***event switch 750***, privacy switch 760, privacy indicator 762, display toggle switch 770, and conductor 612." (Smith, ¶67 (emphasis added).) The event switch 750 is an "*input*" because event switch 750 is one of Smith's "controls 343," and "operation of event switch 750 … starts the recording of incident information by handset 132 …." (Smith, ¶84.) Event switch 750 is also used to stop the recording and to trigger event recording from the privacy state. (Smith, ¶¶85, 105, 137, Fig. 8A.) When event switch 750 triggers event recording, processor 340 "records a mark in the video and audio streams to indicate that event switch 750 (630) was operated at that time during data collection." (Smith, ¶140.)

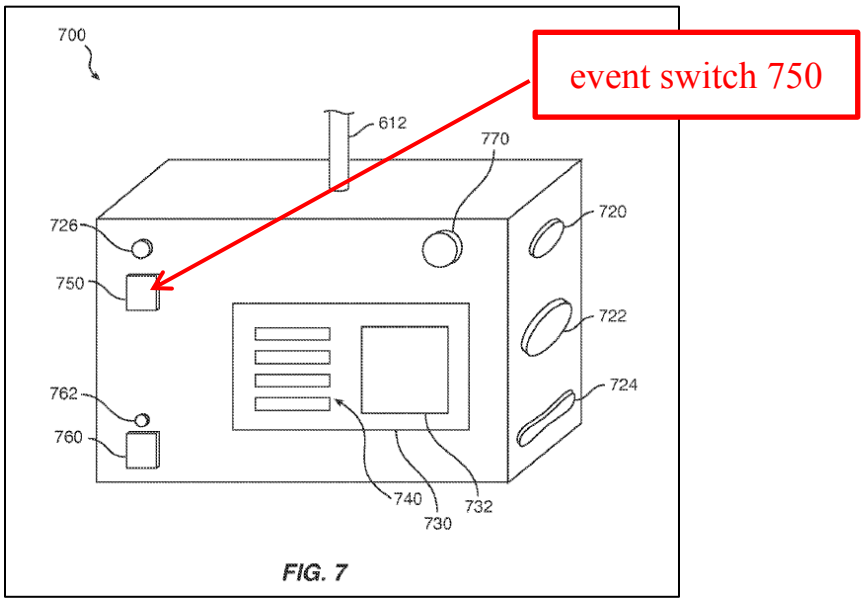


FIG. 7

Smith's event switch 750 is "*configured to be actuated by the law enforcement officer in the field*" because event switch 750 is a control mounted on handsets 132, 134 (700), and the law enforcement officer 204, 206 uses her "fingers or thumbs" to operate the event switch 750 "*in the field*," such as during traffic stops, responding to burglaries, and general patrol, to trigger video recording. (Smith, ¶¶35, 61, 69, 84-85, 129-30, 135, 137, Fig. 2; *see also* ¶82 ("A control may be operated as a consequence of any muscle contraction by the operator" and "may provide analog or binary information to a processor."); Keller, ¶96.)

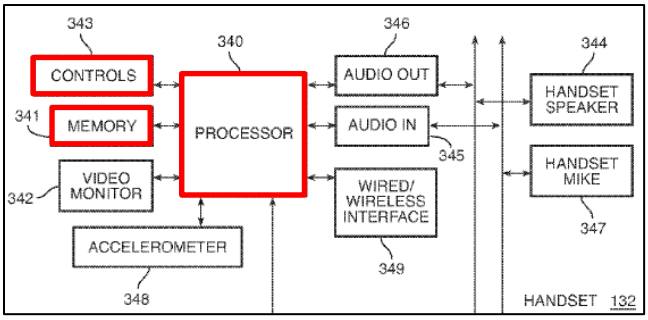
"*[I]n response to being actuated*," Smith's event switch 750 "*generates an activation signal*": "an operation of event switch 750 … produces EVENT signal …." (Smith, ¶129.) When processor 340 detects the EVENT signal, the

incident recorder changes states (e.g., from the pre-recording state or the privacy state to the event recording state). (Smith, ¶¶128-29.)

Thus, Smith teaches or suggests this element. (Keller, ¶¶94-97.)

6. Smith teaches or suggests *"a processing element associated with the memory element and the input."*

Processor 340 in handset 132, 134 (700) is "*a processing element*." (Smith, ¶¶66, 78-79, 89, 102, 128, Fig. 3; Keller, ¶99.) Processor 340 is "*associated with the memory element*" (i.e., memory 341) because processor 340 stores information in memory 341, and processor 340 accesses the data stored in memory 341. (Smith, ¶¶97, 138, 151.) Processor 340 is also "*associated with . . . the input*" (i.e., event switch 750) because "processor 340 records a mark in the video and audio streams to indicate that event switch 750 . . . was operated at that time during data collection." (Smith, ¶140.) Indeed, as shown below in an annotated excerpt of Figure 3, processor 340 is associated with controls 343 (e.g., event switch 750) and memory 341. (Keller, ¶99.)



Smith Figure 3 (reproduced-in-part and annotated)

Thus, Smith teaches or suggests this element. (Keller, ¶¶98-99.)

7. Smith teaches or suggests that the processing element is configured to *"receive said activation signal generated in response to the law enforcement officer actuating the input."*

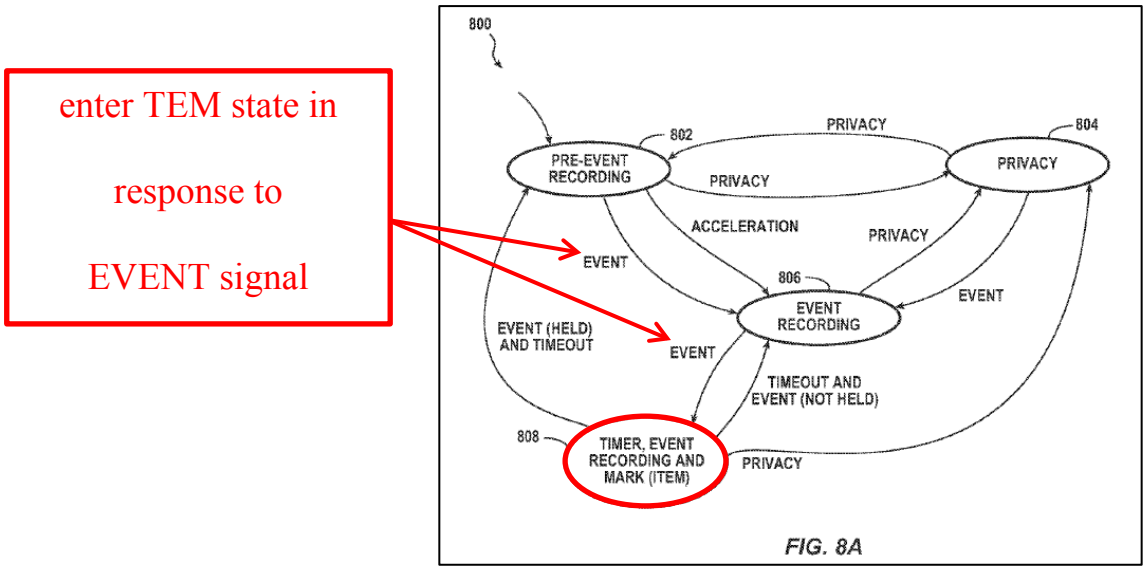
Processor 340 is configured to "*receive said activation signal*" (i.e., the EVENT signal) "*generated in response to the law enforcement officer actuating the input*" (i.e., event switch 750). (Keller, ¶101.) As previously explained, toggling event switch 750—a control—generates an EVENT signal. Smith explains that "[a] control [(e.g., event switch 750)] … is a part of a user interface that provides input to a processor in response to an action by an author-operator." (Smith, ¶82.) Processor 340 receives the EVENT signal (i.e., the activation signal) because, when operation of event switch 750 produces an EVENT signal, "the processor detects the signal." (*See* Smith, ¶¶128-29.)

Thus, Smith teaches or suggests this element. (Keller, ¶¶100-01.)

8. Smith teaches or suggests that the processing element is configured to *"in response to the activation signal, store a mark in the video file for at least one of the plurality of video frames to thereby identify a point in time or location in the video file."*

"[*I*]*n response to the activation signal*" (i.e., the EVENT signal), Smith's processor 340 "*store*[*s*] *a mark in the video file for at least one of the video frames*." (Keller, ¶¶103-08.) Smith teaches that the EVENT signal causes Smith's system to enter the "time, event recording and mark (TEM state), as illustrated in Figure 8A

below. (Smith, ¶¶130, 139, Fig. 8A.) Smith further teaches that "upon entering TEM state 808, ***processor 340 records a mark in the video and audio streams*** …." (*Id*., ¶140 (emphasis added).) Thus, "*in response to the activation signal*" (i.e., the EVENT signal), Smith's processor 340 "*store[s] a mark*." (Keller, ¶103.)



Smith Figure 8A (Annotated)

Smith teaches (or at least suggests) that the mark is stored "*in the video file*." (Keller, ¶¶104-05.) Smith teaches that "[a] mark may be stored ***within a video or audio stream (e.g., same MPEG-4 container, different container, but related by time)*** or separately with information to provide a correlation between the mark and the video or audio streams at the time the mark was made" (Smith, ¶140 (emphasis added).) Smith explains that "[i]nformation in MPEG-4 format is contained in containers, defined by the format." (*Id*., ¶43.) And a POSITA would have understood that an MPEG-4 file is a container file that includes various multimedia

objects of information. (Smith, ¶47; Keller, ¶104 (citing MPEG-4 Standard Overview, 47-51).) Thus, a POSITA would have understood—based on Smith's teachings that the "mark may be stored within a video" in the "same MPEG-4 container" or in a "different container, related by time"—that the mark may be stored in a container in the MPEG-4 file ("*in the video file*"). (Keller, ¶¶104-05.)

Smith further teaches that "upon entering TEM state 808, processor 340 records a mark ***in the video and audio streams***" and that "[a]n operator may ***insert a mark into a data stream*** during recording of the incident." (Smith, ¶140.) These additional teachings would have further confirmed (or at least suggested) to a POSITA that the mark is stored in the same location as the video information, and thus "*in the video file*." (Keller, ¶106.)

Smith's mark is stored "*for at least one of the plurality of video frames*" and *identif*[*ies*] *a point in time or location*[6] *in the video file*." (Keller, ¶107.) Smith teaches that "upon entering TEM state 808, processor 340 records a mark in the

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[6] During prosecution then-applicant made clear that "location" refers to a location in the video file, not a geographic location. (Exhibit 1002, 307 (arguing "but the geographical location of the user is not the same as a location in the video *when the marking occurred*" (emphasis in original)).)

video and audio streams to indicate that event switch 750 (630) was operated ***at that time during data collection***." (Smith, ¶140 (emphasis added).) Smith further teaches that "[e]ach entry into TEM state 808 records a new mark ***associated with the video and audio data being recorded at the time of entry***." (Smith, ¶141 (emphasis added).) A POSITA would have understood that digital video is captured and stored as a sequence of video frames. (Keller, ¶107.) Thus, a POSITA would have understood that Smith's mark is stored for the one or more video frames that are being captured at the time that the TEM state is entered. (*Id*.)

Smith also explains that marks may be used to "skip (e.g., fast forward, fast reverse, hypertext link) from a scene of a movie associated with one mark to a scene of a movie associated with another mark to speed access to information." (Smith, ¶141.) A POSITA would have understood that "a scene of a movie" corresponds to at least one video frame, further confirming that Smith's mark is stored *for at least one of the plurality of video frames*" and that the mark *identif*[*ies*] *a point in time or location in the video file*." (Keller, ¶108.)

Thus, Smith teaches or suggests this element. (Keller, ¶¶102-08.)

9. Smith teaches or suggests *"wherein said mark in the video file of the at least one of the plurality of video frames enables the processing element to perform the following: upon playback of the video file and in response to receipt from a user request, automatically advance the video file to the marked at least one video frame representing the point in time or location in the video file at which the law enforcement officer actuated the input."*

In Smith, processor 340 performs video playback. (Keller, ¶110.) Smith refers to video playback as "reviewing state 902." (Smith, ¶147, Fig. 9; *see also* ¶47 (referring to review of MPEG-4 files as "playback").) For review, Smith explains that "processor 340 includes … a microcontroller for supporting video display …." (Smith, ¶79; *see also* ¶81, Fig. 3 (describing and showing processor 340 associated with the video monitor 342).) During this review, processor 340 also converts audio information from MPEG-4 format to analog format. (Smith, ¶89; Keller, ¶110.)

In Smith, the mark enables processor 340 to "*automatically advance the video file to the marked at least one video frame*" "*upon playback of the video file*": "Information presented for review may skip (e.g., fast forward, fast reverse, hypertext link) from a scene of a movie associated with one mark to a scene of a movie associated with another mark to speed access to information." (Smith, ¶141; *see also* ¶147 (explaining that a user can select marks from a legend).) These video frame(s), as previously explained, "*represent*[] *the point in time or location in the*

video file at which the law enforcement officer actuated the input." *Supra* Section VI.A.8. The mark also enables processor 340 to automatically advance the video file "*in response to receipt from a user request*" because users operate playback functions, such as fast forward. (Smith, ¶¶33 ("author-operators" review recorded information), 46 ("A primary subsystem may include … a user interfacing for reviewing and managing incident information (e.g., preparing supplemental information, selecting, classifying), 51 (describing controls of the user interface), 64 ("[r]eviewing is accomplished by watching previously recorded information on the display of the handset."), 146-50 (describing the "reviewing state" and operation of an event switch to trigger the reviewing state), claims 1-3, 9 (using controls for reviewing); Keller, ¶111.) In other words, reviewers use marks "as an index to the video" and to search, sort, and/or arrange the video frames to facilitate review. (Smith, ¶141; Keller, ¶111.)

Thus, Smith teaches or suggests this element and renders claim 1 obvious. (Keller, ¶¶109-12.)

B. Dependent claim 4.

Smith teaches or suggests that "*said mounting on the law enforcement officer's body includes mounting on an article of clothing worn by the law enforcement officer*." (Keller, ¶¶113-15.) As explained in Section VI.A.2, the handset's housing is configured to be mounted on a body of a law enforcement

officer because, as shown in Figure 2, incident recorder 209 is worn on the chest of officer 206 and incident recorder 208 is worn on the chest of officer 204. Figure 2 also shows that the handset's housing is mounted on the officers' uniforms—"*an article of clothing worn by the law enforcement officer*." (Keller, ¶114; *see also* Smith, ¶¶82-83 (explaining that components of an incident recorder can be "incorporated into clothing worn by the operator (e.g., gloves, sleeves, shoes).").)

Thus, Smith renders dependent claim 4 obvious. (Keller, ¶¶113-15.)

C. Dependent claim 7.

Smith teaches or suggests that "*the processing element is configured to wirelessly transmit the video file to a remote device*." (Keller, ¶¶116-20.) In Smith, handsets 132, 134 transmit data to a secondary subsystem via "wired/wireless interface 349." (*See* Smith, ¶¶55-56, 66, 98, Figs. 1, 3.) The data wirelessly transferred from handset 132, 134 to the secondary subsystem includes "incident reports," which includes the captured video files. (Smith, ¶¶21, 44, 54-55, 57, 60.) Smith also discloses that any function ascribed to handsets 132, 134, which includes wireless transmission of video files via wired/wireless interface 349, is accomplished by processor 340. (Smith, ¶102; Keller, ¶117.)

Smith's processor 340 transmits video files to the "ad hoc transceiver 124" of the secondary subsystem. (*See* Smith, ¶56.) The transceiver is a "*remote device*" because the transceiver is located in a separate, centralized location distant from

the location where law enforcement officers operate their respective incident recorders. (Smith, ¶56 ("Such a network is 'ad hoc' because candidates of the network may enter and members of the network may exit (e.g., moved by humans"); Keller, ¶118.) Further, the incident recorders (primary subsystems) are remote from the secondary subsystem because primary subsystems are used at the time and place of the incident, whereas the secondary subsystem is not used at the time and place of the incident. (Smith, ¶28; Keller, ¶118.)

A POSITA would have also understood that Smith's processor 340 is configured to wireless transmit video files to the station hub 110 because data transfer to station hub 110 and its evidence manager 112 may wirelessly occur via ad hoc transceiver 124. (Smith, ¶60, Fig. 1.) Accordingly, processor 340 is configured to wirelessly transmit the video file via the ad hoc transceiver 124 to station hub 110, which is also a "*remote device*." (Keller, ¶119.) Further, the video files are also transmitted to various other remote devices because the secondary subsystem includes various computer systems, including the server network that stores and manages the database of video files. (Smith, ¶¶30, 54-55, 59; Keller, ¶119.)

Thus, Smith renders claim 7 obvious. (Keller, ¶¶116-20.)

D. Dependent claim 9.

Smith teaches or suggests that "*the processing element is configured to instruct capturing of the plurality of video frames by the camera component for recording the event in response to receiving information indicative of a triggering event*." (Keller, ¶¶121-25.) As explained in Section VI.A.3, processor 340 is configured to instruct camera 337 to capture video frames for recording the event in response to a law enforcement officer actuating event switch 750. In such instances, actuating event switch 750 sends processor 340 "*information*" (e.g., a bit) "*indicative of a triggering event*": "an operation of event switch 750 . . . produces EVENT signal." (Smith, ¶128; *see also* ¶82 ("A control may provide analog or binary information to a processor.").) Accordingly, processor 340 is configured to instruct capturing of the plurality of video frames for recording the event in response to receiving information (e.g., a bit) indicative of a triggering event. (Keller, ¶122.)

In addition to recording in response to a law enforcement officer actuating an input and receiving an EVENT signal, processor 340 also instructs camera 337 to capture video for recording of an event in response to accelerometer data. (Smith, ¶135, Fig. 3.) Specifically, the accelerometer 348 within handset 132 reports sudden acceleration forces to processor 340. (Smith, ¶135, Fig. 3.) Sudden acceleration is indicative of a triggering event. (Smith, ¶135.) In response to

receiving information about sudden acceleration, the processing element instructs camera 337 to capture the plurality of video frames for recording the event. (Smith, ¶135.) Smith states:

> ***A transition from pre-event recording state 802 to event recording state 806 may also occur upon detecting a sudden acceleration of handset 132 (700)***. Generally, handset 132 (700) is worn or held by a user. ***Sudden acceleration of handset 132 (700) may indicate that an event has occurred that should be recorded***. Events that may produce a sudden acceleration may include the operator rapidly accelerating from a stop and a force applied to the operator (e.g., physical blow, struck by a bullet). A sudden acceleration of the handset may indicate a situation in which the user would like to operate event switch 720 (630), but physically cannot. Acceleration may be detected and reported by accelerometer 348.

(Smith, ¶135.)

Figure 8A of Smith illustrates transitioning from the pre-event recording state 802 to the event recording state 806 in response to the EVENT signal or to detecting acceleration:

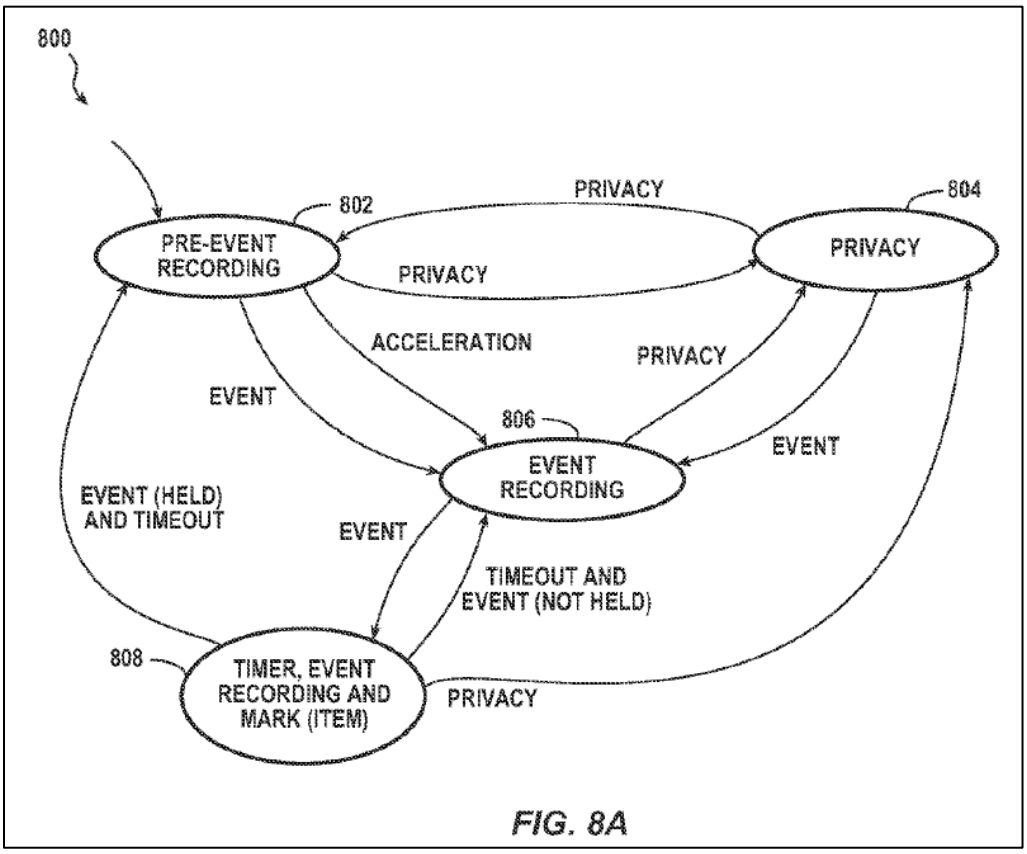


FIG. 8A

Thus, Smith renders claim 9 obvious. (Keller, ¶¶121-25.)

VII. Ground 3: Smith in view of Strub renders claims 2 and 3 obvious.

A. Dependent claim 2.

Smith in view of Strub teaches or suggests "*wherein the mark in the video file of the at least one of the plurality of video frames further records a geographical location of at least one component of the system when the law enforcement officer actuated the input.*" (Keller, ¶¶126-32.) As explained in Section VI.A.8, Smith discloses a portable video and imaging system that stores a mark in the video file for at least one of the plurality of video frames (e.g., with a timestamp) when the law enforcement officer actuates the input. However, Smith

does not "*record*[] *a geographical location of at least one component of the system when the law enforcement officer actuated the input*."

Using a mark to record a geographical location in this manner would have been obvious in view of Strub. (Keller, ¶¶128-32.) A POSITA would have understood that Smith's system records video at the location of an incident for incident reports. (Smith, Abstract, ¶¶23-24, 27; Keller, ¶128.) A POSITA would have also understood that incident reports commonly include location information to identify where the event took place. (Smith, ¶3; Keller, ¶128.) In Smith's system, a law enforcement officer would manually input location information after an event and before leaving the location of the event. (Smith, ¶27.) But staying at an event location to manually input information for an incident report needlessly consumes law enforcement officers' time and extends the amount of time law enforcement officers are not performing their regular duties or patrols. (Keller, ¶128.) To reduce the time required to complete accurate incident reports, a POSITA would have been motivated to seek solutions to automatically mark video files with additional information. (*Id*.) This would have led the POSITA to Strub. (*Id*.)

Like Smith, Strub discloses a wearable system for recording video and documenting information for law enforcement personnel. (Strub, Abstract, 4:18-29, 39:57-59, 66:24-39.) Also like Smith, Strub's system documents information by

marking recorded video files with data. (Strub, 3:44-54, 4:60-61, 5:1-5.) To document the location of the recording unit when recording a video file, Strub's system marks frames of a video file with "position data." (Strub, 5:1-5, 12:4-10, 25:37-46, 50:32-37, 61:51-64:6.)

The position data Strub uses to mark frames of a video file "*records a geographical location*" because "[t]he location can be specified in global coordinates (i.e., relative to earth), local coordinates (i.e., relative to a fixed region or object on earth), or relative coordinates (e.g., relative to other recording units)." (Strub, 61:63-66; *see also* 62:7-63:13 (describing an implementation of a GPS receiver to obtain global coordinates).) Additionally, the mark records the geographical location "*of at least one component of the system*" because "[t]he 'position' of a recording unit includes the location ***of the recording unit*** and/or the orientation of the recording unit." (Strub, 61:61-63 (emphasis added).) And in the Smith/Strub system, the mark would record the geographical location "*when the law enforcement officer actuates the input*" because in Strub the position sensing device "enable[s] the position of the recording unit to be ascertained at any point in time" (e.g., "at the time the recording data was obtained") and in Smith the TEM state occurs when the law enforcement officer actuates the input (i.e., event switch 750). (Strub, 32:64-33:7, 61:52-57; Smith, ¶¶135, 139-41, Fig. 8A; Keller, ¶130.)

A POSITA would have been motivated to implement Straub's position sensing device into Smith's system to reduce the amount of time law enforcement officers need to manually fill out details for incident reports. (Keller, ¶131.) Moreover, implementing the position sensing device would auto populate certain fields of a standard incident-report, ensuring detailed and uniform entry of location information. (*See* Smith, ¶8 ("Increased accuracy and greater completeness of incident reports are needed …."); Keller, ¶131.) A POSITA would have also found it desirable to have greater flexibility in marking video files because different markings can better facilitate searching and/or display of video recordings. (Smith, ¶141; Strub, 3:66-4:15; *see also* O'Donnell, ¶5 ("The inclusion of GPS technology introduces a new level of context to any video, making location, speed, time, and outside world conditions as important as the scene recorded."); Keller, ¶131.) And when an officer has a long duration between recorded events, determining where each recorded event took place becomes increasingly-important information. (Strub, 50:32-37; *see also* 56:29-37.) For at least these reasons, a POSITA would have been motivated to modify the Smith system as proposed. (Keller, ¶131.)

Thus, Smith in view of Strub renders claim 2 obvious. (Keller, ¶¶126-32.)

B. Dependent claim 3.

Smith in view of Strub teaches or suggests "*wherein the processing element receives, from a global positioning system, information indicative of the*

geographical location of the at least one component of the system." (Keller, ¶¶133-36.) In Strub, the position sensing device uses a "*global positioning system*" (GPS) receiver. (Strub, 62:37-41.) "[W]hen the position sensing device is a GPS receiver … location is specified in global coordinates." (*Id.*, 62:11-13.) These global coordinates are "*information indicative of the geographical location of the at least one component of the system*" because the coordinates specify the location of the recorder on Earth at a specific time. (Strub, 61:52-66; Keller, ¶134.) In the Smith/Strub system, a POSITA would have understood, or it would have at least been obvious, that Smith's processor 340 would receive the global coordinates from the GPS system because in Straub the position sensing device provides location information to the system controller, and in Smith, processor 340 includes a microcontroller "for performing all other functions of handset 132." (Strub, 11:29-38, 13:16-25, Fig. 3; Smith, ¶79; Keller, ¶135.) Furthermore, Smith's processor 340 would receive the global coordinates from the GPS system because processor 340 is responsible for storing the data (including marks associated with frames of video files) in memory 341. (Smith, ¶¶97, 102, 138, 140, 151, Fig. 4; Keller, ¶135.) Thus, Smith in view of Strub renders claim 3 obvious. (Keller, ¶¶133-36.)

VIII. Ground 4: Smith in view of O'Donnell renders claims 5, 6, and 8 obvious.

A. Dependent claim 5.

Smith in view of O'Donnell teaches or suggests "*wherein the housing is configured to be selectively mounted on the law enforcement officer's body and in the law enforcement vehicle*." (Keller, ¶¶137-45.) As explained in Section VI.A.2, the housing of Smith's handset is configured to be "*mounted on a law enforcement officer's body*." Smith, however, does not explicitly disclose the mechanism that secures the housing to the body of a law enforcement officer or that the housing is configured to be "*selectively mounted … in the law enforcement vehicle*." Because Smith discloses mounting a handset on a law enforcement officer's body, but does not explicitly disclose the mechanism used to mount the handset's housing onto the body of the law enforcement officer, a POSITA would have sought references that taught mounts for wearable cameras. (Keller, ¶138.) This would have led the POSITA to O'Donnell. (*Id*.)

As shown in Figure 9 (below), O'Donnell discloses a versatile mounting system 120 that comprises a rail plug 132 and a base mount 130. (O'Donnell, ¶98, Fig. 9.) Mount rail cavities 138 (labeled in Fig. 10) of rail plug 132 slide onto housing rails 124 of camera housing 22 as indicated by direction arrow 148 in Figure 9. (*Id.*, ¶102, Fig. 9.) Then, rail plug 132 can be inserted into base mount

130 as indicated by direction arrow 150. (*Id.*, ¶102, Fig. 9.) The base mount 130 is designed as a flexible mount, attaching to "a variety of surfaces such as, for example, the surfaces of helmets, snowboard decks, skis, fuel tanks, windows, doors, and vehicle hoods." (*Id.*, ¶103.)

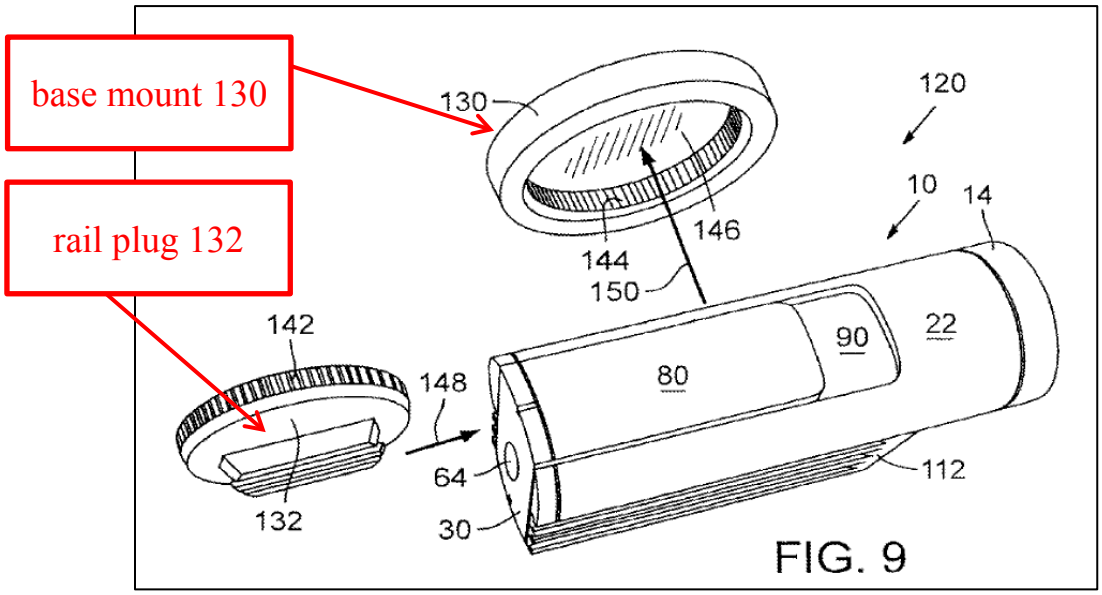


Figure 9 of O'Donnell (Annotated)

Figure 10 (reproduced below) shows base mount 130 and rail plug 132 connected to form "versatile mount 126." (*Id.*, ¶94.) O'Donnell also calls versatile mount 126 an application mount 126. (*Id.*, ¶123.)

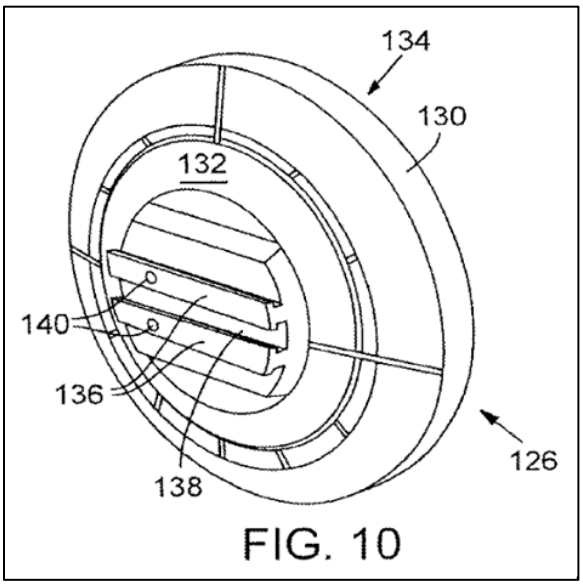


Figure 10 of O'Donnell

In the Smith/O'Donnell system, the housing of Smith's handset would remain configured to be "*mounted on the law enforcement officer's body*" because O'Donnell explains that its versatile mount 126 can be used for a wearable camera: "Digital camera 10 is wearable …. [The] system includes application mounts 126 to attach to any person, equipment, or vehicle." (O'Donnell, ¶123; Keller, ¶¶141.) O'Donnell teaches, for example, that base mount 130 can attach to various surfaces (e.g., a law enforcement officer's uniform) via an adhesive pad or a strap. (O'Donnell, ¶¶100, 108-09, 111, 119.) O'Donnell further teaches that base mount 130 could use Velcro to attach to various surfaces (e.g., a law enforcement officer's uniform). (*Id.*, ¶¶101, 105 (using Velcro to secure base mount 130 to rail plug 132).) Based on these teachings, a POSITA would have understood that using this versatile base mount 130, a rail plug 132 coupled to or integral with the

handset's housing would allow the housing to be mounted on the law enforcement officer's body—just as O'Donnell intended the mounting system to function. (Keller, ¶141.)

The housing of Smith's handset would also be configured to be "*mounted in a law enforcement vehicle*," such as on a dashboard or internal windshield of a patrol car. (*Id.*, ¶142.) O'Donnell explains, "Because base mount 130 can be flexible, it can be attached to a variety of surfaces such as, for example, the surfaces of helmets, snowboard decks, skis, fuel tanks, windows, doors, and vehicle hoods." (O'Donnell, ¶103; *see also* ¶¶104, 123.) A POSITA would have understood that these surfaces include surfaces inside a law enforcement vehicle. (Keller, ¶142.)

The housing of Smith's handset would be configured to be "*selectively*" mounted because in O'Donnell, "[t]he versatile mounting system 120 provides for ease of mounting and orientation of digital video camera 10 with ease of detachment of digital video camera 10 with retention of the mounted orientation." (O'Donnell, ¶100; Keller, ¶143.) After the handset's housing is mounted to the body of the law enforcement officer, for example, the handset along with rail plug 132 may be disengaged from base mount 130. (O'Donnell, ¶104; Keller, ¶143.) The rail plug 132 with the attached handset may then be engaged to a second base mount 130 in the law enforcement vehicle (e.g., on the dashboard or internal

windshield of a patrol car). (O'Donnell, ¶98-102, Fig. 9; Keller, ¶143.) Because mounting system 120 is versatile, the housing of Smith's handset would be configured to be "*selectively mounted on the law enforcement officer's body and in the law enforcement vehicle*." (Keller, ¶143.)

A POSITA would have been motivated to utilize O'Donnell's versatile mounting system to mount Smith's handset to the law enforcement officer, as Smith intends, and to ensure law enforcement officers can direct the incident recorder to record the desired field of view. (*Id*., ¶144) For example, Smith's system may be used to record traffic stops. (Smith, ¶35.) But the incident recorder's handset, mounted on the chest of the law-enforcement officer, would not sufficiently record the start of the traffic stop while the law enforcement officer was sitting in her patrol car—the incident recorder might instead record the steering wheel. (Keller, ¶144.) To ensure that the camera is pointed at the correct field of view at the start of the event, a POSITA would have been motivated to place the recorder on a mount in the patrol car (e.g., on the dashboard or windshield). (*Id*.) A POSITA would have also been motivated to use O'Donnell's mounting system because O'Donnell's mounting system is versatile, includes a quick-release mechanism to enable a fast and smooth transition between a mount in a vehicle and a mount on a law enforcement officer's body, and does not require readjustment during reattachment. (*See* O'Donnell, ¶¶29, 94, 100, 104; Keller,

¶144.) For at least these reasons, a POSITA would have been motivated to modify the Smith system as proposed.

Thus, Smith in view of O'Donnell renders claim 5 obvious. (Keller, ¶¶137-45.)

B. Dependent claim 6.

1. Smith in view of O'Donnell teaches or suggests "*a universal mount coupled to or integral with the portable housing*."

Smith in view of O'Donnell teaches or suggests a "*universal mount*." (Keller, ¶148.) During prosecution, then-applicant argued that "[t]he universal mount as claimed allows for the portable housing to quickly and easily be attached to various types of mounting assemblies." (Exhibit 1002, 1816.) O'Donnell's mounting system 120 at least meets this characterization—it has versatile components that can attach, detach, and reattach quickly and easily to a variety of surfaces. (O'Donnell, ¶100; Keller, ¶148.)

O'Donnell's versatile mounting system includes a base mount 130 and a rail plug 132. (O'Donnell, ¶100, Fig. 9.) "After base mount 130 has been attached to a surface, rail plug 132 can be detached from base mount 130." (O'Donnell, ¶100; *see also* ¶104.) Then, "rail plug 132 can be inserted or re-inserted into base mount 130 …." (*Id.*, ¶102.) A POSITA would have understood that rail plug 132 would be configured to attach, detach, and reattach to any number of base mounts. (*See*

O'Donnell, ¶¶103-04, 123 (describing that rail plug 132 can mount the camera to a base mount 130 attached to a variety of surfaces such as helmets, handlebars, windows, doors, and vehicles); Keller, ¶149.) In this sense, O'Donnell's rail plug 132, being able to accept a multitude of different attachments, is a universal mount. (Keller, ¶149.)

Rail plug 132 is "*coupled to and integral with the portable housing*" because rail plug 132 is attached to and mated with the digital video camera 10. (*Id.*, ¶150.) O'Donnell explains that rail plug 132 is attached to the digital video camera 10. (O'Donnell, ¶¶100, 104.) And "rail plug 132 contains one or more mount rail cavities 138 that are adapted to mate with housing rails 124 on camera housing 22." (*Id.*, ¶98; *see also* ¶102, Fig. 11 (describing and showing rail plug 132 mated with digital video camera 10); Claim 11, (claiming "[a]n integrated point of view digital video camera, comprising . . . a rotatable plug mount").) In view of these teachings, a POSITA would have understood that the rail plug 132 would be "*coupled to and integral with*" the handset's housing in the Smith/O'Donnell system. (Keller, ¶150.)

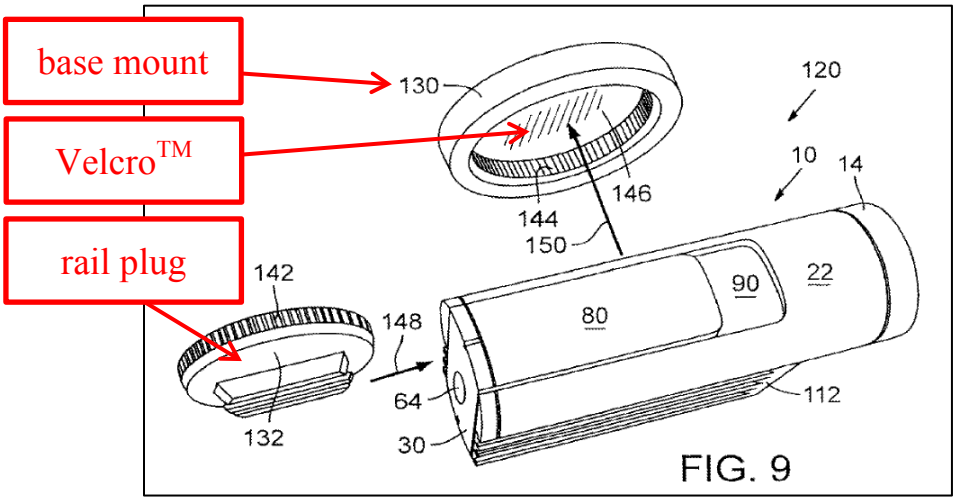
Thus, Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶147-51.)

2. Smith in view of O'Donnell teaches or suggests *"a first mounting assembly including a first coupler for coupling the first mounting assembly to the universal mount, wherein the first mounting assembly is configured for mounting the portable housing to the law enforcement officer's body."*

Smith in view of O'Donnell teaches or suggests a "*first mounting assembly*"—i.e., a first base mount 130 disposed on the law enforcement officer's body. (Keller, ¶153.) As explained in Section VIII.A, the housing of Smith's handset would be "*configured for mounting the portable housing to the law enforcement officer's body*" because in O'Donnell the digital video camera 10 is wearable and can attach to any person, equipment, or vehicle. (O'Donnell, ¶123.) To mount camera 10 to the law enforcement officer, the housing of Smith's handset would be configured to be mounted on a base mount 130 attached to the law enforcement officer's uniform. (Keller, ¶153.)

The base mount 130 includes a "*first coupler for coupling the first mounting assembly to the universal mount*." (*Id*., ¶154.) For example, "double-toothed Velcro™ may be used instead of or in addition to a compression fit technique to further secure rail plug 132 within base mount 130." (O'Donnell, ¶101; *see also* ¶105 ("Rail plug 132a may be attached to base mount 130a through the use of an adhesive mounting, through the use of Velcro™, through the use of a screw, through the use of other conventionally known means, or combinations thereof.").) Figure 9 (annotated below) shows Velcro™ configured to couple the first

mounting assembly (i.e., base mount 130) to the universal mount (i.e., rail plug 132). (Keller, ¶154.) In the Smith/O'Donnell system, the base mount 130 is configured for mounting the portable housing of Smith's handset to the law enforcement officer's body because "rail plug 132 can be inserted or re-inserted into base mount 130 [(e.g., the base mount 130 attached to the law enforcement officer's body)] as indicated by a direction arrow 150 (FIG. 9)." (O'Donnell, ¶102; Keller, ¶154.)



O'Donnell Figure 9 (Annotated)

Thus, Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶152-55.)

3. Smith in view of O'Donnell teaches or suggests *"a second mounting assembly including a second coupler for coupling the second mounting assembly to the universal mount, wherein the second mounting assembly is configured for mounting the portable housing in the law enforcement vehicle."*

Smith in view of O'Donnell teaches or suggests a "*second mounting assembly*"—i.e., a second base mount 130 disposed in the law enforcement vehicle. As explained in Section VIII.A, the housing of Smith's handset would be "*configured for mounting the portable housing in a law enforcement vehicle*," such as on a dashboard or internal windshield of a patrol car. (O'Donnell, ¶123.) To mount camera 10 in the law enforcement vehicle, the housing of Smith's handset would be configured to be mounted on a base mount 130 attached to the law enforcement vehicle. (Keller, ¶157.) That is, a first base mount 130 would be attached to the law enforcement officer's body (as discussed above) and a second base mount 130 would be attached to the law enforcement vehicle. (*Id*.) Again, O'Donnell explains that base mount 130 may attach to a variety of surfaces. (O'Donnell, ¶103.) It would have been obvious to a POSITA to use more than one of O'Donnell's base mounts 130 so that the user would not have to move the base mount 130 every time she wanted to capture a different field of view. (Keller, ¶158.)

The base mount 130 includes a "*second coupler for coupling the second mounting assembly to the universal mount*." (Keller, ¶159.) As explained in Section VIII.B.2, O'Donnell teaches using, for example, Velcro to "secure rail plug 132 within base mount 130." (O'Donnell, ¶¶101, 105, Fig. 9.) Thus, in the Smith/O'Donnell system, the base mount 130 is configured for mounting the portable housing of Smith's handset to the law enforcement vehicle because "rail plug 132 can be inserted or re-inserted into base mount 130 [(e.g., the base mount 130 attached to the law enforcement vehicle)] as indicated by a direction arrow 150 (FIG. 9)." (O'Donnell, ¶102; Keller, ¶159.)

Thus, Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶156-60.)

4. Smith in view of O'Donnell teaches or suggests that the portable housing "*may selectively and interchangeably be mounted on the law enforcement officer's body via the first mounting assembly and the law enforcement vehicle via the second mounting assembly.*"

As explained in Section VIII.A, the housing of Smith's handset in the Smith/O'Donnell system would be configured to be selectively mounted on the law enforcement officer's body and in the law enforcement vehicle. Also explained above for the first and second mounting assemblies (Sections VIII.B.2 and VIII.B.3), the housing of Smith's handset would be mounted on the law enforcement officer's body via a first base mount 130 (i.e., the first mounting

assembly) attached to the law enforcement officer's uniform, and the handset would be mounted in the law enforcement vehicle via a second base mount 130 (i.e., the second mounting assembly) attached to the law enforcement vehicle (e.g., on the dashboard or inside windshield of a patrol car). Using these two base mounts, the housing of Smith's handset could be "*selectively and interchangeably be mounted to the law enforcement officer's body via the first mounting assembly and the law enforcement vehicle via the second mounting assembly*" because O'Donnell discloses a versatile mounting system 120 that has a quick-release mechanism to enable the camera to attach and reattach to a variety of surfaces such as windows, doors, vehicle hoods, and people. (O'Donnell, ¶¶15, 26, 94, 100-04, 123; Keller, ¶162.) That is, a POSITA would have understood that the officer may select which base mount 130 (body or vehicle) to affix the camera to, and may interchange which base mount 130 the camera is affixed to (body mount-to-vehicle mount or vehicle mount-to-body mount). (Keller, ¶162.)

Thus, Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶161-63.)

5. Smith in view of O'Donnell teaches or suggests *"wherein the first mounting assembly and the second mounting assembly are selectively and interchangeably mounted to the portable housing by coupling the respective first coupler or second coupler to the universal mount."*

As explained above in Sections VIII.B.2 and VIII.B.3, the first base mount 130 attached to the law enforcement officer's body and the second base mount 130 attached to the law enforcement vehicle both include Velcro (i.e., the first coupler and the second coupler) within the respective base mount cavity 146. (*See* O'Donnell, ¶¶101, 105, Fig. 9; Keller, ¶165.) The Velcro is used to secure each base mount 130 to rail plug 132 (i.e., the universal mount), which is coupled to or integral with the housing. (*See* O'Donnell, ¶¶101, 105; *see also supra* Section VIII.A (explaining why rail plug 132 is coupled to and integral with the housing).) By coupling rail plug 132 to the Velcro of either the base mount 130 on the law enforcement officer's body or the base mount 130 in the law enforcement vehicle, "*the first mounting assembly and the second mounting assembly are selectively and interchangeably mounted to the portable housing by coupling the respective first coupler or second coupler to the universal mount*" on Smith's handset. (Keller, ¶165.) That is, the officer may select which base mount 130 (body or vehicle) to affix the camera to, and may interchange which base mount 130 the camera is affixed to (body mount-to-vehicle mount or vehicle mount-to-body mount). (Keller, ¶165.)

Thus, Smith in view of O'Donnell teaches or suggests this element and renders claim 6 obvious. (Keller, ¶¶164-66.)

C. Dependent claim 8.

Smith in view of O'Donnell teaches or suggests "*wherein the remote device is a mobile communications device configured for viewing the video file on the mobile communications device*." As explained in Section VI.C, Smith's processor 340 is configured to wirelessly transmit video files to remote devices (e.g., via the "ad hoc transceiver" of the shift hub). Smith's secondary subsystem (including shift hub 120) may also include "any computer system (e.g., personal computer, server, network of servers)" that can display the incident reports (including the captured video) received from incident recorder 208. (*See* Smith, ¶30.) A POSITA would have understood that "personal computer" at the time of the alleged invention included a "*mobile communications device*," such as a laptop computer, a tablet computer, or a mobile phone that would have been "*configured for viewing the video file on the mobile communications device*." (Keller, ¶168.)

To 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. (*Id.*, ¶169.) O'Donnell discloses that its camera 10 communicates with a viewer/controller 510 via a Bluetooth wireless connection.

(O'Donnell, ¶¶144, 146, 148-49, 154, 156, 160-62, Figs. 31, 33-35, 37-39.) The viewer/controller 510 can be a device implementing iOS, such as an iPhone, iPod, or iPad. (*Id.*, ¶¶144, 151, 156, Fig. 37.) The viewer/controller 510 is also "*configured for viewing the video file on the mobile communications device*" because a display screen of an iPhone/iPod/iPad shows user observation camera images. (*Id.*, ¶¶146, 152, 154, Fig. 36.)

A POSITA would have been motivated to combine Smith and O'Donnell such that processor 340 wirelessly communicates with a mobile communications device, like a mobile phone, configured for viewing the video file on the mobile communications device. (Keller, ¶170.) A POSITA would have been motivated to make this modification to eliminate the need for display 730 on Smith's handset 700, making the handset more compact. (*Id*.) A POSITA would have been motivated to make this modification to facilitate both convenient review of recorded video files and easy additions of secondary incident information. (*Id*.; *see also* Smith, ¶33 ("[w]hile reviewing incident information … an author-operator may record supplemental information or classify previously recorded information"), ¶46 ("A primary subsystem may include … a user interface for reviewing and managing incident information (e.g., preparing supplemental information, selecting, classifying.").) A POSITA would have also been motivated to make this modification to allow law enforcement officers to view and edit video

qualities (e.g., color balance, brightness, and contrast) for improved video quality across variable-lit environments. (Keller, ¶170; *see also* O'Donnell, ¶¶148-49, Fig. 34 (disclosing a manual lighting level and color adjustment procedure).) For at least these reasons, a POSITA would have been motivated to modify Smith's system as proposed. (Keller, ¶¶170.)

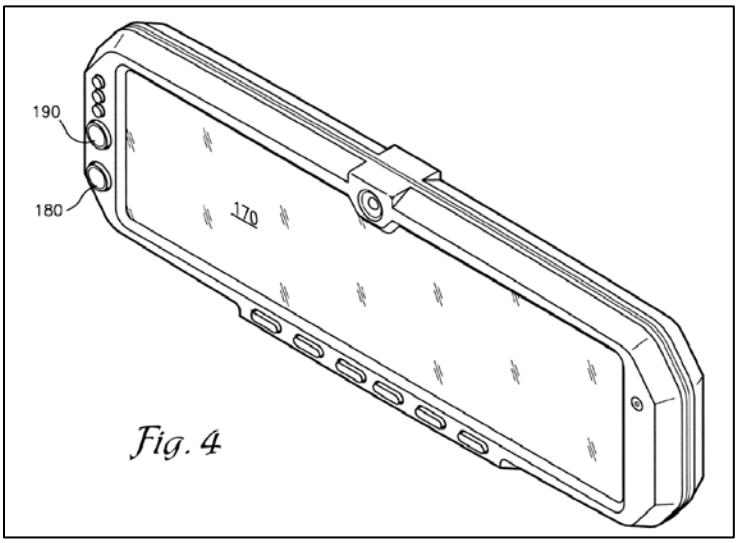
Smith in view of O'Donnell thus renders claim 8 obvious. (Keller, ¶¶167-71.)

IX. Ground 5: Smith in view of Haler renders claims 10 and 12 obvious.

A. Dependent claim 10.

Smith in view of Haler teaches or suggests "*wherein the triggering event is a signal from the law enforcement vehicle*." (Keller, ¶¶172-78.) As explained in Sections VI.A.3 and VI.D, Smith discloses a portable video and imaging system that records an event when receiving information (e.g., an EVENT signal) indicative of a triggering event. Smith also discloses that a law enforcement officer can trigger an event "*from the law enforcement vehicle*"—by actuating event switch 750 when sitting in her patrol car. (*See* Smith, ¶35 (using its system for traffic stops).) To the extent that Smith does not explicitly disclose that the triggering event is a signal "*from*" the vehicle, a POSITA would have been motivated to use a "*signal from the law enforcement vehicle*" to trigger an event for recording. (Keller, ¶173.)

Using a "*signal from the law enforcement vehicle*" to trigger an event for recording was well known at the relevant timeframe. (*Id.*, ¶174.) Haler, for example, discloses a vehicle-mounted system for triggering video recordings. (Haler, ¶¶2, 3, 24-27, 55, 58, Fig. 1.) Haler explains that the vehicle-mounted system wirelessly communicates with external cameras because an external camera "is useful, for example, to record video when an officer leaves the vehicle, such as during a traffic stop." (*Id.*, ¶27.) As shown in Figure 4 (reproduced below), the system includes a rearview mirror 170, a REC button 180, and a MARK button 190 that marks video recordings with the current GPS position. (*Id.*, ¶35.)



Haler Figure 4

A law enforcement officer presses the REC button to trigger a recording. (*Id.*, ¶35.) Haler also explains that the rearview-mirror housing can have input connectors "for receiving signals to trigger operation of the system." (*Id.*, ¶30.)

"These triggers may include, for example, turning on the vehicle's siren and/or signal lights." (*Id.*) When a law enforcement officer triggers one of these inputs, a signal is wirelessly transmitted to the system. (*Id.*) Haler therefore uses a "*signal from the law enforcement vehicle*" to trigger an event for recording. (Keller, ¶175.)

A POSITA would have been motivated to modify Smith's primary subsystem/incident recorder to receive select signals from Haler's inputs (e.g., siren and/or signal lights) and a REC button to trigger an event from the law enforcement vehicle. (Keller, ¶176.) For example, utilizing at least one of Haler's inputs to trigger events (e.g., siren and/or signal lights) would automatically capture video without requiring additional intervention from the law enforcement officer. (*Id.*; *see also* Smith, ¶135 (explaining that triggering an event without additional intervention from a law enforcement officer is desirable).) The system would also record video whenever law enforcement officers use sirens and signal lights, providing additional video for detailed incident reports. (Keller, ¶176.)

Implementing at least one of Haler's inputs to trigger an event for Smith's primary subsystem / incident recorder would have combined prior art elements according to known methods to yield predictable results. (Keller, ¶177.) Smith's primary subsystem / incident recorder also has a wireless interface, which can use conventional IR, radio, or wireless network channels. (*See* Smith, ¶¶45, 56, 66, 71, 98, Fig. 3.) Modifying Smith's handset to receive an input signal from at least one

of Haler's inputs would have been straight forward to implement. (Keller, ¶177.) And using a device to send signals to Smith's handset would have been "inexpensive to manufacture and easy to use" and would have been "fully integrated into a small, easily installable and replaceable package that requires minimal space inside the vehicle." (*See* Haler, ¶43; Keller, ¶177.)

For at least these reasons, a POSITA would have been motivated to modify Smith's system as proposed. Smith in view of Haler renders claim 10 obvious. (Keller, ¶¶172-78.)

B. Dependent claim 12.

Smith in view of Haler teaches or suggests "*an identification sensor associated with the law enforcement officer's person and configured to determine an identity of the law enforcement* [*officer*]." (Keller, ¶¶179-84.) As explained in Section VI.A, Smith discloses a portable video and imaging system that records events. Smith also discloses, and shows in Figure 1 (reproduced below), "[a] person identification detector [that] detects an identity of a person associated or to be associated with a primary subsystem." (Smith, ¶58.) "For example, on check-in of primary subsystem to shift hub 120, the person that plugs components of the primary subsystem into docks 126 may be identified by person identification detector 129 for association to the incident reports transferred from the primary subsystem for purposes of evidence validation." (*Id*.) "On checkout of a primary

subsystem from shift hub 120 (e.g., removal from docks 126), the person that removes components of the primary subsystem may be identified to the primary subsystem so that incident reports are recorded in association with that person's identification, again for purposes of evidence validation." (*Id.*) The officer's identity remains with her device for the officer's entire shift. (Keller, ¶180.) In turn, the system associates with the officer any video, audio, metadata, or other streams recorded on the device during this shift. (*Id.*)

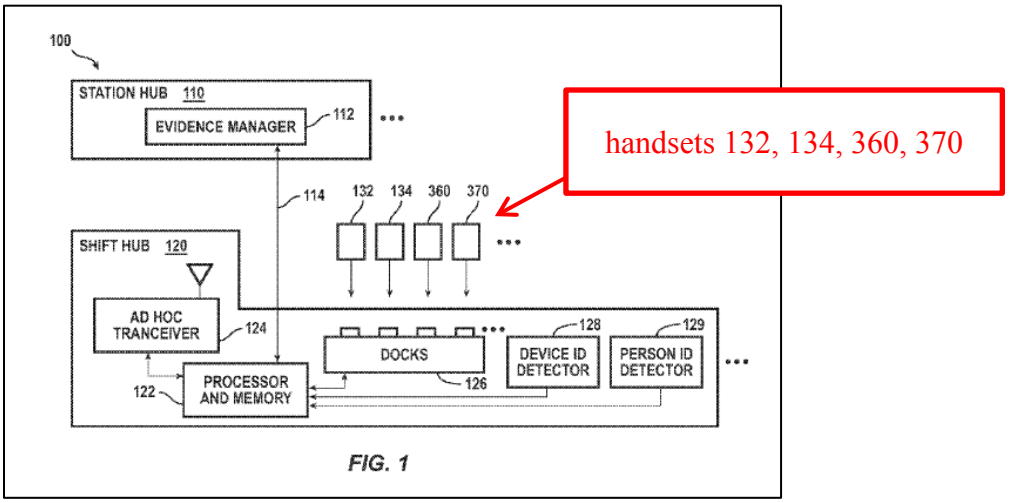


Figure 1 of Smith

To the extent Smith does not explicitly disclose an "*identification sensor associated with the law enforcement officer's person*," Haler provides the teaching. Haler's system "may also include additional components to establish the security and evidentiary value of the audiovisual data recorded thereby." (Haler, ¶59.) For example, Haler's system includes a biometric identification component (e.g., a

fingerprint sensor) to verify the identity of the law enforcement officer before using the system. (Haler, ¶58.) Such a component is associated with the "*law enforcement officer's person*" because the sensor reads information about the officer's body. (Keller, ¶182.)

Haler's system also utilizes other security peripherals, such as a dongle carried by the law enforcement officer, to verify the law enforcement officer's identity. (Haler, ¶58.) A POSITA would have understood that a dongle is a "*sensor*," such as an RFID sensor, because a dongle is a device that connects to a processing element to allow access to protected software. (Keller, ¶182.) A POSITA would have also understood that the dongle is utilized as a "*sensor*" because the dongle is "presented to the system" and "adapted to interface with the video system." (Haler, ¶58, claim 26; Keller, 182.) A dongle is also "*associated with the law enforcement officer's person*" because a law enforcement officer carries and "possesse[s]" her respective dongle. (Haler, ¶58, claim 26; Keller, ¶182.)

A POSITA would have been motivated to incorporate Haler's security measures into Smith, namely the biometric identification component and/or the dongle. (Keller, ¶183.) A POSITA would have recognized that security is important for law enforcement implementations. (Haler, ¶58; Keller, ¶183.) A POSITA would have also recognized that Smith's system does not have sufficient

measures in place to verify that the operator of the incident recorder is the correct law enforcement officer—the only security verification occurs when law enforcement officers dock the incident recorders at the secondary subsystem. (Keller, ¶183.) To provide more secure verification in the field, a POSITA would have been motivated to implement the security measures disclosed in Haler, such as the biometric identification component and a dongle for each law enforcement officer. (*Id*.) For at least these reasons, a POSITA would have been motivated to modify Smith as proposed. (*Id*.)

Thus, Smith in view of Haler renders claim 12 obvious. (Keller, ¶¶179-84.)

X. Ground 6: Smith in view of Guzik renders claims 11 and 22 obvious.

A. Dependent claim 11.

1. Smith teaches or suggests "*wherein the plurality of video frames is associated with metadata.*"

In Smith, the plurality of video frames captured by the camera are "*associated with metadata*" because when the incident recorder is in the TEM state, "processor 340 records a mark in the video … to indicate that event switch 750 (630) was operated at that time during data collection." (Smith, ¶140.) Additionally, "[a]n operator may insert a mark into a data stream during recording of the incident …." (Smith, ¶140.) "A mark may be stored ***within a video*** or audio stream (e.g., ***same MPEG-4 container***, different container, but related by time) or separately with information to provide a correlation between the mark and the

video or audio streams at the time the mark was made." (Smith, ¶140 (emphasis added).) Metadata are any ancillary information that can be added to the video file or container, so metadata can be on and off, synchronized time, GPS location data, event marks, etc. (Keller, ¶187.) Because the marks are data that provide information about the time the video frames were captured and recorded, a POSITA would have understood that these marks are a form of metadata associated with the plurality of video frames in the MPEG-4 file. (*Id*.; *see also* Smith, ¶43 ("Metadata describing a container may identify whether or not one or more categories (possibly further identifying which categories) have been associated with the content of the container.").)

Thus, Smith teaches or suggests this element.(Keller, ¶¶186-88.)

2. Smith in view of Guzik teaches or suggests "*wherein the metadata includes a geographical location of at least one component of the system when at least some of the plurality of video frames was captured, a time or date of when at least some of the plurality of video frames was captured, and any triggering event that initiated capturing of at least some of the plurality of video frames*."

The system in Smith associates the plurality of video frames with metadata to indicate the time when at least some of the video frames were captured, but Smith does not explicitly disclose that the metadata includes a geographical location, a date, or a triggering event. But including a geographical location, a date,

and a triggering event in the metadata would have been obvious in view of Guzik. (Keller, ¶190.)

A POSITA would have understood that Smith's system records video for incident reports. (Smith, Abstract, ¶¶23-24; Keller, ¶191.) A POSITA would have also understood that incident reports commonly require location information to identify where the event took place. (Smith, ¶3; Keller, ¶191.) In Smith's system, a law enforcement officer would manually input location information after an event and before leaving the location of the event. (Smith, ¶27.) But staying at an event location to manually input information for an incident report needlessly consumes law enforcement officers' time and extends the amount of time law enforcement officers are not performing their regular duties or patrols. (Keller, ¶191.) To reduce the time required to complete accurate incident reports, a POSITA would have been motivated to seek solutions to automatically add metadata to video files. (*Id*.) This would have led the POSITA to Guzik. (*Id*.)

Like Smith, Guzik discloses a system for law enforcement that associates and stores metadata in video files. (Guzik, ¶¶11, 34, 46, 110-12, 211.) In Guzik, the metadata includes a "*geographical location*." (Keller, ¶192.) Guzik even explains that common metadata includes location metadata. (Guzik, ¶36.) Location metadata may be collected by a location service receiver. (Guzik, ¶110.) "Geolocation metadata may include Global Positioning System ('GPS') metadata."

(*Id*.) "[G]eolocation metadata may alternatively be determined by triangulating signal strength or weakness from different cell towers with known locations." (*Id.*) In each instance, the geographical location is a "*location of at least one component of the system*" because "[d]uring the recording, [mobile clients] store metadata identifying the date/timestamp and location ***of the recording***." (Guzik, ¶74 (emphasis added).) Further, "[t]he correlating metadata may include geolocation data regarding the location ***of the client device*** . . . ." (Guzik, ¶163 (emphasis added); *see also* ¶¶76, 81, 168, 258.)

In the Smith/Guzik system, the metadata would include a geographical location of a component of the system "*when at least some of the plurality of video frames was captured*" because in Guzik the location is correlated with video frames during capture, and the respective devices may store date/time stamp information or location service tracking location data such as GPS with the file. (*Id.*, ¶¶37-38, 46, 74, 81, 180.) Accordingly, a map may display the location of the video. (*Id.*, ¶238.) "For example, if the video is by a police car in hot pursuit, the map may show a point rendering geolocation of the path of the pursuit itself." (*Id.*)

Guzik uses metadata that includes "*a time or date of when at least some of the plurality of video frames was captured*" because "a video clip may have date/time information stored for each frame . . . ." (Guzik, ¶37; *see also* ¶¶12, 74, 111.) Indeed, date/time stamp metadata was common. (*Id.*, ¶36.)

Guzik also uses metadata that includes "*any triggering event that initiated capturing of at least some of the plurality of video frames.*" Guzik explains that its system can respond to triggering events (e.g., a vehicle collision) by turning on the camera for recording. (*Id.*, ¶¶109, 114, 245.) The system can also associate a unique Event ID or Incident ID with the recording. (*Id.*, ¶¶47, 211.) In this way, data associated with the Event ID / Incident ID may be easily identified. (*Id.*, ¶211; *see also* ¶¶243-44, 250-55, Fig. 13 (explaining how video recordings from multiple officers can be automatically tagged with the Event ID for a robbery).) Users of Guzik's system can also manually enter metadata via a software application. (*Id.*, ¶111.) A POSITA would have understood that a user could use this software application to enter metadata to identify any triggering event that initiated capturing of at least some of the video frames (e.g., by entering the police transmissions use code associated with the event). (Keller, ¶195.)

A POSITA would have been motivated to implement Guzik's use of location metadata, date/time metadata, and metadata including any triggering event that initiated video recording into Smith's primary subsystem/incident recorder to reduce the amount of time law enforcement officers need to manually fill out details for incident reports. (Keller, ¶196.) Moreover, detailed metadata would be used to auto populate a standard incident-report, ensuring detailed and uniform entry of location information. (*See* Smith, ¶8 ("Increased accuracy and greater

completeness of incident reports are needed . . . ."); Keller, ¶196.) A POSITA would have found it desirable to have greater flexibility in associating metadata with video files because different metadata can better facilitate searching and/or display of video recordings. (Keller, ¶196; *see also* Smith, ¶141; Strub, 3:66-4:15; O'Donnell, ¶5 ("The inclusion of GPS technology introduces a new level of context to any video, making location, speed, time, and outside world conditions as important as the scene recorded.").) And when an officer has a long duration between recorded events, determining where each recorded event took place becomes increasingly-important information. (Keller, ¶196; *see also* Strub, 50:32-37; 56:29-37.) For at least these reasons, a POSITA would have been motivated to modify Smith's system as proposed. (Keller, ¶196.)

Thus, Smith in view of Guzik renders claim 11 obvious. (Keller, ¶¶189-97.)

B. Independent claim 22.

1. Smith teaches or suggests "[*a*] *non-transitory computer readable medium storing a video file of a law enforcement event.*"

As explained in Section VI.A.4, Smith discloses memory 341. Smith's memory 341 is a "*non-transitory computer readable medium*" storing a video file of a law enforcement event in MPEG-4. (*See* Smith, ¶¶43, 47, 61, 70, 80.) Thus, Smith teaches or suggests this preamble. (Keller, ¶¶199-201.)

2. Smith teaches or suggests that the video file comprises "*a plurality of frames, each frame including video data of an event.*"

As explained in Section VI.A.8, Smith discloses that the video file (i.e., an MPEG-4) comprises a plurality of frames. Each frame includes "*video data of an event*" because each frame is a plurality of pixels forming an image from the event (e.g., a traffic stop or burglary). (*See* Smith, ¶42; Keller, ¶203.) "Video images may be cropped, panned, and/or zoomed." (Smith, ¶53.) Thus, Smith teaches or suggests the element. (Keller, ¶¶202-04.)

3. Smith teaches or suggests "*wherein said video data is captured by a portable video and imaging system.*"

As explained in Section VI.A.3, Smith discloses a camera 337 configured to capture video data and images. Also, as explained in Sections VI.A.1 and VI.A.3, the camera is a component of a portable video and imaging system. Smith likewise discloses a "*portable video and imaging system*" that captures the video data. *Supra* Section VI.A.1. Thus, Smith teaches or suggests this element. (Keller, ¶¶205-07.)

4. Smith teaches or suggests that the video file comprises "*information indicative of a mark of at least one of the plurality of frames of the video file to thereby identify a point in time or location in the video file.*"

As explained in Section VI.A.8, Smith discloses a processor 340 that stores a mark in the video file for at least one of the plurality of video frames. Likewise,

Smith discloses that processor 340 stores "*information indicative of a mark of at least one of the plurality of frames of the video file*." (Keller, ¶209.) Also, as explained in Section VI.A.8, Smith discloses that the marks "*identify a point in time or location in the video file*." Thus, Smith teaches or suggests this element. (Keller, ¶¶208-10.)

5. Smith teaches or suggests "*wherein said mark is initiated by the law enforcement officer actuating an input on a housing of the portable video and imaging system.*"

As explained in Section VI.A.7, Smith discloses a processor 340 that receives an activation signal generated in response to a law enforcement officer actuating an input on a handset. Also, as explained in Section VI.A.7, the mark is stored in the video file in response to the activation signal. Accordingly, the mark begins to be stored in the video file ("*is initiated*") by the law enforcement officer actuating an input. (Keller, ¶212.) Also explained in Section VI.A.5, the input is "*on a housing of the portable video and imaging system*." Smith thus teaches or suggests this element. (Keller, ¶¶211-13.)

6. Smith teaches or suggests "*wherein said mark in the video file of the at least one of the plurality of video frames enables, during playback of the video file, automatically advancing the video file to the marked at least one video frame representing the point in time or location in the video file at which the law enforcement officer actuated the input.*"

As explained in Section VI.A.9, Smith discloses "*wherein said mark in the video file of the at least one of the plurality of video frames enables the processing element to . . . upon playback of the video file and in response to receipt from a user request, automatically advance the video file to the marked at least one video frame representing the point in time or location in the video file at which the law enforcement officer actuated the input*." Smith likewise teaches or suggests this element. (Keller, ¶¶214-16.)

7. Smith in view of Guzik teaches or suggests that the video file comprises "*metadata associated with at least a portion of the plurality of frames*."

As explained in Section X.A.1, Smith in view of Guzik teaches or suggests that "*the plurality of video frames is associated with metadata*." Smith in view of Guzik likewise teaches metadata associated with at least a portion of the plurality of frames. (Keller, ¶¶214-18.)

8. Smith in view of Guzik teaches or suggests "*wherein the metadata includes a geographical location of at least one component of the portable video and imaging system when at least one of the plurality of frames was captured, a time or date of when at least one of the plurality of frames was captured, and any triggering event that initiated capturing of the video file*"

As explained in Section X.A.2, Smith in view of Guzik teaches or suggests "*wherein the metadata includes a geographical location of at least one component of the system when at least some of the plurality of video frames was captured, a time or date of when at least some of the plurality of video frames was captured, and any triggering event that initiated capturing of at least some of the plurality of video frames*." Smith in view of Guzik likewise teaches or suggests this element. (Keller, ¶¶220.) Thus, Smith in view of Guzik renders claim 22 obvious. (Keller, ¶¶219-21.)

XI. Ground 7: Smith in view of Haler, further in view of Guzik renders claims 13 and 23 obvious.

A. Dependent Claim 13.

Smith in view of Haler, further in view of Guzik teaches or suggests "*wherein the video file is associated with metadata, and the metadata includes an identity of the law enforcement officer associated with the system as provided by the identification sensor*." As explained in Sections VI.A.1 and IX.B, Smith in view of Haler teaches or suggests a portable video and imaging system that includes an identification sensor configured to determine an identity of the law

enforcement officer. But the Smith/Haler system does not explicitly state that "*an identity of the law enforcement officer associated with the system*" is included in metadata associated with the video file. Guzik cures this deficiency.

Guzik discloses "a metadata tag to store an Officer ID and a metadata tag to store a timestamp . . . . When the police video is stored, the tag stored [is] the Officer ID of the owner of the mobile client." (Guzik, ¶269.) In other words, when a video is recorded and stored in memory, the system associates the video file with metadata (i.e., tags the video), and the metadata includes "*an identity of the law enforcement officer associated with the system*" (i.e., the Officer ID of the law enforcement officer associated with the handset). (Keller, ¶224.)

A POSITA would have been motivated to include the Officer ID tag in the metadata already saved in the Smith/Haler system to document the identity of the law enforcement officer associated with the system. A POSITA would have understood that police video captured for incident reports would have been used as evidence at trial. (*See* Guzik, ¶269; Keller, ¶225.) A POSITA would have also understood that evidence often must have an unbroken chain of custody to be admissible. (*See* Guzik, ¶269; Keller, ¶225.) With the Smith/Haler system, if the video file does not identify the law enforcement officer that captured and recorded the video, questions about tampering and authenticity of testimony might arise. (*See* Guzik, ¶269; Keller, ¶225.) Adding the Officer ID into the metadata would

alleviate these potential concerns. (*See* Guzik, ¶269; Keller, ¶225.) And adding the Officer ID into the metadata would be straight forward to implement because the Guzik/Haler system would be already capable of identifying the law enforcement officer's identity when the law enforcement officer provides identifying information (e.g., a fingerprint or officer tag number) to the identification sensor. (Keller, ¶225; *see also supra* Section IX.B.) For at least these reasons, a POSITA would have been motivated to modify the Smith/Haler system as proposed. (Keller, ¶225.) Thus, Smith in view of Haler, further in view of Guzik renders claim 13 obvious. (Keller, ¶¶222-26.)

B. Dependent Claim 23.

As explained above in Section X.B, Smith in view of Guzik renders claim 22 obvious. Smith in view of Guzik, however, does not teach "*wherein the triggering event is a signal from a law enforcement vehicle*." But a POSITA would have been motivated to combine the Smith/Guzik system with Haler's use of a "*signal from the law enforcement vehicle*" to trigger an event for similar reasons as explained in Section IX.A. (Keller, ¶¶228-30 (explaining why Guzik's metadata would not impact the motivation to combine Smith and Haler).) Haler discloses that the triggering event is a signal from a law enforcement vehicle, and a POSITA would have been motivated to combine Haler with Smith in view of Guzik. (Keller,

¶¶228-30.) Thus, Smith in view of Haler, further in view of Guzik renders claim 23 obvious. (Keller, ¶¶227-31.)

XII. Ground 8: Smith in view of Balardeta renders claim 14 obvious.

Smith in view of Balardeta teaches or suggests "*wherein the housing has a width of approximately 0.25 inches to approximately 5 inches and a height of approximately 0.5 inches to approximately 5 inches*." As explained in Section VI.A.2, Smith's handset includes a housing. Smith also states that the handset is a size wearable by a user. (Smith, ¶135, Fig. 2.) But Smith does not provide the dimensions of the housing. When building and implementing Smith's system, a POSITA would have therefore sought references that describe the sizing of these components. (Keller, ¶233.) This would have led the POSITA to Balardeta. (*Id*.)

Balardeta describes a device that includes a processor, a memory component, a battery component, a GPS component, a camera component, and display components (e.g., controls)—similar components to the components in Smith's handset. (*See* Balardeta, ¶¶13-16, 34-40, 46, Figs. 1, 1A, 2A-E; Keller, ¶234.) The device also has a housing. (Balardeta, ¶34.) And for portability, the device is self-contained, compact, and lightweight. (Balardeta, ¶14; *see also* ¶46 ("the entire device has a very compact, thin, and lightweight form factor.").) Indeed, the housing has a width of 1.9 inches or less and a height of 4 inches or less to "fit comfortably in a pocket of a user's clothing." (Balardeta, ¶46.) Because

Balardeta's device is a size that can be wearable, can fit in a pocket, and is portable, a POSITA would have been motivated to use a housing with these dimensions—"*a width of approximately .25 inches to approximately 5 inches and a height of approximately .5 inches to approximately 5 inches*." (Keller, ¶234.) For at least these reasons, a POSITA would have been motivated to modify Smith's system as proposed. (*Id*.) Thus, Smith in view of Balardeta renders claim 14 obvious. (Keller, ¶¶232-35.)

XIII. Ground 9: Smith in view of O'Donnell, further in view of Haler renders claims 15, 17, and 20 obvious.

A. Independent claim 15.

1. Smith teaches or suggests "[*a*] *portable video and imaging system for law enforcement.*"

As explained in Section VI.A.1, Smith discloses this element. (Keller, ¶237.)

2. Smith in view of O'Donnell teaches or suggests "*a portable housing configured to be selectively mounted on a body of a law enforcement officer and in a law enforcement vehicle.*"

As explained in Section VI.A.2, Smith discloses a portable housing configured to be mounted on a body of a law enforcement officer. Also explained in Section VIII.A, a POSITA would have been motivated to modify Smith's system such that the housing is configured to be selectively mounted on the law enforcement officer's body and in a law enforcement vehicle. Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶238-40.)

3. Smith in view of O'Donnell teaches or suggests *"a first mounting assembly configured for mounting the housing to the law enforcement officer's body."*

As explained in Section VIII.B.2, a POSITA would have been motivated to modify Smith's system such that the system comprises "*a first mounting assembly . . . wherein the first mounting assembly is configured for mounting the portable housing to the law enforcement officer's body*." Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶241-43.)

4. Smith in view of O'Donnell teaches or suggests *"a second mounting assembly configured for mounting the housing in the law enforcement vehicle."*

As explained in Section VIII.B.3, a POSITA would have been motivated to modify Smith's system such that the system comprises "*a second mounting assembly . . . wherein the second mounting assembly is configured for mounting the portable housing in the law enforcement vehicle*." Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶¶244-46.)

5. Smith in view of O'Donnell teaches or suggests that the housing *"may selectively and interchangeably be mounted on the law enforcement officer's body via the first mounting assembly and the law enforcement vehicle via the second mounting assembly."*

As explained in Section VIII.B.4, Smith in view of O'Donnell teaches or suggests this element. (Keller, ¶247.)

6. Smith teaches or suggests "*a camera component housed within the housing and configured to capture video of an event.*"

As explained in Section VI.A.3, Smith teaches or suggests this element.

(Keller, ¶248.)

7. Smith teaches or suggests "*a memory element housed within the housing and configured to record the captured video of the event, wherein said captured and recorded video comprises a plurality of video frames of a video file.*"

As explained in Section VI.A.4, Smith teaches or suggests this element.

(Keller, ¶249.)

8. Smith teaches or suggests "*an input mounted on the housing and configured to be actuated by the law enforcement officer in the field and in response to being actuated, generate an activation signal.*"

As explained in Section VI.A.5, Smith teaches or suggests this element.

(Keller, ¶250.)

9. Smith teaches or suggests "*a processing element associated with the memory element and the input.*"

As explained in Section VI.A.6, Smith teaches or suggests this element.

(Keller, ¶251.)

10. Smith teaches or suggests that the processing element is configured to "*receive said activation signal generated in response to the law enforcement officer actuating the input.*"

As explained in Section VI.A.7, Smith teaches or suggests this element.

(Keller, ¶252.)

11. Smith teaches or suggests that the processing element is configured to "*in response to the activation signal, store a mark in the video file for at least one of the plurality of video frames to thereby identify a point in time or location in the video file.*"

As explained in Section VI.A.8, Smith teaches or suggests this element. (Keller, ¶253.)

12. Smith teaches or suggests that the processing element is configured to "*upon playback of the video file and in response to receipt from a user request, automatically advance the video file to the marked at least one video frame representing the point in time or location in the video file at which the law enforcement officer actuated the input.*"

As explained in Section VI.A.9, Smith teaches or suggests this element. (Keller, ¶254.)

13. Smith in view of O'Donnell teaches or suggests 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.*"

As explained in Section VI.C, Smith teaches or suggests that the processor 340 is configured to wirelessly transmit the video file to a remote device. Also explained in Section VIII.C, a POSITA would have been motivated to combine Smith and O'Donnell such that the processor is configured to wirelessly transmit the video file to a mobile communications device configured for viewing the video file on the mobile communications device. Smith in view of O'Donnell thus teaches or suggests this element. (Keller, ¶¶255-57.)

14. Smith teaches or suggests that the processing element is configured to "*instruct capturing of video by the camera component for recording the event in response to receiving information indicative of a triggering event.*"

As explained in Section VI.D, Smith teaches or suggests that the processor 340 is configured to "*instruct capturing of the plurality of video frames by the camera component for recording the event in response to receiving information indicative of a triggering event*." Smith likewise captures "*video*." (*Supra* Section VI.D; *see also* Smith, ¶42 (frames are from video).) Thus, Smith teaches or suggests this element. (Keller, ¶¶258-60.)

15. Smith in view of O'Donnell, further in view of Haler teaches or suggests "*wherein the triggering event is a signal from the law enforcement vehicle.*"

Smith in view of O'Donnell fails to disclose "*wherein the triggering event is a signal from the law enforcement vehicle*." Haler cures this deficiency for the same reasons in Section IX.A. Moreover, a POSITA would have been motivated to combine the Smith/O'Donnell system with the system disclosed in Haler. (*Supra* Section IX.A; Keller, ¶¶262-64 (explaining why O'Donnell's mounting system would not impact the motivation to combine Smith and Haler).) Smith in view of O'Donnell, further in view of Haler teaches or suggests this element. (Keller, ¶¶262-64.) Thus, Smith in view of O'Donnell, further in view of Haler renders claim 15 obvious. (Keller, ¶¶261-65.)

B. Dependent claim 17.

As explained in Section VI.B, Smith teaches or suggests "*wherein said mounting on the law enforcement officer's body includes mounting on an article of clothing worn by the law enforcement officer*." Smith in view of O'Donnell, further in view of Haler renders claim 17 obvious. (Keller, ¶266.)

C. Dependent claim 20.

Smith in view of O'Donnell fails to disclose "*an identification sensor associated with the law enforcement officer's person and configured to determine an identity of the law enforcement* [*officer*]." But Haler cures this deficiency for the same reasons in Section IX.B. Moreover, a POSITA would have been motivated to combine the Smith/O'Donnell system with the system disclosed in Haler. (*Supra* Section IX.B; Keller, ¶¶267-68 (explaining why O'Donnell's mounting system would not impact the motivation to combine Smith and Haler).) Thus, Smith in view of O'Donnell, further in view of Haler teaches or suggests this element and renders claim 20 obvious. (Keller, ¶¶267-69.)

XIV. Ground 10: Smith in view of O'Donnell, further in view of Haler and Strub renders claim 16 obvious.

Smith in view of O'Donnell, further in view of Haler fails to disclose "*wherein the mark in the video file of the at least one of the plurality of video frames further records a geographical location of at least one component of the system when the law enforcement officer actuated the input*." But Strub cures this

deficiency for the same reasons in Section VII.A. Moreover, a POSITA would have been motivated to combine the Smith/O'Donnell/Haler system with Strub's use of a GPS receiver to mark frames of a video file with "position data" when an event is marked. (*Supra* Section VII.A; Keller, ¶271 (explaining why O'Donnell's mounting system and Haler's system to trigger events inside a law enforcement vehicle would not impact the motivation to combine Smith and Strub).) Thus, Smith in view of O'Donnell, further in view of Haler and Strub teaches or suggests this element and renders claim 16 obvious. (Keller, ¶¶270-72.)

XV. Ground 11: Smith in view of O'Donnell, further in view of Haler and Guzik renders claims 18 and 19 obvious.

A. Dependent claim 18.

1. Smith teaches or suggests *"wherein the plurality of video frames is associated with metadata."*

As explained in Section X.A.1, Smith teaches or suggests this element. (Keller, ¶273.)

2. Smith in view of O'Donnell and Haler, further in view of Guzik teaches or suggests *"wherein the metadata includes a geographical location of at least one component of the system when at least some of the plurality of video frames was captured, a time or date of when at least some of the plurality of video frames was captured, and any triggering event that initiated capturing of at least some of the plurality of video frames."*

Smith in view of O'Donnell, further in view of Haler does not explicitly disclose this element. But Guzik cures this deficiency for the same reasons in

Section X.A.2. Moreover, a POSITA would have been motivated to combine the Smith/O'Donnell/Haler system with Guzik's use of metadata. (*Supra* Section X.A.2; Keller, ¶¶276 (explaining why O'Donnell's mounting system and Haler's system to trigger events inside a law enforcement vehicle would not impact the motivation to combine Smith and Guzik).) Thus, Smith in view of O'Donnell, further in view of Haler and Guzik teaches or suggests this element and renders claim 18 obvious. (Keller, ¶¶275-77.)

B. Dependent claim 19.

Smith in view of O'Donnell, further in view of Haler does not explicitly disclose "*wherein the captured video is associated with metadata, and the metadata includes an identity of the law enforcement officer associated with the system as provided by the identification sensor*." But Guzik cures this deficiency for the same reasons in Section XI.A. Moreover, a POSITA would have been motivated to combine the Smith/O'Donnell/Haler system with Guzik's use of metadata. (*Supra* Section XI.A; Keller, ¶279 (explaining why O'Donnell's mounting system and Haler's system to trigger events inside a law enforcement vehicle would not impact the motivation to combine Smith and Guzik).) Thus, Smith in view of O'Donnell, further in view of Haler and Guzik teaches or suggests this element and renders claim 19 obvious. (Keller, ¶¶278-80.)

XVI. Ground 12: Smith in view of O'Donnell, further in view of Haler and Balardeta renders claim 21 obvious.

Smith in view of O'Donnell, further in view of Haler does not explicitly disclose "*wherein the housing has a width of approximately 0.25 inches to approximately 5 inches and a height of approximately 0.5 inches to approximately 5 inches*." But Balardeta cures this deficiency for the same reasons in Section XII. Moreover, a POSITA would have been motivated to combine the Smith/O'Donnell/Haler system Balardeta's housing dimensions. (*Supra* Section XII; Keller, ¶282 (explaining why O'Donnell's mounting system and Haler's system to trigger events inside a law enforcement vehicle would not impact the motivation to combine Smith and Balardeta).) Thus, Smith in view of O'Donnell, further in view of Haler and Balardeta teaches or suggests this element and renders claim 21 obvious. (Keller, ¶¶281-83.)

XVII. Ground 13: Smith in view of Guzik, further in view of Strub renders claim 24 obvious.

Smith in view of Guzik fails to disclose "*wherein the mark in the video file of at least one of the plurality of video frames further records a geographical location of at least one component of the system when the law enforcement officer actuated the input*." But Strub cures this deficiency for the same reasons in Section VII.A. Moreover, a POSITA would have been motivated to combine the Smith/Guzik system with Strub's use of a GPS receiver to mark frames of a video

file with "position data." (*Supra* Section VII.A; Keller, ¶285 (explaining why Guzik's metadata would not impact the motivation to combine Smith and Strub).) Thus, Smith in view of Guzik, further in view of Strub teaches or suggests this element and renders claim 24 obvious. (Keller, ¶¶284-86.)

XVIII. Mandatory Notices (37 C.F.R. § 42.8).

REAL PARTY IN INTEREST: Axon Enterprise, Inc. is the real party in interest.

RELATED MATTERS: There are no pending judicial or administrative matters related to the '730 patent.

LEAD AND BACKUP COUNSEL: Petitioner appoints Michael D. Specht (Reg. No. 54,463) as its lead counsel and Richard M. Bemben (Reg. No. 68,658) and Tyler J. Dutton (Reg. No. 75,069) as its back-up counsel, all at the address: STERNE, KESSLER, GOLDSTEIN & FOX, 1100 New York Avenue, N.W., Washington, D.C., 20005, phone (202) 371-2600 and facsimile (202) 371-2540.

SERVICE INFORMATION: Petitioner consents to service via email at: mspecht-PTAB@sternekessler.com, rbemben-PTAB@sternekessler.com, tdutton-PTAB@sternekessler.com, and PTAB@sternekessler.com.

XIX. Conclusion

This Petition demonstrates that the challenged claims are unpatentable, so Petitioner respectfully requests institution of post-grant review.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Michael D. Specht/

Date: March 19, 2018
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Attorneys for Petitioner

CERTIFICATION OF SERVICE

The undersigned hereby certifies that the foregoing **PETITION FOR POST-GRANT REVIEW**, Petitioner's Power of Attorney, and all supporting exhibits were served via FedEx Express on March 19, 2018, in their entireties on the following:

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7015 College Blvd., Suite 700
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Attorneys for Petitioner

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION, TYPEFACE REQUIREMENTS, AND TYPE STYLE REQUIREMENTS

1. This Petition complies with the type-volume limitation of 18,700 words, comprising 18,544 words, excluding the parts exempted by 37 C.F.R. § 42.24(a).

2. This Petition complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2010 in 14 point Times New Roman.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Michael D. Specht/

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