

Petition for *Inter Partes* Review of U.S. Patent No. 9,253,452

Paper No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TASER INTERNATIONAL, INC.
Petitioner

v.

DIGITAL ALLY, INC.
Patent Owner

Case IPR _____
Patent No. 9,253,452

Issued: February 2, 2016

Filed: August 14, 2013

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,253,452

UNDER 35 U.S.C. §§311-319 AND 37 C.F.R. §42.100 *ET SEQ.*

TABLE OF CONTENTS

I. INTRODUCTION1

II. STANDING1

III. FEE.2

IV. MANDATORY NOTICES (37 C.F.R §42.8(b))2

 A. Real Party in Interest (37 C.F.R §42.8(b)(1)).2

 B. Related Proceedings (37 C.F.R §42.8(b)(2))2

 C. Lead and Back-up Counsel (37 C.F.R §42.8(b)(3)).....3

 D. Service Information (37 C.F.R. §42.8(b)(4))3

 E. Power of Attorney (37 C.F.R. §42.10(b))3

V. STATEMENT OF RELIEF REQUESTED.4

 A. Identification of Prior Art and Challenged Claims.4

 B. Supporting Evidence Relied Upon for the Challenged Claims4

 C. Summary of Unpatentability5

 D. Grounds for Unpatentability.....5

VI. OVERVIEW OF THE '452 Patent6

 A. Effective Filing Date of the '452 Patent6

 B. State of the Art as of the '452 Priority Date6

 1. Third-Party System Development Culminating in Police
 Department Specifications for Automatically Triggered
 Camera-Based Systems.....7

 2. Petitioner TASER's Own Prior, Public Activities and
 Patents9

C.	Summary of the '452 Patent	12
1.	The Patent Owner's Admitted Prior Art.....	12
2.	Technical Overview of the '452 Patent.....	13
3.	The Claims of the '452 Patent	15
D.	Summary of the Prosecution History.	15
E.	Person of Ordinary Skill in the Art.	16
VII.	CLAIM CONSTRUCTION	17
A.	"broadcast" (All Challenged Claims).....	18
B.	"substantially simultaneously" (All Challenged Claims).....	18
C.	"recording device" (All Challenged Claims)	18
D.	"insures" (All Challenged Claims).....	19
E.	"operable to" (All Challenged Claims).	20
F.	"metadata" (Claim 8).....	21
G.	"a law enforcement officer" (All Challenged Claims).....	21
VIII.	DETAILED EXPLANATION OF GROUNDS FOR OBVIOUSNESS.....	21
A.	Ground 1: Obviousness of Claims 1, 3, 4, 7, and 8 under 35 U.S.C. §103 in View of Pierce.....	23
1.	Pierce (Ex.1014).....	23
2.	Obvious Modifications of the Teachings of Pierce	25
3.	Claim-by-Claim Analysis	26
a.	Independent Claim 1 Is Rendered Obvious in View of Pierce.	26

i.	Limitation 1[A] – "A recording device manager for use in a multiple recording device management system, the recording device manager comprising" (Ex.1001, Claim 1).....	26
ii.	Limitation 1[B] – "a controller including at least one receiver and at least one transmitter" (Ex.1001, Claim 1).....	27
iii.	Limitation 1[C] – "wherein said at least one receiver is operable to receive a first communication signal from a first recording device indicating the first recording device is recording an event" (Ex.1001, Claim 1).....	29
iv.	Limitation 1[D] – "wherein said at least one transmitter is operable to broadcast a second communication signal to at least a second recording device instructing the second recording device to begin recording the event" (Ex.1001, Claim 1).....	31
v.	Limitation 1[E] – "wherein the second recording device is distinct from the first recording device and records a distinct set of record data from the first recording device" (Ex.1001, Claim 1).....	34
vi.	Limitation 1[F] – "wherein the second recording device is configured to be mounted on or configured to be carried by a law-enforcement officer" (Ex.1001, Claim 1).....	34
vii.	Limitation 1[G] – "wherein the second communication signal is transmitted to the second recording device in response to the receiver receiving the first communication signal from the first recording device	

	indicating the first recording device is recording, such that the recording device manager insures the first and second recording devices both record the event" (Ex.1001, Claim 1).....	35
viii.	Limitation 1[H] – "wherein the first recording device and the second recording device begin recording substantially simultaneously with the broadcast of the second communication signal" (Ex.1001, Claim 1).....	37
ix.	Limitation 1[I] – "wherein the recording device manager is incorporated into one of the first recording device and the second recording device." (Ex.1001, Claim 1)	38
b.	Dependent Claim 3 Is Obvious in View of Pierce	39
c.	Dependent Claim 4 Is Obvious in View of Pierce	39
d.	Dependent Claim 7 Is Obvious in View of Pierce	40
e.	Dependent Claim 8 Is Obvious in View of Pierce.	40
B.	Ground 2: Obviousness of Claims 1, 4, 7, and 8 under 35 U.S.C. §103 in View of Kashiwa.....	41
1.	Kashiwa (Ex.1007).....	41
2.	Claim-by-Claim Analysis	43
a.	Independent Claim 1 Is Rendered Obvious in View of Kashiwa	43
i.	Limitation 1[A] – "A recording device manager for use in a multiple recording device management system, the recording device manager comprising" (Ex.1001, Claim 1).....	43

ii.	Limitation 1[B] – "a controller including at least one receiver and at least one transmitter" (Ex.1001, Claim 1).....	43
iii.	Limitation 1[C] – "wherein said at least one receiver is operable to receive a first communication signal from a first recording device indicating the first recording device is recording an event" (Ex.1001, Claim 1).....	45
iv.	Limitation 1[D] – "wherein said at least one transmitter is operable to broadcast a second communication signal to at least a second recording device instructing the second recording device to begin recording the event" (Ex.1001, Claim 1).....	46
v.	Limitation 1[E] – "wherein the second recording device is distinct from the first recording device and records a distinct set of record data from the first recording device" (Ex.1001, Claim 1).....	48
vi.	Limitation 1[F] – "wherein the second recording device is configured to be mounted on or configured to be carried by a law-enforcement officer" (Ex.1001, Claim 1).....	48
vii.	Limitation 1[G] – "wherein the second communication signal is transmitted to the second recording device in response to the receiver receiving the first communication signal from the first recording device indicating the first recording device is recording, such that the recording device manager insures the first and second recording devices both record the event" (Ex.1001, Claim 1).....	49

viii.	Limitation 1[H] – "wherein the first recording device and the second recording device begin recording substantially simultaneously with the broadcast of the second communication signal" (Ex.1001, Claim 1).....	50
ix.	Limitation 1[I] – "wherein the recording device manager is incorporated into one of the first recording device and the second recording device." (Ex.1001, Claim 1)	51
b.	Dependent Claim 4 Is Obvious in View of Kashiwa	51
c.	Dependent Claim 7 Is Obvious in View of Kashiwa	53
d.	Dependent Claim 8 Is Obvious in View of Kashiwa	53
IX.	CONCLUSION.....	54
X.	APPENDIX OF EXHIBITS	55
XI.	CERTIFICATE OF WORD COUNT	57
XII.	CERTIFICATE OF SERVICE.....	58

I. INTRODUCTION.

Pursuant to 35 U.S.C. §§311-319 and 37 C.F.R. §42.100 *et seq.*, TASER International, Inc. ("TASER" or "Petitioner") petitions for *inter partes* review of claims 1, 3, 4, 7, and 8 ("challenged claims") of U.S. Patent No. 9,253,452 ("'452 Patent"). (Ex.1001). The '452 Patent is assigned to Digital Ally, Inc. Accordingly, Digital Ally, Inc., is believed to be the "Patent Owner" in this Petition.

This Petition demonstrates a reasonable likelihood that Petitioner will prevail with respect to at least one of the claims challenged in this Petition, and thus a trial for *inter partes* review must be instituted. Evidence in this Petition demonstrates the challenged claims are unpatentable under 35 U.S.C. §103. Petitioner respectfully requests the challenged claims be rejected and cancelled.

II. STANDING.

Pursuant to 37 C.F.R. §42.104(a), Petitioner hereby certifies that the '452 Patent is available for *inter partes* review. The '452 Patent issued on February 2, 2016, more than nine months prior to the filing of this petition. (Ex.1001.)

Petitioner further certifies under 37 C.F.R. §42.104(a) that it is not barred or estopped from requesting *inter partes* review of the '452 Patent on the grounds identified below. Pursuant to 35 U.S.C. §315(b), this Petition is timely because it is being filed within one year after the Patent Owner served its complaint against Petitioner in *Digital Ally, Inc. v. TASER International, Inc.*, Case No. 2:16-cv-

Case IPR_____

US Patent 9,253,452 B1

02032-CM-JPO, now pending in the United States District Court for the District of Kansas.

III. FEE.

The undersigned authorizes the Office to charge \$23,000.00 which includes, if any, additional claims fees, to the credit card supplied in Financial Manager for the fees set forth in 37 C.F.R. § 42.15(a) for this Petition for *Inter Partes* Review Proceeding. The undersigned further authorizes payment for any additional fees that might be due or credit any overpayment in connection with this Petition to the above-referenced credit card.

IV. MANDATORY NOTICES (37 C.F.R §42.8(b)).

A. Real Party in Interest (37 C.F.R §42.8(b)(1)).

TASER International, Inc., located at 17800 North 85th Street, Scottsdale, AZ, 85255, is the sole real party-in-interest.

B. Related Proceedings (37 C.F.R §42.8(b)(2)).

Digital Ally, Inc. v. TASER International, Inc., Case No. 2:16-cv-02032-CM-JPO, now pending in the United States District Court for the District of Kansas ("Kansas Litigation").

The Patent Owner is also asserting the '452 Patent against Enforcement Video, LLC, *dba* Watchguard Video, in *Digital Ally, Inc. v. Enforcement Video*,

Case IPR _____
US Patent 9,253,452 B1

LLC d/b/a/ Watchguard Video, Case No. 2:16-cv-02349-JTM-JPO, pending in the United States District Court for the District of Kansas.

On December 1, 2016, TASER filed two Petitions for *Inter Partes* Review requesting review of several claims of U.S. Patent No. 8,781,292 C1 (child patent of the '452 Patent), Case Nos. IPR2017-00375, IPR2017-00376.

On December 20, 2016, TASER filed a Petition for *Inter Partes* Review requesting review of Claims 10-17 and 20 of the '452 Patent, Case No. IPR2017-00515.

C. Lead and Back-up Counsel (37 C.F.R. §42.8(b)(3)).

In accordance with 37 C.F.R. §§42.8(b)(3) and 42.10(a), TASER designates Brandon C. Stallman, Reg. No. 46,468, as Lead Counsel, and L. Rhys Lawson, Reg. No. 57,869, as Back-up Counsel.

D. Service Information (37 C.F.R. §42.8(b)(4)).

Counsel for Petitioner can be reached at Christensen O'Connor Johnson Kindness PLLC; 1201 Third Ave., Suite 3600, Seattle, Washington, 98101; Tel. (206) 682-8100; Fax (206) 224-0779. TASER consents to service by electronic mail at: brandon.stallman@cojk.com; rhys.lawson@cojk.com; litdoc@cojk.com.

E. Power of Attorney (37 C.F.R. §42.10(b)).

A Power of Attorney is filed concurrently with this Petition.

V. STATEMENT OF RELIEF REQUESTED.

Pursuant to 35 U.S.C. §311, and 37 C.F.R. §§42.22(a)(1) and 42.104(b), Petitioner respectfully requests cancellation of the challenged claims of the '452 Patent based on the following reasons.

A. Identification of Prior Art and Challenged Claims.

Ground 1: Claims 1, 3, 4, 7, and 8 are unpatentable under 35 U.S.C. §103 over U.S. Patent Publication No. 2005/0083404 to Pierce ("Pierce," Ex.1014).

Ground 2: Claims 1, 4, 7, and 8 are unpatentable under 35 U.S.C. §103 over U.S. Patent Publication No. 2007/0274705, to Kashiwa ("Kashiwa," Ex.1007).

B. Supporting Evidence Relied Upon for the Challenged Claims.

The evidence to support the above challenges and the identification of where each claim limitation is found in the prior art references is provided below. This Petition and the Declaration of Dr. Henry Houh (Ex.1003) demonstrate the challenged claims are not patentable. In particular, the Petition and Declaration explain where each claim element is found in the prior art and why the claims would have been obvious to a person of ordinary skill in the art ("POSITA") when the '452 Patent was filed.

C. Summary of Unpatentability.

The challenged claims generally describe a system for recording an event with multiple recording devices using a "recording device manager." Based on the Patent Owner's admitted prior art (Ex.1001, 1:18-46), the purported inventive concept of the challenged claims includes a recording device manager that automatically signals a second, synced, recording device to record data of the event based on the recording status of a first, synced recording device. The use of a "recording device manager" in this manner was not new.

This Petition is based on systems that teach a "manager" that, in response to receiving a signal indicating that a first recording device is recording, automatically broadcasts a signal to at least a second recording device instructing it to record, as well as other requirements of the challenged claims.

D. Grounds for Unpatentability.

Ground 1 is based on prior art patent publication Pierce (Ex.1014). Pierce is directed to a data acquisition system for use with a law enforcement vehicle, and discloses techniques for both manually and automatically triggering recordings of an event (e.g., a police incident) by a number of wired or wireless cameras and microphones, as well as a radar or laser-based speed gun. (Ex.1014, ¶¶0035, 0083, 0084). Pierce addresses the same problems of prior art systems as raised by the Patent Owner. The acquisition of video and audio data from the cameras and

microphones as well as traffic speed data from the speed gun is managed by a "central unit." (Ex.1014, ¶0039). As a result, the data acquisition system of Pierce automatically records distinct sets of record data of the event.

Ground 2 is based on prior art patent publication Kashiwa. (Ex.1007). Kashiwa is generally directed to a system for capturing an image of a subject using a first image capturing device, and transmitting a trigger signal to one or more different image capturing devices, which also capture an image in accordance with the trigger signal. (Ex.1007, Abstract, Fig.1). As a result, the system of Kashiwa automatically records distinct sets of record data of the subject. Kashiwa discloses many embodiments of this system and also suggests many modifications of these embodiments and the interchangeability of features between embodiments.

VI. OVERVIEW OF THE '452 PATENT.

A. Effective Filing Date of the '452 Patent.

The '452 Patent was filed on August 14, 2013. Based on the record, there is no reason to believe that the priority date of any of the challenged claims is earlier than August 14, 2013.

B. State of the Art as of the '452 Priority Date.

As of this priority date, the concept of a connected system of recording devices, such as cameras, microphones, and other triggering devices, was well known, including as a result of Petitioner TASER's own disclosures. In addition to

Pierce and Kashiwa (relied upon herein as invalidating references), the patent art and public record are replete with references teaching systems such as those claimed in the challenged claims.

1. Third-Party System Development Culminating in Police Department Specifications for Automatically Triggered Camera-Based Systems.

Before the '452 Patent priority date, many surveillance systems captured and stored data from multiple video cameras (and audio recorders). (See, e.g., Ex.1001, 1:18-28). One commercially available example was the Raytheon 20/20-W system, which was sold to law enforcement and involved the use of multiple automatic triggers to initiate recording, such as activating one of the system's wireless microphones or the patrol vehicle's light bar or siren. (Ex.1006, p.9). This system is cited as an invalidating reference in Petitioner's IPR2017-00375 against a child patent (U.S. Patent No. 8,781,292 ("292 Patent")) that claims priority as a continuation of the '452 Patent.

Other examples of prior art systems included the multi-camera setup described in Kister (Ex.1005, Ex.1028), TASER's TACOM wireless system (further described below), and systems disclosed in various other patents and prior publications. See, for example, Vasavada (Ex.1010), Blanco (Ex.1018), Park (Ex.1019), Brown (Ex.1020), Mirabile (Ex.1021), Pearlson (Ex.1022), and Lee (Ex.1023). Many of these systems focused on in-car recording systems with video

cameras, along with officer-worn microphones and/or cameras. It was also well known that one such recording device could trigger another, or that one such recording device could simultaneously start multiple recording devices, such as video cameras, microphones, etc., to record distinct sets of record data of the event. (*Id.*; See also Ex.1003, ¶89).

Before the Patent Owner's priority date for the '452 Patent, such recording systems were so well known that law enforcement customers were describing them in requests for proposal and detailed specifications. (See, e.g., Ex.1017, Ex.1025. Ex.1029). For example, the City of Pomona issued a Request for Proposal ("RFP") in early 2013 that specified: (1) three mounted, miniature cameras; (2) a digital video recorder; (3) a wireless microphone; (4) a monitor to provide integration with a body-worn camera system; (5) auto-activation of the mobile video system and/or officer-worn microphone; (6) simultaneous recordings; and (7) optional metadata and time stamping. (Ex.1025 pp.5-7, 9-12, 15-16; public at least by 4/4/2013;

http://www.ci.pomona.ca.us/mm/finance/bids/S0901.6_Mobile_Video_Recording_Sys.pdf; Ex.1003, ¶107). Similarly, the International Association of Chiefs of Police ("IACP") issued a "minimum specifications" document stating that such systems should include: (1) at least one camera and at least one microphone; (2) a device used to record Digital Multimedia Evidence and associated metadata; (3)

Case IPR_____

US Patent 9,253,452 B1

auto-activation of audio and video recording by the Vehicle Recording wireless microphone; (4) auto-activation of a Vehicular Recording System by a police vehicle's emergency lights and/or sirens; and (5) time syncing. (Ex.1017, pp.1, 3, 6, 15-16, and 18-19; §§1.4.17, 1.4.51, 4.1.1, 4.2.15, 4.2.16, 4.2.22, 4.2.24, and 5.4.1-5; Ex.1003, ¶106).

All of these activities and documents predate the Patent Owner's '452 Patent filing.

2. Petitioner TASER's Own Prior, Public Activities and Patents.

TASER was also active in this space years before the Patent Owner's priority date. In the early 2000s, TASER conceived what would become the "Axon" network of devices and applications, a connected device ecosystem that included automatically triggered cameras worn by law enforcement officers.

TASER gave several public presentations describing its "TACOM" (TASER Communications) system, including CEO Rick Smith's April 28, 2009, slide presentation below at the Evidence.com Technology Summit in Scottsdale, AZ:



The TACOM system facilitated communication between connected devices, including cameras, such that when one triggering event occurred, other devices were alerted and could act accordingly. The cameras could be triggered by activation of a vehicle's light bar, a weapon, or even another camera. TACOM also enabled time synchronization, event triggering and logging between devices, including officer-mounted cameras and TASER weapons.

The following slide, presented on July 27, 2009, at a TASER Master Instructor Conference in Fort McDowell, AZ, further illustrates the connected TACOM system, including "sync" communication between a weapon (via trigger pull) and an on-officer camera system.



In the illustrated TACOM system, the data from the weapon and on-officer camera could be communicated to a computer-based evidence system (TASER's Evidence.com system, as shown). This coordination allowed for synchronization of data recordings from connected devices when transferred to Evidence.com. TASER also secured patents on triggering and time alignment within such an ecosystem of weapons and cameras (see, e.g., Brundula (Ex.1015), filed December 30, 2010, and cited as an invalidating reference in Petitioner's IPR2017-00515).

Thus, it was well known from many prior art sources, including TASER, to provide an automatically triggered system of synced devices for recording an event.

C. Summary of the '452 Patent.

1. The Patent Owner's Admitted Prior Art.

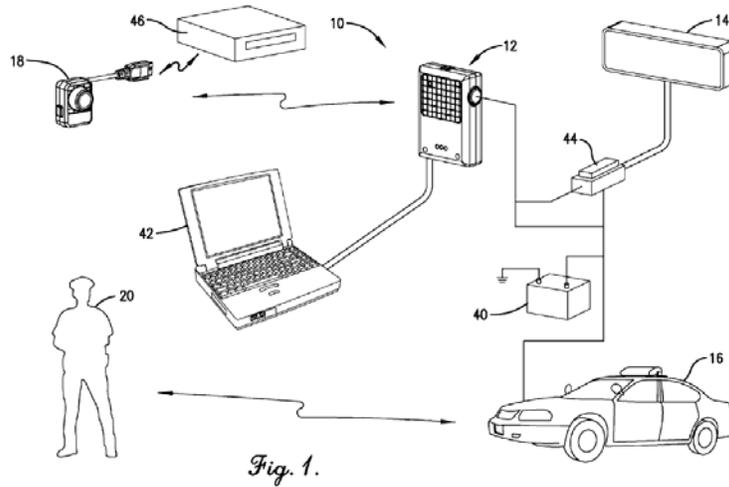
The '452 Patent admits that recording device management systems were known prior to August 14, 2013, and had been used to coordinate recording devices to capture multiple recordings of an event. (Ex.1001, 1:18-20). An example of an admitted prior art recording device management system includes a control board that starts multiple video cameras to record video data from multiple vantage points. (Ex.1001, 1:20-22). This is said to occur by the control board simply receiving a single input, such as a button press, that is transmitted to multiple recording devices. (Ex.1001, 1:22-24).

The '452 Patent also admits the law enforcement field is growing more dependent on recording devices, such as cameras and audio recorders, to preserve evidence. (Ex.1001, 1:29-33). The '452 Patent states that prior to the filing date officers had used "dash-cams, hidden cameras, and personal recording devices worn by the officers to obtain crucial video and audio data recordings." (Ex.1001, 1:31-33). One type of vehicle recording device that can be employed by the claims of the '452 Patent is described in prior art U.S. Patent Publication 2009/0002491. (Ex.1001, 11:26-32; Ex.1026).

2. Technical Overview of the '452 Patent.

The '452 Patent is said to solve the problems of the prior art by providing a computer program, method, apparatus, and system for managing multiple recording devices. (Ex.1001, 1:50-53). According to the '452 Patent, the multiple recording device management system includes a multiple recording device managing apparatus, referred to in the challenged claims as the "recording device manager." (Ex.1001, 1:54-56). The multiple recording device management system also includes a vehicle recording device, such as a video camera, synced to the recording device manager and a personal recording device, such as a video camera, synced to the recording device manager. (Ex.1001, Abstract). According to the '452 Patent, the recording device manager "is a standalone device but can be incorporated into other devices, such as a police laptop, a police radio, a recording device (including the vehicle recording device 14), or a mobile communications device." (Ex.1001, 8:4-8).

The basic components of the claimed system are shown in Fig. 1 below.



According to claim 1, and with reference to Fig. 1, the recording device manager 12 operates by first receiving "a first communication signal from a first recording device," which may be either the vehicle recording device 14 or the personal recording device 18. (Ex.1001, Claim 1, Fig.1). The first communication signal is said to indicate that the first synced recording device "is recording an event." (Ex.1001, Claim 1). In response to receiving the first communication signal, the recording device manager 12 transmits "a second communication signal to at least a second recording device," which may be the other one of the vehicle recording device 14 or the personal recording device 18. (Ex.1001, Claim 1, Fig.1). The second communication signal instructs the second synced recording device "to begin recording the event." (Ex.1001, Claim 1).

By instructing the second synced recording device to record data of the event based on the recording status of the first synced recording device, the

invention is said to address the problems in the prior art associated with manually managing recording devices and "insure" that both recording devices record the event. (Ex.1001, 1:38-62).

The recording of record data by the personal recording device 18 and the vehicle recording device 14 is said to begin "almost simultaneously." (Ex.1001, 7:11-15).

3. The Claims of the '452 Patent.

Claim 1 of the challenged claims is independent. The remaining challenged claims depend from claim 1. Claim 1 is representative of the challenged claims.

D. Summary of the Prosecution History.

The '452 Patent was filed on August 14, 2013, with 20 original claims. (Ex.1005, pp.447-454). In an attempt to overcome a final rejection based on Kister (U.S. Patent Publication No. 2008/0100705) and Robinson (U.S. Patent Publication No. 2006/0164534), the Patent Owner amended Claim 1 to include the amendatory language of "at least one transmitter is operable to broadcast," "wherein the second recording device is mounted on a law-enforcement officer," and "wherein the first recording device and the second recording device begin recording substantially simultaneously with the broadcast second communication signal." (Ex.1005, pp. 157-166 and 177-204). Regarding Kister, the Patent Owner argued that "Kister describes the latency between the time a camera is triggered

and recording begins ... [and] describ[es] this latency as a problem inherent in the art that Kister attempts to circumvent by triggering a camera before it detects motion. Thus, even assuming that a first camera in Kister's system triggered a second camera to start recording as soon as the first camera detected motion, the latency described above would mean that the cameras would not record 'substantially simultaneously.'" (Ex.1005, p.166).

Thereafter, the Patent Owner amended Claim 1 to require the second recording device to be "configured to be mounted on or carried by a law-enforcement officer," and at the request of the Examiner, provided arguments regarding, in the Patent Owner's words, the "infeasibility of integrating mobile cameras [from Robinson] into Kister's system" and "the lack of a reason to combine Kister with any reference teaching mobile cameras." (Ex.1005, pp.126-136).

After a follow-up interview in which additional prior art was discussed, a Notice of Allowance was mailed with additional amendments to the claims entered by the Examiner. (Ex.1005, pp.19-30, 72-73). U.S. Patent No. 9,253,452 issued on February 2, 2016.

E. Person of Ordinary Skill in the Art.

A POSITA in the field of the '452 Patent in August 2013, would have been someone with at least a bachelor's degree in electrical engineering or a related field

Case IPR_____

US Patent 9,253,452 B1

(including but not limited to computer or network engineering), with two years of additional experience in the area of data communications and data storage. (Ex.1003, ¶66). The additional two years of experience could be either in an industrial setting or in an educational setting, such as in the course of obtaining an advanced degree. (*Id.*).

VII. CLAIM CONSTRUCTION.

A claim subject to *inter partes* review ("IPR") is given its "broadest reasonable construction ("BRI") in light of the specification of the patent in which it appears." 37 C.F.R. §42.100(b). Under the BRI standard, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history. *Straight Path IP Grp., Inc. v. Sipnet EU S.R.O.*, 806 F.3d 1356, 1362 (Fed.Cir.2015).

Petitioner proposes below the BRI of certain claim language, as understood by a POSITA as of the filing date of the '452 Patent. 37 C.F.R. §42.104(b)(3). Petitioner also sets forth claim terms that are subject to 35 U.S.C. §112(f). Petitioner submits that all remaining claim terms should be accorded their plain and ordinary meaning as understood by a POSITA. 77 Fed. Reg. 48700 (2012). Petitioner reserves all rights regarding claim constructions presented during litigation, including the Kansas Litigation, as they do not necessarily correspond to a BRI approach. Different standards may be involved in litigation and Patent

Office proceedings. *Cuozzo Speed Technologies, LLC v. Lee*, 136 S.Ct. 2131 (2016).

A. "broadcast" (All Challenged Claims).

The term "broadcast" should be construed as: "sending a transmission simultaneously to two or more synced recording devices." This construction is consistent with the specification of the '452 Patent. (Ex.1001, 4:44-55, 7:46-67, 9:49-62, 14:17-48).

B. "substantially simultaneously" (All Challenged Claims).

In the Kansas Litigation, the Patent Owner has proposed that "substantially simultaneously" be construed as "at the same time or nearly the same time." (Ex.1011, p.23). The Patent Owner has not explained what "nearly the same time" means. However, for purposes of this Petition, Petitioner demonstrates unpatentability based on the same manner in which the term "substantially simultaneously" appears to be applied within the text of Claim 1 as well as the Patent Owner's statements from the prosecution history of the '452 Patent.

C. "recording device" (All Challenged Claims).

The term "recording device" is a means-plus-function limitation under 35 U.S.C. §112(f). Although "means" is not recited, the rebuttable presumption should be overcome, as the term "recording device" lacks sufficiently definite structure. (MPEP 2181(I)). This claim term uses the generic placeholder or nonce term

"device." (*Id.*). And, the term "recording" that modifies the nonce word "device" is written as a present participle ("ing"), which does nothing more than to identify the function for the "device" to perform. To be sure, the function associated with the nonce term "device" is "recording." In other words, a recording device is a "device [means] for recording."

In the Kansas Litigation, the Patent Owner has proposed that "recording device" be construed as "a device that records information." (Ex.1013, p.4). Petitioner asserts this merely attempts to circumvent the functional claiming in the '452 Patent by rewriting the claim language. Regardless, it is clear from the '452 Patent that whichever construction applies, "recording devices" at least include structures such as video cameras, audio recorders, radar and LIDAR scanners, and chemical analyzers, as well as a number of video camera products produced by the Patent Owner, and their equivalents. (Ex.1001, 3:40-48, 11:13-19, 11:43-63; Ex.1003, ¶87). Thus, Petitioner demonstrates unpatentability based on both constructions.

D. "insures" (All Challenged Claims).

In the Kansas Litigation, Petitioner and the Patent Owner have agreed to a construction of "insures" as meaning "make certain or sure." (Ex.1012, p.6). The Patent Owner contends in the Kansas Litigation that the recording device manager can meet this limitation by simply transmitting a second communication signal to

the second recording device instructing the second recording device to record (Ex.1013, pp.19-20).

Under a BRI approach, Petitioner will apply the Patent Owner's position on "insures" for purposes of this Petition, and demonstrate unpatentability on that basis. Petitioner will also demonstrate where the applied references teach additional features that actually "make certain or sure," should the Board require more than the interpretation advocated by the Patent Owner to meet this claim term. In the context of the Kansas Litigation, Petitioner does not concede that merely transmitting a signal to a recording device instructing it to record "makes certain or sure" that the second device is actually recording.

E. "operable to" (All Challenged Claims).

The term "operable to" should be construed as: "capable of." In the reexamination of the child '292 Patent, on August 17, 2015, the USPTO made eight rejections of limitations that used the phrase "operable to," finding that this phrase only refers to an intended use: "If the prior art structure is capable of performing the intended use, then it reads on the claimed limitation." (Ex.1009, pp.243-244, 246-248, 251-256, 260 (with similar finding for the phrases "so as to" and "so that")).

F. "metadata" (Claim 8).

In the Kansas Litigation, Petitioner and the Patent Owner have agreed to a construction of "metadata" as meaning "data about a data recording, including but not limited to a time stamp, location, user, device serial number, number of recording devices, or trigger type." (Ex.1012, p.6).

Petitioner accepts this construction of the term "metadata" for purposes of this Petition, and demonstrates unpatentability based on this construction.

G. "a law enforcement officer" (All Challenged Claims).

The challenged claims include recitations of a recording device configured to be mounted on or carried by a "law enforcement officer." Petitioner submits that the structure recited in the challenged claims does not change based on the type of user carrying the respective machine. (See, e.g., Ex.1003, ¶216). Thus, the term "law enforcement officer" should be treated as an intended use and afforded no patentable weight, and therefore, should be interpreted as a "user" in the generic sense. This petition below demonstrates unpatentability even if such language has patentable weight.

VIII. DETAILED EXPLANATION OF GROUNDS FOR OBVIOUSNESS.

Provided below is a detailed discussion of why the challenged claims of the '452 Patent are rendered obvious. Indeed, the challenged claims recite nothing

more than predictable design choices that use known components and techniques according to their well-understood and established functions.

The showing below establishes a reasonable likelihood of prevailing as to each ground of invalidity with respect to the challenged claims as to that ground. This showing is supported by the Declaration of Dr. Henry Houh. (Ex.1003).

The first set of grounds is based on Pierce under 35 U.S.C. §103. These grounds are arguably stronger than the second set of grounds at least because Pierce discloses many of the same devices that comprise the system described in the '452 Patent, including a police vehicle-based central control unit, a radar-based or laser-based speed gun, and an audio recorder in the form of a wireless microphone.

The second set of grounds is based on Kashiwa under 35 U.S.C. §103. These grounds are arguably stronger than Pierce because the recording device manager is explicitly depicted as being incorporated in a recording device, although Kashiwa does not expressly discuss a "law enforcement officer" context (to the extent that such terminology may be given patentable weight), as Pierce does.

Petitioner would be prejudiced by the Board's decision to institute trial based only on one of the two grounds presented. Further, the Board's construction of terms, such as "law enforcement officer" or "operable to," could also affect the strength of the grounds and will not be known until the Final Written Decision. If

the Board institutes trial for only one set of grounds, Petitioner may be precluded from asserting its best challenge against claims that are clearly unpatentable. Accordingly, the Board should use its discretion to institute trial for each challenged claim based on both sets of presented grounds.

A. Ground 1: Obviousness of Claims 1, 3, 4, 7, and 8 under 35 U.S.C. §103 in View of Pierce.

1. Pierce (Ex.1014).

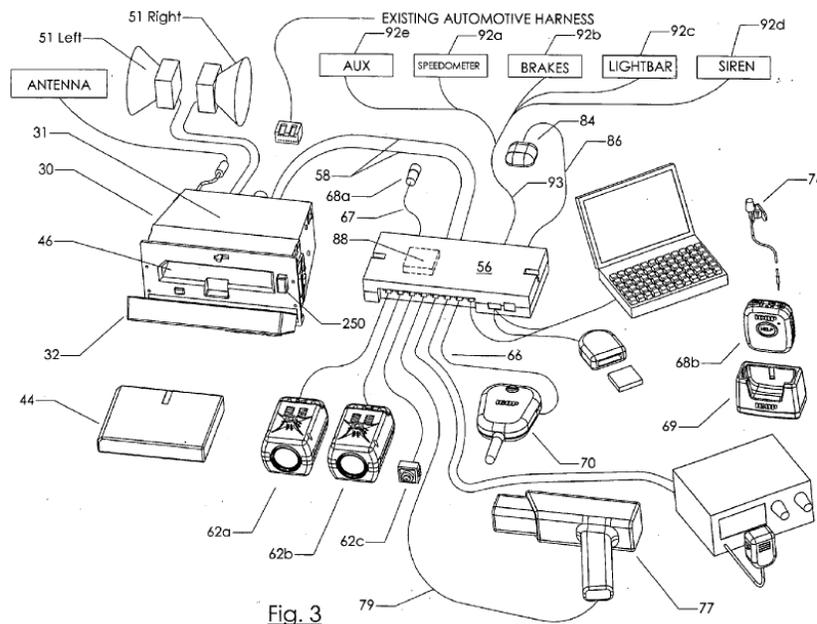
Pierce published on April 21, 2005, before the earliest possible priority date claimed by the '452 Patent. Pierce thus qualifies as prior art under §102(a)(1). Pierce was not cited during prosecution of the '452 Patent.

Pierce was assigned to ICOP Digital, of Overland Park, Kansas. (Ex.1024). Pierce is directed to a data acquisition system, referred to as the ICOP 20/20 (Ex.1014, Fig.4a), for use with a law enforcement vehicle, and discloses techniques for both manually and automatically triggering recordings of a police incident by a number of recording devices, including radar and laser-based speed guns and wired or wireless microphones and cameras. (Ex.1014, ¶¶0035, 0083, 0084).

Pierce explains that while prior art in-car video systems are "generally useful," it "is often difficult for officers to operate the electronic apparatus during high-speed pursuits, domestic disturbances, and other high-stress and high-activity

situations." (Ex.1014, ¶0004). Pierce also states these in-car video systems "are often underutilized and valuable data, including video data and speed data, is often not recorded." (*Id.*). Pierce further explains that there "is an increasing demand for apparatus [*sic*] that monitor and record the activity of police officers and/or suspects during arrests, altercations, vehicle searches, and traffic stops." (Ex.1014, ¶0006).

To address these problems, which are quite similar to those set forth in the '452 Patent, Pierce teaches, among other things, automatic activation of, for example, a number of wired or wireless microphones 68 and cameras 62 as a result of recording by, for example, a speed measuring apparatus 77 (e.g., a radar or laser-based speed gun). (Ex.1014, ¶0084, Fig.3 (reproduced below)).



The automatic activation of the recording devices of the Pierce system in order to acquire police incident data is managed by a central processing unit (CPU) or controller 31 communicating with associated components, such as communication ports 54 and a transceiver 70. (Ex.1014, ¶¶0039, 0051, Figs.3, 6). As a result, the data acquisition system of Pierce automatically obtains distinct sets of record data of an incident.

2. Obvious Modifications of the Teachings of Pierce.

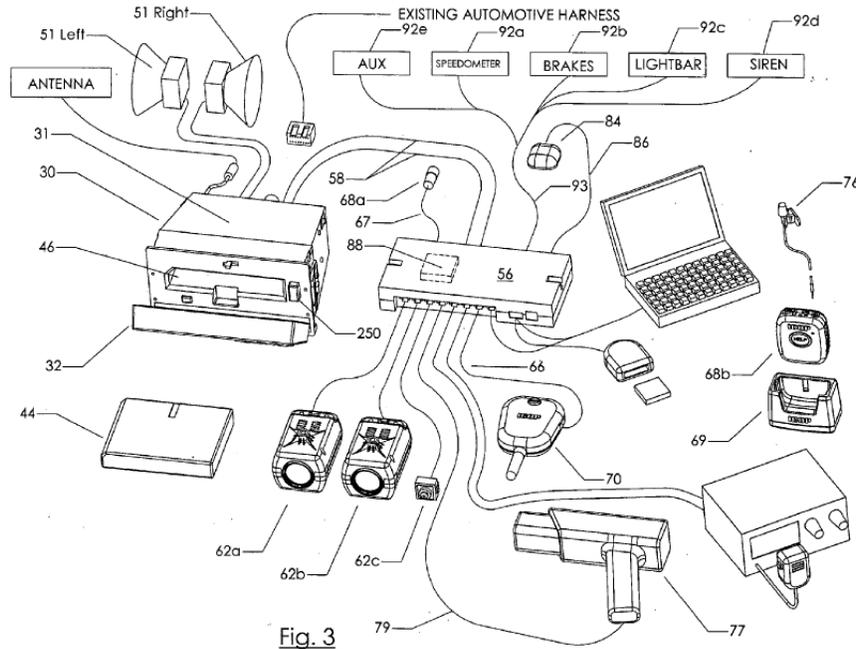
Various common practices and modifications of prior art devices and systems have been held to normally require only ordinary skill in the art and hence are considered obvious "routine expedients" if the applicant has not demonstrated the "criticality" of a specific limitation. (MPEP §2144.04). For example, it is well known that incorporating separate components is typically obvious to one of ordinary skill in the art. (See *In re Larson*, 340 F.2d 965, 968, 144 U.S.P.Q. 347, 349 (C.C.P.A.1965); MPEP §2144.04(V)(B)). Such a modification would yield predictable results and would not require undue experimentation. (Ex.1003, ¶164). And, nothing in Pierce teaches away from the compatibility or operability of this modification. (Ex.1003, ¶165).

3. Claim-by-Claim Analysis.

a. Independent Claim 1 Is Rendered Obvious in View of Pierce.

i. Limitation 1[A] – "A recording device manager for use in a multiple recording device management system, the recording device manager comprising" (Ex.1001, Claim 1).

Pierce is directed to a data acquisition and display system for use in a conventional police car. (Ex.1014, ¶0035). Pierce discloses in Fig. 3 (below) a system 10 that includes a central unit 30, multiple recording devices including a portable wireless microphone 68b, patrol car mounted cameras 62a, 62b, 62c, a speed measuring apparatus 77 (e.g., a radar-based gun or a laser-based speed gun), a patrol car mounted microphone 68a, and a portable camera (not shown). (Ex.1014; Fig.3, ¶¶0039, 0052, 0057, 0062, 0069, Claim 23). According to Pierce, the central unit 30 "houses a central processing unit or controller 31, which is programmable to coordinate operation of the data acquisition and display system 10." (Ex.1014, ¶0039). The central processing unit (CPU) or controller 31 communicates with the multiple recording devices via one or more of the communication ports 54, junction box 56, and/or transceiver 70. (Ex.1014, ¶¶0039, 0051, 0062).



In sum, Pierce discloses a system that manages the acquisition and storage of police-related data between a plurality of discrete recording devices distributed in different locations in the vicinity of a police car. Included in the system is a CPU or controller 31 and one or more associated components, such as communication ports 54 and a transceiver 70, etc., that function as the "recording device manager." (See also Ex.1003, ¶123).

ii. Limitation 1[B] – "a controller including at least one receiver and at least one transmitter" (Ex.1001, Claim 1).

Pierce discloses a CPU or controller "which is programmable to coordinate operation of the data acquisition and display system 10." (Ex.1014, ¶0039). According to Pierce, the CPU or controller receives signals and data from a

number of recording devices, such as radar or laser-based speed gun 77, cameras 62a-c, and microphones 68a and 68b via communication ports 54. (Ex.1014, ¶0051, Fig.3). Accordingly, at least the CPU or controller 31 or the communication ports 54 act as a receiver since each of these devices receives signals. (Ex.1003, ¶¶125, 128).

To "coordinate operation of the data acquisition and display system 10," the CPU or controller 31 transmits signals and data to a number of recording devices, such as microphones 68a and 68b, cameras 62, etc., via associated, linked components of the system, such as communication ports 54, junction box 56, and/or transceiver 70. (Ex.1014, ¶¶0039, 0051, Fig.3). Transmission of signals to the microphone 68b is handled by the transceiver 70. (Ex.1014, ¶0066; Ex.1003, ¶127). Accordingly, at least the transceiver 70 acts as a transmitter. (Ex.1003, ¶¶127-128).

In sum, Pierce discloses a controller comprised of, for example, a CPU or controller 31, the communication ports 54 (e.g., receiver), and the transceiver 70 (e.g., transmitter). (See also Ex.1003, ¶128).

- iii. Limitation 1[C] – "wherein said at least one receiver is operable to receive a first communication signal from a first recording device indicating the first recording device is recording an event" (Ex.1001, Claim 1).**

The term "operable to" is construed in Section VII(E) as: "capable of." The CPU or controller 31 or the communication ports 54 (i.e., receiver) of the Pierce system receives communication signals from the speed measuring apparatus 77, also referred to as a radar or laser-based speed gun. (Ex.1014, ¶¶0069, 0070). For example, according to Pierce, "[s]peed data recorded by the speed measuring apparatus 77 is transmitted via line 79 or otherwise (shown schematically in FIG. 3) to the controller 31 and the recording media 44." (Ex.1014, ¶0069). Since the CPU or controller 31 receives communication signals from the speed measuring apparatus 77 (e.g., radar or laser-based speed gun) through communication ports 54 (via lines 79 and 58), the CPU or controller 31 or the communication ports 54 (i.e., receiver) is capable of receiving communication signals from a first recording device. (Ex.1003, ¶137).

The term "recording device" is construed in Section VII(C) under 35 U.S.C. §112(f). Regarding both the function and corresponding structure of a first "recording device," Pierce discloses, for example, a speed measuring apparatus 77 (e.g., a radar-based gun or a laser-based speed gun) "operable to record the speed of target vehicles." (Ex.1014, ¶0069; Ex.1003, ¶¶132-133). According to Pierce,

"[s]peed data recorded by the speed measuring apparatus 77 is transmitted via line 79 or otherwise (shown schematically in FIG. 3) to the controller 31 and the recording media 44." (Ex.1014, ¶0069; see also ¶0051).

If not identical to the radar or LIDAR scanner disclosed in the '452 Patent, the speed measuring apparatus 77 of Pierce is nevertheless an equivalent for performing the function of "recording" speed of a target vehicle. (Ex.1003, ¶135). Moreover, if it is found that the first recording device is not a means-plus-function limitation, Pierce's speed measuring apparatus nevertheless satisfy the claim limitation of the first recording device. (Ex.1014, ¶0069; Ex.1003, ¶136). In short, a speed measuring apparatus, such as a radar-based gun or a laser-based speed gun, is a machine that is capable of recording data (i.e., traffic speed data) of an event.

Regarding the remaining requirements of limitation 1[C], Pierce discloses that the communication signals received from the speed measuring apparatus (i.e., first recording device) indicate that the speed measuring apparatus is recording an event. In particular, the CPU or controller 31 receives signals via communication ports 54 in the form of speed data from the speed measuring apparatus (i.e., first recording device). Again, according to Pierce, "[s]peed data recorded by the speed measuring apparatus 77 is transmitted via line 79 or otherwise (shown schematically in FIG. 3) to the controller 31 and the recording media 44." (Ex.1014, ¶0069; see also ¶0084). Since speed data is being received from the

speed measuring apparatus, such speed data (i.e., communication signal) necessarily indicates that the speed measuring apparatus is recording an event. (Ex.1003, ¶138).

- iv. **Limitation 1[D] – "wherein said at least one transmitter is operable to broadcast a second communication signal to at least a second recording device instructing the second recording device to begin recording the event" (Ex.1001, Claim 1).**

The term "operable to" is construed in Section VII(E) as "capable of," and the term "broadcast" is construed in Section VII(A) as "sending a transmission simultaneously to two or more synced recording devices."

The CPU or controller 31 causes the transceiver 70 (i.e., transmitter) of the Pierce system to send communication signals to at least the wireless second microphone 68b. (Ex.1014, ¶¶0067, 0084). For example, according to Pierce, the second microphone 68b "receive[s] sound data from other sources (e.g., from a headquarters, a dispatcher, another officer, or the internal microphone 68a, etc.) in a conventional manner." (Ex.1014, ¶0067; see also ¶0085 ("the operator can deactivate and reactivate either of the microphones 68a, 68b")).

Pierce describes the second microphone 68b as a "walky-talky, a two-way radio, etc." (Ex.1014, ¶0062) that operates "between about 902 MHz and about 928 MHz." (Ex.1014, ¶0066). Pierce also discloses that the wireless second

microphone 68b is set up and synced via a wireless connection with the transceiver 70 of the Pierce system prior to use. (Ex.1014, ¶0064; Ex.1003, ¶147).

According to Pierce, the controller 31 causes transmission of a second communication signal via transceiver 70, which is received by at least a second recording device, such as the wireless second microphones 68b. (Ex.1014, ¶¶0067, 0084, 0085). This transmitted communication signal can also be received by other wireless microphones having the same channel assignment, and if applicable, transmission codes, as the transceiver 70. (Ex.1003, ¶148). Accordingly, the transceiver 70 is capable of sending a transmission simultaneously to two or more synced recording devices, one of which may be the wireless microphone 68b, which receives the transmission. (Ex.1003, ¶148). Thus, the communication signal is capable of being "broadcasted" by the transceiver 70 to at least a second recording device, such as the wireless second microphone 68b. (Ex.1014, ¶¶0067, 0084, 0085; Ex.1003, ¶148).

The term "recording device" is construed in Section VII(C) under 35 U.S.C. §112(f). Regarding both the function and corresponding structure of the second "recording device," Pierce discloses, for example, an audio recording apparatus or wireless second microphone 68b capable of recording, e.g., an officer's voice. (Ex.1014, ¶0066; Ex.1003, ¶¶141-144). According to Pierce, "[s]ound data from the second microphone 68b is transmitted across one of 1040 channels in the 900

MHz range (e.g., between about 902 MHz and about 928 MHz) back to the in-car transceiver #70, connected to communication port 54a on the junction box 56 and along line 58 from the junction box 56 to the controller 31 and the recording media 44 where the sound data is stored and indexed for later retrieval or transmitted to some other device." (Ex.1014, ¶0066; see also ¶¶0068, 0084, 0085).

If not identical to the audio recorder disclosed in the '452 Patent, the wireless second microphone 68b of Pierce is nevertheless an equivalent for performing the function of "recording" sound. (Ex.1003, ¶145). Moreover, if it is found that the second recording device is not a means-plus-function limitation, Pierce's wireless microphone nevertheless satisfies the claim limitation of the second recording device. (Ex.1014, ¶¶0061, 0062; Ex.1003, ¶146). In short, a wireless microphone is a machine that is capable of recording data.

Regarding the remaining requirements of limitation 1[D], Pierce discloses that the second communication signal broadcasted to the wireless second microphone 68b (i.e., second recording device) during EVENT recording instructs the wireless second microphone 68b to record the event. According to Pierce, "[d]uring EVENT recording, the controller 31 and the recording media 44 automatically record data from ... the first and second microphones 68a, 68b, ... the clock 47, [and] the speed measuring apparatus 77." (Ex.1014, ¶0084; see also ¶0085 ("the operator can deactivate and reactivate either of the microphones 68a,

68b"). In order to record the audio data from the wireless second microphone 68b, an activation signal (i.e., record instructions) is sent from the transceiver 70 thereto. (Ex.1003, ¶149).

- v. **Limitation 1[E] – "wherein the second recording device is distinct from the first recording device and records a distinct set of record data from the first recording device" (Ex.1001, Claim 1).**

Pierce discloses in Fig. 3 that the radar or laser-based speed gun 77 (i.e., first recording device) and the wireless second microphone 68b (i.e., second recording device) are distinct. (Ex.1014, ¶¶0061-0062, 0069, Fig.3; Ex.1003, ¶151). As such, the second recording device records a second set of record data (i.e., sound data) that is distinct from the first set of record data (i.e., traffic speed data) recorded by the first recording device.

- vi. **Limitation 1[F] – "wherein the second recording device is configured to be mounted on or configured to be carried by a law-enforcement officer" (Ex.1001, Claim 1).**

Pierce discloses that the wireless second microphone 68b (i.e., second recording device) is configured to be mounted on or carried by a user, such as a law enforcement officer. As "illustrated in FIG. 9, the second microphone 68b also includes a belt clip 74 and a corded microphone 76. During operation, the operator can clip the belt clip 74 on his belt and can clip the optional corded microphone 76

to his collar or lapel for convenient handsfree operation." (Ex.1014, ¶0065). Pierce additionally discloses that "the operator can bring the second microphone 68*b* with him when he leaves the vehicle V to approach a suspect or to investigate a building or a parked vehicle or the like." (Ex.1014, ¶0062).

- vii. Limitation 1[G] – "wherein the second communication signal is transmitted to the second recording device in response to the receiver receiving the first communication signal from the first recording device indicating the first recording device is recording, such that the recording device manager insures the first and second recording devices both record the event" (Ex.1001, Claim 1).**

Pierce discloses in paragraph 84 that the CPU or controller 31 automatically causes the transceiver 70 to transmit a second communication signal to the wireless second microphone 68*b* (i.e., second recording device) in response to receiving a communication signal (e.g., speed data above a predetermined value) from the speed measuring apparatus 77 (i.e., first recording device) that indicates it is recording. (Ex.1014, ¶0084). According to Pierce, "EVENT recording can be initiated when the speed measuring apparatus 77 records speed data above a predetermined value (e.g., above 80 mph)." (Ex.1014, ¶0084).

Initiation of EVENT recording based on the value of the speed data recorded by the first recording device causes "the controller 31 and the recording media 44 [to] automatically record data from ... the first and second microphones 68*a*, 68*b*,

... [and] the speed measuring apparatus 77." (Ex.1014, ¶0084). In other words, receiving speed data above a predetermined speed value from the speed measuring apparatus 77 indicates that it is recording, and such a condition triggers EVENT recording by Pierce's system, including the automatic transmission of a second communication signal to the wireless second microphone 68b (i.e., second recording device) instructing the wireless second microphone 68b to begin recording. (Ex.1014, ¶0084; Ex.1003, ¶159).

Under the construction of what is necessary to "insure" advanced by the Patent Owner in the Kansas Litigation and applied here in this Petition, the CPU or controller 31 and associated, linked components, such as communications ports 54 and the transceiver 70 (i.e., recording device manager), thus insure that both the first and second recording devices record data of the event by transmitting the second communication signal to the second, microphone 68b based on receipt of a first communication signal (e.g., speed data above a predetermined value) from the speed measuring apparatus 77. The speed measuring apparatus 77 and the wireless second microphone 68b are also each set up and synced via wired and wireless connections, respectively, to the recording device manager prior to use, which further insures that each recording device records data of the event. (Ex.1003, ¶157).

viii. Limitation 1[H] – "wherein the first recording device and the second recording device begin recording substantially simultaneously with the broadcast of the second communication signal" (Ex.1001, Claim 1).

Pierce discloses that during EVENT recording, which is triggered by receiving speed data above a predetermined speed value from the speed measuring apparatus 77, sound data is automatically recorded by the wireless second microphone 68b. (Ex.1014, ¶0084). Therefore, as soon as the speed data is determined by the CPU or controller 31 to be above a predetermined value, the second communication signal is automatically broadcasted by the transceiver 70 to instruct the wireless second microphone 68b to begin recording. Pierce does not disclose any latency issues¹ or delays during the automatic activation of the multiple recording devices during EVENT recording (or otherwise). As such, Pierce teaches that the activation of the radar or laser-based speed gun 77 (i.e., first

¹ In the August 28, 2015 response to the Examiner during the '452 prosecution, the Applicant distinguished "the first recording device and the second recording device begin recording substantially simultaneously with the broadcast second communication signal" from the Kister reference by stating that "Kister describes the latency between the time a camera is triggered and recording begins ... [and] describ[es] this latency as a problem inherent in the art that Kister attempts to circumvent by triggering a camera before it detects motion. Thus, even assuming that a first camera in Kister's system triggered a second camera to start recording as soon as the first camera detected motion, the latency described above would mean that the cameras would not record 'substantially simultaneously.'" (Ex.1005, p.166).

recording device) recording and the wireless, second microphone 68b (i.e., second recording device) recording should occur in the sequence that is claimed² with no identified latencies or delays. (Ex.1003, ¶159).

- ix. Limitation 1[I] – "wherein the recording device manager is incorporated into one of the first recording device and the second recording device." (Ex.1001, Claim 1).**

To the extent this limitation is not explicitly disclosed in *Pierce*, it would have been obvious to a POSITA to incorporate the components of the recording device manager (i.e., at least the CPU or controller 31, the communication ports 54, and the transceiver 70) into the speed measuring device 77 (i.e., first recording device). (Ex.1003, ¶¶161-165). Incorporating separate components into an integrated device would be obvious to a POSITA as a simple design choice that could simplify the configuration and potentially reduce manufacturing costs. (Ex.1003, ¶¶162-163). Moreover, incorporating separate components into an integrated device is typically obvious to one of ordinary skill in the art where, as here, the applicant has not "demonstrated the criticality" of this limitation. (See *In*

² Given the causal flow of the claim, where the first device must begin recording in order to trigger the broadcast to the second device, true "simultaneous" activation of both of the recordings and the broadcast does not occur.

re Larson, 340 F.2d 965, 968, 144 U.S.P.Q. 347, 349 (C.C.P.A.1965); MPEP §2144.04).

Such a modification would yield predictable results and would not require undue experimentation. (Ex.1003, ¶164). And, nothing in *Pierce* teaches away from the compatibility or operability of this modification. (Ex.1003, ¶165). Indeed, integrating the components of the recording device manager within the speed measuring device while retaining its functionality as taught in *Pierce* would not change the principle of operation of *Pierce* as disclosed in paragraph 84 of *Pierce*. (Ex.1003, ¶165).

b. Dependent Claim 3 Is Obvious in View of Pierce.

Pierce renders obvious claim 3, which adds to claim 1 a requirement that "wherein the first recording device does not record audiovisual information." (Ex.1001, Claim 3). As described in Section VIII(A)(3)(a)(iii), the first recording device is a radar or laser based speed gun that records traffic speed data. Traffic speed data is not audiovisual information. (Ex.1014, ¶0069, Ex.1003, ¶168).

c. Dependent Claim 4 Is Obvious in View of Pierce.

Pierce renders obvious claim 4, which adds to claim 1 a requirement that "wherein the first recording device is configured to be mounted on or carried by the law enforcement officer." (Ex.1001, Claim 4). *Pierce* discloses in Fig. 3 a handheld form factor for the speed measuring apparatus 77 (i.e., first recording

device), which allows the speed measuring device to be carried by the user, such as a law enforcement officer. (Ex.1014, Fig.3). Such a handheld form factor would still allow the recording device manager to provide all of the claimed functionality without causing inoperability problems. (Ex.1003, ¶170).

d. Dependent Claim 7 Is Obvious in View of Pierce.

Pierce renders obvious claim 7, which adds to claim 1 a requirement that "wherein the second communication signal further causes the second recording device to record a timestamp with the event." (Ex.1001, Claim 7). Pierce discloses that time and location data is stored with sound data recorded by the second microphone 68b as a result of the second communication signal activating the second microphone 68b to begin recording. (Ex.1014, ¶¶0066, 0084; Ex.1003, ¶172).

e. Dependent Claim 8 Is Obvious in View of Pierce.

Pierce renders obvious claim 8, which adds to claim 1 a requirement that "wherein the timestamp is recorded as metadata for the event." (Ex.1001, Claim 8). Metadata has been construed in Section VII(F) as being data about a data recording, including but not limited to a time stamp, location, user, device serial number, number of recording devices, or trigger type. As set forth above regarding Claim 7, Pierce discloses that time and location data is stored with sound data recorded by the second microphone 68b as a result of the second communication

signal activating the second microphone 68b to begin recording. (Ex.1014, ¶¶0066, 0084; Ex.1003, ¶172). The time and location data describe when and where the sound data is recorded, which allows the recorded data to be indexed and relatedly coordinated for later retrieval. (Ex.1014, ¶¶0066, 0084; Ex.1003, ¶174).

B. Ground 2: Obviousness of Claims 1, 4, 7, and 8 under 35 U.S.C. §103 in View of Kashiwa.

1. Kashiwa (Ex.1007).

Kashiwa qualifies as prior art under §102(a)(1) because it is a U.S. patent application that published on November 29, 2007, more than one year before the earliest effective filing date of the '452 Patent. Kashiwa was not cited during prosecution of the '452 Patent.

Kashiwa is generally directed to a system for capturing an image of a subject using a first image capturing device, and transmitting a trigger signal to another image capturing device, which also captures an image "in accordance with the trigger signal." (Ex.1007, Abstract). Kashiwa discloses many embodiments of this system. Fig. 36 (a "thirteenth embodiment") is discussed in detail below, but the disclosure of Kashiwa incorporates many other embodiments and also suggests many modifications of these embodiments and the interchangeability of features between embodiments. (Ex.1007, Figs.28, 36, 42, 45, ¶¶0567, 0595, 0675-0677, 0679). For example, Fig. 36 depicts still cameras, but this embodiment is also

described as being combinable with or modifiable in view of embodiments that use video cameras. (Ex.1007, Figs.42, 45, ¶¶0567, 0595). As another example, Fig. 36 depicts two cameras, but this embodiment is also described as being combinable with or modifiable in view of arrangements that involve more cameras. (Ex.1007, Fig.28, ¶¶0675-0677). Combining such embodiments found in a single prior art reference "does not require a leap of inventiveness." (See *Boston Scientific Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed.Cir.2009)).

To the extent that Kashiwa's disclosed embodiments may be combined or modified in view of one another to arrive at the claimed arrangement, such combinations or modifications would have been obvious to a POSITA and would yield predictable results. Such combinations or modifications would be nothing more than combining "prior art elements according to known methods to yield predictable results" and/or the "[u]se of known technique[s] to improve similar devices (methods, or products) in the same way." (*KSR* 550 U.S. at 417-22; MPEP §2143(I); see also Ex.1003, ¶177).

2. Claim-by-Claim Analysis.

a. Independent Claim 1 Is Rendered Obvious in View of Kashiwa.

i. Limitation 1[A] – "A recording device manager for use in a multiple recording device management system, the recording device manager comprising" (Ex.1001, Claim 1).

The system of Kashiwa includes one or more local cameras 1 and one or more common cameras 2, which can each include a control unit and transmission unit. (Ex.1007, Fig.36). In operation, common camera 2 may act as a recording device with components related to recording, such as an image capturing unit 31, a signal processing unit 32, and a recording playback unit 33. (Ex.1007, Fig.36, ¶0170; Ex.1003, ¶186). Common camera 2 also manages data collection by other recording device(s) with its ability to transmit the trigger signal to the local camera(s) and cause them to record. (Ex.1003, ¶187). For example, the common camera 2 transmits a trigger signal TG to the local camera 1, causing it to record. (Ex.1007, Fig.36, ¶¶0448-0449, 0491, 0493, 0495).

ii. Limitation 1[B] – "a controller including at least one receiver and at least one transmitter" (Ex.1001, Claim 1).

Kashiwa discloses that common camera 2 includes a common control unit 30 and a transmission unit 39. As shown in Fig. 36 (below with annotations), the common control unit 30 receives inputs (e.g., a first signal from shutter

- iii. Limitation 1[C] – "wherein said at least one receiver is operable to receive a first communication signal from a first recording device indicating the first recording device is recording an event" (Ex.1001, Claim 1).**

The term "operable to" is construed in Section VII(E) as: "capable of." The common control unit 30 is capable of receiving communication signal from a first recording device indicating that it is recording an event.

Kashiwa discloses that the common control unit 30 receives inputs (e.g., a signal from shutter switch 40). (Ex.1007, Fig.36, ¶0497; Ex.1003, ¶195). Shutter switch 40 is part of a first recording device that includes the image capturing unit 31, the signal processing unit 32, and the recording playback unit 33 with recording media 36. (Ex.1007, Fig.36, ¶¶0448-0449; Ex.1003, ¶195).

The term "recording device" is construed in Section VII(C) under 35 U.S.C. §112(f). Regarding both the function and corresponding structure of a first "recording device," the aforementioned components of Kashiwa provide the corresponding structure that performs the claimed function of "recording" image data. (Ex.1007, Fig.36, ¶¶0448-0449; Ex.1003, ¶¶194-199). If not identical to the cameras disclosed in the '452 Patent, the common camera 2 of Kashiwa is nevertheless an equivalent for performing the function of "recording" image data. (Ex.1003, ¶199). If the "first recording device" is not interpreted as a means-plus-

function claim element, the claimed recording device is nevertheless disclosed by common camera 2. (Ex.1003, ¶200).

Regarding the other requirements of limitation 1[C], the common control unit 30 receives a signal from the shutter switch 40 indicating that the first recording device is recording an event. (Ex.1007, Figs.36-37 (step F421), ¶0497; Ex.1003, ¶201). (The description of Figs. 42-43 also indicates that video switch 43 can be activated by a user to start recording video in common camera 2, and that shutter switch 40 can be activated after common camera 2 has begun recording.) (Ex.1007, ¶¶0548-0550, 0556-0557; Ex.1003, ¶196).

- iv. **Limitation 1[D] – "wherein said at least one transmitter is operable to broadcast a second communication signal to at least a second recording device instructing the second recording device to begin recording the event" (Ex.1001, Claim 1).**

The term "operable to" is construed in Section VII(E) as "capable of," and the term "broadcast" is construed in Section VII(A) as "sending a transmission simultaneously to two or more synced recording devices."

Kashiwa discloses a transmission unit 39 that transmits output signals (e.g., trigger signal TG) to a second recording device in the form of local camera 1, causing the local camera 1 to begin recording the event. (Ex.1007, Fig.36, ¶¶0448, 0491, 0493, 0495; Ex.1003, ¶205).

The transmission unit 39 is capable of sending a transmission simultaneously to two or more synced recording devices, one of which may be the local camera 1. (Ex.1003, ¶211). Kashiwa discloses that the transmission unit 39 and antenna 35 wirelessly transmit data (e.g., trigger signal TG) to a device (local camera 1) under control of common control unit 30. (Ex.1007, ¶¶0448, 0454, 0491). Kashiwa also discloses that the local camera 1 is configured to receive the transmitted trigger signal. (Ex.1003, ¶212). Kashiwa further discloses a "system configuration" in which embodiments such as the "thirteenth embodiment" described with reference to Fig. 36 can be extended to more recording devices, with the common camera 2 (i.e., first recording device) transmitting a trigger signal to multiple local cameras (i.e., at least a second recording device). (Ex.1007, Fig.28, ¶¶0675-0677; Ex.1003, ¶211). Thus, Kashiwa teaches that a second communication signal (trigger signal TG) is broadcasted to at least the local camera (i.e., second recording device), which begins recording. (Ex.1003, ¶212).

The term "recording device" is construed in Section VII(C) under 35 U.S.C. §112(f). Regarding both the function and corresponding structure of the second "recording device," Kashiwa discloses a local camera 1 that functions to record image data using image capturing unit 13, an image-capturing signal processing unit 14, and a recording playback unit 15 with recording media 19. (Ex.1007, ¶0446, Fig.36). Thus, Kashiwa discloses the corresponding structure of a second

"recording device," that performs the claimed function of "recording" image data. (Ex.1007, Fig.36; Ex.1003, ¶¶204-208). If not identical to the cameras disclosed in the '452 Patent, the local camera 1 of Kashiwa is nevertheless an equivalent for performing the function of "recording" image data. (Ex.1003, ¶208). If the "second recording device" is not interpreted as a means-plus-function claim element, the claimed second recording device is nevertheless disclosed by local camera 1. (Ex.1003, ¶209).

- v. **Limitation 1[E] – "wherein the second recording device is distinct from the first recording device and records a distinct set of record data from the first recording device" (Ex.1001, Claim 1).**

As shown in Fig. 36 above, the local camera 1 and the common camera 2 are distinct. As such, the local camera 1 (i.e., second recording device) records a set of record data (e.g., image data) that is distinct from record data recorded by the common camera 2 (i.e., first recording device). (See also Ex.1007, Fig.4(a)-(b)).

- vi. **Limitation 1[F] – "wherein the second recording device is configured to be mounted on or configured to be carried by a law-enforcement officer" (Ex.1001, Claim 1).**

Fig. 1 of Kashiwa explicitly depicts cameras of various form factors, such as local cameras 1v, 1f, and 1s, that may be carried by a user, such as a law enforcement officer. For example, a local camera (i.e., second recording device) is

depicted as being held in a user's hand. (Ex.1007, Fig.1). The use of the term "law enforcement officer" in limitation 1[F] is clearly an intended use, and therefore, should not be afforded any patentable weight. (See Section VII(G)). No structural modifications would be needed to allow such handheld cameras to be carried by a law enforcement officer. (Ex.1003, ¶216).

- vii. Limitation 1[G] – "wherein the second communication signal is transmitted to the second recording device in response to the receiver receiving the first communication signal from the first recording device indicating the first recording device is recording, such that the recording device manager insures the first and second recording devices both record the event" (Ex.1001, Claim 1).**

Kashiwa discloses that the common control unit 30 controls recording of the event at the common camera 2. (Ex.1007, Fig.36, ¶0492). Kashiwa also discloses in Figs. 36 and 37 that, in response to the receiver (e.g., of the common control unit 30) receiving the shutter signal of the common camera 2, the transmission unit 39 automatically transmits trigger signal TG to the local camera 1. The signal TG causes the local camera 1 to record the event. (Ex.1007, Figs.36-37 (F321, F325, F422)).

Under the construction of what is necessary to "insure" advanced by the Patent Owner in the Kansas Litigation and applied here in this Petition, the recording device manager (e.g., common control unit 30 and transmission unit 39)

insure that both the first and second recording devices (common camera 2 and local camera 1, respectively) record data of the event. (Ex.1003, ¶220).

viii. Limitation 1[H] – "wherein the first recording device and the second recording device begin recording substantially simultaneously with the broadcast of the second communication signal" (Ex.1001, Claim 1).

Kashiwa discloses that when the shutter signal is detected at the common camera 2, indicating that the common camera 2 (i.e., first recording device) is recording, the common camera 2 automatically triggers, with the broadcast trigger signal TG, the local camera 1 to begin recording. (Ex.1007, Figs.36 (F421, F422) and 37 (F321, F325)). Kashiwa does not disclose any latency issues³ or delays during the triggering sequence of common camera 2 automatically triggering the activation of the local camera 1. As such, Kashiwa teaches that the common camera 2 (i.e., first recording device) recording and the local camera 1 (i.e., second

³ In the August 28, 2015 response to the Examiner during the '452 prosecution, the Applicant distinguished "the first recording device and the second recording device begin recording substantially simultaneously with the broadcast second communication signal" from the Kister reference by stating that "Kister describes the latency between the time a camera is triggered and recording begins ... [and] describ[es] this latency as a problem inherent in the art that Kister attempts to circumvent by triggering a camera before it detects motion. Thus, even assuming that a first camera in Kister's system triggered a second camera to start recording as soon as the first camera detected motion, the latency described above would mean that the cameras would not record 'substantially simultaneously.'" (Ex.1005, p.166).

recording device) recording should occur in the sequence that is claimed⁴ with no identified latencies or delays. (Ex.1003, ¶222).

ix. Limitation 1[I] – "wherein the recording device manager is incorporated into one of the first recording device and the second recording device." (Ex.1001, Claim 1).

Kashiwa discloses in Fig. 36 (above) that the recording device manager, which comprises the controller including the at least one receiver and the at least one receiver (e.g., common control unit 30 and transmission unit 39) is incorporated into the first recording device (common camera 2). (Ex.1007, Fig.36). Other embodiments of Kashiwa also include a similar "incorporated" arrangement. (Ex.1007, Figs.30, 33, 39, 42, 45, 54).

b. Dependent Claim 4 Is Obvious in View of Kashiwa.

Kashiwa renders obvious claim 4, which adds to claim 1 a requirement that "wherein the first recording device is configured to be mounted on or carried by the law enforcement officer." (Ex.1001, Claim 4). Fig. 1 of Kashiwa explicitly depicts cameras of various form factors, such as local cameras 1v, 1f, and 1s, that may be carried by a user, such as a law enforcement officer. (Ex.1007, Fig.1).

⁴ Given the causal flow of the claim, where the first device must begin recording in order to trigger the broadcast to the second device, true "simultaneous" activation of both of the recordings and the broadcast does not occur.

To the extent that Kashiwa does not explicitly disclose that the first recording device (common camera 2) is configured to be mounted on or carried by a user, such as a law-enforcement officer, modifying the common camera 2 of Kashiwa's system to be mounted on or carried by a user would have been obvious to a POSITA and would yield predictable results. (Ex.1003, ¶¶226-227). A handheld form factor for the first recording device would still allow the recording device manager to provide all of the claimed functionality without causing inoperability problems. (Ex.1003, ¶227).

The recording device manager incorporated into the common camera 2 is described elsewhere in Kashiwa as being incorporated into a local camera 1, which is depicted in Fig. 1 as being carried by a user. (Ex.1007, Figs.1, 5, 8, 11, 14, 17; Ex.1003, ¶227). Combining such embodiments found in a single prior art reference "does not require a leap of inventiveness." (See *Boston Scientific Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed.Cir.2009)). Indeed, modifying Kashiwa in this manner is nothing more than combining "prior art elements according to known methods to yield predictable results" and/or the "[u]se of known technique[s] to improve similar devices (methods, or products) in the same way." (See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417-22 (2007); MPEP §2143(I)). This is particularly the case where "[a] person of ordinary skill is also a person of ordinary creativity, not an automaton." *KSR*, 550 U.S. at 421.

Moreover, making an old device portable has been held to be not patentably distinctive, requiring only ordinary skill in the art, unless doing so provides new or unexpected results. (See MPEP §2144.04(V) (citing *In re Lindberg*, 194 F.2d 732, 93 U.S.P.Q. 23 (C.C.P.A.1952)). Nothing in the prosecution history indicates a new or unexpected result resulted from such an arrangement.

c. Dependent Claim 7 Is Obvious in View of Kashiwa.

Kashiwa renders obvious claim 7, which adds to claim 1 a requirement that "wherein the second communication signal further causes the second recording device to record a timestamp with the event." (Ex.1001, Claim 7). Kashiwa discloses that the second communication signal (e.g., trigger signal TG) further causes the second recording device (e.g., local camera 1), to record a timestamp with the event. (Ex.1003, ¶229). For example, the meta-data generating unit 21 generates metadata MTDL, which may include "point-in-time information" and which the local control unit 10 stores in recording media 19 to be associated with local image VL. (Ex.1007, Fig.36, ¶¶0495, 0509). Point-in-time information is a time stamp. (Ex.1003, ¶229).

d. Dependent Claim 8 Is Obvious in View of Kashiwa.

Kashiwa renders obvious claim 8, which adds to claim 1 a requirement that "wherein the timestamp is recorded as metadata for the event." (Ex.1001, Claim 8). Metadata has been construed in Section VII(F) as being data about a data

Case IPR_____

US Patent 9,253,452 B1

recording, including but not limited to a time stamp. Kashiwa teaches that metadata (e.g., MTDL) recorded for an event may include a timestamp. (Ex.1007, Fig.36, ¶¶0495, 0509; Ex.1003, ¶231).

IX. CONCLUSION.

In light of the above prior art and the information provided in this petition, there is a reasonable likelihood that Petitioner would prevail in its challenge of patentability of at least one of the claims challenged in the petition. It is therefore requested that a trial for *inter partes* review of the '452 Patent be instituted and claims 1, 3, 4, 7, and 8 be canceled as unpatentable.

Dated this 25th day of January, 2017.

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS PLLC

By: /Brandon C. Stallman/

Brandon C. Stallman, Reg. No. 46,468

1201 Third Avenue, Suite 3600

Seattle, WA 98101-2347

Telephone: 206.682.8100

Fax: 206.224.0779

E-mail: brandon.stallman@cojk.com,

litdoc@cojk.com

Attorneys for Petitioner

TASER International, Inc.

X. APPENDIX OF EXHIBITS.

- Ex.1001 U.S. Patent No. 9,253,452 B2 ('452 Patent)
- Ex.1002 U.S. Patent No. 8,781,292, with Reexamination Certificate ('292 Patent)
- Ex.1003 Declaration of Dr. Henry Houh
- Ex.1004 Curriculum Vitae of Dr. Henry Houh
- Ex.1005 Original File History of the '452 Patent
- Ex.1006 Raytheon JPS Communications Raytheon 20/20-W ("20/20-W Publication")
- Ex.1007 U.S. Patent Publication 2007/0274705 ("Kashiwa")
- Ex.1008 Original File History of the '292 Patent
- Ex.1009 Original File History of the '292 Patent Reexamination
- Ex.1010 U.S. Patent No. 8,805,431 ("Vasavada")
- Ex.1011 Plaintiff's Opening Brief in Support of Claim Construction
- Ex.1012 Defendant's Opening Brief in Support of Claim Construction
- Ex.1013 Plaintiff's Reply Brief in Support of Claim Construction
- Ex.1014 U.S. Patent Publication No. 2005/0083404 ("Pierce")
- Ex.1015 U.S. Patent No. 8,594,485 ("Brundula")
- Ex.1016 Affidavit of Christopher Butler of Internet Archive attesting to the public availability of the 20/20-W Publication on November 25, 2010
- Ex.1017 International Association of Chiefs of Police Digital Video System Minimum Specifications 11/21/2008.
- Ex.1018 U.S. Patent No. 8,446,469 ("Blanco")

Case IPR_____

US Patent 9,253,452 B1

- Ex.1019 Korean Patent Publication 1050897 ("Park"), with Certified Translation
- Ex.1020 U.S. Patent Publication 2005/0101334 ("Brown")
- Ex.1021 U.S. Patent No. 6,950,122 ("Mirabile")
- Ex.1022 PCT Publication WO 2004/036926 ("Pearlson")
- Ex.1023 US Patent Publication 2006/0274166 ("Lee")
- Ex.1024 Transmittal Sheet and Assignment of U.S. Application No. 10/926,721, to ICOP Digital
- Ex.1025 City of Pomona RFP for Mobile Video Recording System for Police Vehicles
- Ex.1026 U.S. Patent Publication 2009/0002491 to Haler ("Haler")
- Ex.1027 Defendant's Sur Reply on Claim Construction
- Ex.1028 Patent Owner's Claim Charting for the '452 Patent
- Ex.1029 Kustom Signals Inc. State of Utah Contract signed 4/27/10

XI. CERTIFICATE OF WORD COUNT.

Pursuant to 37 C.F.R. §42.24, the undersigned attorney for the Petitioner, TASER International, Inc. ("TASER"), declares that Sections I-III and IV(E)-IX of this Petition, exclusive of Mandatory Notices under 37 C.F.R. §42.8, Table of Contents, Certificate of Service, Certificate of Word Count, and Appendix of Exhibits, but inclusive of the footnotes 1, 2, 3 and 4 located on pages 37, 38, 50, and 51, respectively, has a total of 10,511 words, according to the word count tool in Microsoft Word™.

By: /Brandon C. Stallman/
Brandon C. Stallman, Reg. No. 46,468
Lead Counsel for Petitioner

Case IPR _____
US Patent 9,253,452 B1

XII. CERTIFICATE OF SERVICE.

Pursuant to 37 C.F.R. §§42.8(e) and 42.105(b), the undersigned hereby certifies that on January 25, 2017, a complete and entire copy of this Petition for *Inter Partes* Review, including Exhibits 1001-1029, has been served via U.S. Priority Mail Express upon the following Patent Owner of record by serving the correspondence address of record as follows:

Erise IP, P.A.
6201 College Boulevard
Suite 300
Overland Park, KS 66211

By: /Brandon C. Stallman/
Brandon C. Stallman, Reg. No. 46,468
Lead Counsel for Petitioner