

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UBER TECHNOLOGIES, INC.
Petitioner

v.

ENOVSY LLC
Patent Owner.

Case No. IPR2024-00827
U.S. Patent No. 6,756,918

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 6,756,918**

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. MANDATORY NOTICES UNDER 37 C.F.R. §42.8.....	2
III. FEE AUTHORIZATION	3
IV. GROUNDS FOR STANDING.....	3
V. PRECISE RELIEF REQUESTED	3
VI. THE CHALLENGED PATENT	5
A. Proximity Alert Claims	5
VII. PROSECUTION HISTORY OF THE '918 PATENT.....	6
VIII. LEVEL OF ORDINARY SKILL IN THE ART.....	6
IX. PRIORITY DATE	7
X. CLAIM CONSTRUCTION	7
A. Proposed Constructions.....	7
1. “means to obtain the location of the portable mobile remote unit” (Claim 1).....	7
2. “means to obtain geographic boundary information in order to disclose a global location at the network” (Claim 1)	8
3. “means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network” (Claim 1)	8
4. “means to determine and report to the system upon request that, another mobile remote unit of the network has tracked the portable mobile remote over a period of time” (Claim 1)	9
5. “means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network” (Claim 2).....	10
6. “means to request whether the at least second communication unit is tracking the at least first	

TABLE OF CONTENTS

(continued)

	Page
communication unit” (Claim 22)	10
7. “means to determine from said location provided (ii) that the at least first and second communication unit maintained proximity while in motion during said time” (Claim 22)	11
8. “means to provide result of the determination (iv) to the requestor of (iii)” (Claim 22)	12
XI. BRIEF DESCRIPTION OF THE APPLIED PRIOR ART	12
A. Layson’757 (Ex-1007)	12
B. Layson’213 (Ex-1008)	14
C. Wang (Ex-1009)	15
D. IllinoisLaw (Ex-1010)	16
E. Taylor (Ex-1011)	18
F. Fast (Ex-1012)	19
XII. DETAILED EXPLANATION OF THE UNPATENTABILITY GROUNDS	20
A. Ground 1: Claim 15 is rendered obvious by Layson’757-Layson’213	20
1. A POSITA would have been motivated to combine Layson’757-Layson’213 with a reasonable expectation of success	20
2. Independent Claim 15	24
a. Element 15[pre]: A method for determining that a first portable remote unit of a wireless consumer associated with a network is being tracked by at least a second portable remote unit that is in motion with the first portable remote unit over a tracking period comprising;	24

TABLE OF CONTENTS

(continued)

	Page
b. Element 15[A]: i) obtaining the location information of the first portable mobile remote unit, said location information provided at intervals during said tracking period; c. Element 15[B]: ii) obtaining the location information of the at least second portable communication unit that is within a specified geographic boundary of the first portable remote unit, said location information provided at intervals during said tracking period; d. Element 15[C]: iii) using the location obtained according to step (i) and (ii) to verify whether the first portable remote unit and second portable remote unit have maintained relative proximity during the tracking period; e. Element 15[D]: iv) forwarding the result of the verification to a network requestor at the end of the tracking period.....	27 29 36 38
B. Ground 2: Claims 1 and 22 are rendered obvious by Layson’757-Layson’213-IllinoisLaw 1. A POSITA would have been motivated to combine Layson’757-Layson’213-IllinoisLaw with a reasonable expectation of success..... 2. Independent Claim 1 a. Element 1[pre]: A communication system comprising: b. Element 1[A]: a portable mobile remote unit;..... c. Element 1[B]: a network of communication units; d. Element 1[C]: means to obtain the location of the portable mobile remote unit;.....	40 40 42 42 43 43 45

TABLE OF CONTENTS

(continued)

	Page
e. Element 1[D]: means to obtain geographic boundary information in order to disclose a global location at the network;	47
f. Element 1[E]: means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network;	49
g. Element 1[F]: means to determine and report to the system upon request that, another mobile remote unit of the network has tracked the portable mobile remote unit over a period of time.	51
3. Independent Claim 22	54
a. Element 22[pre]: A communication system comprising:	54
b. Element 22[A]: (i) a network of communication units;.....	54
c. Element 22[B]: (ii) at least a first communication unit and at least a second communication unit able to provide location information to the network for a time while in motion;.....	54
d. Element 22[C]: (iii) means to request whether the at least second communication unit is tracking the at least first communication unit;	55
e. Element 22[D]: (iv) means to determine from said location provided (ii) that the at least first and second communication unit maintained proximity while in motion during said time;.....	57
f. Element 22[E]: (v) means to provide result of the determination (iv) to the requestor of (iii).	60
C. Ground 3: Claim 2 is obvious over Layson’757-Layson’213-IllinoisLaw-Wang.....	61

TABLE OF CONTENTS

(continued)

	Page
1. A POSITA would have been motivated to combine Layson'757-Layson'213-IllinoisLaw-Wang and had a reasonable expectation of success.....	61
2. Dependent Claim 2: The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.....	64
D. Ground 4: Claim 15 is rendered obvious by Taylor-Fast.....	66
1. A POSITA would have been motivated to combine Taylor-Fast with a reasonable expectation of success.....	66
2. Independent Claim 15	69
a. Element 15[pre]:	69
b. Element 15[A]:	71
c. Element 15[B]:	73
d. Element 15[C]:	77
e. Element 15[D]:	78
E. Ground 5: Claims 1, 2, and 22 are obvious over Taylor-Fast-IllinoisLaw.....	79
1. A POSITA would have been motivated to combine Taylor-Fast-IllinoisLaw with a reasonable expectation of success.....	79
2. Independent Claim 1	81
a. Element 1[pre]:	81
b. Element 1[A]:	82
c. Element 1[B]:	82
d. Element 1[C]:	83
e. Element 1[D]:	85
f. Element 1[E]:	85

TABLE OF CONTENTS
(continued)

	Page
g. Element 1[F]:.....	86
3. Dependent Claim 2.....	89
a. Claim 2:	89
4. Independent Claim 22	90
a. Element 22[pre]:	90
b. Element 22[A]:	91
c. Element 22[B]:.....	91
d. Element 22[C]:.....	91
e. Element 22[D]:	92
f. Element 22[E]:.....	92
XIII. THE BOARD SHOULD NOT USE ITS DISCRETION TO DENY INSTITUTION UNDER <i>FINTIV</i>	92
XIV. CONCLUSION.....	93

LIST OF EXHIBITS¹

Ex-1001	U.S. Patent No. 6,756,918
Ex-1002	Declaration of Mr. Scott Andrews
Ex-1003	Curriculum Vitae of Mr. Scott Andrews
Ex-1004	File History of U.S. Patent No. 6,441,752
Ex-1005	File History of U.S. Patent No. 6,756,918
Ex-1006	File History of U.S. Patent No. 7,199,726
Ex-1007	U.S. Patent No. 5,731,757 (“Layson’757”)
Ex-1008	U.S. Patent No. 6,405,213 (“Layson’213”)
Ex-1009	U.S. Patent No. 5,365,451 (“Wang”)
Ex-1010	720 Ill. Comp. Stat. Ann. 5/12-7.3, as amended by 1995 Ill. Legis. Serv. P.A. 89-377 (H.B. 1792), eff. Aug. 18, 1995 (“IllinoisLaw”)
Ex-1011	U.S. Patent No. 6,160,481 (“Taylor”)
Ex-1012	U.S. Patent No. 5,497,149 (“Fast”)
Ex-1013	U.S. Patent No. 6,212,393 (“Suarez”)
Ex-1014	U.S. Patent No. 5,532,702 (“Mintz”)
Ex-1015	U.S. Patent No. 5,493,694 (“Vlcek”)
Ex-1016	U.S. Patent No. 3,663,762 (“Joel”)
Ex-1017	Australian Patent App. No. 200037767 (“Mezhvinsky”)
Ex-1018	Certified Translation of German Patent Application Publication DE 19751741A1 (“Heedfeld”)

¹ Four-digit pin citations that begin with 0 are to the branded numbers added by Petitioner in the bottom right corner of the exhibits. All other pin citations are to original page, column, paragraph, or line numbers.

Ex-1019	German Patent Application Publication DE 19751741A1
Ex-1020	Claim Mapping Table
Ex-1021	U.S. Patent No. 4,242,538 (“Ito”)
Ex-1022	U.S. Patent No. 5,736,962 (“Tendler”)
Ex-1023	U.S. Patent No. 6,133,853 (“Obradovich”)
Ex-1024	U.S. Patent Application Publication No. 2002/0034292 (“Tuoriniemi”)
Ex-1025	U.S. Patent No. 6,968,179 (“De Vries”)
Ex-1026	U.S. Patent No. 5,904,727 (“Prabhakaran”)
Ex-1027	Enovsys Infringement Contentions
Ex-1028	INTENTIONALLY LEFT BLANK
Ex-1029	Yilin Zhao, <i>Vehicle Location and Navigation Systems</i> , Artech House Publishers (1st ed. 1997)
Ex-1030	U.S. Patent No. 6,901,260 (“Xin”)
Ex-1031	U.S. Patent No. 5,592,173 (“Lau”).
Ex-1032	U.S. Patent No. 6,748,224 (“Chen”)
Ex-1033	U.S. Patent No. 5,208,756 (“Song”)
Ex-1034	Joseph Hoshen, et al., <i>Wide Area Continuous Offender Monitoring</i> , Lucent Technologies, New Mexico Corrections Dept., Sandia National Laboratories (1996)
Ex-1035	U.S. Patent No. 5,461,390 (“Hoshen”)
Ex-1036	Soumia Ichoua, et al., <i>Diversion Issues in Real-Time Vehicle Dispatching</i> , <i>Transportation Science</i> , INFORMS (2000)
Ex-1037	Rebecca K. Lee, <i>Romantic and Electronic Stalking in a College Context</i> , 4 Wm. & Mary J. Women & L. 373-466 (1998) (“Lee”)
Ex-1038	U.S. Patent No. 5,982,281 (“Layson’281”)

Ex-1039	J. Hoshen and G. Drake, <i>Offender Wide Area Continuous Electronic Monitoring Systems: Project Summary</i> , National Institute of Justice, report NCJ 187102 (2000)
Ex-1040	<i>Project To Develop a Model Anti-Stalking Code for States</i> , National Criminal Justice Association, National Institute of Justice, report NCJ 144477 (Oct. 1993)
Ex-1041	U.S. Patent No. 5,266,944 (“Carroll”)
Ex-1042	International Patent Pub. No. WO 96/20464 (“Green”)
Ex-1043	U.S. Patent No. 6,072,396 (“Gaukel”)
Ex-1044	J. Travis, <i>Stalking: Lessons from Recent Research</i> , National Center for Women and Policing Conference (Apr. 14, 1999)
Ex-1045	<i>Domestic Violence, Stalking, and Antistalking Legislation – An Annual Report to Congress under the Violence Against Women Act</i> , National Institute of Justice Research Report (Apr. 1996)
Ex-1046	Emily Spence-Diehl, <i>Stalking – A Handbook for Victims</i> , Learning Publications, Inc. (1999)
Ex-1047	<i>The Crime of Stalking: How Big Is the Problem?</i> , National Institute of Justice Research Preview (Nov. 1997)
Ex-1048	Brian E. McGuire & Anita E. Wraith, <i>Legal and Psychological Aspects of Stalking: A Review</i> , The Journal of Forensic Psychiatry, Vol. 11, No. 2 (Sept. 2000)
Ex-1049	David D. Clark, Kenneth T. Pograd, and David P. Reed, <i>An Introduction to Local Area Networks</i> , Proceedings of the IEEE, Vol. 66, No. 11 (Nov. 1978)
Ex-1050	Ivan Pepelnjak and Jim Guichard, <i>MPLS and VPN Architectures – A practical guide to understanding, designing and deploying MPLS and MPLS-enabled VPNs</i> , Cisco Press (2001)
Ex-1051	Excerpts from C. J. Date, <i>An Introduction to Database Systems</i> , The Systems Programming Series, Addison-Wesley Publishing Co., (6th ed. 1995)

Ex-1052	Excerpts from Elmasri Navathe, <i>Fundamentals of Database Systems</i> , Addison-Wesley (3rd ed. 2000)
Ex-1053	John J. Moslow, <i>False Alarms: Cause for Alarm</i> , 63 FBI Law Enforcement Bulletin 63, No. 11 (Nov. 1994)
Ex-1054	J. Reid Meloy, <i>Stalking (Obsessional Following): A Review of Some Preliminary Studies</i> , Aggression and Violent Behavior, Vol. 1, No. 2, pp. 147-162 (1996)
Ex-1055	Paul E. Mullen et al., <i>Study of Stalkers</i> , Am. J. Psychiatry 156:8 (Aug. 1999)

I. INTRODUCTION

Uber Technologies, Inc. (“Petitioner”) requests *inter partes* review (“IPR”) of Claims 1-2, 15, and 22 of U.S. Patent No. 6,756,918 (“the ’918 Patent”) (Ex-1001), currently assigned to Enovsys LLC (“PO”).

The ’918 Patent discloses a communication system consisting of mobile units capable of location disclosure, and claims two embodiments with different applications. All of the challenged claims—Claims 1-2, 15, and 22 (the “Proximity Alert Claims”)—are directed to the first embodiment—a “tracking mode,” where a wireless consumer is alerted to the presence of one or more mobile units maintaining relative proximity to the consumer. Claim 15, for example, recites requesting that mobile devices in proximity to a wireless consumer disclose their location. Those disclosed locations are used to identify devices that have maintained proximity to the wireless consumer over time. The prior art teaches comparable victim-offender tracking systems that use disclosed locations to report when an offender’s device is in violation of a buffer zone around the victim’s device for a “loiter time”, such violation is reported. The prior art, which was not considered during prosecution, thus renders the challenged Proximity Alert Claims unpatentable.

These grounds are more than reasonably likely to prevail, and this Petition should be granted.

II. MANDATORY NOTICES UNDER 37 C.F.R. §42.8

Real Parties-in-Interest: Petitioner identifies the following real parties-in-interest: Uber Technologies, Inc.

Related Matters: A decision in this proceeding could affect or be affected by the following: (1) *Enovsys LLC v. Uber Technologies, Inc. d/b/a Uber*, 5:23-cv-04549 (N.D. Cal.); and (2) *Enovsys LLC v. Lyft, Inc.*, 5:23-cv-05157 (N.D. Cal.).

Lead and Back-Up Counsel:

- Lead Counsel:

William M. Fink (Reg. No. 72,332)
O'Melveny & Myers LLP
1625 Eye Street, NW
Washington, DC 20006
Telephone: (202) 383-5300
Fax: (202) 383-5414
E-Mail: tfink@omm.com

- Backup Counsel:

Ben Haber (Reg. No. 67,129)
O'Melveny & Myers LLP
400 South Hope Street, 18th Floor
Los Angeles, CA 90071
Telephone: (213) 430-6000
Fax: (213) 430-6407
E-Mail: bhaber@omm.com

Frances Mackay (*pro hac vice* anticipated)
O'Melveny & Myers LLP
2801 North Harwood Street, Suite 1600
Dallas, TX 75201-2692
Telephone: (972) 360-1900
Fax: (972) 360-1901

E-Mail: fmackay@omm.com

Argirenia Zervos (*pro hac vice* anticipated)
O'Melveny & Myers LLP
1625 Eye Street, NW
Washington, DC 20006
Telephone: (202) 383-5300
Fax: (202) 383-5414
E-Mail: rzervos@omm.com

Service Information: Petitioner consents to electronic service by email to

the following addresses:

- tfink@omm.com
- bhaber@omm.com
- fmackay@omm.com
- rzervos@omm.com

III. FEE AUTHORIZATION

Pursuant to 37 C.F.R. §42.15(a) and §42.103(a), the PTO is authorized to charge any and all fees to Deposit Account No. 50-0639.

IV. GROUNDS FOR STANDING

Petitioner certifies that the '918 Patent is available for review, this Petition is timely filed, and Petitioner is not barred or estopped from requesting review.

V. PRECISE RELIEF REQUESTED

Petitioner requests review and cancellation of Claims 1-2, 15, and 22 as unpatentable based on the following grounds, supported by a declaration from Mr. Scott Andrews. Ex-1002 ¶¶28-364.

Ground	Summary of Grounds for the Proximity Alert Claims
1	Claim 15 is obvious over U.S. Patent No. 5,731,757 (“Layson’757,” Ex-1007) in view of U.S. Patent No. 6,405,213 (“Layson’213,” Ex-1008)
2	Claims 1 and 22 are obvious over Layson’757 in view of Layson’213 in further view of 720 Ill. Comp. Stat. Ann. 5/12-7.3, as amended by 1995 Ill. Legis. Serv. P.A. 89-377 (H.B. 1792), eff. Aug. 18, 1995 (“IllinoisLaw,” Ex-1010)
3	Claim 2 is obvious over Layson’757 in view of Layson’213 and IllinoisLaw, in further view of U.S. Patent No. 5,365,451 (“Wang”)
4	Claim 15 is obvious over U.S. Patent No. 6,160,481 (“Taylor,” Ex-1011) in view of U.S. Patent No. 5,497,149 (“Fast,” Ex-1012)
5	Claims 1, 2, and 22 are obvious over Taylor in view of Fast in further view of IllinoisLaw

For the Board’s convenience, Petitioner notes the close relationship between the two claim types and the grounds of unpatentability across Patent Owner’s three patents, including the ’918 Patent challenged here:

Claim Types	’752 Patent	’918 Patent	’726 Patent	Grounds
Proximity Alert Claims (8 unique claims) ²	1	15		Layson’757-Layson’213
	4			Layson’757-Layson’213-Wang
	9, 14	1, 22	1	Layson’757-Layson’213-IllinoisLaw
	15	2	2	Layson’757-Layson’213-IllinoisLaw-Wang

² Claim 14 of the ’752 Patent recites the exact same limitations as Claim 1 of the U.S. Patent No. 6,756,918 (“’918”). Claim 15 of the ’752 Patent recites the same

		15		Taylor-Fast
		1, 2, 22		Taylor-Fast-IllinoisLaw
Geographic Boundary Claims (4 claims)			12, 13	Suarez
			8	Suarez-Mezhvinsky
	6			Suarez-Mintz
			8, 12, 13	Heedfeld

VI. THE CHALLENGED PATENT

A. Proximity Alert Claims

Claims 1-2, 15, and 22 of the '918 Patent are directed to a “tracking mode” (Ex-1001, 5:37-42) for determining if a user is being tracked by any other mobile unit (Ex-1001, 3:40-42 (same)). As the user’s mobile unit is moving, either that unit itself, or the control station (on behalf of the unit), requests that other mobile units in proximity to the user’s unit disclose their location. Ex-1001, 5:59-63. In one example, a list is maintained of the mobile units that disclosed their locations, and “[a]t the end of the tracking period, if there are any units in the tracking list and [a] minimum tracking distance was covered, such communication units are deemed to be tracking [the user] and are reported to the [user].” Ex-1001, 6:8-11.

limitations as Claim 2 of the '918 Patent and U.S. Patent No. 7,199,726 (“’726”). Claim 1 of the '918 and the '726 Patents use slightly different language to describe substantially the same invention. *See* Ex-1020.

VII. PROSECUTION HISTORY OF THE '918 PATENT

The '918 Patent's file history (Ex-1005) is unremarkable. The application leading to the '918 Patent was filed on July 19, 2002, as a continuation-in-part of App. No. 09/753,178, filed on December 30, 2000 and issued as the '752 Patent. Ex-1001, Cover. The examiner rejected challenged Claims 1-2, 15, and 22 under the nonstatutory double patenting doctrine over claims of the '752 Patent. Ex-1005, 0240-0247. The applicant submitted amendments and a terminal disclaimer (Ex-1005, 0112, 0191-0215), and the examiner issued a notice of allowance on April 16, 2004. Ex-1005, 0228. The '918 Patent issued on June 29, 2004.

VIII. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art at the relevant time ("POSITA") would have had a bachelor's degree in electrical engineering, computer engineering, computer science, or a related field, and at least two years of experience in the research, design, development, and/or testing of GPS and related location tracking techniques, or the equivalent, with additional education substituting for experience and vice versa. Ex-1002 ¶¶25. Mr. Andrews meets or exceeds this level of skill, and provides additional discussion of relevant technical background knowledge that a POSITA would have had at the time of invention. Ex 1002 ¶¶54-117.

IX. PRIORITY DATE

The earliest possible priority for the '918 Patent is December 30, 2000. Petitioner takes no position on the proper priority date for each claim of the '918 Patent. Assuming this earliest date, all prior art references asserted herein are prior art.

X. CLAIM CONSTRUCTION

Petitioner interprets the claims of the '918 Patent according to the *Phillips* standard. 37 C.F.R. §42.100(b). Claims 1, 2, and 22 recite elements that use the word “means,” creating a rebuttable presumption that they are means-plus-function elements under 35 U.S.C. § 112, ¶6. For the purposes of this Petition and pursuant to 37 C.F.R. § 42.104(b)(3), Petitioner’s proposed constructions for these terms are below.³ Petitioner does not currently believe that any other terms require express construction. Consolidated Trial Practice Guide (“CTPG”) 44.

A. Proposed Constructions

1. “means to obtain the location of the portable mobile remote unit” (Claim 1)

Function: “to obtain the location of the portable mobile remote unit.”

³ For each means-plus-function term below, Petitioner has identified structure in the '918 Patent that corresponds to the recited function, including as Patent Owner appears to apply those terms in its infringement contentions. But by doing so, Petitioner does not intend to, and does not, waive any argument about the sufficiency of the identified structure in performing the claimed function.

Structure: “an antenna 20 and a transceiver circuitry 21” (Ex-1001, 4:62-65) configured to receive signals (*id.*, 4:55-58), together with a “control unit” (*id.*, 4:65-5:1) programmed to use such signals to determine location (*id.*, 5:11-16), and equivalents thereof.

2. “means to obtain geographic boundary information in order to disclose a global location at the network” (Claim 1)

Function: “to obtain geographic boundary information in order to disclose a global location at the network.”

Structure: “an antenna 20 and a transceiver circuitry 21” (Ex-1001, 4:62-65) configured to receive signals that include geographic boundary information (*id.*, 5:51-55) and to transmit location information (*id.*, 5:11-16), and equivalents thereof.

3. “means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network” (Claim 1)

Function: “to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network.”

Structure: “an antenna 20 and a transceiver circuitry 21” (*id.*, 4:37-45) configured to transmit location information (*id.*, 4:53-58), together with a “control unit” (*id.*, 4:43-46) programmed to determine that the unit is within the geographic boundary (*id.*, 5:38-39), and equivalents thereof.

4. “means to determine and report to the system upon request that, another mobile remote unit of the network has tracked the portable mobile remote over a period of time” (Claim 1)

Function: “to determine and report to the system upon request that, another mobile remote unit of the network has tracked the portable mobile remote over a period of time.”

Structure: a control unit (*id.*, 4:38-40) programmed to: (1) receive, at intervals, the location of the “tracked” mobile unit (*id.*, *id.*, 5:48-51, 5:59-63, 6:1-2, Fig. 5-step 3), (2) receive the locations of “other” mobile units, during such intervals (*id.*, 5:51-55, 5:59-63, Fig. 5-step 4), (3) maintain a list of such “other” units within a predefined geographic boundary of the “tracked” unit for a period of time as the tracked unit and such “other” units have moved a minimum distance⁴ (*id.*, 5:37-42, 6:58-64, Fig. 5-step 7, Fig. 5-step 10), together with a transmitter (*id.*, 4:40-43) configured to transmit a message identifying such “other” unit(s) (*id.*, 5:37-42), and equivalents thereof. The control unit may be within the tracked mobile unit or a network control center. Ex-1001, 5:44-48, 6:48-56 (similar).

⁴ See n.5, below.

5. “means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network” (Claim 2)

Function: “to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.”

Structure: a control unit (*id.*, 5:1-4) programmed to (1) compare its current location to an exclusion zone (*id.*, Figure 6, step 4); (2) if its current location is within the exclusion zone, abort (*id.*, Figure 6, step 5); (3) otherwise, proceed to provide its current location to the network (*id.*, Figure 6, step 7), and equivalents thereof.

6. “means to request whether the at least second communication unit is tracking the at least first communication unit” (Claim 22)

Function: “to request whether the at least second communication unit is tracking the at least first communication unit.”

Structure: either “antenna 20 and transceiver circuitry 21” (Ex-1001, 4:62-65) configured to transmit tracking requests (Ex-1001, 5:44-48), or “input panel 25” configured “to take user instructions” (Ex-1001, 5:8-10) in the form of tracking requests (Ex-1001, 5:33-37), and equivalents thereof.

7. “means to determine from said location provided (ii) that the at least first and second communication unit maintained proximity while in motion during said time” (Claim 22)

Function: “to determine from said location provided (ii) that the at least first and second communication unit maintained proximity while in motion during said time.”

Structure: a control unit (Ex-1001, 4:38-40) programmed to: (1) receive, at intervals, the location of the at least first communication unit (*id.*, 5:48-51, 5:59-63, 6:1-2, Fig. 5-step 3), (2) receive the location of the at least second communication unit during such intervals (*id.*, 5:51-55, 5:59-63, Fig. 5-step 4), (3) maintain a list of second communication unit(s) within a predefined geographic boundary of the at least first communication unit for a period of time as the at least first communication unit and the at least second communication unit(s) have moved a minimum distance⁵ (*id.*, 5:37-42, 6:58-64, Fig. 5-step 7, Fig. 5-step 10), and equivalents thereof. The

⁵ This construction is consistent with Patent Owner’s apparent construction from its Infringement Contentions. Ex-1027. Petitioner adopts and applies this construction for purposes of this petition, as the parties have not yet submitted claim construction contentions in district court. To the extent that the parties or Court addresses this term or others, Petitioner will submit such information for the record. 37 C.F.R. §42.100(b). Additionally, to the extent that Patent Owner or the Board adopts a construction that does not require a “minimum distance” as part of the algorithm that performs the recited function, then Claims 1, 2, and 22 are rendered obvious by the Layson’757-Layson’213 combination and the Taylor-Fast combination without the need to rely on IllinoisLaw, as explained in further detail in the Grounds below.

control unit may be within the “another portable mobile remote unit” or a network control center. Ex-1001, 5:44-48, 6:48-56 (similar).

8. “means to provide result of the determination (iv) to the requestor of (iii)” (Claim 22)

Function: “to provide result of the determination (iv) to the requestor of (iii).”

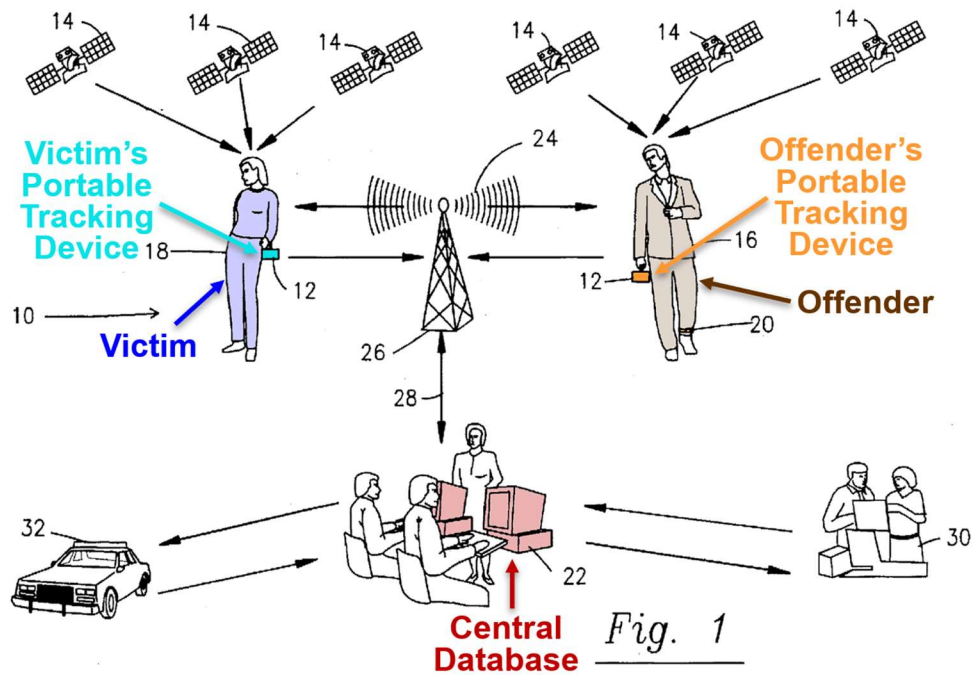
Structure: either a transmitter configured to transmit the result of the determination to a device belonging to the requestor (Ex-1001, 6:53-56), or “display 23” (Ex-1001, 5:9-10) configured to display the result of the determination to the requestor (Ex-1001, 5:37-41), and equivalents thereof.

XI. BRIEF DESCRIPTION OF THE APPLIED PRIOR ART

A. Layson’757 (Ex-1007)

Layson’757, titled “Portable Tracking Apparatus For Continuous Position Determination of Criminal Offenders and Victims,” is U.S. Patent No. 5,731,757, issued on March 24, 1998. Ex-1002 ¶¶127-131. Layson’757 is prior art under at least pre-AIA 35 U.S.C. §102(b), based on its issue date.

Layson’757 teaches dynamic tracking of offenders and victims (“subjects”), by assigning a portable tracking device to each, as illustrated in annotated Figure 1, below. Ex-1007, 2:46-58.

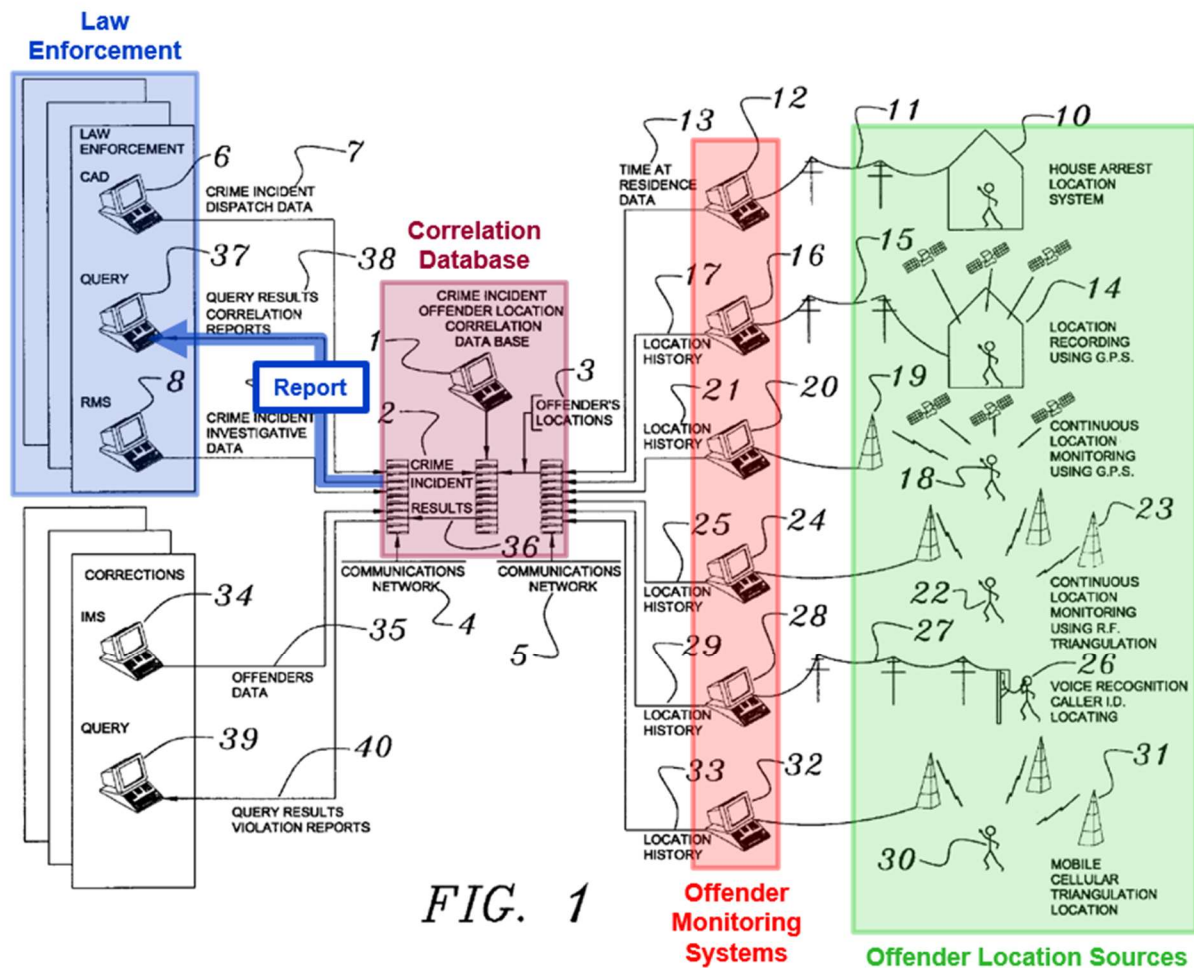


Layson'757's "location constraints" define "buffer zones" around locations meant to exclude a subject (Ex-1007, 8:36-43), sent from a central database to the subjects' tracking devices for continual processing. Ex-1007, 9:41-50. Using these location constraints, an offender tracking device is able to determine locally when it is in violation of a victim's buffer zone, and notify the central database immediately of such violation. *Id.*, 9:48-50. When the central database is aware of a potential "stalker-victim encounter[]," Layson'757 also discloses querying the offender and victim portable tracking devices for their locations, as part of "data fusion processing." *Id.*, 7:42-55.

B. Layson'213 (Ex-1008)

Layson'213, titled "System to Correlate Crime Incidents With a Subject's Location Using Crime Incident Data and a Subject Location Recording Device," is U.S. Patent No. 6,405,213, filed June 11, 1999, and issued June 11, 2002. Ex-1002 ¶¶131-137. Layson'213 is prior art under at least pre-AIA 35 U.S.C. §102(e), based on its filing date.

Layson'213 teaches a "crime incident/offender location correlation system," as illustrated in annotated Figure 1, below. Ex-1008, 8:28-32.



Layson'213's system receives offender location data from one or more monitoring systems (Ex-1008, 8:28-32), and analyzes that data to generate reports for law enforcement (*id.*, 10:12-23). For instance, Layson'213's system may be used to generate reports of "exclusion zone violations," corresponding to instances in which an offender is located in a prohibited area. *Id.*, 23:9-38. Layson'213 explains that such exclusion zone violations are reported when the offender remains in the exclusion zone for a "loiter time," "since passing through an exclusion zone is permitted but loitering is not (i.e. pedophile driving by a school on the way to work)." *Id.*, 23:33-38.

C. Wang (Ex-1009)

Wang, titled "Mobile Unit Tracking System," is U.S. Patent No. 5,365,451, issued November 15, 1994. Ex-1002 ¶¶138-140. Wang is prior art under at least per-AIA 35 U.S.C. §102(b), based on its issue date.

Wang teaches a tracking system in which mobile units obtain their locations using GPS, and communicate those locations to a network. Ex-1009, 3:50-53. In order to conserve "communication resources" and prevent "excessive use" of battery power (Ex-1009, 1:38-52), Wang's network provides the mobile units with "borders" (Ex-1009, 3:50-56), each sized according to the network's desired location accuracy for the associated mobile unit (Ex-1009, 6:20-24), as illustrated in

annotated Figure 1, below. *See also* Ex-1009, 3:20-21 (border 22a), 3:25-27 (border 22b).

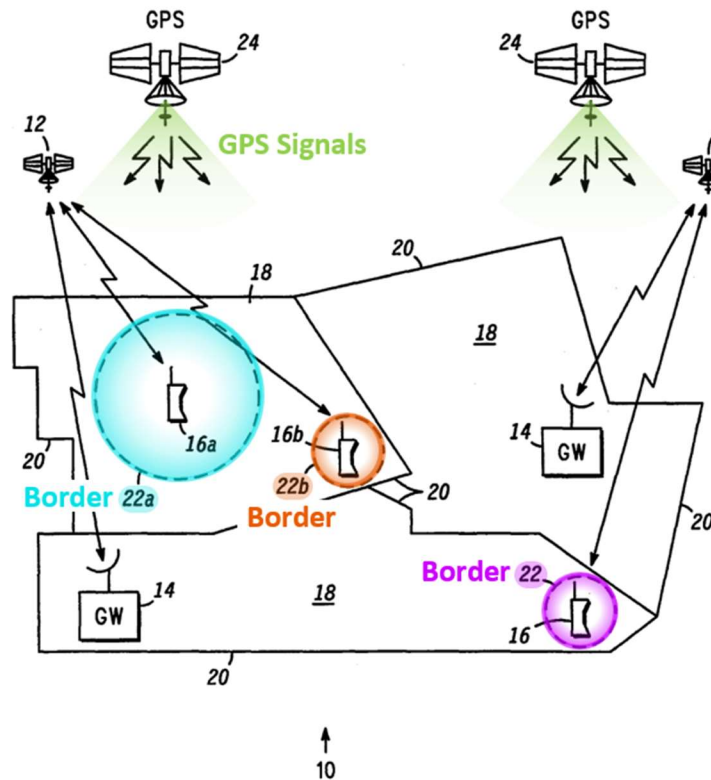


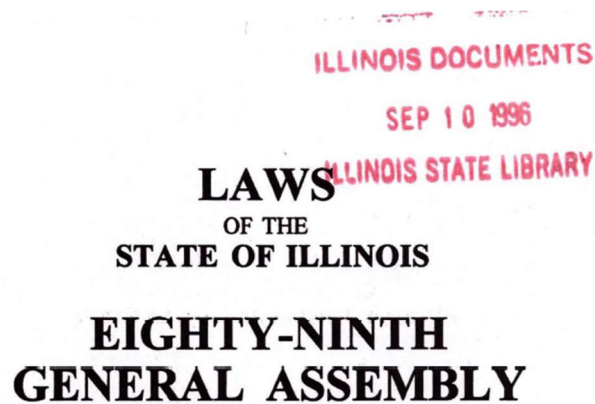
FIG. 1

When a mobile unit is located within its border, it does not need to transmit its location to the network. Ex-1009, 3:56-58. “However, when the mobile unit 16 goes outside the border 22, it sends a new location communication to network 10 and receives a new border definition in response.” Ex-1009, 3:58-61.

D. IllinoisLaw (Ex-1010)

IllinoisLaw, 720 Ill. Comp. Stat. 5/12-7.3, as amended by P.A. 89-377 (H.B. 1792), was passed in the Illinois General Assembly on May 26, 1995, and became

effective on August 18, 1995. Ex-1010, 0009-0023. IllinoisLaw was publicly available at least as of September 10, 1996. For example, Public Act 89-337 appears as pages 3920-3938 of the Laws of the State of Illinois, Eighty-Ninth General Assembly (1995), Public Act 89-1 Thru Public Act 89-443, which was received and shelved in the Illinois State Library in Springfield, Illinois, on September 10, 1996, as indicated by the stamp on the front cover of the publication:



1995

PUBLIC ACT 89-1
THRU
PUBLIC ACT 89-443



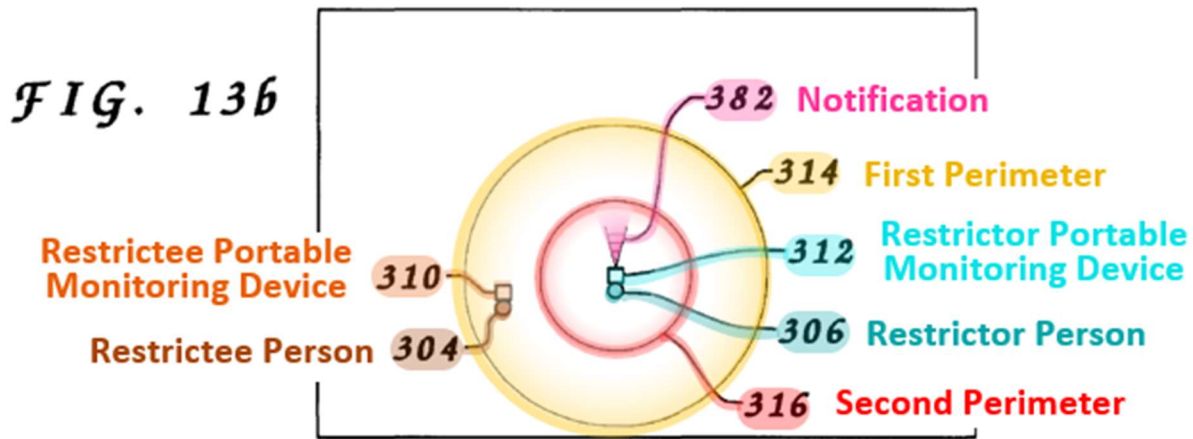
IllinoisLaw is thus prior art under pre-AIA 35 U.S.C. §102(b), based on when it published. Ex-1002 ¶¶141-143.

IllinoisLaw states that “[a] person commits stalking when he or she, knowingly and without lawful justification ... follows another person,” where “‘follows another person’ means (i) to move in relative proximity to a person as that person moves from place to place.” Ex-1010, 0009-0010.

E. Taylor (Ex-1011)

Taylor, titled “Monitoring System,” is U.S. Patent No. 6,160,481, filed on January 12, 1999, and issued on December 12, 2000. Ex-1002 ¶¶144-147. Taylor is prior art under at least pre-AIA 35 U.S.C. §102(e), based on its filing date.

Taylor teaches a “dual tracking system” for monitoring the position of a “restrictor” person (e.g., a victim) relative to one or more “restrictree” persons (e.g., a stalker against whom the victim has a restraining order). Ex-1011, 19:61-20:12. Each monitored person is assigned a portable tracking device (*id.*, 20:58-62) that communicates the person’s position to a central location (*id.*, 18:62-64). One or more perimeters are defined around the restrictor person, and used to notify the restrictor person and/or “an oversight authority” of a nearby restrictree person, as illustrated in annotated Figure 13b, below. *Id.*, 20:13-20.



For instance, in response to restrictee person 304 entering first perimeter 314 around restrictor person 306, notification 382 is sent, advising the restrictor person “of the position of the restrictee person relative to the restrictor person.” *Id.*, 20:16-29.

F. Fast (Ex-1012)

Fast, titled “Global Security System,” is U.S. Patent No. 5,497,149, issued on March 5, 1996. Ex-1002 ¶¶148-150. Fast is prior art under at least pre-AIA 35 U.S.C. §102(b), based on its issue date.

Fast teaches a system that may be used to enforce a restraining order held by a “threatened person” against a “threatening person.” Ex-1012, 7:50-8:7. Each person is assigned a “beacon,” which is programmed to periodically “phone” the other beacon and request its position. *Id.*, 7:62-67. If the beacons are “too close together,” a warning message is first sent. *Id.*, 7:67-8:3. Then, “[i]f greater separation

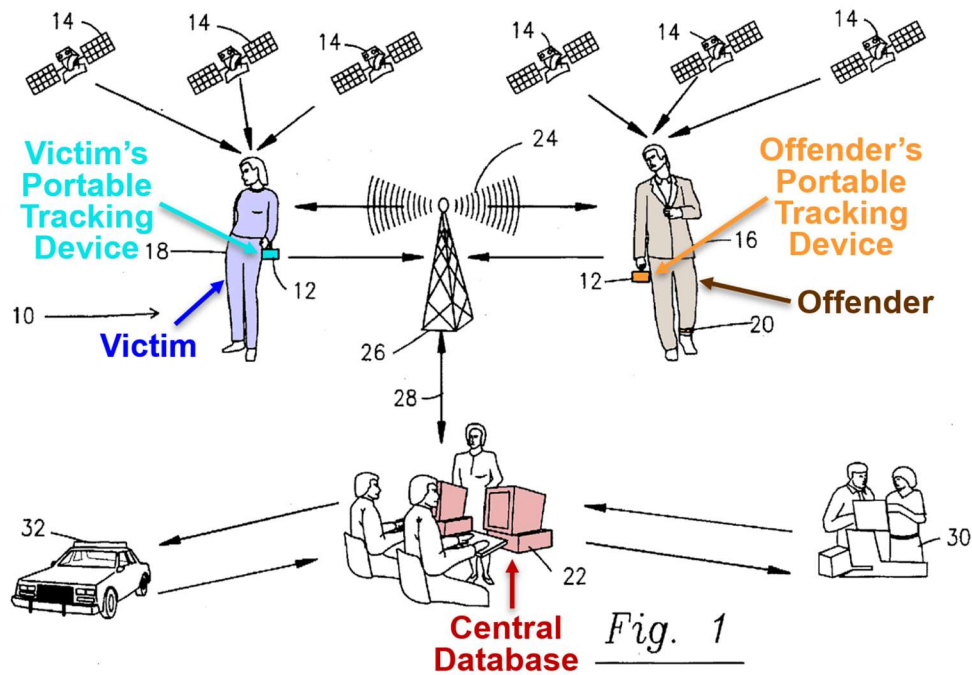
distance [is] not provided within a predetermined time limit,” the supervising authority is contacted. *Id.*, 8:3-7.

XII. DETAILED EXPLANATION OF THE UNPATENTABILITY GROUNDS

A. Ground 1: Claim 15 is rendered obvious by Layson’757-Layson’213

1. A POSITA would have been motivated to combine Layson’757-Layson’213 with a reasonable expectation of success

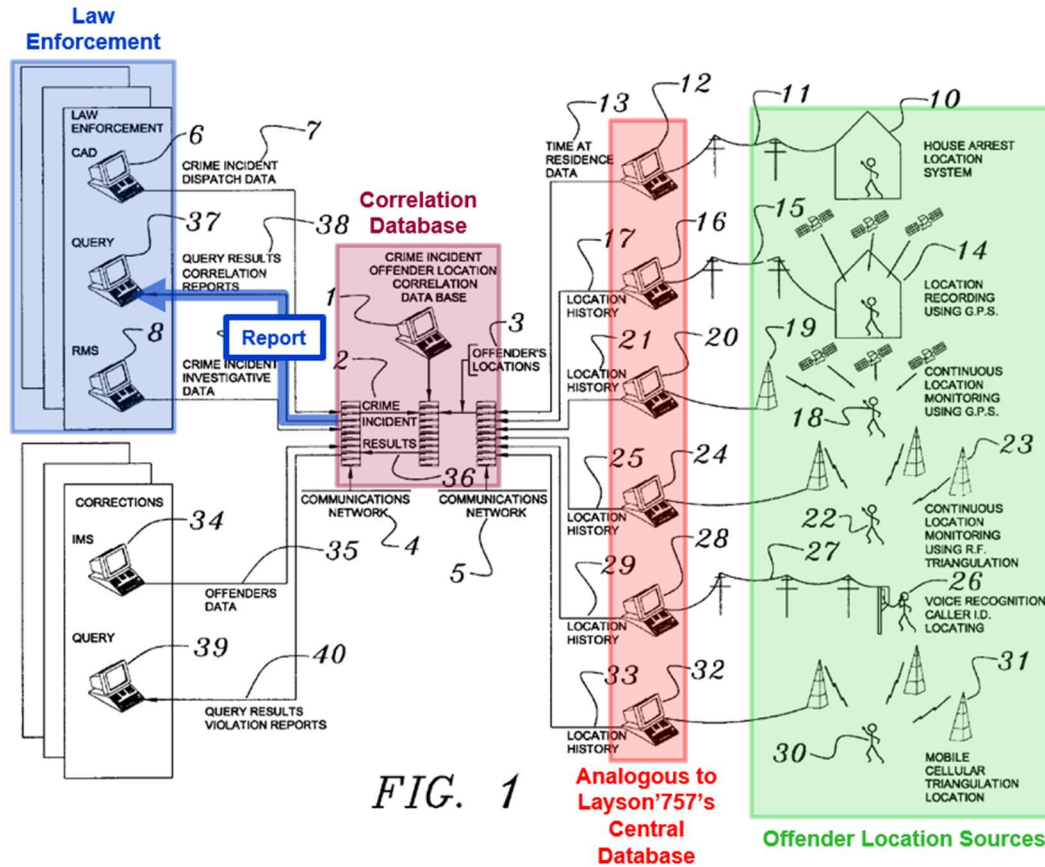
Layson’757 discloses “a portable locator or tracking apparatus ... for continuous location determination of subjects.” Ex-1007, Abstract; Ex-1002 ¶¶152-160. Specifically, Layson’757 teaches tracking offenders 16 and corresponding victims 18, by assigning a portable tracking device 12 to each, as illustrated in annotated Figure 1, below. Ex-1007, 2:46-49. These devices communicate with other networked devices, such as “central data-base system 22” (*id.*, 3:9-12), “to provide advance offender violation warning for victims beyond the confines of the victim’s home.” Ex-1007, 1:13-15.



As Layson'757 explains, each portable tracking device receives, from the central database, "schedule rules and location constraints," against which it compares its location. Ex-1007, 3:9-13, 7:3-5 (same). If the location is in violation of those rules/constraints (e.g., if offender 16 is located within a "buffer area" around victim 18), the device notifies the central database of the violation. *Id.*, 9:41-50. Otherwise, the device stores its current location for upload to the central database at the next scheduled time. *Id.*, 7:5-10.

Layson'213 describes how a "correlation database" receives offender location data (Ex-1008, 8:28-32), such as provided by Layson'757, and generates "either electronic or hardcopy reports" (Ex-1008, 19:40) for "law enforcement and/or corrections/community supervision agency(s)," either automatically (Ex-1008,

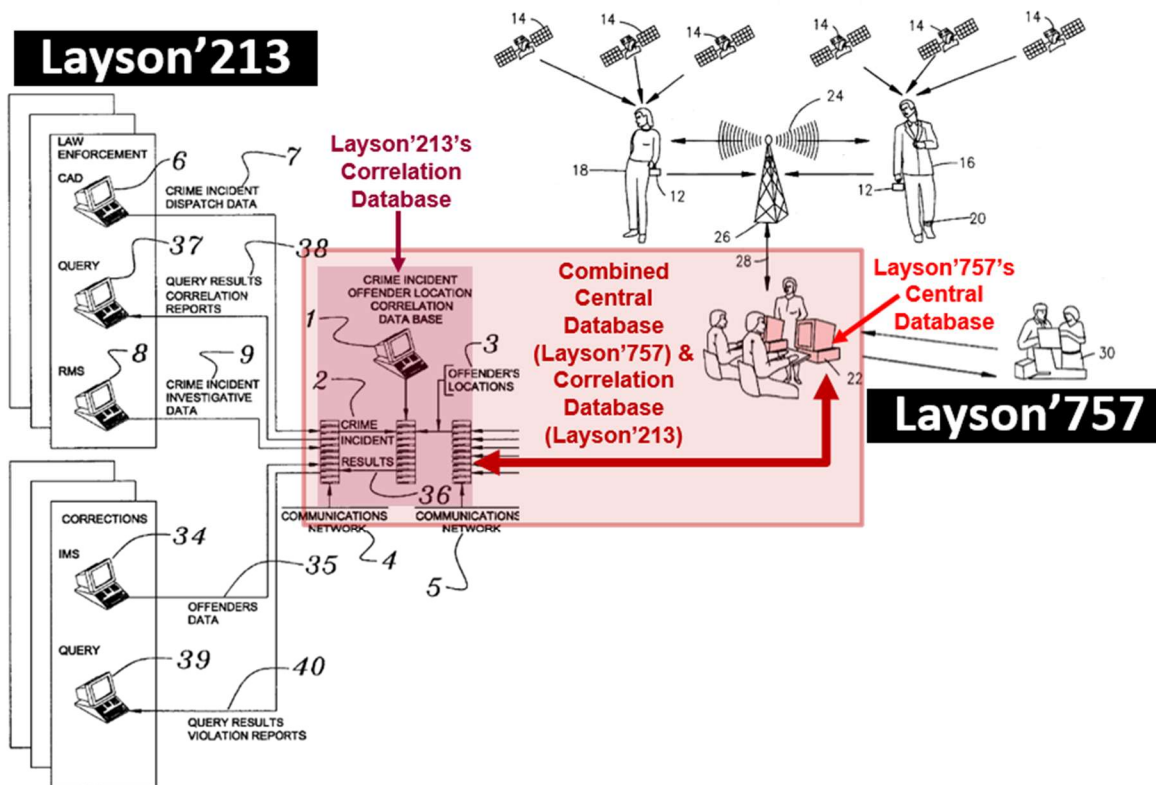
19:41-60), or in response to “structured queries” (Ex-1008, 20:28-30), as illustrated below in annotated Figure 1.



Notably, Layson'213 relates to the same subject matter—offender tracking—as Layson'757, and lists the same inventor—Hoyt M. Layson, Jr.—as Layson'757. Ex-1007, [75], 1:7-13. A POSITA seeking to implement Layson'757's system would thus have been motivated to incorporate the teachings of Layson'213's complementary system for implementation details on Layson'757's system's capability to “build reports.” Ex-1002 ¶¶151-158. In particular, a POSITA would have been motivated to implement Layson'757's central database to work with

Layson'213's corresponding teachings of its correlation database and real-time reporting of violations to law enforcement, as illustrated below. Ex-1002 ¶158. A POSITA would have recognized that such a combination of familiar elements would have predictable results. *Id.*

In the combined system, the locations of portable tracking device holders would have been generated and provided by the infrastructure depicted in Layson'757 Figure 1. The reporting and correlating actions would have been performed by the infrastructure depicted in Layson'213 Figure 1.



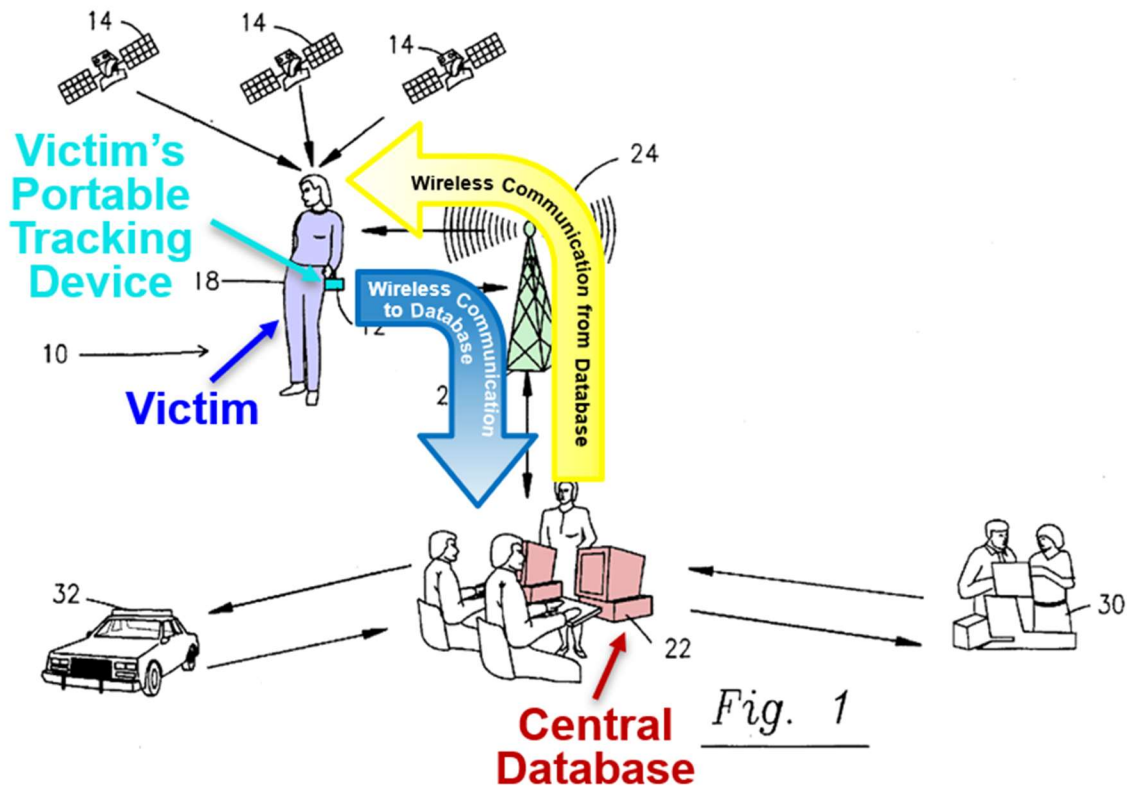
A POSITA would have had a reasonable expectation of success in implementing this combined system ("Layson'757-Layson'213") because both

Layson'213's correlation database and Layson'757's central database are configured to operate on the same type of offender location data. Ex-1002 ¶159. Indeed, Layson'213 explicitly identifies Layson'757 as providing for “determining the location of a person or subject, such as an offender ... outside the confines of their respective residence,” and incorporates Layson'757's disclosure by reference. Ex-1008, 2:26-30. Thus, the references themselves teach and suggest this combination. Ex-1002 ¶160.

2. Independent Claim 15

- a. **Element 15[pre]: A method for determining that a first portable remote unit of a wireless consumer associated with a network is being tracked by at least a second portable remote unit that is in motion with the first portable remote unit over a tracking period comprising;**

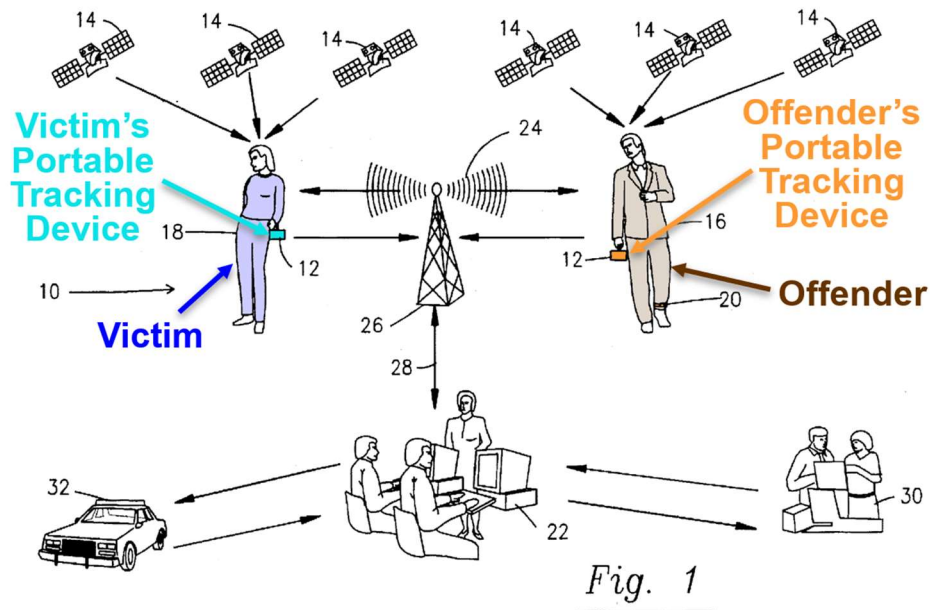
First portable remote unit: Layson'757's victim portable tracking device corresponds to the “first portable remote unit.” Ex-1002 ¶¶162-167. Layson'757 teaches a victim to whom a portable tracking device is assigned. Ex-1007, 2:46-49. As illustrated in annotated/excerpted Figure 1, below, victim 18's portable tracking device 12 communicates wirelessly with “central data-base system 22” (Ex-1007, 3:9-12) via “network cell site 26” (Ex-1007, 2:65-3:2).



Because the victim's portable tracking device performs wireless communications via network cell site 26, the victim consumes wireless resources of the wireless communication network to which that network cell site belongs, and is thus a "wireless consumer" of that network, when using the device. Ex-1002 ¶164.

Each of Layson'757's portable tracking devices is configured for wireless communication (Ex-1007, 2:65-3:13), and obtains and transmits information about its current position to the central database as it is carried about (*id.*, 1:62-66, 7:66-8:5 (similar)). Accordingly, each of Layson'757's portable tracking devices is a "portable mobile remote unit." Ex-1002 ¶¶165-167.

At least a second portable remote unit: Layson'757 also teaches that offenders 16 have portable tracking devices secured to them, all illustrated in annotated Figure 1, below. Ex-1007, 2:46-49.



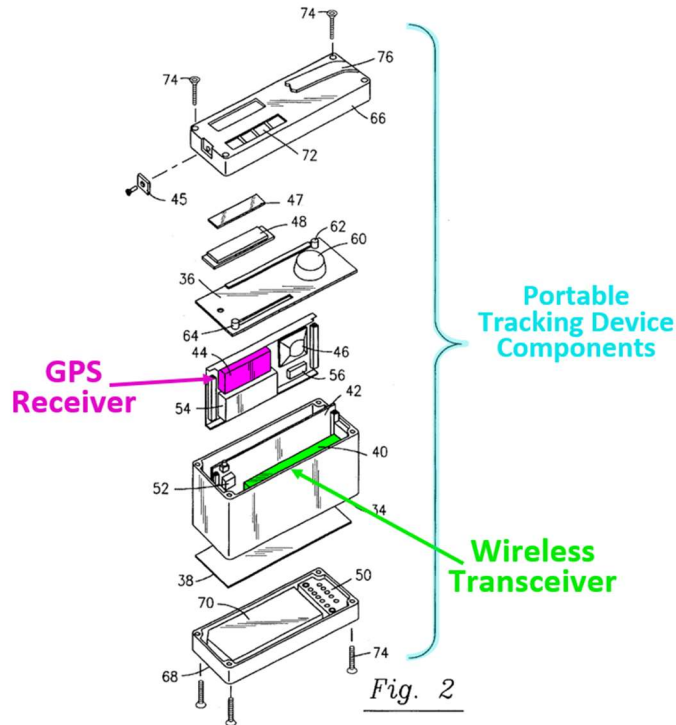
Layson'757's offender tracking device corresponds to the "second portable remote unit." Ex-1002 ¶168.

Victim and offender tracking devices are in motion: Layson'757's portable tracking devices are carried by offenders and their victims, enabling the system to "*monitor their movements*" with respect to one another (Ex-1007, 1:46-49), and provide warnings to the victims and/or alarms to law enforcement "*based on the dynamic movements of the offender and victim.*" (Ex-1007, 8:13-19). This is done through the use of dynamic location constraints, each of which defines "a buffer area" around the location of a moving victim. Ex-1007, 9:40-45.

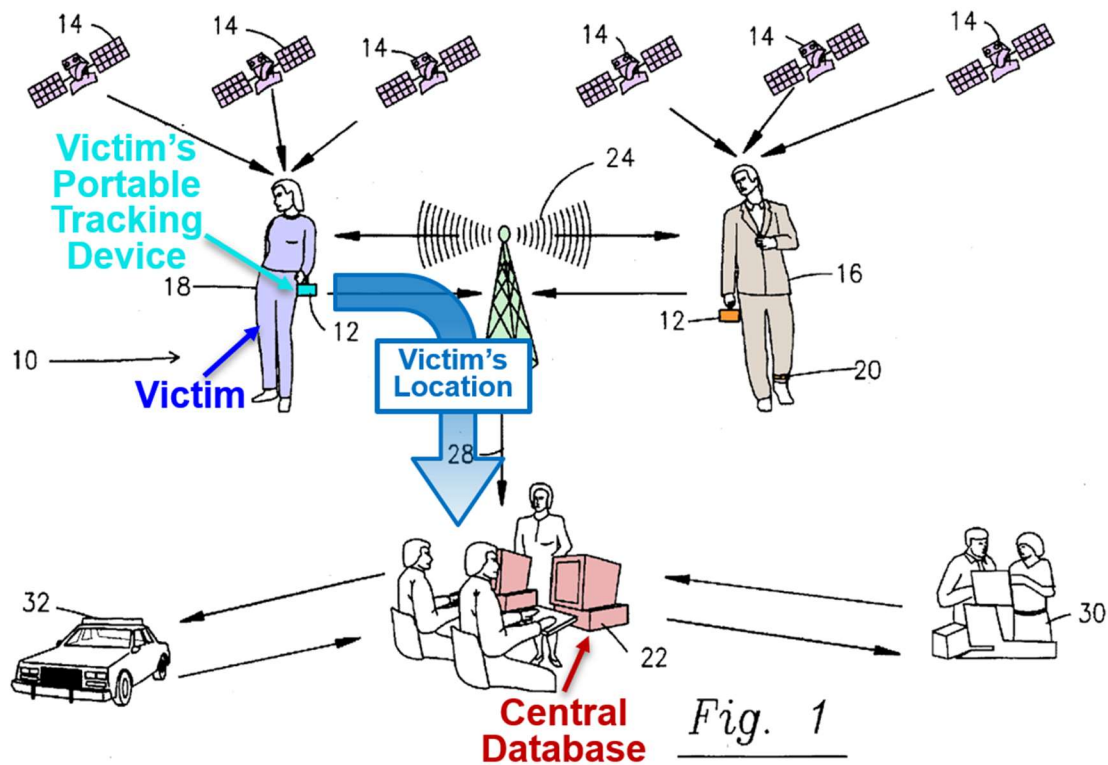
As discussed below, Layson'757-Layson'213 teaches a method by which Layson'757's central database determines that the victim portable device is being tracked by the offender portable device over a tracking period, while the devices are in motion. Ex-1002 ¶¶169-170.

b. Element 15[A]: i) obtaining the location information of the first portable mobile remote unit, said location information provided at intervals during said tracking period;

Layson'757's victim portable tracking device corresponds to the claimed first portable mobile remote unit. Layson'757 teaches obtaining the location of the victim portable monitoring device as the victim carries it about. Ex-1002 ¶¶171-176. Each portable tracking device includes "GPS receiver 44," as illustrated in Figure 2, below, that "receives communication signals from a global position satellite (GPS) 14 to determine the location of the subject (offender 16 or victim 18)." Ex-1007, 2:46-49.

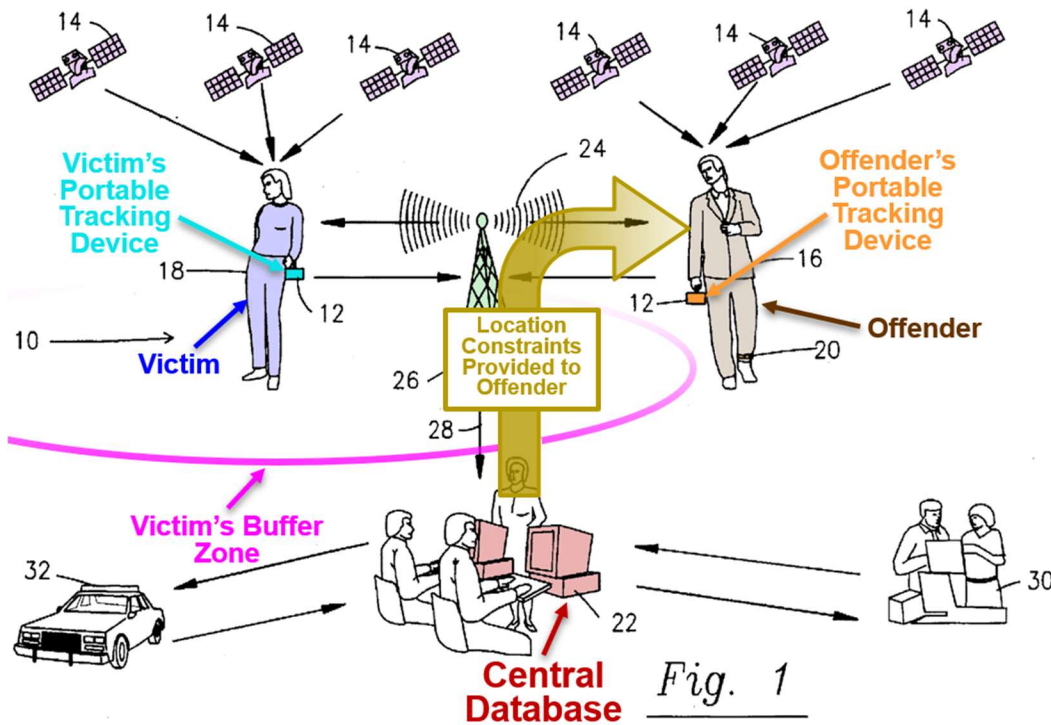


Each of Layson’757’s portable tracking devices provides its location to the network by transmitting the location to the central database, either at “deterministic reporting intervals” (Ex-1007, 7:40-42) or on demand. *See, e.g.*, Ex-1007, 3:18-23 (“At any time the central data-base system 22 may ... query the portable tracking device 12 to ascertain ... the location of the offender 16 or victim 18.”); 7:18-20 (similar). These reporting intervals correspond to the claimed “intervals during said tracking period.” Ex-1002 ¶¶174-175. As explained for Element 15[C], “said tracking period” in Layson’757-Layson’213 corresponds to at least two or more intervals necessary to constitute the offender loitering within the victim’s buffer zone as opposed to passing through (i.e., “said tracking period” is the “loiter time” for the offender).



- c. **Element 15[B]: ii) obtaining the location information of the at least second portable communication unit that is within a specified geographic boundary of the first portable remote unit, said location information provided at intervals during said tracking period;**

Specified geographic boundary: Layson'757's victim portable tracking device corresponds to the claimed first portable remote unit. Layson'757 teaches defining a geographic boundary around the location of the victim device ("a specified geographic boundary of the first portable remote unit"), as illustrated in annotated Figure 1, below, and providing it to the offender device within "location constraints." Ex-1007, 9:41-48.



These location constraints identify “locations that are meant to ... exclude a subject [e.g., the offender]”—such as the victim’s current location—together with “buffer zones” around those locations. Ex-1007, 8:36-43; *id.*, 9:41-43 (“The location constraints define locations and a distance radius which constitute a buffer area around a location.”). Thus, “in the case of a moving victim, [the] location constraints can be dynamic”—i.e., the buffer zones are updated based on the current location of the victim, as reported to the central database by the victim’s portable tracking device. Ex-1007, 9:42-44; Ex-1002 ¶179.

Obtaining the offender device’s location at intervals: Layson’757’s offender portable tracking device corresponds to the claimed at least second portable

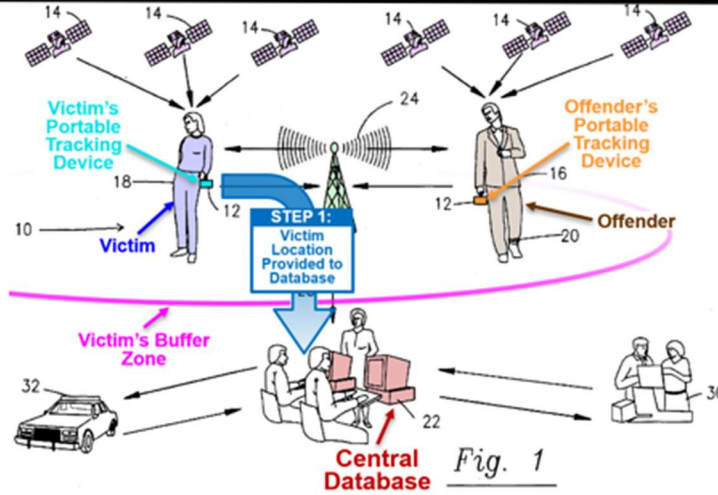
communication unit. Ex-1002 ¶¶180-188. Layson’757 teaches that the offender device sends its location to the central database (“obtaining the location information of the at least second portable communication unit”) when the device is located within the victim device’s buffer zone (“specified geographic boundary of the first portable remote unit”), as determined using its location constraints. Ex-1002 ¶180. In particular, at each time interval, in response to receiving the victim’s location, the central location sends updated location constraints (defining a buffer zone around that current location) to the offender device. Ex-1007, 8:36-39 (“[T]he central database system ... download[s] schedule rules and location constraints to the portable tracking device.”). The offender device “continuously processe[s]” these dynamically-updated location constraints (Ex-1007, 9:46-49), enabling the offender device to notify the central database “immediately when a violation occurs.” Ex-1007, 9:45-51. To accurately identify such buffer zone violations, the central database would provide updated location constraints to the offender device each time it received an updated location from the victim’s portable tracking device (“at intervals”). Doing so would achieve Layson’757’s goal of enabling “real-time event processing....” Ex-1007, 1:38-61; Ex-1002 ¶181.

Thus, the central database’s transmission of the buffer zone location constraints to the offender device results in the offender device providing its location to the central database if it is within the victim’s buffer zone (“specified geographic

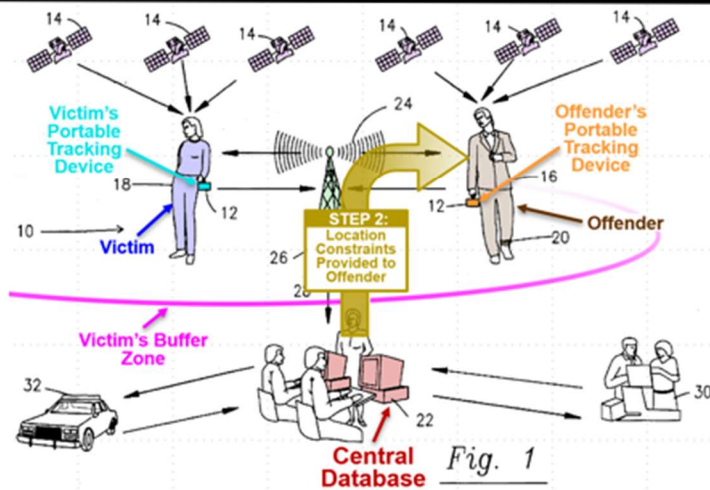
boundary of the first portable remote unit”). Ex-1002 ¶¶182-183. Layson’757’s offender portable tracking device “continuously processe[s]” these dynamically-updated location constraints and provides immediate notifications when the offender device (portable mobile remote unit) enters within the “buffer zone” around the victim’s portable device (“within close proximity to the wireless consumer”). Ex-1007, 9:45-51, Cl. 16. As shown in annotated Figure 1, in step 1, the central database receives the victim’s current location; in step 2, the central database uses this location to update the offender’s location constraints (which includes a buffer region around the victim’s location) and transmits these updated location constraints to the offender; and in step 3, the offender device compares its location to the updated location constraints, determines it is in violation of the victim’s buffer, and reports this violation to the central database. Ex-1002 ¶184.

Offender Inside Victim's Buffer Zone

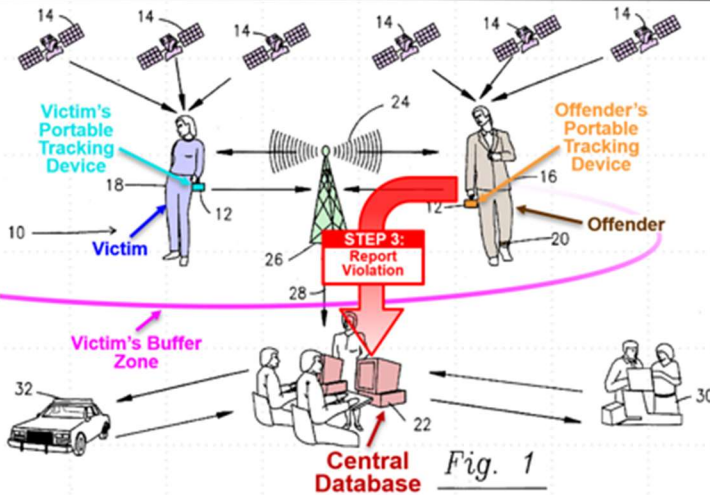
STEP 1: Victim Location
Provided to Database



STEP 2: Location Constraints
Provided to Offender

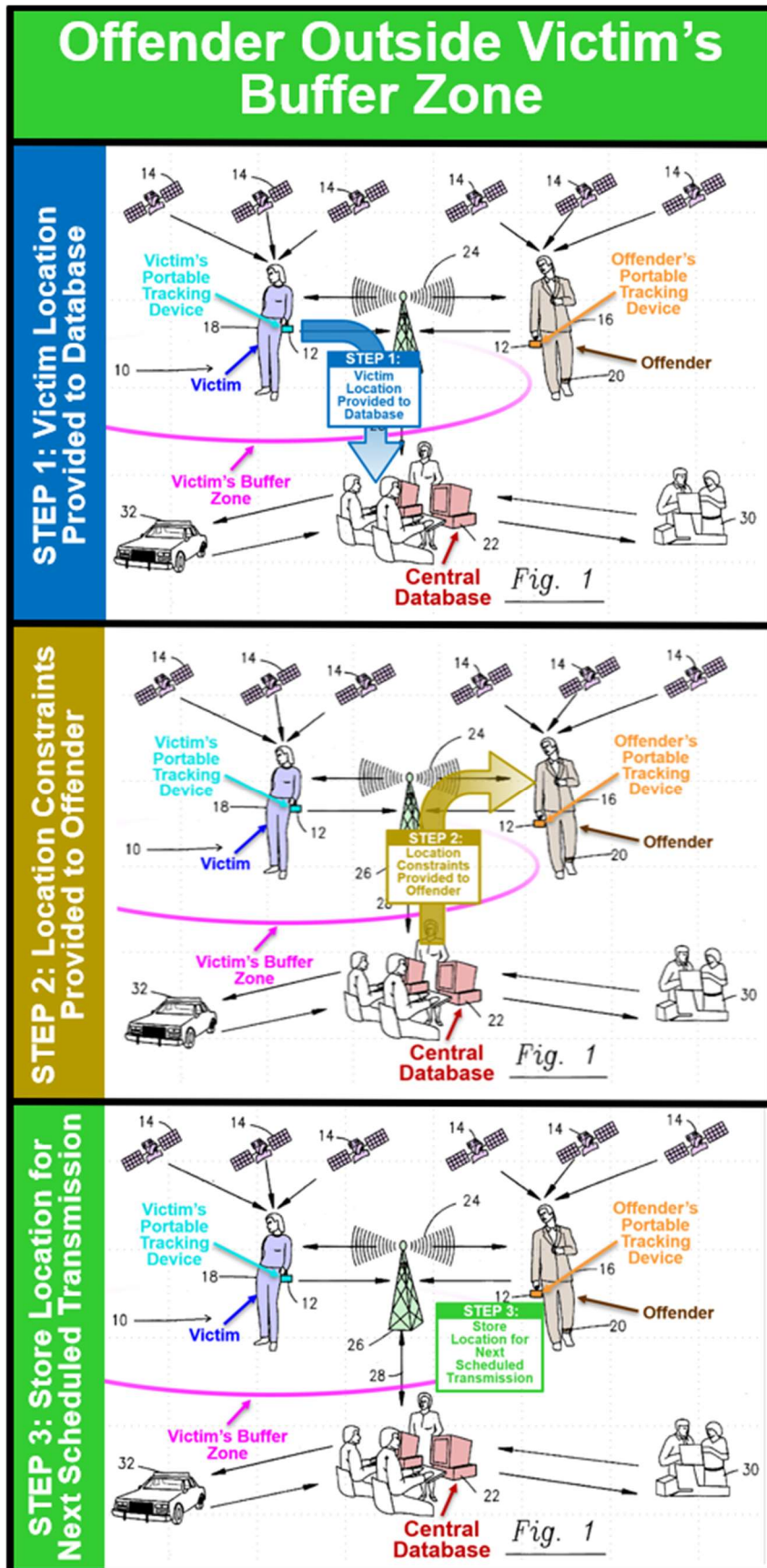


STEP 3: Report Violation



Notifying the central database of the violation would have entailed the offender's portable tracking device providing its current location to the central database (Ex-1007, 7:66-8:1), for potential inclusion in a "notification response to corrections, law enforcement and victims" (Ex-1007, 9:50-54). Ex-1002 ¶185.

On the other hand, if the offender's "current location complies with the ... location constraints" it is stored by the offender device for upload to the central database at "the next scheduled time," annotated below. Ex-1007, 7:14-19. The below images are similar to the ones above, except that, in response to determining that its location is not in violation of the victim's buffer, the offender's device does not report its location to the central database. Ex-1002 ¶¶186-187.



Thus, in Layson'757's system, the central database's transmission of updated location constraints causes an offender's portable tracking device either to transmit its location to the central database in response to identifying a violation, or store its location for later batch transmission.

Layson'757 also discloses that the central database obtains the offender device's location as part of "data fusion processing" (Ex-1007, 7:42-55), when the database "analyzes developing situations such as [] stalker-victim encounters" (Ex-1007, 8:50-56)—i.e., when a stalker is located within a victim's buffer zone. Ex-1002 ¶189. Thus, when the central database has been alerted to a violation (i.e., when the offender is "within close proximity" to the victim), the central database would query the victim and offender devices for their locations at the same time intervals ("obtaining... at intervals during said tracking period"), in order to accurately analyze the offender's location relative to the victim. *Id.*

- d. Element 15[C]: iii) using the location obtained according to step (i) and (ii) to verify whether the first portable remote unit and second portable remote unit have maintained relative proximity during the tracking period;**

Layson'757's victim and offender devices are located in proximity to one another when the offender device is located within the victim's buffer. Ex-1002 ¶¶190-195. Because the victim and offender devices are in motion, verifying that the devices "have maintained relative proximity during the tracking period"

corresponds to determining that the offender device remained located within the victim's buffer at each interval during the tracking period. Ex-1002 ¶¶191-192.

As Layson'757 explains, the central database may notify or report a violation of a victim's buffer zone to "corrections, law enforcement and victims based on the nature of the offender's violation" (Ex-1007, 9:50-54), according to "guidelines in the schedule rules for each offender" (*Id.*). *See also id.*, 3:3-8.

A POSITA would have been motivated to turn to Layson'213 for specific guidelines a tracking system would use to determine whether or not to issue notifications to law enforcement and victims. Ex-1002 ¶¶193-194. Layson'213 teaches determining whether an offender has violated an "exclusion zone" (e.g., a location from which the offender is banned according to a court order, such as Layson'757's "buffer zone") based on the offender's presence in that zone for at least a "loiter time," in contrast to passing through (e.g., a "pedophile driving by a school on the way to work"). Ex-1008, 23:33-36. Layson'213's use of a loiter time helps to ensure that the offender's presence within the exclusion zone is reported as a violation when it is intentional, as opposed to temporary and inadvertent. Ex-1002 ¶194.

Layson'213's loiter time would have been chosen to cover two or more intervals (*see* Element 15[a]) over which the victim's and offender's location is reported, to ensure the close proximity time is sufficient to qualify as loitering within

the victim's buffer zone, as opposed to transitory and inadvertent violations, and therefore identify intentional violations of the victim's buffer zone. Ex-1002 ¶195. Accordingly, Layson'213's loiter time would correspond to a "tracking period."

e. Element 15[D]: iv) forwarding the result of the verification to a network requestor at the end of the tracking period.

Forwarding the result: Layson'757-Layson'213 teaches alerting the victim (through their portable monitoring device) and/or law enforcement, in response to determining that the offender maintained relative proximity to the victim during the tracking period. Ex-1002 ¶196. In particular, a POSITA implementing Layson'757's system would have been motivated to include Layson'213's loiter time as part of Layson'757's "guidelines" for reporting a violation described above, such that Layson'757's central database only sends reports to law enforcement/victims of offender violations after determining that the offender device has maintained close proximity to the victim's tracking device for a duration of a loitering tracking period. Ex-1002 ¶196. A POSITA would have been motivated to do so because it would both waste law enforcement resources and place unnecessary stress on victims to send out notifications for temporary, inadvertent occurrences, such as when an offender is temporarily passing through a buffer/exclusion zone while driving on their way to work, as taught by Layson'213 (Ex-1008, 23:33-36). Ex-1002 ¶196 (citing Ex-1053).

Network requestor: Layson'757's victim corresponds to a wireless consumer associated with Layson'757's wireless network. A POSITA would have understood that Layson'757's central database tracks proximately-located offenders and alerts the victim to their presence at the victim's request, based on the victim's voluntary enrollment in the monitoring system (Ex-1007, 6:19-25) and transmission of their location coordinates to the central database, such that the victim corresponds to a "network requestor." Ex-1002 ¶197.

Law enforcement officials, to which a report of the violation is provided over the network (Ex-1007, 8:16 ("alarms to law enforcement")), also correspond to network requestors. Ex-1002 ¶198. As with the victim, a POSITA would have understood that Layson'757's central database provides alerts to law enforcement of violations at their request, based on their use of the monitoring system (Ex-1007, 3:3-8). Ex-1002 ¶198. Additionally, in the Layson'757-Layson'213 system, "[q]ueries for location history data can be performed by law enforcement." Ex-1007, 3:24-25; *see also* Ex-1008, 10:11-23. In the combined Layson'757-Layson'213 system, these queries are performed using "query terminal 39" "connect[ed] to the communications network 4." Ex-1008, 10:11-13. Accordingly the law enforcement agent performing the query is a "network requestor." A POSITA would have recognized that such queries could be performed by law enforcement to obtain evidence of a stalker's restraining order violation (Ex-1007, 8:54-55) for use in a

subsequent legal proceeding. Ex-1002 ¶198 (citing Ex-1011, 20:9-12). A POSITA would have understood that the central database would provide to the law enforcement agent, as a result of the query (Ex-1008, 10:11-23), the locations of the victim and offender devices, when they were located in relative proximity to one another over the tracking period (to help ensure the proximity was not due to temporary, inadvertent occurrences), as determined by the central database. Ex-1002 ¶198.

B. Ground 2: Claims 1 and 22 are rendered obvious by Layson’757-Layson’213-IllinoisLaw

1. A POSITA would have been motivated to combine Layson’757-Layson’213-IllinoisLaw with a reasonable expectation of success

As explained in §XII.A.1.a, in the combined Layson’757-Layson’213 system, the reporting and correlating actions of Layson’213’s correlation database (Ex-1008, 19:41-20:27) would be performed on the locations of Layson’757’s portable tracking devices received at Layson’757’s central location (Ex-1007, 7:9-19). Ex-1002 ¶¶199-213.

Layson’213 teaches providing the correlation database with multiple crime incidents, and “correlating [those] crime incidents with offender(s) locations” (Ex-1008, 21:37-39), to generate a table reporting “suspect offenders” (Ex-1008, 21:61-64). One such crime is stalking. Layson’757 teaches that the crime of stalking involves a prolonged victim-offender encounter. Ex-1007, 8:54-55. A POSITA

would have recognized that the Layson combined system could be used to identify offenders located within a buffer region of the victim (the location of the “crime incident” (Ex-1008, 21:37-39)) for a prolonged period of time as potential criminal stalkers (Ex-1008, 21:59-64 (identifying “suspect offenders”)). Ex-1002 ¶¶200-202.

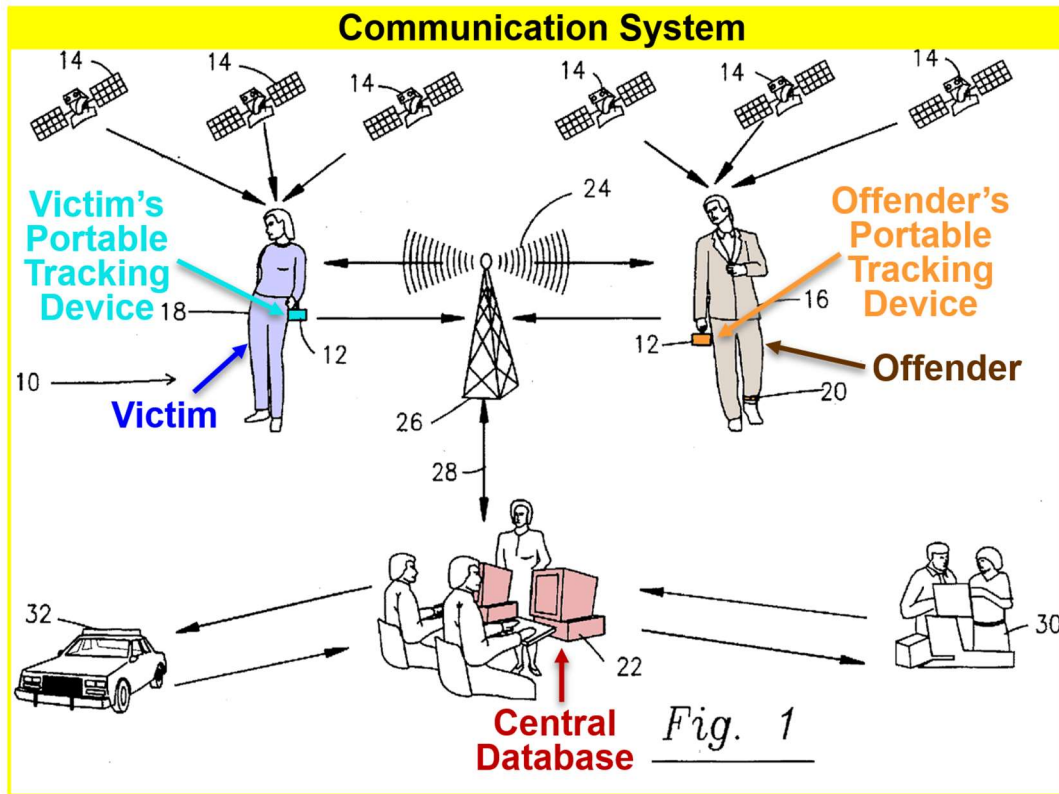
In addressing this crime of stalking, a POSITA would have been motivated to implement a system that identifies potential stalking incidents using the legal definition of the crime. Ex-1002 ¶¶203-212. For example, IllinoisLaw provides Illinois’s definition of “stalking.” Ex-1010. IllinoisLaw teaches that the crime of stalking may be characterized by the stalker “mov[ing] in relative proximity to a person as that person moves from place to place.” Ex-1010, 0009-0010. A POSITA seeking to use Layson’757-Layson’213’s system to address the crime of stalking would thus have been motivated to design a system that would identify potential stalking scenarios where a stalker “move[s] in relative proximity to a person as that person moves from place to place.” *Id.* A POSITA would have understood that following a person “from place to place” would correspond to following that person for at least longer than an incidental distance (e.g., from home to work), because following for a *short* distance might be accidental and innocent. Ex-1002 ¶203-204 (citing Ex-1037, 0011 (characterizing stalking as involving following over “a prolonged distance”)). In the combined Layson’757-Layson’213-IllinoisLaw system, the locations and corresponding times of a potential stalking victim would

be used as the “multiple crime incidents” provided in a query of Layson’213’s correlation database (as described above), to identify offenders located within a buffer distance around the victim’s locations at approximately the same times. Ex-1002 ¶¶205-209. In order to limit false positives, the list would be filtered to identify those offenders whose locations correlated with those of the victim as the victim traveled “from place to place,” as taught by IllinoisLaw, in addition to Layson’s “loiter time.” Ex-1002 ¶¶210-211. To capture such movement “from place to place,” a POSITA would have included a “minimum distance” threshold in Layson’757’s system, as taught by IllinoisLaw, because following for a *short* distance might be incidental and innocent. Ex-1002 ¶212.

2. Independent Claim 1

a. Element 1[pre]: A communication system comprising:

Layson’757 discloses a communication system, “system 10,” as illustrated in annotated Figure 1, below, which includes “a portable tracking device 12” for each “subject (offender 16 or victim 18)” (Ex-1007, 2:46-49) connected with “central data-base system 22” (Ex-1007, 3:9-12) via “network cell site 26” (Ex-1007, 2:65-3:2). Ex-1002 ¶¶213-216.



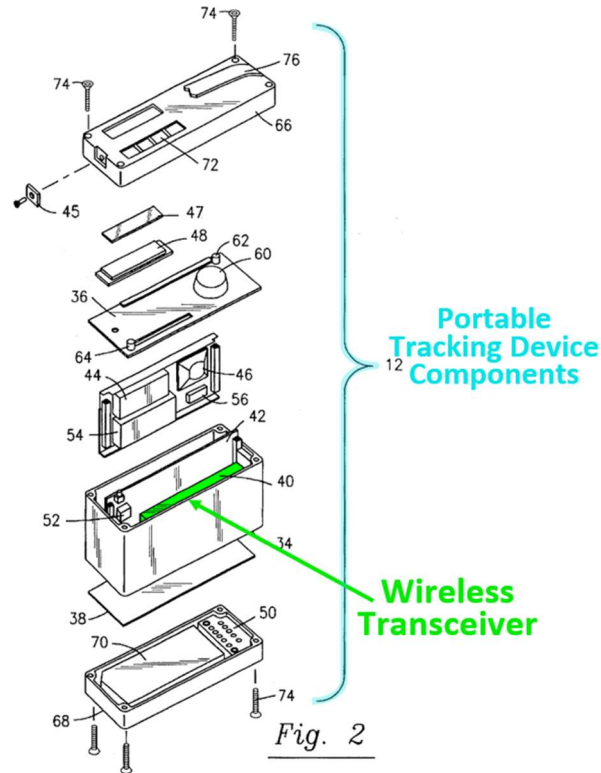
b. Element 1[A]: a portable mobile remote unit;

Layson'757's victim portable tracking device corresponds to the claimed "portable mobile remote unit," because it obtains and transmits position information to the central location as the monitored person moves about (*id.*, 1:62-66, 7:66-8:5 (similar)). Ex-1002 ¶¶217-218.

c. Element 1[B]: a network of communication units;

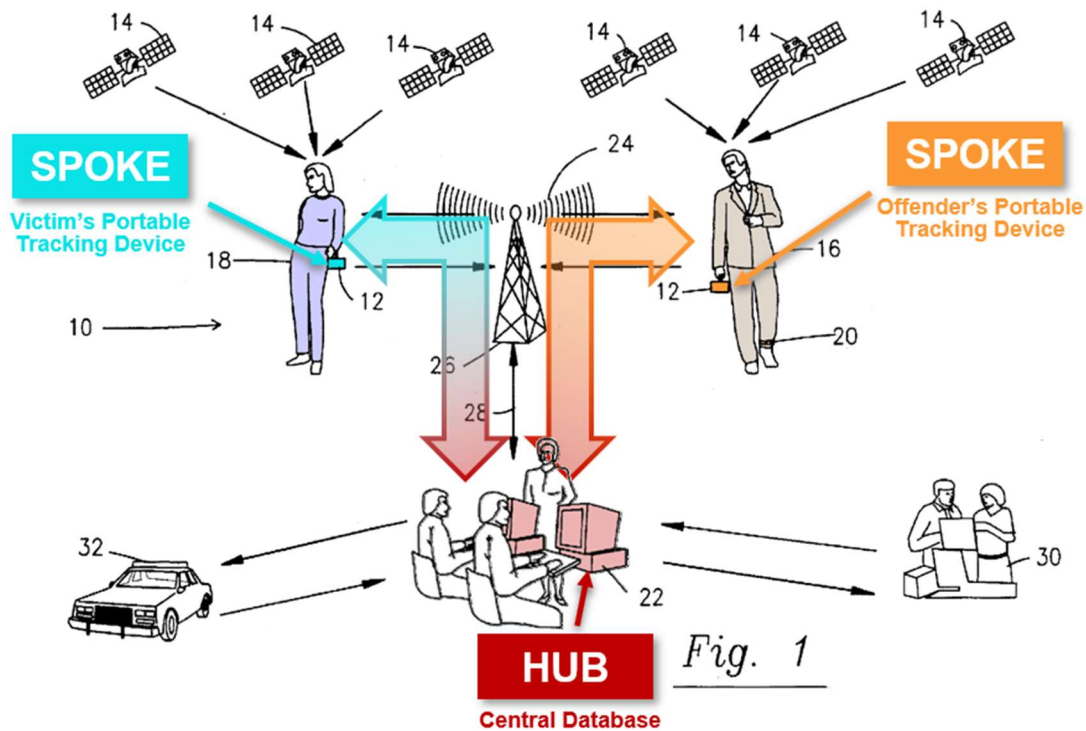
Each of Layson'757's portable tracking devices is a "communication unit" because it is capable of sending and receiving communications. *See, e.g.*, Ex-1007, 3:3-4 (sending) 3:9-12 (receiving). Annotated Figure 2 shows a "wireless transceiver 40 [that] provides two-way data and voice communications between the portable

tracking device 12 and the central data-base system 22.” Ex-1007, 3:36-38. Ex-1002 ¶¶219-223.



Layson’757’s system includes multiple portable tracking devices. Ex-1007, 2:46-49, 7:35-38 (“... processing for **the multiple portable tracking apparatus** in real-time.”).

Together with the central database, Layson’757’s portable tracking devices form “a network of communication units,” because each device is communicatively connected to the central database system, as illustrated in annotated Figure 1, below. Ex-1007, 3:9-11.

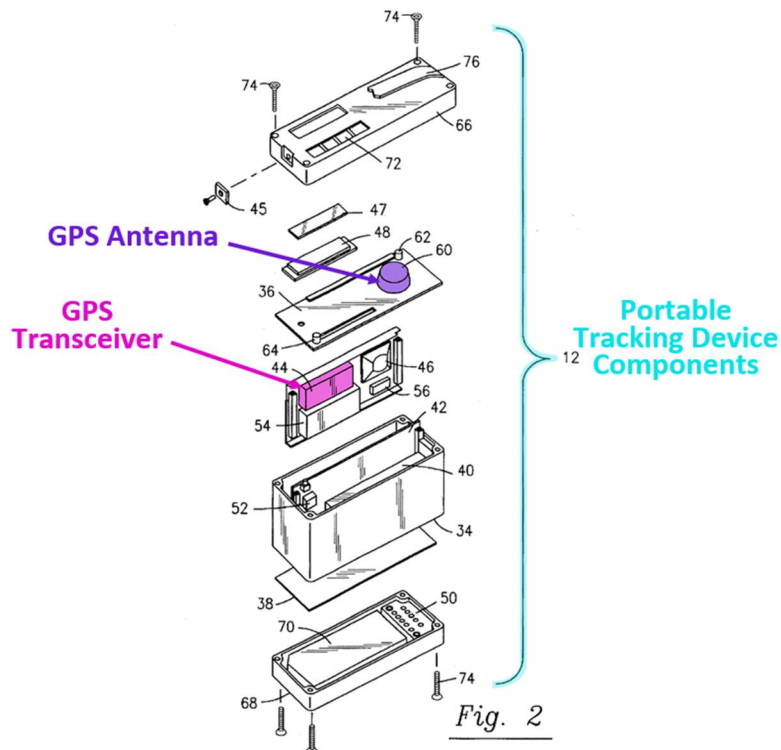


In particular, a POSITA would have recognized this configuration—i.e., a set of devices configured to communicate with a central control location—as corresponding to a “hub-and-spoke” communication network. Ex-1002 ¶222; Ex-1049, 0004; Ex-1050, 0026.

d. Element 1[C]: means to obtain the location of the portable mobile remote unit;

Layson’757-Layson’213 teaches the claimed “means” under the construction proposed in §X.A.1, which is equivalent to “an antenna 20 and a transceiver 21” configured to receive signals, together with a “control unit” programmed to use such signals to determine location. Ex-1002 ¶¶223-226.

As illustrated in annotated Figure 2, below, each portable tracking device includes “GPS antenna 60,” which communicates with “the GPS satellite constellation” and provides signals to “GPS transceiver 44.” Ex-1007, 4:23-35. GPS transceiver 44 is also a control unit, because it uses the received signals to “determin[e] location.” Ex-1007, Abstract, 3:45-48 (similar).

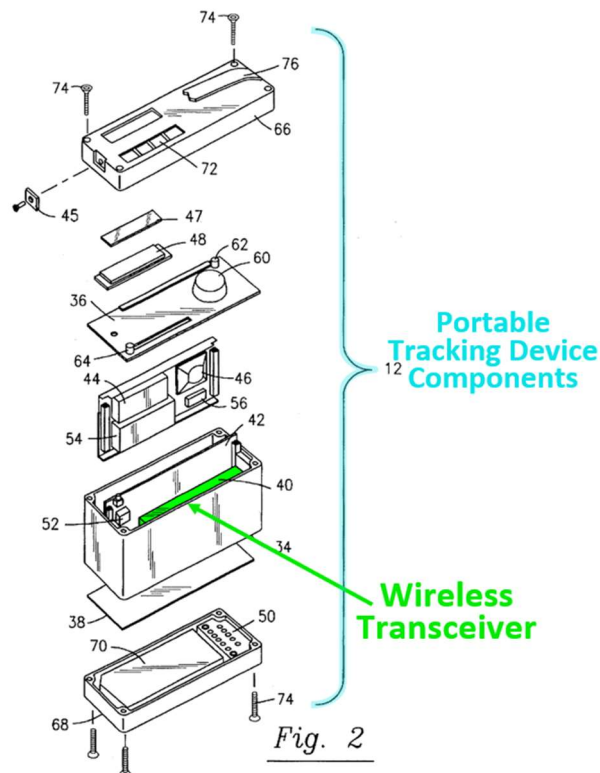


Each of Layson’757’s portable tracking devices performs the recited function each time it (1) uses GPS antenna 60 and transceiver 44 to acquire GPS signals (Ex-1007, 4:23-35), and then (2) uses GPS transceiver 44 to determine the current location of the device using those signals (Ex-1007, Abstract). Ex-1002 ¶226.

- e. **Element 1[D]: means to obtain geographic boundary information in order to disclose a global location at the network;**

Layson'757-Layson'213 teaches the claimed “means” under the construction proposed in §X.A.2, which is equivalent to “an antenna 20 and a transceiver circuitry 21” configured to receive signals that include geographic boundary information. Ex-1002 ¶¶227-235.

Annotated Figure 2, below, illustrates a “transceiver 40” within Layson'757's portable tracking devices that “provides two-way data and voice communications between the portable tracking device 12 and the central data-base system 22.” Ex-1007, 3:36-38.



Such data received by the transceiver from the central database includes “geographic boundary information” in the form of location constraints. Ex-1002 ¶230. The central database sends “location constraints” to each portable tracking device (Ex-1007, 8:36-39), which identify “buffer zones” around locations meant to exclude a subject.⁶ Ex-1007, 8:36-43, 9:41-43 (similar). These dynamically-updated location constraints (Ex-1007, 9:42-44) “are sent from the central data-base system to the portable tracking apparatus.” Ex-1007, 9:45-50.

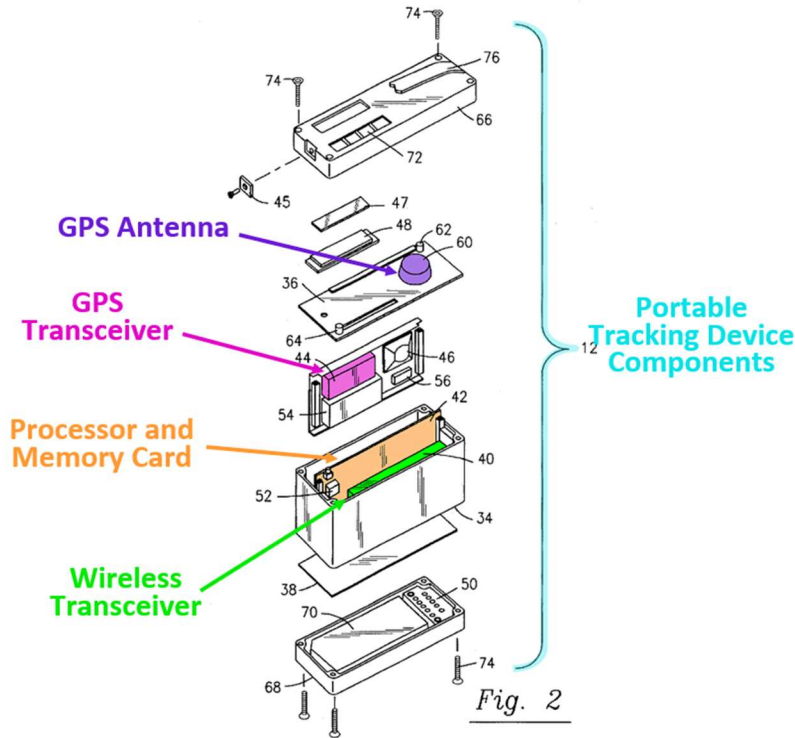
To enable the central database to accurately identify when an offender is located too close to a victim, or vice versa, each of the monitored subjects’ devices would receive location constraints from the central database (both offender and victim, Ex-1007, 1:17-18). In particular, the victim device would receive the associated offender’s location and “buffer zone” around that location (Ex-1007, 8:36-43) (the claimed “geographic boundary information”), so that the victim does not enter it inadvertently. Ex-1002 ¶231-234. As explained for Element 1[E], below, these location constraints are used by the victim device in determining whether to transmit its location to the central database.

⁶ Layson’757 defines the monitored “subjects” as including both the offender and the victim: “subjects, such as criminal offenders and victims.” Ex-1007, 1:17-18. *See also id.*, 1:9.

- f. **Element 1[E]: means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network;**

Layson’757-Layson’213 teaches the claimed “means” under the construction proposed in §X.A.3, which is equivalent to “an antenna 20 and a transceiver circuitry 21” configured to transmit location information, together with a “control unit” programmed to determine that the unit is within the geographic boundary. Ex-1002 ¶¶236-241.

Each of Layson’757’s devices also includes a “processor and memory card 42” that “provides the execution environment for the algorithms to compare the current location obtained from the GPS receiver 44” against the “location constraints” provided by the central database (“network”). Ex-1007, 3:45-51.



The location constraints provided to the victim’s portable tracking device include the offender location obtained at the network, together with a buffer zone around that location (“geographic boundary”). Ex-1007, 8:36-43. The victim portable device’s processor and memory card 42 (Ex-1007, 3:45-51) “continuously processe[s]” these location constraints, enabling the device to notify the central database “immediately when a violation occurs”—i.e., when the victim portable tracking device is located within the buffer zone around the offender’s device. Ex-1007, 9:45-50. Thus, the victim device provides its location to the central database at intervals when the offender and victim are in proximity.

Notifying the central database of the violation would have entailed the victim’s portable tracking device providing its current location to the central

database, for use in dynamically updating the offender's location constraints (Ex-1007, 9:43-48). Ex-1002 ¶¶240-241. Such notification would be sent by the portable tracking device using transceiver 40, which enables two-way data communication between the device and the central location. Ex-1007, 3:36-38.

- g. Element 1[F]: means to determine and report to the system upon request that, another mobile remote unit of the network has tracked the portable mobile remote unit over a period of time.**

Layson'757-Layson'213-IllinoisLaw teaches the claimed "means" under the construction proposed in §X.A.4. Ex-1002 ¶¶242-248.

Layson'757's "central data-base system" is a control unit of a network control center, because it "implements distributed and parallel processing in order to perform event processing for the multiple portable tracking apparatus in real-time." Ex-1007, 7:35-39; Ex-1002 ¶244. The central database receives the location of the victim portable tracking device ("tracked" unit) at intervals when an offender device is in proximity of the victim device. The central database also receives the locations of offender tracking devices ("other" mobile units) during such intervals (*see* Element 15[B]).

Layson'757's central database maintains a list of offender tracking devices (such "other" units) located within a buffer region surrounding the victim tracking device (i.e., within a predefined geographic boundary of the "tracked" unit) that

provided their location at each interval. Layson'757 teaches both a "list of subjects" and storing the locations received from the portable tracking devices of those subjects. Ex-1007, Fig. 7A, 7:66-8:1 (similar).

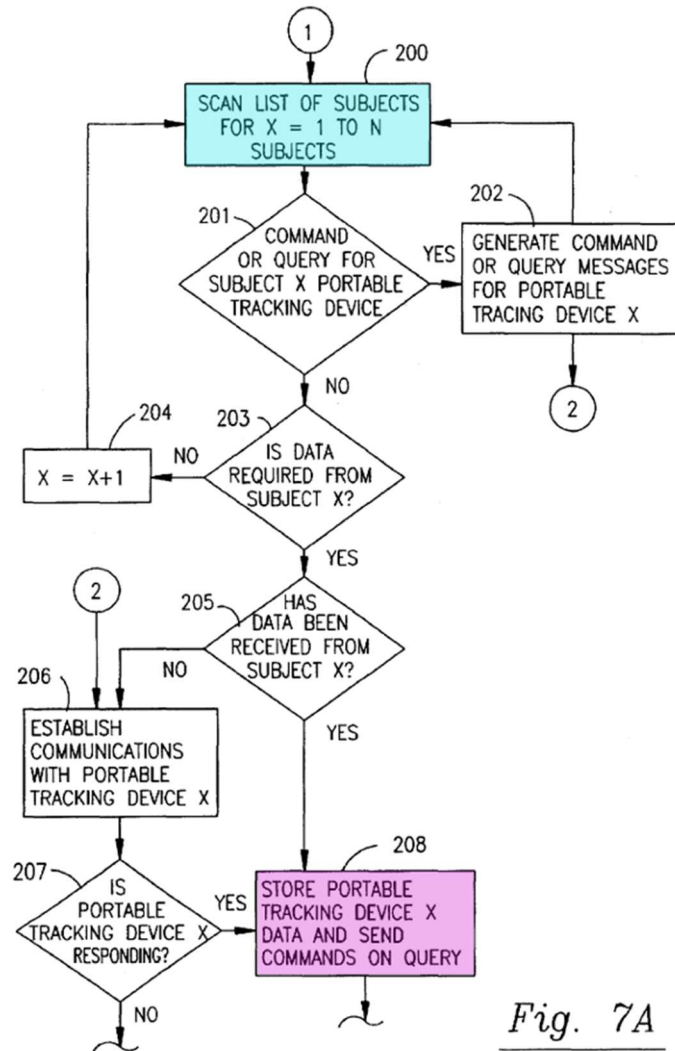


Fig. 7A

As explained in §XII.A.1, in the combined Layson'757-Layson'213 system, these stored locations would be provided to Layson'213's correlation database for correlation and reporting purposes. Layson'213 teaches that its correlation database may receive "exclusion zone violations reported by [an] offender location

monitoring system”—i.e., Layson’757’s central database—in real-time (Ex-1008, 18:35-40), for continuous processing, resulting in the generation of “a table report” of such violations. Ex-1008, 19:41-52. To provide evidence for use by “law enforcement” (Ex-1008, 19:50-52), such a report would at least include, for each time interval, the identities of any offenders in violation of the victim’s buffer/exclusion zone, and the locations of those offenders. Ex-1008, 23:9-21 (data characterizing “exclusion zone violations”); Ex-1002 ¶¶245-246. Such information would be stored (i.e., maintained) by Layson’757-Layson’213’s databases (Ex-1008, 9:45-50) for later use in generating such reports. One of a finite number of ways of storing such information would be as a list. Ex-1002 ¶246.

As explained in §XII.B.1, the central database may determine that such offender devices maintained close proximity to the victim device while the devices traveled a minimum distance threshold,⁷ for a period of time, to identify and report potential stalking behavior, thus performing the recited function. Ex-1002 ¶247.

⁷ As noted in §X.A.4, to the extent that Patent Owner or the Board adopts a construction that does not require a “minimum distance” as part of the algorithm that performs the recited function, then Claim 1 is rendered obvious by the Layson’757-Layson’213 combination without the need to rely on IllinoisLaw. As shown by the relied upon evidence to this point in the analysis, Layson’757-Layson’213 and its described “loiter time” teaches this element if function can be performed using time-only based techniques. But, under the construction set out in §X.A.4, the IllinoisLaw teaching is brought in if the function also needs to include a minimum distance-based approach as well.

Layson’757’s central database also includes a transmitter, to enable it to communicate “via the wireless communication link.” Ex-1007, 3:9-13. The central database uses such transmitter to report potential stalking behavior to the victim and law enforcement for reporting buffer zone violations (*see* Element 15[D]).

3. Independent Claim 22

a. Element 22[pre]: A communication system comprising:

Layson’757-Layson’213-IllinoisLaw teaches the preamble of Claim 22, as explained for Element 1[pre].

b. Element 22[A]: (i) a network of communication units;

Layson’757-Layson’213-IllinoisLaw teaches Element 22[A], as for Element 1[A].

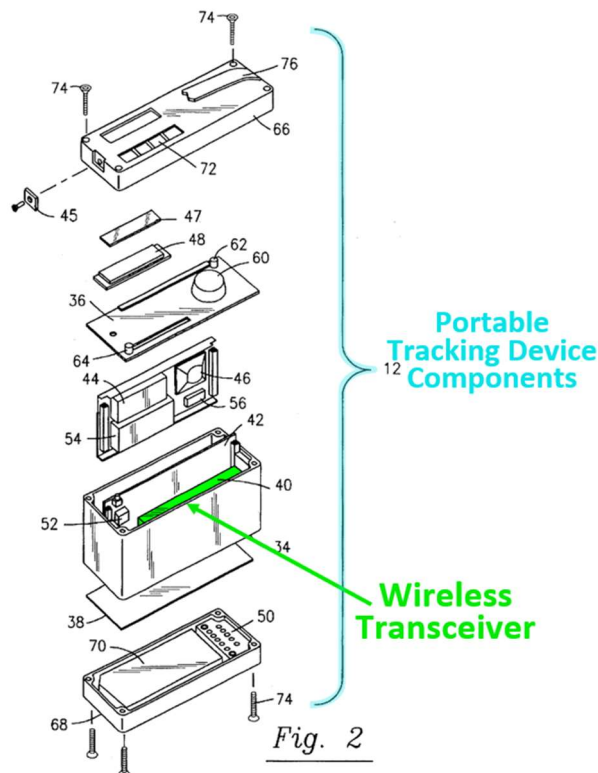
c. Element 22[B]: (ii) at least a first communication unit and at least a second communication unit able to provide location information to the network for a time while in motion;

Layson’757’s victim portable tracking device is a first communication unit, and Layson’757’s offender portable tracking device is a second communication unit. *See* Element 15[pre]. Layson’757’s portable tracking devices are in motion and are able to provide their locations to the central database (“network”) for a time during such motion, as explained for Elements 15[pre] (in motion), 15[A] (victim tracking device), and 15[B] (offender tracking device). Ex-1002 ¶251.

- d. **Element 22[C]: (iii) means to request whether the at least second communication unit is tracking the at least first communication unit;**

Layson'757-Layson'213-IllinoisLaw teaches the claimed “means” under the construction proposed in §X.A.6, which is equivalent to either “antenna 20 and transceiver circuitry 21” configured to transmit tracking requests, or “input panel 25” configured “to take user instructions” in the form of tracking requests.

Request sent from Layson'757's victim device: Each of Layson'757's portable tracking devices includes a “transceiver 40” that “provides two-way data and voice communications between the portable tracking device 12 and the central data-base system 22.” Ex-1007, 3:36-38.



The victim portable tracking device uses transceiver 40 to provide its location to the central database (*see* Element 15[A]). As explained for Elements 22[D]-[E], below, such locations are used to determine and report to the victim that the offender is tracking the victim. Accordingly, a POSITA would have understood that each transmission of location coordinates by the victim device corresponds to a request for the central database to track any proximately-located offenders. Ex-1002 ¶¶253-254.

Request sent from Layson'213's query terminal: In the Layson'757-Layson'213 system, a query terminal is used by a law enforcement personnel to submit queries of the location data stored by Layson'213's correlation database (Ex-1008, 20:43), by entering criteria in response to prompts (Ex-1008, 21:36-58). A POSITA would have understood that the query terminal would include an input panel to enter such criteria. Ex-1002 ¶255. As explained in §XII.B.1, for a victim who suspects that he/she is being stalked, Layson'213's correlation database may be used to identify potential stalkers tracking the victim, by using a series of the victim's locations as "crime incidents" in a central database query (Ex-1008, 21:37-39). Such a query corresponds to a tracking request.

- e. **Element 22[D]: (iv) means to determine from said location provided (ii) that the at least first and second communication unit maintained proximity while in motion during said time;**

Layson'757-Layson'213-IllinoisLaw teaches the claimed “means” under the construction proposed in §X.A.7, which is equivalent to a control unit programmed to: (1) receive, at intervals, the location of the at least first communication unit, (2) receive the location of the at least second communication unit during such intervals, and (3) maintain a list of second communication unit(s) within a predefined geographic boundary of the at least first communication unit for a period of time as the at least first communication unit and the at least second communication unit(s) have moved a minimum distance.

Layson'757's central database: Layson'757's “central data-base system” is a control unit of a network control center, because it “implements distributed and parallel processing in order to perform event processing for the multiple portable tracking apparatus in real-time.” Ex-1007, 7:35-39; Ex-1002 ¶257. The central database receives the locations of the victim portable tracking device (“first communication unit”) and the offender portable tracking device (“second communication unit”) at intervals (*see* Elements 15[A]-[B]). The central database maintains a list of offender tracking devices (“second communication unit”) located within a buffer region surrounding the victim tracking device (i.e., within a

predefined geographic boundary of the first communication unit) that provided their location at each interval.⁸ *See* Element 1[F]. As explained in §XII.B.1, the central database may determine that such offender devices maintained close proximity to the victim device while the devices traveled a minimum distance threshold, for a period of time, to identify and report potential stalking behavior, thus performing the recited function.

Layson’213’s correlation database: Layson’213’s “correlation database” is a control unit, because it is “a real-time system” (Ex-1008, 18:17-18) that performs an iterative process to “continuously perform correlation” on data received from location monitoring systems (Ex-1008, 19:41-45). Ex-1002 ¶258. As explained in §XII.A.1.a, in the combined Layson’757-Layson’213 system, the reporting and correlating actions of Layson’213’s correlation database (Ex-1008, 19:41-20:27) would be performed on the locations of Layson’757’s portable tracking devices received at Layson’757’s central location (Ex-1007, 7:9-19).

As explained in §XII.B.1, a series of victim locations captured over a tracking time would be used in a correlation database query to identify those offenders who were located within a buffer distance of the victim over time. Ex-1008, 21:37-39 (a

⁸ As noted in §X.A.4, to the extent that Patent Owner or the Board adopts a construction that does not require a “minimum distance” then Claim 22 is rendered obvious by the Layson’757-Layson’213 combination without the need to rely on IllinoisLaw.

central database query may involve correlating “multiple crime incidents with offender(s) locations”). Such offenders would be included in Layson’213’s table reporting “suspect offenders,” generated in response to the database query. Ex-1008, 21:61-64. A POSITA would have understood that a table corresponds to a set of lists. Ex-1002 ¶259.

As explained in §XII.B.1, in the combined Layson’757-Layson’213-IllinoisLaw system, a POSITA would have been motivated to ensure that any offenders whose locations correlated over time with the victim’s location had traveled together with the victim as the victim “move[d] from place to place” (Ex-1010, 0009-0010) to avoid false positives arising when an offender and victim are merely incidentally located in the same area over a period of time. Ex-1002 ¶260. Accordingly, a POSITA would have been motivated to implement a check for a minimum pre-specified distance of joint travel over a period of time (corresponding, for example, to the victim’s travel from work to home) to evaluate whether the offender “move[d] from place to place” with the victim over the period of time, crossing the line into criminal stalking. Ex-1010, 0009-0010. Such incidents would then be included in Layson’213’s filtered table reporting “suspect offenders” (Ex-1008, 21:61-64) who may be stalking the victim. Ex-1002 ¶260.

f. Element 22[E]: (v) means to provide result of the determination (iv) to the requestor of (iii).

Layson'757-Layson'213-IllinoisLaw teaches the claimed “means” under the construction proposed in §X.A.8, which is equivalent to either a transmitter configured to transmit the result of the determination to a device belonging to the requestor, or “display 23” configured to display the result of the determination to the requestor.

Result received by Layson'757's victim device: Layson'757's central database includes a transmitter, to enable it to communicate “via the wireless communication link.” Ex-1007, 3:9-13. The central database uses such transmitter to report potential stalking behavior to the victim and law enforcement, as explained for Element 15[D] for reporting buffer zone violations. Ex-1002 ¶262

Request received by Layson'213's query terminal: As explained for Element 22[D], a query of Layson'213's correlation database may be used to generate a report of suspect offenders who maintained proximity with the victim while in motion. Such report is provided “electronically” to the law enforcement requestor, using the query terminal. Ex-1008, 18:10-13. A POSITA would have understood that the query terminal would include a display, to display such report. Ex-1002 ¶263.

C. Ground 3: Claim 2 is obvious over Layson’757-Layson’213-IllinoisLaw-Wang

1. A POSITA would have been motivated to combine Layson’757-Layson’213-IllinoisLaw-Wang and had a reasonable expectation of success

In Layson’757’s tracking system, each portable tracking device is configured to compare its position to “location constraints [] sent from the central data-base system,” and alert the central database in response to any violations of those constraints. Ex-1007, 9:45-50. Layson’757 explains that the constraints “define locations and a distance radius” around a location, and correspond to areas where the subject (victim or offender) “is allowed or not allowed.” Ex-1007, 9:37-43. The location constraints may be static or dynamic (e.g., a buffer region around a moving victim). Ex-1007, 9:35-41. Ex-1002 ¶¶264-267.

Wang similarly teaches a “tracking system” (Ex-1009, 1:2) in which each mobile unit can operate within defined “borders” provided by the network, as illustrated in annotated Figure 1. Ex-1009, 3:50-56.

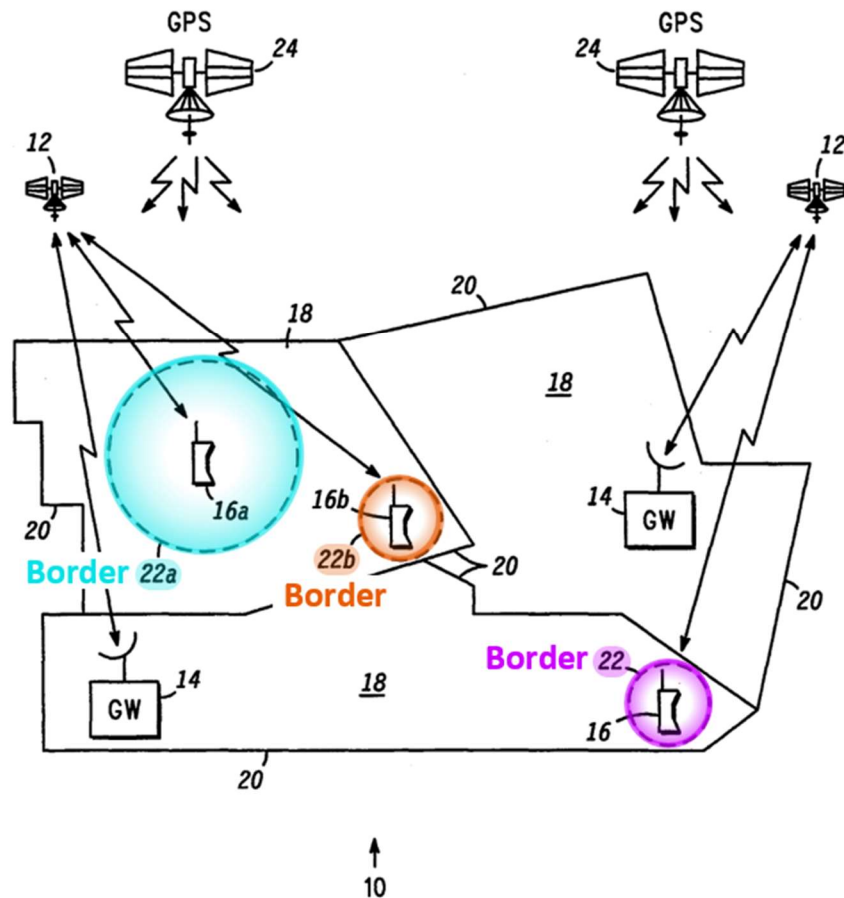


FIG. 1

When a mobile unit is located anywhere within its permissible border, it does not need to transmit its location to the network. Ex-1009, 3:56-58. In this manner, the borders are used to reduce the consumption of “communication resources” and battery power that would otherwise be associated with repeated location transmissions. Ex-1009, 1:38-52. “However, when the mobile unit 16 goes outside the border 22, it sends a new location communication to network 10” and is provided with a new border. Ex-1009, 3:58-61. Wang’s borders may take any shape (Ex-1009, 6:20-24) and are sized based on the network’s desired accuracy level for the

associated mobile unit's location (Ex-1009, 3:64-4:3). For instance, as illustrated above, Wang's network need only know that mobile unit 16a is located *somewhere* within the region defined by border 22a, rather than its precise location. *Id.* Wang teaches that its system may thus conserve communication resources. Ex-1009, 1:44-59. Ex-1002 ¶¶268-269.

A POSITA seeking to implement Layson'757's location constraints would have recognized that, where an offender's location constraints include both static permitted regions (e.g., the offender's home or workplace) and dynamic prohibited regions (e.g., buffer region around a victim), the permitted and prohibited regions may sometimes overlap (e.g., a victim driving by an offender's home), and that notifying the authorities of the offender's presence in such an overlapping area would correspond to a false alarm. Ex-1002 ¶¶270-272 (citing Ex-1010, 0010). To avoid such false alarms,⁹ a POSITA would have been motivated to modify Layson'757-Layson'213, based on Wang's teachings, such that Layson'757's portable monitoring devices do not provide their locations to the central database when located within a permitted region (analogous to the region defined by Wang's border), as specified in the offender's location constraints. Ex-1002 ¶¶273-275.

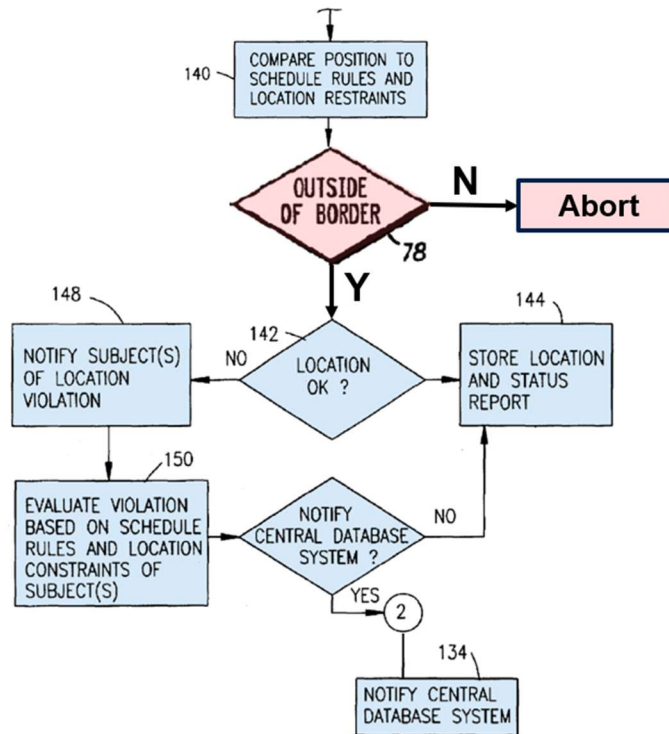
⁹ The Layson'757-Layson'213 combination already addresses another type of false alarms, through Layson'213's "loiter time." Ex-1008, 23:33-36.

- 2. Dependent Claim 2: The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.**

Layson'757-Layson'213-IllinoisLaw-Wang teaches the claimed “means” under the construction proposed in §X.A.5, which is equivalent to a control unit programmed to: (1) compare its current location to an exclusion zone; (2) if its current location is within the exclusion zone, abort; (3) otherwise, proceed to provide its current location to the network. Ex-1002 ¶¶276-279.

Each of Layson'757's portable monitoring devices includes a “control unit,” that includes a “processor and memory card [that] provide[] the execution environment for the algorithms” used to compare the current location of the device to the “location constraints stored in the memory,” and to initiate transmission of “a data message to the central data-base system” in response to identifying a violation. Ex-1007, 3:45-60. In the combined system, Layson'757's comparison step would be modified as illustrated below (combining aspects of Figures 6A and 6B of Layson'757, with step 78 of Wang's Figure 6):

Layson'757 Modified By Wang



In step 140, the victim's portable monitoring device compares its current location to location constraints received from the central database. These location constraints would include a buffer region around an offender's location, as a prohibited region. And, as explained in Section XII.C.1, these location constraints would also include allowed regions, in the form of the victim's home and work. In step 78, the victim device compares its location to its permitted regions in its location constraints (analogous to Wang's border, Ex-1009, 6:7-9). If its current location *is* within a permitted region, the device does not store its location or send its location to the central database (abort in the above figure). If its current location *is not* within a permitted region, in step 142 the victim device determines if the device is located in

a prohibited region (e.g., the offender's buffer region), and either immediately provides its location to the central database (step 134) in response to determining it is in a prohibited region, or it stores its location for later batch upload to the central database (step 144). Each of Layson'757's portable tracking devices, as modified by Wang, performs the recited function, each time it executes Layson'757's algorithms, as modified by Wang. Ex-1002 ¶¶278-279.

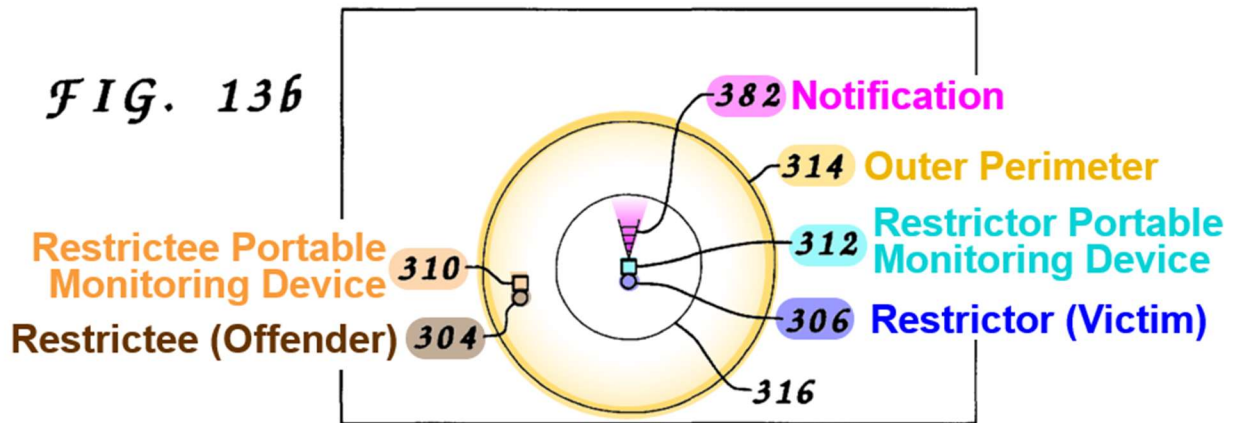
D. Ground 4: Claim 15 is rendered obvious by Taylor-Fast

1. A POSITA would have been motivated to combine Taylor-Fast with a reasonable expectation of success

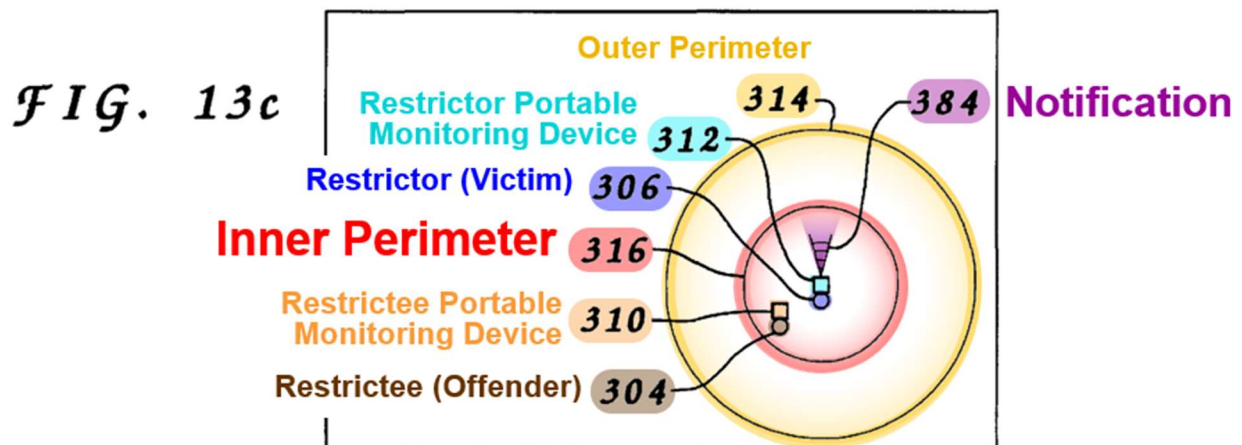
Taylor discloses a “tracking system” “to monitor the behavior of a first person, a restrictee person, relative to a second person, a restrictor person” (Ex-1011, 19:61-64), by assigning a portable monitoring device to each person (Ex-1011, 16:41-44). Ex-1002 ¶¶280-284. Taylor's system “is particularly expedient in the enforcement of court issued restraining orders” (Ex-1011, 20:5-7), where it may be used to protect a restrictor/victim from a restrictee/stalker by providing notifications to the restrictor and/or “an oversight authority” when the restrictee person is nearby. Ex-1011, 20:16-24. Transmission of such notifications may be based on the position of the restrictee person (obtained from their portable monitoring device) relative to one or more “perimeters” defined around the restrictor person. Ex-1011, 20:13-34. As illustrated in annotated Figure 13b below, when restrictee 304 is located within first perimeter 314 around restrictor 306, the system sends notification 382 to

restrictor portable monitoring device 312 to warn them of the restrictee's proximity.

Ex-1011, 21:4-7.



When restrictee person 304 is even closer, e.g. within second perimeter 316, the system escalates the response taken. Ex-1011, 16:57-60 (“disable restrictee person 304.”), 21:8-15 (distinct notification).



Fast is in the same field as Taylor, disclosing a monitoring system for “restraining order enforcement” establishing a set distance between a “threatened

person” and a “threatening person.” Ex-1012, 7:36-8:7; Ex-1002 ¶280. Fast, similar to Taylor, assigns portable tracking devices (“beacons”) (Ex-1012, 7:62-67) to both the threatened person and the threatening person (Ex-1012, 7:62-63), which correspond to Taylor’s restrictor and restrictee. Ex-1002 ¶281.

In Fast, when “the two beacons [are] found to be too close together,” an alarm is sent to both beacons and, if “greater separation distance [is] not provided within a predetermined time limit,” the system triggers both beacons “into emergency mode allowing [a] supervising authority to track one or both parties.” Ex-1012, 7:67-8:7. Thus, Fast teaches waiting a “predetermined time limit” to confirm the violation is ongoing, before notifying a “supervising authority” of the violation. Put another way, Fast teaches that the violation is reported only if close proximity has been maintained for at least the “predetermined time limit.” A POSITA would have understood that Fast’s “predetermined time limit” (like the loitering time of Layson’213) allows a threatening person to remedy an inadvertent violation of the threatened person/restrictor’s space, and prevents false alarms caused by a brief, unintentional violation that does not pose an actual threat. Ex-1002 ¶282. A POSITA would have recognized that notification of such false-alarm circumstances would burden oversight authorities and create unnecessary stress on the victim. *Id.* (citing Ex-1053, 0002, 0005).

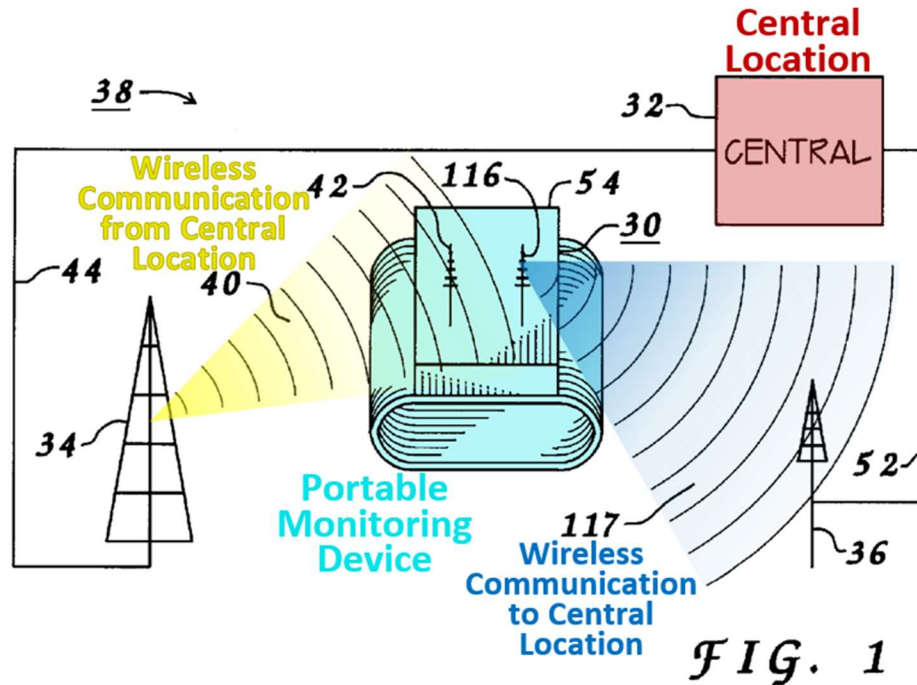
A POSITA would have been motivated to implement Fast's "predetermined time limit" in Taylor's monitoring system by waiting for Fast's "predetermined time limit" before notifying "an oversight authority" (Ex-1011, 20:17-20), in response to the restrictee's violation of one of the restrictor's perimeters, in case the violation was inadvertent. Ex-1002 ¶283. The combined Taylor-Fast system would include the record keeping and central location features of Taylor while obtaining the benefit of Fast's teachings; namely helping to avoid false alarms from a temporary/inadvertent violation. Ex-1002 ¶284.

2. Independent Claim 15

a. Element 15[pre]:

First and second portable remote units: Taylor's restrictor portable monitoring device corresponds to the "first portable remote unit" and Taylor's restrictee portable monitoring device corresponds to the "second portable remote unit." Ex-1002 ¶¶286-291. Taylor teaches a "restrictor" person (e.g., a potential victim) that seeks to be warned when one or more "restrictor" persons (e.g., a stalker subject to a restraining order) is located nearby. Ex-1011, 20:5-29, 20:2-4 ("multiple restrictor persons [may be] monitored relative to a single restrictor person"). Both the restrictor and restrictee carry a "portable monitoring device" (Ex-1011, 20:58-62) configured to communicate with a central location (Ex-1011, 6:21-28). As

illustrated in annotated Figure 1 below, this communication may occur wirelessly, using “conventional wireless communication systems” (Ex-1011, 6:34-40).



The restrictor is a wireless consumer, because he/she consumes wireless resources when using his/her device. Ex-1002 ¶288.

Each of Taylor’s restrictee portable monitoring devices is also configured for wireless communication (Ex-1011, 6:21-28), obtains and transmits information about its current position to the central location as the restrictee person moves (*id.*, 14:45-56), and is, therefore, a “portable mobile remote unit.” Ex-1002 ¶¶289-291.

Restrictor and restrictee devices are in motion: Taylor’s system monitors the movement of the restrictee person relative to the restrictor person. Ex-1011, 19:62-64. Perimeters around the restrictor “are variable and move with restrictor

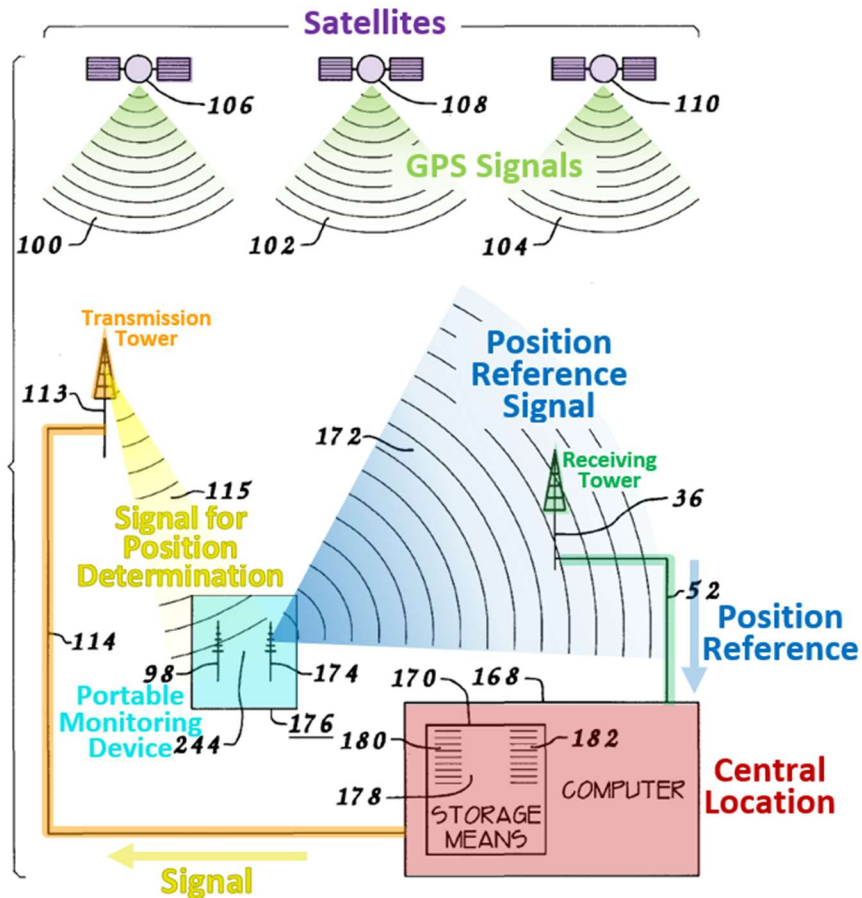
portable monitoring device 312 as restrictor person 306 carries it about.” Ex-1011, 20:66-21:1.

As discussed below, Taylor-Fast teaches a method by which Taylor’s central location determines that the restrictor device is being tracked by the restrictee device over a tracking period, while the devices are in motion. Ex-1002 ¶¶292-293.

b. Element 15[A]:

Taylor teaches obtaining the location of the restrictor/wireless consumer using their portable monitoring device. Ex-1002 ¶¶294-298. “[E]ach portable monitoring device may routinely receive at least one signal ... [that] is then capable of, through a mathematical computation, being reduced to *a position reference* indicative of *a specific location*, within a predetermined range of measurement.” Ex-1011, 14:9-14. These location-determining signal(s) may be transmitted from central location 168 (below, yellow) and/or GPS satellites (below, green), as illustrated in Figure 3, below:

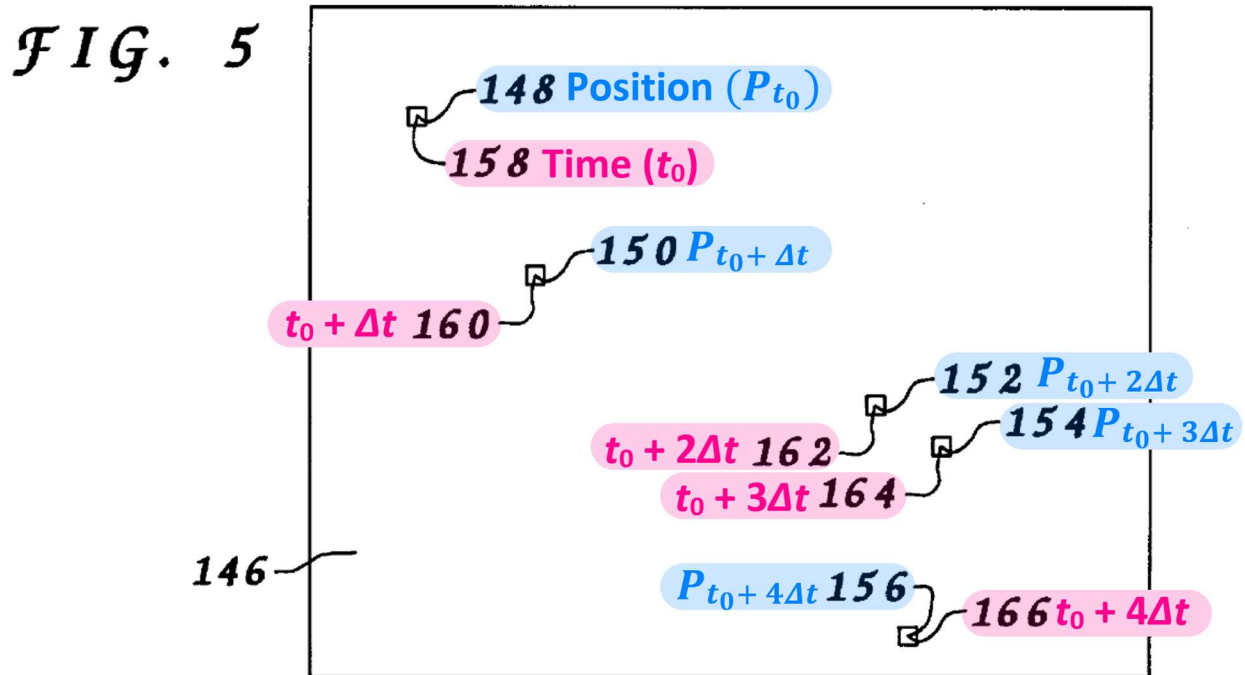
FIG. 3



Ex-1011, 9:40-49 (discussing positioning signals). Each portable monitoring device may then “transfer signal 172 containing position reference 244” to the central location, where it is stored in database 182. Ex-1011, 14:53-56; *see also id.*, 14:14-23 (similar), 18:62-64 (similar).

Taylor’s portable monitoring devices generate position references at time “intervals during said tracking period.” For example, a set of five position references for a portable monitoring device, each obtained “a uniform measurement of time apart.” Ex-1011, 11:20-31. As shown in the figure, the first measurement is taken at

time t_0 , and subsequent measurements are taken at time intervals of Δt , a uniform measurement of time apart (pink).



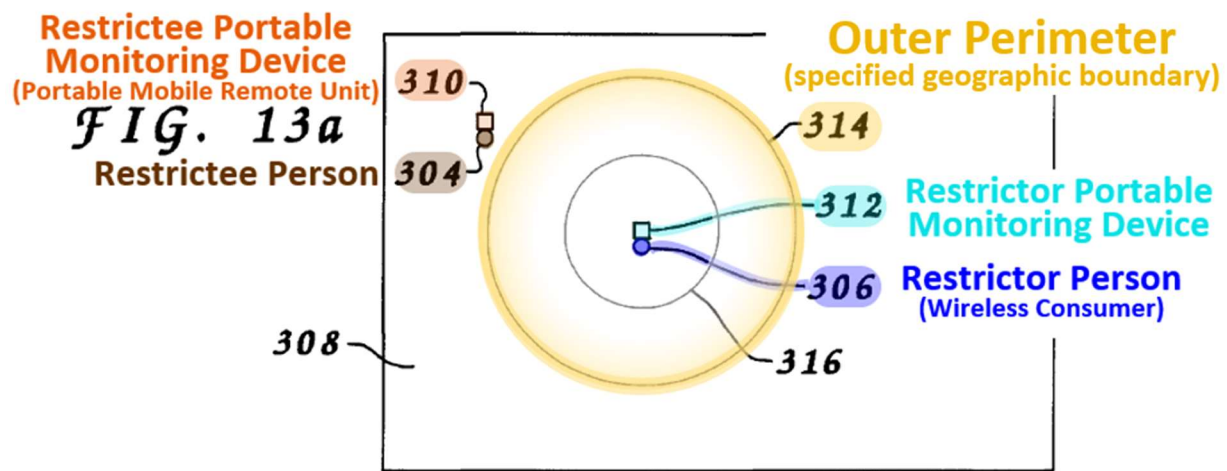
In the Taylor-Fast combination, the claimed “tracking period” corresponds to Fast’s “predetermined time limit” (Ex-1012, 7:65-8:7) before notifying Taylor’s “oversight authority” (Ex-1011, 20:17-20) of restrictee’s violation of a restrictor’s perimeters. Waiting Fast’s predetermined time limit would entail sampling both the restrictor’s and the restrictee’s positions over two or more intervals before alerting the authorities and the restrictor/victim. Ex-1002 ¶¶297-298.

c. Element 15[B]:

Taylor’s central location obtains the location information of the restrictee portable monitoring device, which is provided by the restrictee device, at intervals,

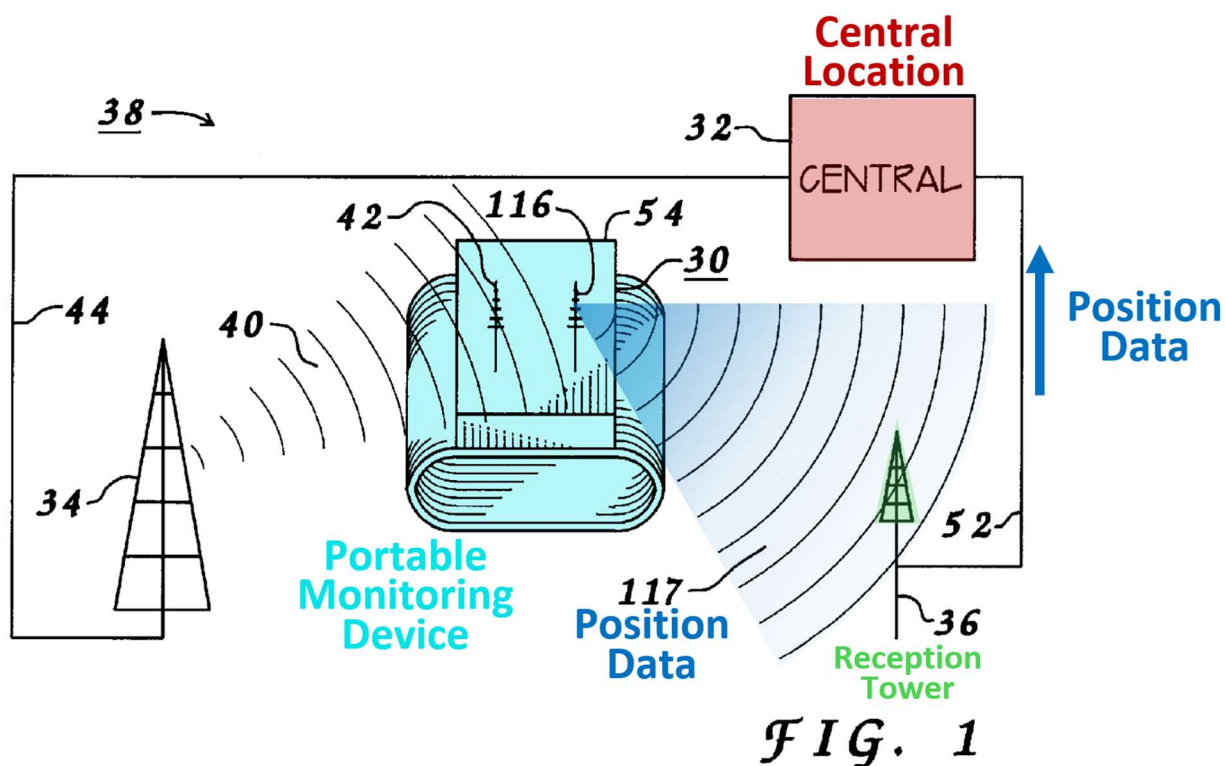
when the device is located within a perimeter around the restrictor. Ex-1002 ¶¶300-307.

Specified geographic boundary: Taylor teaches defining one or more perimeters (each a “specified geographic boundary”) around a restrictor, as illustrated in annotated Figure 13, below, and notifying the restrictor when the restrictee enters within each perimeter. Ex-1011, 20:58-21:15.



Obtaining the restrictee device’s location at intervals: In Taylor, both the restrictor and the restrictee portable monitoring devices provide location information by routinely receiving “at least one signal” that is “reduced to *a position reference* indicative of *a specific location*.” Ex-1011, 14:9-14. Each transmission of signal 40 corresponds to an “interval.” Ex-1011, 11:20-31 (“a uniform measurement of time apart”).

Upon receiving signal 40, Taylor's restrictee portable monitoring device will determine its position (Ex-1011, 5:63-6:13, 14:10-18 (similar)), and then "immediately transfer" it (Ex-1011, 10:5-7) to the central location (Ex-1011, 9:7-9), as illustrated in annotated Figure 1 below:



Taylor’s signal 40 corresponds to a request for all restrictee devices capable of receiving the signal to disclose their locations, whereas in Fast only victim/offender devices in close proximity disclose their locations to the central authority. Fast teaches that a beacon assigned to the threatened person and a beacon assigned to the threatening person “phone” one another to request their respective positions, to determine whether the beacons were “too close together ... indicating

that a potential violation had occurred.” Ex-1012, 7:65-8:3. Thus, the two Fast beacons determine when they are in close proximity and report this information to a central authority if greater separation distance is not provided “within a predetermined time limit.” Ex-1012, 8:3-7.

A POSITA would have been motivated to include these teachings in Taylor. Ex-1002 ¶306. Taylor teaches an embodiment in which its portable monitoring devices transmit their location information to the central location in batches. Ex-1011, 10:5-13. Taylor also teaches that the devices may evaluate locally whether they are in prohibited or allowed areas. Ex-1011, 17:33-41 (“positional conditional database” defining “allowable” and/or “excluded” areas), 18:40-45 (portable device may store a copy of the positional conditional database for local use). In response to locally identifying violations, the devices report the violations in real-time to the central location. Ex-1011, 19:8-17.

In the Taylor-Fast combined system, the restrictor and restrictee devices may report their location in batches under non-violation circumstances, but would communicate information needed to identify dynamic perimeter violations (as taught by Fast), and report any identified violations in real-time to the central station location (as taught by Taylor). Ex-1002 ¶307. Thus, in the Taylor-Fast combined system, the central location’s transmission of signal 40 causes a restrictee portable monitoring device either to transmit its position (determined using signal 40) to the

central location in response to identifying a violation, or store its position for later batch transmission. Where the only mobile units in close proximity to the restrictor are corresponding restrictee devices, each transmission of signal 40 by central location thus corresponds to a request, at a given time interval, at the network (central location), that all mobile remote units (restrictor portable monitoring devices) disclose their location to the network if they are in close proximity to the wireless consumer (in violation of a restrictor's perimeter). Ex-1002 ¶307.

d. Element 15[C]:

Taylor's restrictor and restrictee devices are located in proximity to one another when the restrictee device is located within the restrictor's perimeter. Ex-1011, 21:4-7, 20:16-18 (similar). Because the restrictor and restrictee devices are in motion, verifying that the devices "have maintained relative proximity during the tracking period" corresponds to determining that the restrictee device remained located within moving restrictor's perimeter at each interval during the tracking period. Ex-1002 ¶¶308-312.

As explained in §XII.D.1 (motivation to combine Taylor and Fast), in response to detecting a restraining order violation, Fast teaches waiting a "predetermined time limit" (or grace period) to confirm the violation is ongoing, before notifying a "supervising authority" of the violation. Ex-1012, 7:67-8:7. A POSITA would have been motivated to implement Fast's "predetermined time limit"

in Taylor's system by notifying "an oversight authority" (Ex-1011, 20:16-19) of the restrictee person's violation after determining that the violation continued over Fast's predetermined time limit, indicating that the restrictee person may pose an actual threat to the restrictor person. Ex-1002 ¶¶310-311.

e. Element 15[D]:

Taylor teaches notifying "an oversight authority" or the restrictor person in response to identifying a perimeter violation. Ex-1011, 20:17-20. A POSITA would have been motivated to wait to ensure that the violation was maintained over Fast's "predetermined time limit" (the tracking period), before sending the notification (*see* Element 15[C]). Ex-1002 ¶¶313-315.

Both Taylor's restrictor and oversight authority personnel correspond to a "network requestor." Taylor's central location tracks proximately-located restrictees and alerts the restrictor to their presence at the restrictor's request based on the restrictor's voluntary enrollment in the monitoring system and transmission of their location coordinates to the central location. Ex-1002 ¶315. Similarly, Taylor's central location notifies the oversight authority of violations at its request, based on its use of Taylor's system. *Id.*

E. Ground 5: Claims 1, 2, and 22 are obvious over Taylor-Fast-IllinoisLaw

1. A POSITA would have been motivated to combine Taylor-Fast-IllinoisLaw with a reasonable expectation of success

As explained in §XII.D.1, a POSITA would have been motivated to combine Taylor-Fast. Ex-1002 ¶¶316-323.

Taylor teaches that its monitoring system “is particularly expedient in the enforcement of court issued restraining orders,” where it may be used to protect a restrictor person (e.g., a victim) from a restrictee person (e.g., a stalker subject to the restraining order). Ex-1011, 20:5-7. As explained in §XII.D.1, a POSITA would have been motivated to help ensure that a restrictee’s presence within one of the restrictor’s perimeters corresponds to an actual threat, before issuing a notification, such as by waiting Fast’s “predetermined time limit” (Ex-1012, 7:67-8:7) before notifying an oversight authority (Ex-1011, 20:17-20) of a restraining order violation, in case the violation was inadvertent.

Certain other behaviors, such as stalking, can be indicative of intentional restraining order violations, even when an offender/restrictee maintains the minimum separation distance from the victim/restrictor specified in the restraining order. Ex-1002 ¶319 (citing Ex-1007, 8:50-56; Ex-1035, 4:36-53). Moreover, a POSITA would understand that stalking includes following and maintaining surveillance of a victim. Ex-1002 ¶XX (citing Ex-1055, 0001). In order to identify

both types of violations, a POSITA would have been motivated to implement at least two of Taylor's perimeters around a restrictor (Ex-1011, 20:13-34)—an inner perimeter corresponding to the minimum required separation distance in the restraining order to detect violation of such separation distance, and a larger outer perimeter to detect stalking. Ex-1002 ¶319.

As explained in §XII.C.1, to detect such stalking, a POSITA would have been motivated to implement a system that addresses the legally-defined characteristics of stalking, such as following and maintaining surveillance as the victim “move[s] from place to place.” Ex-1010, 0009-0010. A POSITA seeking to use the Taylor-Fast combined system to address the crime of stalking would thus have been motivated to design a system that would address following as the victim “move[s] from place to place” as well as maintaining close proximity. To capture such movement “from place to place,” a POSITA would have included a distance threshold, because following for a *short* distance might be incidental and innocent. Ex-1002 ¶¶320-321 (citing Ex-1017 (stalking involves following for a “prolonged distance”). In addition, while a following event may be coincidental and innocent, in the event it is not, reporting and forwarding such occurrences would have been recognized as useful for subsequent use as “evidence during a legal proceeding.” Ex-1011, 18:38-41. Ex-1002 ¶¶322-323.

2. Independent Claim 1

a. Element 1 ``` : ```

Taylor's "mobile location reporting communication system consists of a network of communication sources and targets managed by one or more control stations." Ex-1001, Abstract. Ex-1002 ¶¶324-326.

Taylor discloses a communication system in the form of a "monitoring system 38" (Ex-1011, 5:32-34) "for monitoring a plurality of monitored persons" (*id.*, 2:34-37). Taylor's monitoring system 38 includes "a portable monitoring device [30] for each of the monitored persons" (*id.*, 2:37-39) together with a "central location 32" (*id.*, 5:32-34), which is a "control station." *See id.*, 5:55-65 ("Supervisory personnel, not shown, would have access to exert control over, or otherwise interface with, monitoring system 38 at central location 32.").

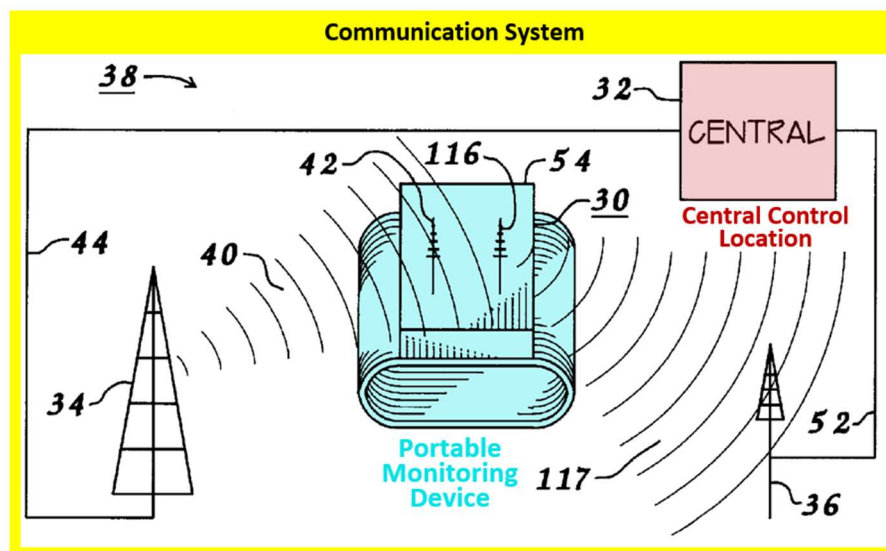


FIG. 1

b. Element 1[A]:

Taylor's restrictor portable tracking device is a portable mobile remote unit, because it obtains and transmits position information to the central location as the monitored person moves (*id.*, 14:45-56), as explained for Element 15[pre]. Ex-1002 ¶328.

c. Element 1[B]:

Each of Taylor's portable monitoring devices is a "communication unit" because it is capable of sending and receiving communications. *See, e.g.*, Ex-1011, 9:20-22 (device includes a "reception antenna"), 10:18-20 (device includes "a transmit antenna"). Ex-1002 ¶¶329-332.

Taylor's system includes a network of portable monitoring devices, because it "monitor[s] the behavior of a first person, a restrictee person, relative to a second person, a restrictor person" (Ex-1011, 19:61-64), with each restrictee/restrictor assigned a portable monitoring device (*id.*, 20:58-62). Moreover, "a single restrictee person [may be] monitored relative to a plurality of restrictor persons" and/or "multiple restrictee persons [may be] monitored relative to a single restrictor person." *Id.*, 20:1-4.

The restrictor/restrictee portable monitoring devices form "a network of communication units," because each device is communicatively connected to the central location. Ex-1011, 6:21-26 ("It is a requirement that the central location(s)

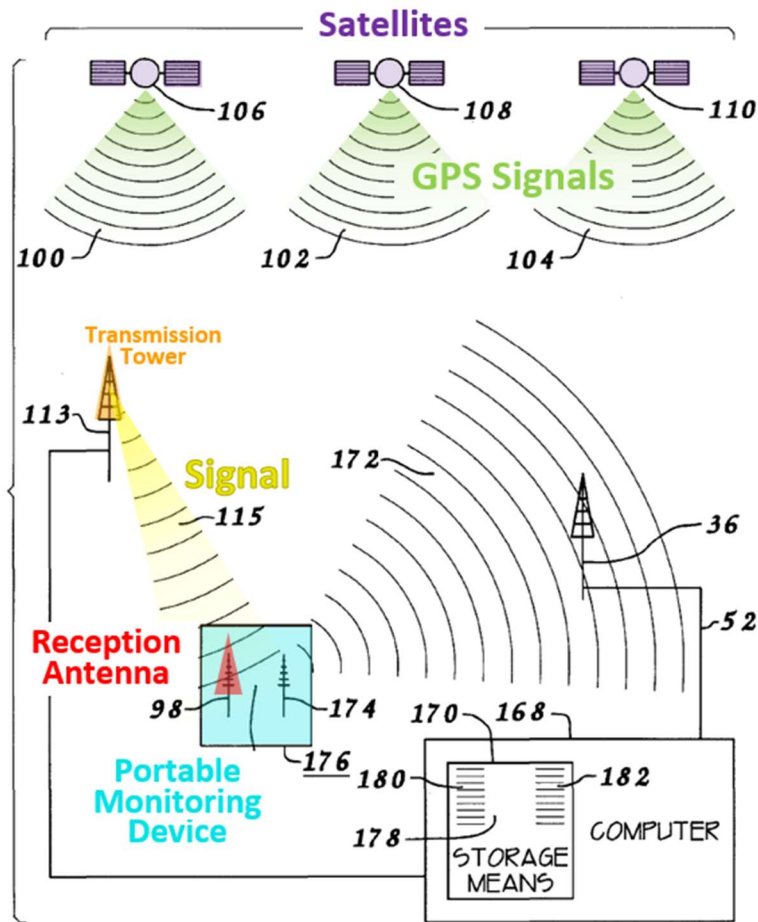
be capable of communicating with respective portable monitoring devices”). In particular, this configuration—i.e., a set of devices configured to communicate with a central control location—corresponds to a “hub-and-spoke” communications network. Ex-1002 ¶332. In the combined Taylor-Fast system, the portable devices are also able to communicate directly with one another (Ex-1012, 7:62-8:7), over Taylor’s cellular network (Ex-1011, 10:3-4; Ex-1012, 2:54-55).

d. Element 1[C]:

Taylor teaches the claimed “means” under the construction proposed in §X.A.1. Ex-1002 ¶¶333-336.

Each portable monitoring device includes a “reception antenna 98” that is capable of receiving GPS signals and/or signal 115. Ex-1011, 9:40-48.

FIG. 3



“[A] device located within the portable monitoring device” may be programmed to perform a “mathematical computation” to reduce these received signal(s) to “a position reference indicative of a specific location....” Ex-1011, 14:8-18, 14:45-56 (similar). Thus, each of the portable monitoring devices perform the recited function of obtaining its location. Ex-1002 ¶336.

e. Element 1[D]:

Taylor-Fast teaches the claimed “means” under the construction proposed in §X.A.2. Ex-1002 ¶¶337-339.

Each of Taylor’s portable monitoring devices includes a “reception antenna 98.” Ex-1011, 9:41-44. Additionally, in the Taylor-Fast combined system, Taylor’s restrictor and restrictee devices would communicate geographic boundary information needed to identify dynamic perimeter violations to one another (as taught by Fast (Ex-1012, 7:65-8:3)), in order to report any identified violation in real-time to the central location (as taught by Taylor (Ex-1011, 19:8-17)). Thus, each portable monitoring device performs the recited function of obtaining geographic boundary information. Ex-1002 ¶339. As explained for Element 14[E], below, this geographic boundary information is used by the restrictee device in determining whether to transmit its location to the central location (“to disclose a global location at the network”).

f. Element 1[E]:

Taylor-Fast teaches the claimed “means” under the construction proposed in §X.A.3. Ex-1002 ¶¶340-343.

Fast teaches that each of its “beacons” includes “a microprocessor and a memory for storing programs to be executed by said microprocessor.” Ex-1012, Cl. 1. In the Taylor-Fast combined system, Taylor’s restrictor and restrictee devices may

report their location in batches under non-violation circumstances, but would communicate geographic boundary information needed to identify dynamic perimeter violations to one another and report any identified violations in real-time to the central location.

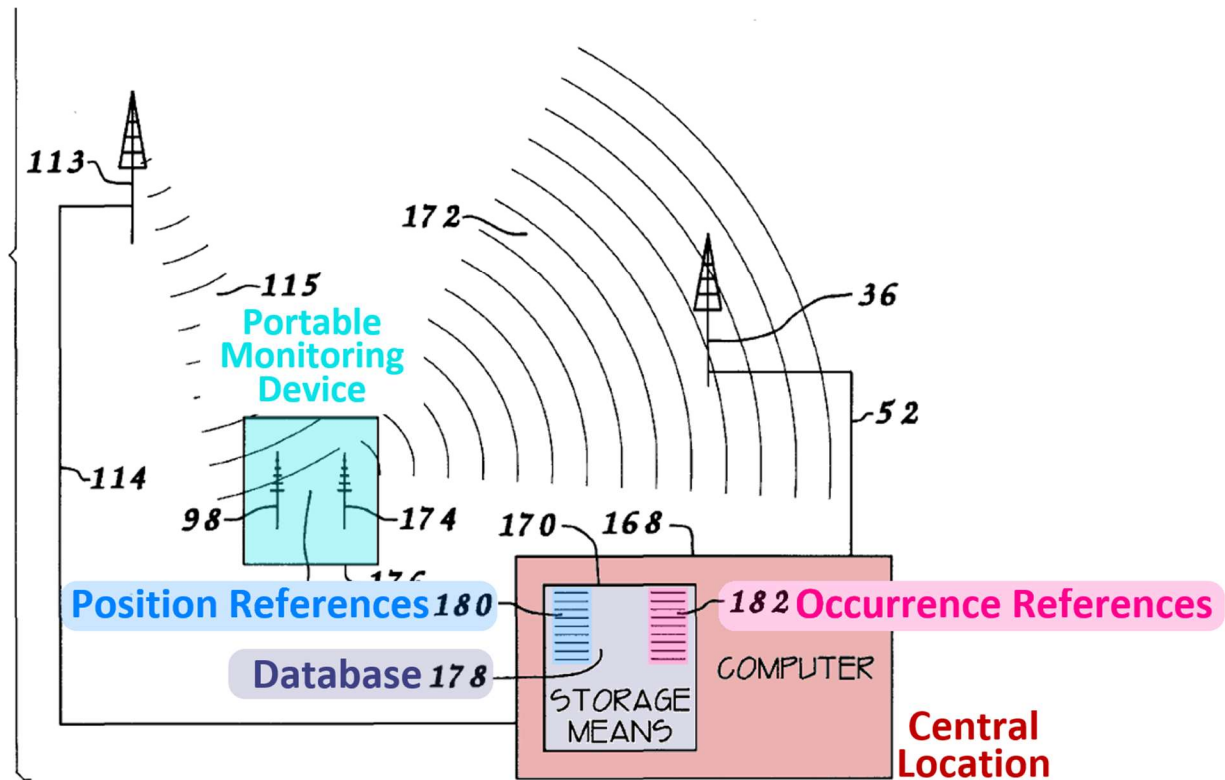
Taylor teaches that each portable monitoring device includes a “transmitting antenna 116” for transmitting signals to the central location (Ex-1011, 10:18-22), such as to report identified violations (“determination[s] that the portable mobile remote unit is within the geographic boundary”) to the central location. Reporting such violations would involve transmitting the device’s location to the central location, thus performing the function of providing the portable monitoring device location to the network. Ex-1002 ¶343.

g. Element 1[F]:

Taylor-Fast teaches the claimed “means” under the construction proposed in §X.A.4, which is equivalent to a control unit programmed to: (1) receive, at intervals, the location of the “tracked” mobile unit, (2) receive the locations of “other” mobile units, during such intervals, and (3) maintain a list of such “other” units within a predefined geographic boundary of the “tracked” unit for a period of time as the tracked unit moves, together with a transmitter configured to transmit a message identifying such “other” unit. Ex-1002 ¶¶344-350.

Taylor's central location includes a control unit of a network control center, because it is configured to "perform computational calculations" on information received from portable monitoring units. Ex-1011, 5:42-46. The central location receives the location of the restrictor portable tracking device ("tracked" unit). *See* Element 1[E]. These locations are transmitted over intervals (*see* Element 15[A]) while the restrictor and restrictee devices are in proximity. The central location also receives the locations of restrictee portable tracking devices ("other" mobile units) during such intervals, as explained for Element 15[B].

Taylor's central location maintains a list of restrictee monitoring devices (such "other" units) located within a perimeter around the restrictor monitoring device (i.e., within a predefined geographic boundary of the "tracked" unit) that provided their location at each interval. Ex-1002 ¶¶347-348. Taylor teaches maintaining the position references, along with associated time-of-occurrence references, received from the portable tracking devices, as lists in a database (storage means 170):



A POSITA would have understood that, conceptually, a database is a set of related lists. Ex-1002 ¶348.

As explained in §XII.E.1, the central location may determine that such restrictee devices maintained close proximity to the restrictor device while the devices traveled a minimum distance threshold,¹⁰ for a period of time (Fast’s “predetermined time limit”), to identify and report potential stalking behavior, thus performing the recited function. Ex-1002 ¶¶349-350.

¹⁰ As noted in §X.A.4, to the extent that Patent Owner or the Board adopts a construction that does not require a “minimum distance,” then Claim 1 is rendered obvious by the Taylor-Fast combination without the need to rely on IllinoisLaw.

Taylor's central location also includes a transmitter, to enable it to communicate using "wireless communications systems." Ex-1011, 6:34-40. The central location uses such transmitter to report violations to the victim and law enforcement, as explained for Element 15[D].

3. Dependent Claim 2

a. Claim 2:

Taylor-Fast teaches the claimed "means" under the construction proposed in §X.A.5, which is equivalent to a control unit programmed to: (1) compare its current location to an exclusion zone; (2) if its current location is within the exclusion zone, abort; (3) otherwise, proceed to provide its current location to the network. Ex-1002 ¶¶351-355.

Fast teaches that each of its "beacons" includes a control unit in the form of "a microprocessor and a memory for storing programs to be executed by said microprocessor." Ex-1012, Cl. 1.

Taylor teaches use of "a computer program" to purge a series of position data from Taylor's locational tracking database when the positions within that series do not vary beyond a "predetermined tolerance range" (because, for example, the monitored person is sleeping). Ex-1011, 11:56-67. While Taylor teaches such "purg[ing]" occurring at the database (*id.*), a POSITA would have recognized advantages in configuring Taylor's portable monitoring devices to perform such

purging locally, including conservation of both the communication resources and the central location's processing resources that would otherwise be consumed by transmitting those positions to Taylor's central location, only for the central location to subsequently purge them. Ex-1002 ¶¶352-354.

In the Taylor-Fast combination, Taylor's devices would be configured to dynamically identify perimeter violations (as taught by Fast), and report such violations in real time to the central location. In this system, each of Taylor's devices would report its position to the central location in response to first identifying a violation, and, while the violation was ongoing, only transmit a new position to the central location if that position varied from the previously reported position by Taylor's "predetermined tolerance range." Ex-1002 ¶355. This tolerance range would thus correspond to an "exclusion zone," defining an area around the device's last-reported position within which the device should not provide its location to the central location. *Id.*

4. Independent Claim 22

a. Element 22[pre]:

Taylor-Fast-IllinoisLaw teaches the preamble of Claim 22, as explained for Element 1[pre].

b. Element 22[A]:

Taylor-Fast-IllinoisLaw teaches Element 22[A], as explained for Element 1[A].

c. Element 22[B]:

Taylor's restrictor monitoring device is a first communication unit, and Taylor's restrictee monitoring device is a second communication unit, as explained for Element 15[pre]. Taylor's devices are in motion, as explained for Element 15[pre], and are able to provide their locations to the central database ("network") for a time during such motion, as explained for Elements 15[A] (restrictor device) and 15[B] (restrictee device). Ex-1002 ¶359.

d. Element 22[C]:

Taylor-Fast teaches the claimed "means" under the construction proposed in §X.A.6, which is equivalent to either "antenna 20 and transceiver circuitry 21" configured to transmit tracking requests.

Taylor teaches that each portable monitoring device includes a "transmitting antenna 116" for transmitting its location to the central location (Ex-1011, 10:18-22). Ex-1002 ¶361. As explained for Element 22[D]-[E], below, such locations are used to determine and report to the restrictor that he/she is being tracked by the restrictee. Accordingly, each transmission of location coordinates by the restrictor

portable monitoring device corresponds to a request for the central location to track any proximately-located restrictees. Ex-1002 ¶362.

e. Element 22[D]:

Taylor-Fast-IllinoisLaw teaches Element 22[D] for the reasons explained for Element 1[F].

f. Element 22[E]:

Taylor-Fast-IllinoisLaw teaches the claimed “means” under the construction proposed in §X.A.8, which is equivalent to a transmitter configured to transmit the result of the determination to a device belonging to the requestor.

Taylor’s central database includes a transmitter, to enable it to communicate using “wireless communications systems.” Ex-1011, 6:34-40. The central location uses such transmitter to report violations to the victim and law enforcement, as explained for Element 15[D]. Ex-1002 ¶365.

XIII. THE BOARD SHOULD NOT USE ITS DISCRETION TO DENY INSTITUTION UNDER *FINTIV*

At this time, the district court has not set a trial date, and therefore the concerns animating the Board’s precedent in *NHK/Fintiv* are not present. If, prior to institution, the court sets a trial date and PO thus raises an *NHK/Fintiv* argument, Petitioner will respectfully request an opportunity to respond to PO.

XIV. CONCLUSION

Claims 1-2, 15, and 22 of the '918 should be canceled.

Respectfully Submitted,

/s/ Ben Haber

Ben Haber (Reg. No. 67,129)

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner certifies that this petition includes 13,982 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under § 42.8, certificates of service, word count, and exhibits.

CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on May 3, 2024, by filing this document through the Patent Trial and Appeal Board P-TACTS System, as well as delivering a copy via express mail upon the attorney of record for the patent at the following address:

33356-SoCAL IP Law Group LLP
310 N. Westlake Blvd. Ste 120
Westlake Village, CA

A courtesy copy was sent to the below counsel via electronic mail:

Sandeep Seth
ss@sethlaw.com
SETHLAW, PLLC
Pennzoil Place
700 Milam Street, Suite 1300
Houston, Texas 77002
Telephone: (713) 244-5017
Fax: (713) 244-5018

Stanley H. Thompson, Jr.
stan@thompsontechlaw.com
THOMPSON TECHNOLOGY LAW
655 N. Central Ave., 17th Floor
Glendale, CA 91203
Telephone: (323) 409-9066

Dated: May 3, 2024

Respectfully submitted,

/s/ Ben Haber

Benjamin Haber (Reg. No. 67,129)
O'Melveny & Myers LLP
400 South Hope Street, 18th Floor
Los Angeles, CA 90071
Telephone: (213) 430-6000
Fax: (213) 430-6407
Email: bhaber@omm.com
Attorney for Petitioner