

Exhibit B-01 to CMT's Invalidity Contentions:
Comparison of U.S. Patent No. 9,333,946 and Abramson '480

As described in the following claim chart, claims 1-6, 8-13, and 15-20 (“asserted claims”) of U.S. Patent No. 9,333,946 (“the '946 patent”) are invalid under 35 U.S.C. §§ 102 and/or 103 in view of U.S. Patent No. 8,290,480 (“Abramson '480”), titled “System and method for selectively restricting in-vehicle mobile device usage.”

Abramson '480 was filed on Sep 26, 2001, claiming priority to provisional application No. 61/384,726, filed on September 21, 2010. Abramson '480 issued on October 16, 2012. Therefore, it constitutes prior art to the '946 patent under at least pre-AIA 35 U.S.C. §§ 102(a), (b) or (e) and/or AIA § 102(a).

To the extent that Abramson '480 is found not to anticipate one or more of the asserted claims of the '946 patent, those claims are obvious in view of Abramson '480 alone or in combination with the knowledge of a POSITA and/or with other prior art references, including, without limitation, one or more references identified in Exhibits B-01 through B-29 to CMT's Invalidity Contentions. CMT's Invalidity Contentions provide additional details regarding the motivation to combine Abramson '480 and the references cited in those exhibits.

CMT notes that while certain potential obviousness arguments and/or combinations may be cited within these charts, such recitations are not meant to be exhaustive. As such, to the extent that any asserted claims are found not to be anticipated by the reference herein, Plaintiff reserves the right to argue that such non-anticipated claims are obvious over the reference alone, in view of the ordinary skill in the art at the time of the alleged invention, in view of any of the arguments and/or prior art identified in the cover pleading or any exhibits thereto, and/or in combination with other charts provided herewith.

Claim construction is yet to occur, fact discovery is ongoing, and the invalidity of the asserted claims will likely be the subject of expert discovery. Thus, this chart should not suggest CMT's adoption of or acquiescence in any claim scope and/or claim construction positions taken by Sfara in its infringement contentions or elsewhere. This chart is intended to set forth CMT's contentions, not all of the evidence that may support such contentions. Where this chart states that a reference discloses any aspect of the claimed invention, the disclosure may be either express or inherent. The cited passages are illustrative and not intended to be exhaustive. Further, citations to any figure, table, or chart is also meant to encompass the language describing the respective figure, table, or chart; and vice-versa. CMT reserves the right to rely on other documents or passages providing comparable evidence of how that Abramson '480 alone or in combination with the knowledge of a POSITA and/or other prior art references renders the asserted claims of the '946 patent invalid.

'946 Patent, Claim 1	Prior Art
1[pre] A device, for use with a database, said device comprising:	CMT does not concede that the preamble is limiting. To the extent it is limiting, Abramson '480 discloses and/or renders obvious a device, for use with a database. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 2:66-3:56: Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature

'946 Patent, Claim 1	Prior Art
	sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31:

'946 Patent, Claim 1	Prior Art
	According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor.

'946 Patent, Claim 1	Prior Art
	It will also be appreciated that the systems and methods disclosed herein can be arranged and/or deployed across a number of scenarios. In one scenario, the systems and methods can be principally employed at a mobile device itself, such as in the form of a mobile application or 'app' executing on the mobile device. In other scenarios, a central machine such as a server in communication with a mobile device can employ the present systems and methods. Such a centralized architecture can enable efficient processing and use of a larger database of user determination characteristics, eliminates power constraints and enables third parties, such as law-enforcement agencies and/or insurance companies, to easily monitor and/or adjust the operation of various mobile devices. Abramson '480 at 16:25-62: Preferably, included among the software modules 130 is a determination module 170 that is executed by processor 110. During execution of the software modules 130, and specifically the determination module 170, the processor 110 configures the control circuit 140 to determine an in-vehicle role of a user of the mobile device 105, as will be described in greater detail below. It should be understood that while software modules 130 and/or determination module 170 can be embodied in any number of computer executable formats, preferably software modules 130 and/or determination module 170 comprise one or more applications or 'apps' that are configured to be executed at mobile device 105 and/or in relation to mobile device 105. In other arrangements, software modules 130 and/or determination module 170 are incorporated and/or integrated within operating system 176. Furthermore, in certain arrangements, software modules 130 and/or determination module 170 can be configured to execute at the request or selection of a user of mobile device 105 (or any other such user having the ability to execute a program in relation to mobile device 105, such as a network administrator), while in other arrangements mobile device 105 can be configured to automatically execute software modules 130 and/or determination module 170, without requiring an affirmative request to execute. The advantages of such an automatic arrangement can be appreciated in context of a regulatory scheme that mandates or recommends that

'946 Patent, Claim 1		Prior Art
		software modules 130 and/or determination module 170 be executed by a mobile device 105 some or all of the time, in furtherance of a campaign to improve driver safety. It should also be noted that while FIG. 1 depicts memory 120 oriented on control circuit 140, in an alternate arrangement, memory 120 can be operatively connected to the control circuit 140. In addition, it should be noted that other software modules (such as user interface 172 and operating system 176) and other information and/or data relevant to the operation of the present systems and methods (such as database 174) can also be stored on storage 190, as will be discussed in greater detail below. Abramson '480 at 17:57-64: In certain arrangements, one or more external databases and/or servers 162 are also in communication with mobile device 105. As will be described in greater detail below, database/server 162 is preferably a computing and/or storage device, and/or a plurality of computing and/or storage devices, that contain(s) information, such as determination characteristics, that can be relevant to the determination of an in-vehicle role of a user of mobile device 105. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
1[a]	a field-detecting component operable to detect at least one of an electric field, a	Abramson '480 discloses and/or renders obvious a field-detecting component operable to detect at least one of an electric field, a magnetic field and an electro-magnetic field and to generate a detected field signature based on the detected one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g.:</i>

'946 Patent, Claim 1	Prior Art
magnetic field and an electro-magnetic field and to generate a detected field signature based on the detected one of an electric field, a magnetic field and an electro-magnetic field;	Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 3:3-56: The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit.

'946 Patent, Claim 1	Prior Art
	The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a

'946 Patent, Claim 1	Prior Art
	magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and

'946 Patent, Claim 1	Prior Art
	during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices.

'946 Patent, Claim 1	Prior Art
	Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
1[b]	an input component operable to input the detected field signature into the database; Abramson '480 discloses and/or renders obvious an input component operable to input the detected field signature into the database. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 12:48-54: The terms “user interface” and “user interfaces” as used herein are intended to encompass one or more input devices, software modules executing in conjunction with one or more operating systems and/or input devices, or any other such similar or related device, accessory, apparatus, and/or software application or module that enable or facilitate input and/or interaction with a computing device Abramson '480 at 2:66-3:56:

'946 Patent, Claim 1	Prior Art
	Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first

'946 Patent, Claim 1	Prior Art
	input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first

'946 Patent, Claim 1	Prior Art
	mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. Abramson '480 at 22:30-35: The process begins at step 210 where a first input of a first device 105 is received, and proceeds to step 220 where the first input is analyzed. Steps 210 and 220 have already been described above with reference to FIG. 2A and thus will not be further elaborated upon here as their operation is substantially identical to steps 210 and 220 described above. Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc.

'946 Patent, Claim 1	Prior Art
	For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 1	Prior Art
1[c] an accessing component operable to access the detected field signature from the database;	Abramson '480 discloses and/or renders obvious an input component operable to input the detected field signature into the database. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 3:3-56: The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication

'946 Patent, Claim 1	Prior Art
	(NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:3-56: The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one

'946 Patent, Claim 1	Prior Art
	of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one

'946 Patent, Claim 1	Prior Art
	determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one

'946 Patent, Claim 1	Prior Art
	operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. Abramson '480 at 23:44-24:2: At step 224, the processor 110 executing one or more of software modules 130, including, preferably, determination module 170, compares determination characteristics such as user determination characteristics (including, but not limited to, the user determination characteristics from the first input, as identified at step 220, and/or the user determination characteristics from the second input, as identified at step 222) with stored determination characteristics such as user determination characteristics, such as those stored at one or more databases, such as database 174 (that is local to mobile device 105) and/or database/server 162 (that is external to mobile device 105). Stored user determination characteristics can be archived user determination characteristics that have been retained from previous user determinations that have been performed, can be generated based on statistical analyses of previous user determinations, and/or can be defined or established independent of any particular previous user determination. In comparing user determination characteristics (such as those identified at step 220 and/or step 222) with stored user determination characteristics (such as stored user determination characteristics that have historically demonstrated a high degree of prediction accuracy in determining an in-vehicle role of a user), the processor 110 can more accurately compute the probability that the in-vehicle role of the user of mobile device 105 is a driver or that the in-vehicle role of the user of mobile device 105 is a passenger. Abramson '480 at 53:48-54:2:

'946 Patent, Claim 1	Prior Art
	Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device

'946 Patent, Claim 1		Prior Art
		105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
1[d]	a comparing component operable to generate a comparison signal; and	Abramson '480 discloses and/or renders obvious a comparing component operable to generate a comparison signal. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 2:66-3:56: Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a

'946 Patent, Claim 1	Prior Art
	processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of

'946 Patent, Claim 1	Prior Art
	the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination

'946 Patent, Claim 1	Prior Art
	characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. Abramson '480 at 23:44-24:2: At step 224, the processor 110 executing one or more of software modules 130, including, preferably, determination module 170, compares determination characteristics such as user determination characteristics (including, but not limited to, the user determination characteristics from the first input, as identified at step 220, and/or the user determination characteristics from the second input, as identified at step 222) with stored determination characteristics such as user determination characteristics, such as those stored at one or more databases, such as database 174 (that is local to mobile device 105) and/or database/server 162 (that is external to mobile device 105). Stored user determination characteristics can be archived user determination characteristics that have been retained from previous user determinations that have been performed, can be generated based on statistical analyses of previous user determinations, and/or can be defined or established independent of any particular previous user determination. In comparing user determination characteristics (such as those identified at step 220 and/or step 222) with stored user determination characteristics (such as stored user determination characteristics that have historically demonstrated a high degree of prediction accuracy in determining an in-vehicle role of a user), the processor 110 can more accurately compute the probability that the in-vehicle role of the user of mobile

'946 Patent, Claim 1	Prior Art
	device 105 is a driver or that the in-vehicle role of the user of mobile device 105 is a passenger. Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence

'946 Patent, Claim 1		Prior Art
		each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
1[e]	an identifying component operable to identify one of an item and a location based on the comparison signal,	Abramson '480 discloses and/or renders obvious an identifying component operable to identify one of an item and a location based on the comparison signal. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device.

'946 Patent, Claim 1	Prior Art
	Abramson '480 at 2:66-3:56: Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the

'946 Patent, Claim 1	Prior Art
	determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the

'946 Patent, Claim 1	Prior Art
	proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. It will also be appreciated that the systems and methods disclosed herein can be arranged and/or deployed across a number of scenarios. In one scenario, the systems and methods can be principally employed at a mobile device itself, such as in the form of a mobile application or 'app' executing on the mobile device. In other scenarios, a central machine such as a server in communication with a mobile device can employ the present systems and methods. Such a centralized architecture can enable efficient processing and use of a larger database of user determination characteristics, eliminates power constraints and enables third parties, such as law-enforcement agencies and/or insurance companies, to easily monitor and/or adjust the operation of various mobile devices. Abramson '480 at 16:25-62: Preferably, included among the software modules 130 is a determination module 170 that is executed by processor 110. During execution of the software modules 130, and specifically the determination module 170, the processor 110 configures the control circuit 140 to determine an in-vehicle role of a user of the mobile device 105, as will be described in greater detail

'946 Patent, Claim 1	Prior Art
	below. It should be understood that while software modules 130 and/or determination module 170 can be embodied in any number of computer executable formats, preferably software modules 130 and/or determination module 170 comprise one or more applications or 'apps' that are configured to be executed at mobile device 105 and/or in relation to mobile device 105. In other arrangements, software modules 130 and/or determination module 170 are incorporated and/or integrated within operating system 176. Furthermore, in certain arrangements, software modules 130 and/or determination module 170 can be configured to execute at the request or selection of a user of mobile device 105 (or any other such user having the ability to execute a program in relation to mobile device 105, such as a network administrator), while in other arrangements mobile device 105 can be configured to automatically execute software modules 130 and/or determination module 170, without requiring an affirmative request to execute. The advantages of such an automatic arrangement can be appreciated in context of a regulatory scheme that mandates or recommends that software modules 130 and/or determination module 170 be executed by a mobile device 105 some or all of the time, in furtherance of a campaign to improve driver safety. It should also be noted that while FIG. 1 depicts memory 120 oriented on control circuit 140, in an alternate arrangement, memory 120 can be operatively connected to the control circuit 140. In addition, it should be noted that other software modules (such as user interface 172 and operating system 176) and other information and/or data relevant to the operation of the present systems and methods (such as database 174) can also be stored on storage 190, as will be discussed in greater detail below. Abramson '480 at 17:57-64: In certain arrangements, one or more external databases and/or servers 162 are also in communication with mobile device 105. As will be described in greater detail below, database/server 162 is preferably a computing and/or storage device, and/or a plurality of computing and/or storage devices, that contain(s) information, such as determination

'946 Patent, Claim 1	Prior Art
	characteristics, that can be relevant to the determination of an in-vehicle role of a user of mobile device 105. Abramson '480 at 12:33-47: The terms “identifying event” and “identifying events” as used herein are intended to encompass one or more occurrences or instances of events, stimuli, or phenomena, including explicitly the perceived coordinated or correlated occurrence or instance of two or more such events, stimuli, and/or phenomena, such as those originating at one or more devices. It should be understood that the referenced occurrences or instances of events, stimuli, or phenomena include single/singular events, stimuli, or phenomena as well as a set or series of multiple events, stimuli, or phenomena over a period of time. In addition, the referenced occurrences or instances of events, stimuli, or phenomena should also be understood to include one or more coordinations or correlations of the occurrence or instance of any number of such events, stimuli, and/or phenomena over any period of time. Abramson '480 at 22:30-35: The process begins at step 210 where a first input of a first device 105 is received, and proceeds to step 220 where the first input is analyzed. Steps 210 and 220 have already been described above with reference to FIG. 2A and thus will not be further elaborated upon here as their operation is substantially identical to steps 210 and 220 described above. Abramson '480 at 23:44-24:2: At step 224, the processor 110 executing one or more of software modules 130, including, preferably, determination module 170, compares determination characteristics such as user determination characteristics (including, but not limited to, the user determination characteristics from the first input, as identified at step 220, and/or the user determination characteristics from the second input, as identified at step 222) with stored determination characteristics such as user determination characteristics, such as those stored at one or more databases, such as database 174 (that is local to mobile device 105) and/or database/server 162

'946 Patent, Claim 1	Prior Art
	(that is external to mobile device 105). Stored user determination characteristics can be archived user determination characteristics that have been retained from previous user determinations that have been performed, can be generated based on statistical analyses of previous user determinations, and/or can be defined or established independent of any particular previous user determination. In comparing user determination characteristics (such as those identified at step 220 and/or step 222) with stored user determination characteristics (such as stored user determination characteristics that have historically demonstrated a high degree of prediction accuracy in determining an in-vehicle role of a user), the processor 110 can more accurately compute the probability that the in-vehicle role of the user of mobile device 105 is a driver or that the in-vehicle role of the user of mobile device 105 is a passenger. Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105.

'946 Patent, Claim 1	Prior Art
	Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
1[f] wherein said field-detecting component is further operable to detect a second	Abramson '480 discloses and/or renders obvious that said field-detecting component is further operable to detect a second one of an electric field, a magnetic field and an electro-magnetic field and to generate a second detected field signature based on the detected second one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g.:</i>

'946 Patent, Claim 1	Prior Art
one of an electric field, a magnetic field and an electro-magnetic field and to generate a second detected field signature based on the detected second one of an electric field, a magnetic field and an electro-magnetic field, and	Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 2:66-3:56: Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control

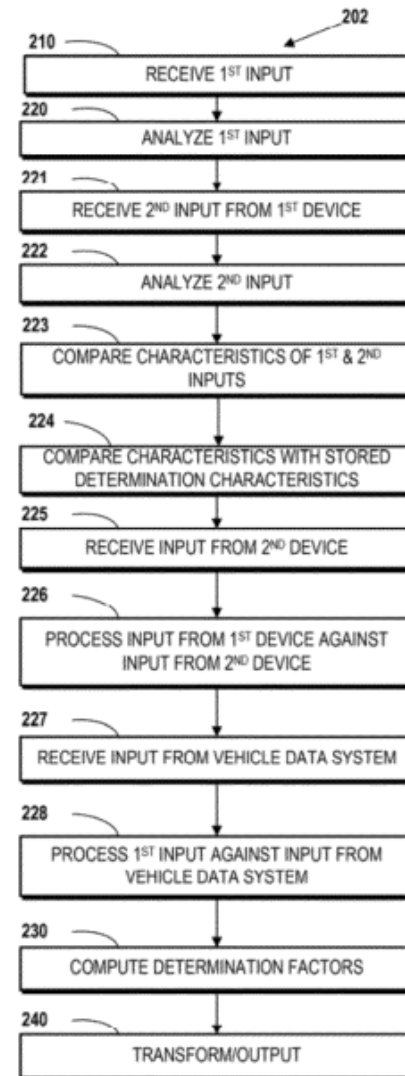
'946 Patent, Claim 1	Prior Art
	circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an

'946 Patent, Claim 1	Prior Art
	operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. It will also be appreciated that the systems and methods disclosed herein can be arranged and/or deployed across a number of scenarios. In one scenario, the systems and methods can be principally employed at a mobile device itself, such as in the form of a mobile application or 'app' executing on the mobile device. In other scenarios, a central machine such as a server

'946 Patent, Claim 1	Prior Art
	in communication with a mobile device can employ the present systems and methods. Such a centralized architecture can enable efficient processing and use of a larger database of user determination characteristics, eliminates power constraints and enables third parties, such as law-enforcement agencies and/or insurance companies, to easily monitor and/or adjust the operation of various mobile devices. Abramson '480 at 6:51-7:23: According to another aspect, a computer-implemented method for modifying at least a feature of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes monitoring at least a first input provided by at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, defining an operation signature based on at least the first input provided by at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the operation signature reflecting a normal operation state of the first mobile device, further monitoring at least a second input provided by at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, and processing at least the second

'946 Patent, Claim 1	Prior Art
	input against the operation signature to identify a degree of deviation of the second input from the operation signature or a degree of correlation of the second input with the operation signature. The method further includes adjusting at least one operation state of the mobile device based on the degree of deviation or the degree of correlation. Abramson '480 at 22:36-23:9: Then, at step 221, processor 110 executing one or more of software modules 130, including, preferably, determination module 170, receives a second input from one or more of sensors 145, software modules 130, user interface 172, operating system 176, and/or communication interface 150. As described above with reference to step 210, examples of such an input include, but are not limited to, an input corresponding to an acceleration perceived by accelerometer 145A, and/or an input corresponding to a change in geographic location as perceived by GPS receiver 145C. At step 222, the second input is analyzed by processor 110 executing determination module 170, in a manner substantially similar to that described above with reference to step 220, in order to identify one or more determination characteristics such as user determination characteristics within the second input. For example, where the second input (received at step 221) comprises one or more accelerations detected by accelerometer 145A, determination module 170 can analyze the accelerations to identify one or more user determination characteristics within the second input. Here, determination module 170 can analyze various patterns within the second input (such as the time and duration of acceleration and deceleration). Certain patterns, such as frequent periods of sustained forward acceleration interspersed with periodic intervals of rapid and/or brief forward deceleration can indicate that the user of mobile device 105 is likely traveling in, if not operating, a car which often follows such an acceleration/deceleration pattern. As described in detail herein, by identifying one or more user determination characteristics (such as identifying that the user of mobile device 105 is likely traveling in a car, as described above), the context and significance of one or more other user determination characteristics can be better evaluated and/or quantified. For example,

'946 Patent, Claim 1		Prior Art
		the typing patterns of a user determined to be traveling in a moving car are, on average, of greater significance in determining whether the user of the device is a driver/passenger. On the other hand, the typing patterns of a user of a mobile device 105 that has been determined not to be traveling in a moving car can be understood to be, on average, of lesser significance in determining whether the user of the device is a driver/passenger. Abramson '480 at Fig. 2B:

**FIG. 2B**

'946 Patent, Claim 1	Prior Art
	Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other

'946 Patent, Claim 1		Prior Art
		arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
1[g]	wherein said comparing component is operable to generate the comparison signal based on a comparison of the detected field signature and the second detected field signature.	Abramson '480 discloses and/or renders obvious that said comparing component is operable to generate the comparison signal based on a comparison of the detected field signature and the second detected field signature. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 2:66-3:56:

'946 Patent, Claim 1	Prior Art
	Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first

'946 Patent, Claim 1	Prior Art
	input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first

'946 Patent, Claim 1	Prior Art
	mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. It will also be appreciated that the systems and methods disclosed herein can be arranged and/or deployed across a number of scenarios. In one scenario, the systems and methods can be principally employed at a mobile device itself, such as in the form of a mobile application or 'app' executing on the mobile device. In other scenarios, a central machine such as a server in communication with a mobile device can employ the present systems and methods. Such a centralized architecture can enable efficient processing and use of a larger database of user determination characteristics, eliminates power constraints and enables third parties, such as law-enforcement agencies and/or insurance companies, to easily monitor and/or adjust the operation of various mobile devices. Abramson '480 at 6:51-7:23: According to another aspect, a computer-implemented method for modifying at least a feature of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor,

'946 Patent, Claim 1	Prior Art
	a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes monitoring at least a first input provided by at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, defining an operation signature based on at least the first input provided by at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the operation signature reflecting a normal operation state of the first mobile device, further monitoring at least a second input provided by at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, and processing at least the second input against the operation signature to identify a degree of deviation of the second input from the operation signature or a degree of correlation of the second input with the operation signature. The method further includes adjusting at least one operation state of the mobile device based on the degree of deviation or the degree of correlation. Abramson '480 at 23:10-38: Then, at step 223, the processor 110 executing one or more of software modules 130, including, preferably, determination module 170, can compare the determination characteristics such as user determination characteristics identified within the first input (such as those identified at step 220) with the determination characteristics such as user determination characteristics identified within the second input (such as those identified at step 222). In doing so, one or more patterns, correlations and/or relationships can be identified

'946 Patent, Claim 1	Prior Art
	between the user determinations characteristics of the first input and the user determination characteristics of the second input. By way of illustration, referring to the examples discussed above, the typing patterns identified at step 220 can be compared with the acceleration/deceleration patterns identified at step 222. In doing so, patterns, correlations, and/or relationships between the typing patterns and acceleration/deceleration patterns can be identified. For example, if time intervals between typed characters and/or typing inconsistencies increase at the same time as substantial and/or sudden forward and/or lateral acceleration and/or deceleration, this can further indicate that the user of a mobile device 105 is a driver. Being that for a driver to engage in a maneuver with sudden acceleration and/or deceleration the driver is expected to have temporarily stopped typing due to the increased attention a driver must pay to his driving activities, if such accelerations correlate closely with inconsistent typing speeds and/or slower typing speed and/or such accelerations are just prior to typing delays, this can be a strong indication that the user of mobile device 105 is a driver. Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby

'946 Patent, Claim 1	Prior Art
	indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 2	Prior Art
2. The device of claim 1, wherein said field-detecting component is operable to detect the at least one of an electric field, a magnetic field and an electro-magnetic field as a function over a period of time.	Abramson '480 discloses and/or renders obvious that said field-detecting component is operable to detect the at least one of an electric field, a magnetic field and an electro-magnetic field as a function over a period of time. <i>See, e.g.:</i> Abramson '480 at 12:33-47: The terms “identifying event” and “identifying events” as used herein are intended to encompass one or more occurrences or instances of events, stimuli, or phenomena, including explicitly the perceived coordinated or correlated occurrence or instance of two or more such events, stimuli, and/or phenomena, such as those originating at one or more devices. It should be understood that the referenced occurrences or instances of events, stimuli, or phenomena include single/singular events, stimuli, or phenomena as well as a set or series of multiple events, stimuli, or phenomena over a period of time. In addition, the referenced occurrences or instances of events, stimuli, or phenomena should also be understood to include one or more coordinations or correlations of the occurrence or instance of any number of such events, stimuli, and/or phenomena over any period of time. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 3		Prior Art
3[pre]	The device of claim 1, further comprising:	Abramson '480 discloses and/or renders obvious the device of claim 1. <i>See</i> 1[pre]-1[g]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
3[a]	a parameter-detecting component operable to detect a parameter and to generate a parameter signal based on the detected parameter,	Abramson '480 discloses and/or renders obvious a parameter-detecting component operable to detect a parameter and to generate a parameter signal based on the detected parameter. <i>See, e.g.:</i> Abramson '480 at 17:39-56: Also preferably connected to and/or in communication with control circuit 140 are one or more sensors 145A-145M (generically sensors 145). Generally, sensors 145 are various components, devices, and/or receivers that are preferably incorporated within and/or in communication with mobile device 105. Sensors 145 preferably detect one or more stimuli, phenomena, or any other such inputs, as will be described in greater detail below. Examples of such sensors 145 include, but are not limited to, an accelerometer 145A, a gyroscope 145B, a GPS receiver 145C, a microphone 145D, a magnetometer 145E, a camera 145F, a light sensor 145G, a temperature sensor 145H, an altitude sensor 145I, a pressure sensor 145J, a proximity sensor 145K, a near-field communication (NFC) device 145L, and a compass 145M. As will be described in greater detail below, mobile device 105 can preferably receive one or more inputs from one or more sensors 145 in order to determine an in-vehicle role of a user of mobile device 105.

'946 Patent, Claim 3	Prior Art
	Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
3[b] wherein said identifying component is operable to identify the one of an item and a location based additionally on the parameter signal.	Abramson '480 discloses and/or renders obvious that said identifying component is operable to identify the one of an item and a location based additionally on the parameter signal. <i>See, e.g.:</i> Abramson '480 at 26:18-49: Then, at step 228, processor 110 executing one or more of software modules 130, including, preferably, determination module 170, processes an input of mobile device 105 against an input of vehicle data system 164, in a manner similar to that described above with respect to step 226. However, here an input of mobile device 105, such as various typing tendencies (as illustrated above) is processed against an input from vehicle data system 164 that preferably pertains to an operation of a car (e.g., the car accelerating, braking, and/or swerving) and which is qualitatively different than the input of mobile device 105 because vehicle data system 164 cannot necessarily detect the various stimuli perceptible to mobile device 105, owing in part to the fact that mobile device 105 is preferably not fixed relative to the car's coordinate system. As such, the various inputs (that is, the inputs from mobile device 105 and those from vehicle data system 164) are compared and/or synchronized from a chronological standpoint, substantially in the manner described above with respect to step 226. In doing so, inputs from mobile device 105 can be processed against inputs from vehicle data system 164 (which, in turn, originate at the car itself), thereby enabling the association of various inputs from mobile device 105 with events such as the accelerating, braking, and/or swerving of the car. Thus, following the typing tendencies example provided, if certain highly erratic typing tendencies perceived at mobile device 160, occur just prior and/or closely correlate to various

'946 Patent, Claim 3		Prior Art
		driving operations (reflected in the inputs from vehicle data system 164) such as accelerating, braking, and/or swerving, one or more user determination characteristics can be identified with regard to the input(s) from mobile device 105, indicating that there is a high likelihood that the in-vehicle role of the user of mobile device 105 is a driver. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 4		Prior Art
4.	The device of claim 3, wherein said parameter-detecting component is operable to detect, as the parameter, one of the group consisting of a velocity,	Abramson '480 discloses and/or renders obvious that said parameter-detecting component is operable to detect, as the parameter, one of the group consisting of a velocity, acceleration, angular velocity, angular acceleration, geodetic position, sound, temperature, vibrations, pressure, biometrics, contents of surrounding atmosphere and combinations thereof. <i>See, e.g.:</i> Abramson '480 at 17:39-56: Also preferably connected to and/or in communication with control circuit 140 are one or more sensors 145A-145M (generically sensors 145). Generally, sensors 145 are various components, devices, and/or receivers that are preferably incorporated within and/or in communication with mobile device 105. Sensors 145 preferably detect one or more stimuli, phenomena, or any

'946 Patent, Claim 4		Prior Art
	acceleration, angular velocity, angular acceleration, geodetic position, sound, temperature, vibrations, pressure, biometrics, contents of surrounding atmosphere and combinations thereof.	other such inputs, as will be described in greater detail below. Examples of such sensors 145 include, but are not limited to, an accelerometer 145A, a gyroscope 145B, a GPS receiver 145C, a microphone 145D, a magnetometer 145E, a camera 145F, a light sensor 145G, a temperature sensor 145H, an altitude sensor 145I, a pressure sensor 145J, a proximity sensor 145K, a near-field communication (NFC) device 145L, and a compass 145M. As will be described in greater detail below, mobile device 105 can preferably receive one or more inputs from one or more sensors 145 in order to determine an in-vehicle role of a user of mobile device 105. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 5		Prior Art
5.	The device of claim 1, further comprising a communication component operable to	Abramson '480 discloses and/or renders obvious a communication component operable to wirelessly communicate with a network. <i>See, e.g.:</i> Abramson '480 at 16:63-17:11:

'946 Patent, Claim 5	Prior Art
wirelessly communicate with a network.	A communication interface 150 is also operatively connected to control circuit 140. Communication interface 150 can be any interface that enables communication between the mobile device 105 and external devices, machines and/or elements. Preferably, communication interface 150 includes, but is not limited to, a modem, a Network Interface Card (NIC), an integrated network interface, a radio frequency transmitter/receiver (e.g., Bluetooth, cellular, NFC), a satellite communication transmitter/receiver, an infrared port, a USB connection, or any other such interfaces for connecting mobile device 105 to other computing devices and/or communication networks such as the Internet. Such connections can include a wired connection or a wireless connection (e.g. 802.11) though it should be understood that communication interface 150 can be practically any interface that enables communication to/from the control circuit 140. Abramson '480 at 18:10-21: At this juncture it should be noted that in certain arrangements, such as the one depicted in FIG. 1, mobile devices 160, database/server 162, and/or vehicle data system 164 can be in periodic or ongoing communication with mobile device 105 through a computer network such as the Internet 166. Although not depicted in FIG. 1, it should be understood that in certain other arrangements, mobile devices 160, database/server 162, and/or vehicle data system 164 can be in periodic or ongoing direct communication with mobile device 105, such as through communications interface 150, thus not requiring the presence of a network (such as the Internet 166) in order to initiate and maintain communications. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 6		Prior Art
6[pre]	The device of claim 1,	Abramson '480 discloses and/or renders obvious the device of claim 1. <i>See</i> 1[pre]-1[g]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
6[a]	wherein said field-detecting component is operable to detect a magnetic field,	Abramson '480 discloses and/or renders obvious that said field-detecting component is operable to detect a magnetic field. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver more so than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 2:66-3:56: Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination

'946 Patent, Claim 6	Prior Art
	system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one

'946 Patent, Claim 6	Prior Art
	aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and

'946 Patent, Claim 6	Prior Art
	computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. It will also be appreciated that the systems and methods disclosed herein can be arranged and/or deployed across a number of scenarios. In one scenario, the systems and methods can be principally employed at a mobile device itself, such as in the form of a mobile application or 'app' executing on the mobile device. In other scenarios, a central machine such as a server in communication with a mobile device can employ the present systems and methods. Such a centralized architecture can enable efficient processing and use of a larger database of user determination characteristics, eliminates power constraints and enables third parties, such as law-enforcement agencies and/or insurance companies, to easily monitor and/or adjust the operation of various mobile devices. Abramson '480 at 16:25-62: Preferably, included among the software modules 130 is a determination module 170 that is executed by processor 110. During execution of the software modules 130, and specifically the determination module 170, the processor 110 configures the control circuit 140 to determine an in-vehicle role of a user of the mobile device 105, as will be described in greater detail below. It should be understood that while software modules 130 and/or determination module 170 can be embodied in any number of computer executable formats, preferably software modules 130 and/or determination module 170 comprise one or more applications or 'apps'

'946 Patent, Claim 6	Prior Art
	that are configured to be executed at mobile device 105 and/or in relation to mobile device 105. In other arrangements, software modules 130 and/or determination module 170 are incorporated and/or integrated within operating system 176. Furthermore, in certain arrangements, software modules 130 and/or determination module 170 can be configured to execute at the request or selection of a user of mobile device 105 (or any other such user having the ability to execute a program in relation to mobile device 105, such as a network administrator), while in other arrangements mobile device 105 can be configured to automatically execute software modules 130 and/or determination module 170, without requiring an affirmative request to execute. The advantages of such an automatic arrangement can be appreciated in context of a regulatory scheme that mandates or recommends that software modules 130 and/or determination module 170 be executed by a mobile device 105 some or all of the time, in furtherance of a campaign to improve driver safety. It should also be noted that while FIG. 1 depicts memory 120 oriented on control circuit 140, in an alternate arrangement, memory 120 can be operatively connected to the control circuit 140. In addition, it should be noted that other software modules (such as user interface 172 and operating system 176) and other information and/or data relevant to the operation of the present systems and methods (such as database 174) can also be stored on storage 190, as will be discussed in greater detail below. Abramson '480 at 17:57-64: In certain arrangements, one or more external databases and/or servers 162 are also in communication with mobile device 105. As will be described in greater detail below, database/server 162 is preferably a computing and/or storage device, and/or a plurality of computing and/or storage devices, that contain(s) information, such as determination characteristics, that can be relevant to the determination of an in-vehicle role of a user of mobile device 105. Abramson '480 at 53:48-54:2:

'946 Patent, Claim 6	Prior Art
	Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device

'946 Patent, Claim 6		Prior Art
		105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
6[b]	wherein said input component is further operable to input an association between a vehicle and the detected magnetic field,	Abramson '480 discloses and/or renders obvious that said input component is further operable to input an association between a vehicle and the detected magnetic field. <i>See, e.g.:</i> Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105.

'946 Patent, Claim 6	Prior Art
	Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
6[c] wherein said field-detecting component is further operable to detect a second magnetic field and to generate a	Abramson '480 discloses and/or renders obvious that said field-detecting component is further operable to detect a second magnetic field and to generate a second detected field signature based on the detected second magnetic field. <i>See, e.g.:</i> Abramson '480 at Abstract: Systems and methods are disclosed for computing various determinations at one or more mobile devices and/or central machines. In part, such determinations are computed based on

'946 Patent, Claim 6	Prior Art
second detected field signature based on the detected second magnetic field, and	analysis of one or more inputs originating at one or more sensors of one or more devices. Such determinations include determining an in-vehicle role, an in-vehicle location, a handheld state, and a vehicle class. Various transformations, modifications, and outputs can result from such determinations. Also disclosed are systems and methods for restricting operation of a mobile device, including restrictions that impede operation by a driver moreso than operation by a passenger. Also disclosed are systems and methods for orienting a coordinate system of a mobile device. Abramson '480 at 2:66-3:56: Technologies are presented herein in support of a system and method for determining an in-vehicle role of a user of a mobile device. According to one aspect, an in-vehicle determination system for adjusting an operation of a first mobile device is provided. The system includes a processor, a control circuit operatively connected to the processor, a memory operatively connected to the control circuit and accessible by the processor, and a determination module stored in the memory and executable in the processor, and at least one of: a user interface stored in the memory and executing in the processor, an operating system stored in the memory and executing in the processor, an accelerometer operatively connected to the control circuit, a gyroscope operatively connected to the control circuit, a GPS receiver operatively connected to the control circuit, a microphone operatively connected to the control circuit, a magnetometer operatively connected to the control circuit, a camera operatively connected to the control circuit, a light sensor operatively connected to the control circuit, a temperature sensor operatively connected to the control circuit, an altitude sensor operatively connected to the control circuit, a pressure sensor operatively connected to the control circuit, a proximity sensor operatively connected to the control circuit, a near-field communication (NFC) device operatively connected to the control circuit, a compass operatively connected to the control circuit, and a communications interface operatively connected to the control circuit. The determination module, when executed by the processor, configures the control circuit to receive a first input from at least one of the user interface, the operating system, the

'946 Patent, Claim 6	Prior Art
	accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from an identifying event perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyze the first input with the determination module to identify one or more determination characteristics within the first input, and compute at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The determination module further configures the control circuit to at least one of (a) transform at least one operation state of the first mobile device based on the at least one determination factor, (b) output at least one operation state based on the at least one determination factor, (c) output at least one in-vehicle role of the user based on at least one determination factor, (d) output at least one in-vehicle location of the mobile device based on at least one determination factor, and (e) output at least one result based on the at least one determination factor. Abramson '480 at 3:57-4:31: According to another aspect, a computer-implemented method for determining at least one of (a) an in-vehicle role of a user; and (b) an in-vehicle location of a first mobile device is provided, the first mobile device having a processor, a memory, a determination module stored in the memory and executable by the processor, and at least one of a user interface, an operating system, an accelerometer, a gyroscope, a GPS receiver, a microphone, a magnetometer, a camera, a light sensor, a temperature sensor, an altitude sensor, a pressure sensor, a proximity sensor, a near-field communication (NFC) device, a compass, and a

'946 Patent, Claim 6	Prior Art
	communications interface. The method includes receiving a first input from at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, the first input originating from one or more identifying events perceptible to at least one of the user interface, the operating system, the accelerometer, the gyroscope, the GPS receiver, the microphone, the magnetometer, the camera, the light sensor, the temperature sensor, the altitude sensor, the pressure sensor, the proximity sensor, the NFC device, the compass, and the communications interface of the first mobile device, analyzing the first input with the determination module executing at the processor to identify one or more determination characteristics within the first input, and computing at least one determination factor based on the one or more determination characteristics, the at least one determination factor pertaining to at least one of (a) at least one aspect of the in-vehicle role of the user; and (b) at least one aspect of an in-vehicle location of the mobile device. The method further includes at least one of (a) transforming at least one operation state of the first mobile device based on the at least one determination factor, (b) outputting at least one operation state based on the at least one determination factor, (c) outputting at least one in-vehicle role of the user based on at least one determination factor; (d) outputting at least one in-vehicle location of the mobile device based on at least one determination factor and (e) outputting at least one result based on the at least one determination factor. It will also be appreciated that the systems and methods disclosed herein can be arranged and/or deployed across a number of scenarios. In one scenario, the systems and methods can be principally employed at a mobile device itself, such as in the form of a mobile application or 'app' executing on the mobile device. In other scenarios, a central machine such as a server in communication with a mobile device can employ the present systems and methods. Such a centralized architecture can enable efficient processing and use of a larger database of user determination characteristics, eliminates power constraints and enables third parties, such as

'946 Patent, Claim 6	Prior Art
	law-enforcement agencies and/or insurance companies, to easily monitor and/or adjust the operation of various mobile devices. Abramson '480 at 16:25-62: Preferably, included among the software modules 130 is a determination module 170 that is executed by processor 110. During execution of the software modules 130, and specifically the determination module 170, the processor 110 configures the control circuit 140 to determine an in-vehicle role of a user of the mobile device 105, as will be described in greater detail below. It should be understood that while software modules 130 and/or determination module 170 can be embodied in any number of computer executable formats, preferably software modules 130 and/or determination module 170 comprise one or more applications or 'apps' that are configured to be executed at mobile device 105 and/or in relation to mobile device 105. In other arrangements, software modules 130 and/or determination module 170 are incorporated and/or integrated within operating system 176. Furthermore, in certain arrangements, software modules 130 and/or determination module 170 can be configured to execute at the request or selection of a user of mobile device 105 (or any other such user having the ability to execute a program in relation to mobile device 105, such as a network administrator), while in other arrangements mobile device 105 can be configured to automatically execute software modules 130 and/or determination module 170, without requiring an affirmative request to execute. The advantages of such an automatic arrangement can be appreciated in context of a regulatory scheme that mandates or recommends that software modules 130 and/or determination module 170 be executed by a mobile device 105 some or all of the time, in furtherance of a campaign to improve driver safety. It should also be noted that while FIG. 1 depicts memory 120 oriented on control circuit 140, in an alternate arrangement, memory 120 can be operatively connected to the control circuit 140. In addition, it should be noted that other software modules (such as user interface 172 and operating system 176) and other information and/or data relevant to the operation of the present systems

'946 Patent, Claim 6	Prior Art
	and methods (such as database 174) can also be stored on storage 190, as will be discussed in greater detail below. Abramson '480 at 17:57-64: In certain arrangements, one or more external databases and/or servers 162 are also in communication with mobile device 105. As will be described in greater detail below, database/server 162 is preferably a computing and/or storage device, and/or a plurality of computing and/or storage devices, that contain(s) information, such as determination characteristics, that can be relevant to the determination of an in-vehicle role of a user of mobile device 105. Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62:

'946 Patent, Claim 6	Prior Art
	Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device 105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
6[d] wherein said identifying component is further operable, based on the association, to identify the	Abramson '480 discloses and/or renders obvious that said identifying component is further operable, based on the association, to identify the vehicle as the item. <i>See, e.g.:</i> Abramson '480 at 53:48-54:2: Magnetic Field—A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. A 3-axis magnetometer 145E of mobile device 105 can be

'946 Patent, Claim 6	Prior Art
vehicle as the item.	used to detect these influences by measuring such magnetic field(s) at various times before and during a vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of mobile device 105. Such signatures can be universal and/or can depend on additional parameters such as vehicle model, vehicle location, etc. For example, the major metallic component in most vehicles is the motor and in most vehicles (e.g., cars, buses), and it is normally situated in the front part of the vehicle, near the center. The magnetic field sensed by magnetometer 145E of mobile device 105 can be compared with the magnetic field that is otherwise present absent the magnetic disturbances—thereby indicating the direction of the motor. The lateral component of that direction is preferably the opposite of the left-right in-car location of mobile device 105. Abramson '480 at 57:42-62: Magnetic Field: A vehicle's metallic and electrical parts influence the magnetic field in the vicinity of and inside such vehicle. Inputs originating at a 3-axis magnetometer 145E of a mobile device 105, 160 can be used to detect and determine these influences by processing such inputs to determine a magnetic field at various times before and during such vehicle's operation (e.g., a car that has not yet been started will have a different magnetic signature than one in which the electric systems are operating) and by comparing them with known magnetic signatures of different in-vehicle locations in order to determine the in-vehicle location of such device 105, 160. The presence of two or more devices within a single vehicle can influence each other's magnetic readings in a way that can be determined based on their comparison. It should be understood that in certain arrangements, such signatures are universal while in other arrangements they depend on additional parameters such as vehicle model, vehicle location, etc. In addition, comparing the magnetometer 145E inputs from more than one mobile device

'946 Patent, Claim 6		Prior Art
		105, 160 located within the same vehicle can enable a more accurate determination of the in-vehicle location of one or more of such devices. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 8		Prior Art
8[pre]	A method, for use with a database, said method comprising:	CMT does not concede that the preamble is limiting. To the extent it is limiting, Abramson '480 discloses and/or renders obvious a method, for use with a database. <i>See, e.g., 1[pre].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 8		Prior Art
8[a]	detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field;	Abramson '480 discloses and/or renders obvious detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[b]	generating, via the field-detecting component, a detected field signature based on the detected one of an electric field, a magnetic field and an electro-magnetic field;	Abramson '480 discloses and/or renders obvious generating, via the field-detecting component, a detected field signature based on the detected one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[a], 8[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[c]	inputting, via an input component, the detected field	Abramson '480 discloses and/or renders obvious inputting, via an input component, the detected field signature into the database.

'946 Patent, Claim 8		Prior Art
	signature into the database;	<i>See, e.g., 1[b].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[d]	accessing, via an accessing component, the detected field signature from the database;	Abramson '480 discloses and/or renders obvious accessing, via an accessing component, the detected field signature from the database. <i>See, e.g., 1[c].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[e]	generating, via a comparing component, a comparison signal;	Abramson '480 discloses and/or renders obvious generating, via a comparing component, a comparison signal. <i>See, e.g., 1[d].</i>

'946 Patent, Claim 8		Prior Art
		Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[f]	identifying, via an identifying component, one of an item and a location based on the comparison signal;	Abramson '480 discloses and/or renders obvious identifying, via an identifying component, one of an item and a location based on the comparison signal. <i>See, e.g., 1[e].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[g]	detecting, via the field-detecting component, a second one of an electric field, a magnetic field and an electro-magnetic field; and	Abramson '480 discloses and/or renders obvious detecting, via the field-detecting component, a second one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[f].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 8		Prior Art
8[h]	generating, via the field-detecting component, a second detected field signature based on the detected second one of an electric field, a magnetic field and an electro-magnetic field,	Abramson '480 discloses and/or renders obvious generating, via the field-detecting component, a second detected field signature based on the detected second one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[f], 8[g].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
8[i]	wherein said generating a comparison signal comprises generating the comparison signal based on a comparison of the detected field signature and the second detected field signature.	Abramson '480 discloses and/or renders obvious that said generating a comparison signal comprises generating the comparison signal based on a comparison of the detected field signature and the second detected field signature. <i>See, e.g., 1[g].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 9		Prior Art
9.	The method of claim 8, wherein said detecting comprises detecting the at least one of an electric field, a magnetic field and an electro-magnetic field as a function over a period of time.	Abramson '480 discloses and/or renders obvious that said detecting comprises detecting the at least one of an electric field, a magnetic field and an electro-magnetic field as a function over a period of time. <i>See, e.g., claim 2.</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 10		Prior Art
10[pre]	The method of claim 8, further comprising:	Abramson '480 discloses and/or renders obvious the method of claim 8. <i>See 8[pre]-8[i].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 10		Prior Art
10[a]	detecting, via a parameter-detecting component, a parameter; and	Abramson '480 discloses and/or renders obvious detecting, via a parameter-detecting component, a parameter. <i>See, e.g., 3[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
10[b]	generating, via the parameter-detecting component, a parameter signal based on the detected parameter,	Abramson '480 discloses and/or renders obvious generating, via the parameter-detecting component, a parameter signal based on the detected parameter. <i>See, e.g., 3[a], 10[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
10[c]	wherein said identifying comprises identifying the	Abramson '480 discloses and/or renders obvious that said identifying comprises identifying the one of an item and a location based additionally on the parameter signal.

'946 Patent, Claim 10		Prior Art
	one of an item and a location based additionally on the parameter signal.	<i>See, e.g., 3[b].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 11		Prior Art
11.	The method of claim 10, wherein said detecting a parameter comprises detecting, as the parameter, one of the group consisting of a velocity, acceleration, angular velocity, angular acceleration,	Abramson '480 discloses and/or renders obvious that said detecting a parameter comprises detecting, as the parameter, one of the group consisting of a velocity, acceleration, angular velocity, angular acceleration, geodetic position, sound, temperature, vibrations, pressure, biometrics, contents of surrounding atmosphere and combinations thereof. <i>See, e.g., claim 4.</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 11		Prior Art
	geodetic position, sound, temperature, vibrations, pressure, biometrics, contents of surrounding atmosphere and combinations thereof.	

'946 Patent, Claim 12		Prior Art
12.	The method of claim 8, further comprising wirelessly communicating, via a communication component, with a network.	Abramson '480 discloses and/or renders obvious wirelessly communicating, via a communication component, with a network. <i>See, e.g.,</i> claim 5. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 13		Prior Art
13[pre]	The method of claim 8, further comprising:	Abramson '480 discloses and/or renders obvious the device of claim 8. <i>See</i> 8[pre]-8[i]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[a]	inputting, via the input component is further operable to input an association; and	Abramson '480 discloses and/or renders obvious inputting, via the input component is further operable to input an association. <i>See, e.g.</i>, 6[b]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[b]	identifying, via the identifying component, a vehicle,	Abramson '480 discloses and/or renders obvious identifying, via the identifying component, a vehicle. <i>See, e.g.</i>, 6[d].

'946 Patent, Claim 13		Prior Art
		Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[c]	wherein said detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field comprises detecting detect a magnetic field,	Abramson '480 discloses and/or renders obvious that said detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field comprises detecting detect a magnetic field. <i>See, e.g., 6[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[d]	wherein said inputting an association comprises inputting an association between a vehicle	Abramson '480 discloses and/or renders obvious that said inputting an association comprises inputting an association between a vehicle and the detected magnetic field. <i>See, e.g., 6[b], 13[a].</i>

'946 Patent, Claim 13		Prior Art
	and the detected magnetic field,	Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[e]	wherein said detecting a second one of an electric field, a magnetic field and an electro-magnetic field comprises detecting a second magnetic field,	Abramson '480 discloses and/or renders obvious that said detecting a second one of an electric field, a magnetic field and an electro-magnetic field comprises detecting a second magnetic field. <i>See, e.g., 6[c].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[f]	wherein said generating a second detected field signature comprises generating a second detected field signature based on the detected second	Abramson '480 discloses and/or renders obvious that said generating a second detected field signature comprises generating a second detected field signature based on the detected second magnetic field. <i>See, e.g., 6[c], 13[e].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01

'946 Patent, Claim 13		Prior Art
	magnetic field, and	through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
13[g]	wherein said identifying a vehicle comprises identifying, based on the association, the vehicle as the item.	Abramson '480 discloses and/or renders obvious that said detecting a second one of an electric field, a magnetic field and an electro-magnetic field comprises detecting a second magnetic field. <i>See, e.g., 6[d], 13[b].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 15		Prior Art
15[pre]	A non-transitory, tangible, computer-readable media having computer-readable instructions	CMT does not concede that the preamble is limiting. To the extent it is limiting, Abramson '480 discloses and/or renders obvious A non-transitory, tangible, computer-readable media having computer-readable instructions stored thereon, for use with a database, the computer-readable instructions being capable of being read by a computer and being capable of instructing the computer to perform the method.

'946 Patent, Claim 15		Prior Art
	stored thereon, for use with a database, the computer-readable instructions being capable of being read by a computer and being capable of instructing the computer to perform the method comprising:	<i>See, e.g., 1[pre], 8[pre].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[a]	detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field;	Abramson '480 discloses and/or renders obvious detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[a], 8[a], 8[b].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 15		Prior Art
15[b]	generating, via the field-detecting component, a detected field signature based on the detected one of an electric field, a magnetic field and an electro-magnetic field;	Abramson '480 discloses and/or renders obvious generating, via the field-detecting component, a detected field signature based on the detected one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[a], 8[a], 8[b], 15[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[c]	inputting, via an input component, the detected field signature into the database;	Abramson '480 discloses and/or renders obvious inputting, via an input component, the detected field signature into the database. <i>See, e.g., 1[b], 8[c].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[d]	accessing, via an accessing component, the	Abramson '480 discloses and/or renders obvious accessing, via an accessing component, the detected field signature from the database.

'946 Patent, Claim 15		Prior Art
	detected field signature from the database;	<i>See, e.g., 1[c], 8[d].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[e]	generating, via a comparing component, a comparison signal;	Abramson '480 discloses and/or renders obvious generating, via a comparing component, a comparison signal. <i>See, e.g., 1[d], 8[e].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[f]	identifying, via an identifying component, one of an item and a location based on	Abramson '480 discloses and/or renders obvious identifying, via an identifying component, one of an item and a location based on the comparison signal. <i>See, e.g., 1[e], 8[f].</i>

'946 Patent, Claim 15		Prior Art
	the comparison signal;	Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[g]	detecting, via the field-detecting component, a second one of an electric field, a magnetic field and an electro-magnetic field; and	Abramson '480 discloses and/or renders obvious detecting, via the field-detecting component, a second one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[f], 8[g], 8[h].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[h]	generating, via the field-detecting component, a second detected field signature based on the detected second one of an electric field, a magnetic field and an	Abramson '480 discloses and/or renders obvious generating, via the field-detecting component, a second detected field signature based on the detected second one of an electric field, a magnetic field and an electro-magnetic field. <i>See, e.g., 1[f], 8[g], 8[h], 15[g].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01

'946 Patent, Claim 15		Prior Art
	electro-magnetic field,	through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
15[i]	wherein said generating a comparison signal comprises generating the comparison signal based on a comparison of the detected field signature and the second detected field signature.	Abramson '480 discloses and/or renders obvious that said generating a comparison signal comprises generating the comparison signal based on a comparison of the detected field signature and the second detected field signature. <i>See, e.g., 1[g], 8[i].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 16		Prior Art
16.	The non-transitory, tangible, computer-readable media of claim 15, wherein	Abramson '480 discloses and/or renders obvious that the computer-readable instructions are capable of instructing the computer to perform the method such that said detecting comprises detecting the at least one of an electric field, a magnetic field and an electro-magnetic field as a function over a period of time.

'946 Patent, Claim 16		Prior Art
	the computer-readable instructions are capable of instructing the computer to perform the method such that said detecting comprises detecting the at least one of an electric field, a magnetic field and an electro-magnetic field as a function over a period of time.	<i>See, e.g.</i>, claims 2, 9. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 17		Prior Art
17[pre]	The non-transitory, tangible,	Abramson '480 discloses and/or renders obvious the non-transitory, tangible, computer-readable media of claim 15.

'946 Patent, Claim 17		Prior Art
	computer-readable media of claim 15, the computer-readable instructions being capable of being read by a computer and being capable of instructing the computer to perform the method further comprising:	<i>See</i> 15[pre]-15[i]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
17[a]	detecting, via a parameter-detecting component, a parameter; and	Abramson '480 discloses and/or renders obvious detecting, via a parameter-detecting component, a parameter. <i>See, e.g.,</i> 3[a], 10[a], 10[b]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 17		Prior Art
17[b]	generating, via the parameter-detecting component, a parameter signal based on the detected parameter,	Abramson '480 discloses and/or renders obvious generating, via the parameter-detecting component, a parameter signal based on the detected parameter. <i>See, e.g., 3[a], 10[a], 10[b], 17[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
17[c]	wherein said identifying comprises identifying the one of an item and a location based additionally on the parameter signal.	Abramson '480 discloses and/or renders obvious that said identifying comprises identifying the one of an item and a location based additionally on the parameter signal. <i>See, e.g., 3[b], 10[c].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 18	Prior Art
18. The non-transitory, tangible, computer-readable media of claim 17, wherein the computer-readable instructions are capable of instructing the computer to perform the method such that said detecting a parameter comprises detecting, as the parameter, one of the group consisting of a velocity, acceleration, angular velocity, angular acceleration, geodetic position, sound,	Abramson '480 discloses and/or renders obvious that the computer-readable instructions are capable of instructing the computer to perform the method such that said detecting a parameter comprises detecting, as the parameter, one of the group consisting of a velocity, acceleration, angular velocity, angular acceleration, geodetic position, sound, temperature, vibrations, pressure, biometrics, contents of surrounding atmosphere and combinations thereof. <i>See, e.g., 4, 11.</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 18		Prior Art
	temperature, vibrations, pressure, biometrics, contents of surrounding atmosphere and combinations thereof.	

'946 Patent, Claim 19		Prior Art
19.	The non-transitory, tangible, computer-readable media of claim 15, the computer-readable instructions being capable of being read by a computer and	Abramson '480 discloses and/or renders obvious the computer-readable instructions being capable of being read by a computer and being capable of instructing the computer to perform the method further comprising wirelessly communicating, via a communication component, with a network. <i>See, e.g., claims 5, 12.</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 19		Prior Art
	being capable of instructing the computer to perform the method further comprising wirelessly communicating, via a communication component, with a network.	

'946 Patent, Claim 20		Prior Art
20[pre]	The non-transitory, tangible, computer-readable media of claim 15, the computer-readable instructions being	Abramson '480 discloses and/or renders obvious the non-transitory, tangible, computer-readable media of claim 15. <i>See 15[pre]-15[i].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 20		Prior Art
	capable of instructing the computer to perform the method further comprising:	
20[a]	inputting, via the input component is further operable to input an association; and	Abramson '480 discloses and/or renders obvious inputting, via the input component is further operable to input an association. <i>See, e.g., 6[b], 13[a], 13[d].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
20[b]	identifying, via the identifying component, a vehicle,	Abramson '480 discloses and/or renders obvious identifying, via the identifying component, a vehicle. <i>See, e.g., 6[d], 13[b], 13[g].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01

'946 Patent, Claim 20		Prior Art
		through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
20[c]	wherein said detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field comprises detecting detect a magnetic field,	Abramson '480 discloses and/or renders obvious that said detecting, via a field-detecting component, at least one of an electric field, a magnetic field and an electro-magnetic field comprises detecting detect a magnetic field. <i>See, e.g., 6[a], 13[c].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
20[d]	wherein said inputting an association comprises inputting an association between a vehicle and the detected magnetic field,	Abramson '480 discloses and/or renders obvious that said inputting an association comprises inputting an association between a vehicle and the detected magnetic field. <i>See, e.g., 6[b], 13[a], 13[d], 20[a].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.

'946 Patent, Claim 20		Prior Art
20[e]	wherein said detecting a second one of an electric field, a magnetic field and an electro-magnetic field comprises detecting a second magnetic field,	Abramson '480 discloses and/or renders obvious that said detecting a second one of an electric field, a magnetic field and an electro-magnetic field comprises detecting a second magnetic field. <i>See, e.g., 6[c], 13[e], 13[f].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
20[f]	wherein said generating a second detected field signature comprises generating a second detected field signature based on the detected second magnetic field, and	Abramson '480 discloses and/or renders obvious that said generating a second detected field signature comprises generating a second detected field signature based on the detected second magnetic field. <i>See, e.g., 6[c], 13[e], 13[f], 20[e].</i> Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.
20[g]	wherein said identifying a	Abramson '480 discloses and/or renders obvious that said identifying a vehicle comprises identifying, based on the association, the vehicle as the item.

'946 Patent, Claim 20	Prior Art
vehicle comprises identifying, based on the association, the vehicle as the item.	<i>See, e.g.</i>, 6[d], 13[b], 13[g], 20[b]. Furthermore, this limitation would have been obvious in light of Abramson '480 alone or in combination with the knowledge of a POSITA and/or the references identified in Exhibits B-01 through B-29 relating to this limitation. CMT's Invalidity Contentions describe the motivations to combine Abramson '480 and those references.