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(54) Title: VEHICLE INFORMATION SYSTEM, METHOD FOR CONTROLLING AT LEAST ONE VEHICULAR FUNCTION AND/OR FOR DISPLAYING AN INFORMATION AND USE OF A VEHICLE INFORMATION SYSTEM FOR THE EXECUTION OF A MOBILE COMMERCE TRANSACTION

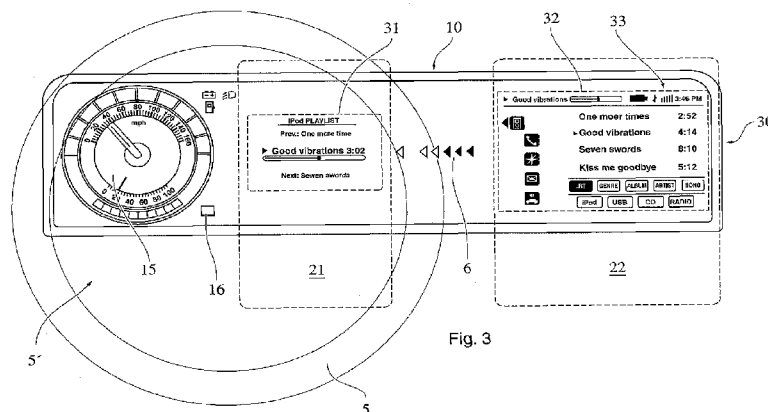


Fig. 3

(57) Abstract: A vehicle information system for a vehicle and a method for controlling at least one vehicular function and/or for displaying information is suggested, wherein the vehicle comprises a steering wheel, wherein the vehicle information system comprises a user interface module, a first display module and a second display module, wherein the user interface module has a sensitive interface surface, wherein the second display module has a viewable second display surface, wherein the interface surface is provided at least partly overlapping with the second display surface, wherein the first display module has a viewable first display surface, wherein the first display surface is at least partly located inside a driver's field of view usually delimited by the steering wheel, and wherein the second display module is located adjacent to or in proximity to the first display module but at least partly at a location external to the driver's field of view usually delimited by the steering wheel.

Vehicle information system, method for controlling at least one vehicular function and/or for displaying an information and use of a vehicle information system for the execution of a mobile commerce transaction

Field of the invention

The present invention relates generally to the field of vehicle information systems or instrument clusters, particularly instrument clusters and vehicle information systems for cars and other land vehicles.

German patent application document DE 10 2004 006 605 A1 discloses a vehicle having a first display device and a second display device and having further an actuation device wherein the second display device is located behind a steering wheel of the vehicle. A display control unit controls both the first and second display device.

The problem to solve by means of the present invention is to provide a vehicle information system or an instrument cluster and a use thereof as well as a method for controlling at least one vehicular function and/or for displaying an information such that the intuitiveness and ease of use of the vehicle information system and of the vehicle is enhanced.

Disclosure of the invention

The problem is solved by a vehicle information system for a vehicle, the vehicle comprising a steering wheel, wherein the vehicle information system comprises a user interface module, a first display module and a second display module, wherein the user interface module has a sensitive interface surface, wherein the second display module has a viewable second display surface, wherein the interface surface is provided at least partly overlapping with the second display surface, wherein the first display module has a viewable first display surface, wherein the first display surface is at least partly located inside a driver's field of view usually delimited by the steering wheel, and wherein the second display module is located adjacent to or in

proximity to the first display module but at least partly at a location external to the driver's field of view usually delimited by the steering wheel. Thereby, it is advantageously possible to provide a vehicle information system that can be produced easily and cost effectively and that can be used in an ergonomic manner by the user of the vehicle and especially by both the driver of the vehicle and a passenger of the vehicle seating adjacent to the driver. These advantages can be realized by means of positioning the first display surface at least partly inside a driver's field of view usually delimited by the steering wheel of the vehicle. The driver's field of view referred to in this regard relates to the view of a normal driver in a normal seating position and the part of the field of vision of such a driver that is surrounded by the steering wheel. Usually, this driver's field of view corresponds roughly to the projection of the steering wheel along a direction perpendicular to the main plane of the steering wheel onto the plane corresponding to the first display surface. In a preferred embodiment of the present invention, the first display surface is located almost entirely inside of the driver's field of view usually delimited by the steering wheel of the vehicle. The second display surface and/or the second display module is located at least partly outside of the driver's field of view usually delimited by the steering wheel of the vehicle. In a preferred embodiment of the present invention, the second display surface and/or the second display device is located almost entirely outside of the driver's field of view usually delimited by the steering wheel of the vehicle. The part of the driver's field of view usually delimited by the steering wheel is hereinafter also called the primary zone of the driver's field of view and the part of the driver's field of view outside of the steering wheel is hereinafter also called the secondary zone of the driver's field of view. The first display module is located inside the primary zone and the second display module is located in the secondary zone of the driver's field of view. The first display module is provided to primarily display driving centric information in a manner that is concise, focused on the driving task and can be viewed at a glance. The second display module is preferably provided as a fully interactive information display using a larger color display and sensing/touch screen technologies.

According to a further preferred embodiment of the present invention, the vehicle information system further comprises a third display module, the third display module having a pointer provided rotatable about a rotation axis, wherein the third display

module is at least partly located inside a driver's field of view usually delimited by the steering wheel. The third display module is provided e.g. for displaying the speed of the vehicle and/or the engine speed of the vehicle.

In a most preferred embodiment of the vehicle information system according to the present invention, the interface module is provided as a touch-screen module and/or as a near field sensing module. The hand and/or the finger of a driver and/or of a passenger of the vehicle can be detected by the sensor or sensors of the touch-screen and/or near field sensing module of the interface module. The interface module thereby is able to detect and/or predict the location (e.g. by means of x/y coordinates in the plane of the touch screen) and/or the distance (along an axis z perpendicular to the main plane of the touch screen) of the hand and/or the finger of the driver/passenger to the display. This allows for an improved human machine interface for information on the second display module to be manipulated and/or reprioritized based on driver's needs. Especially, a piece of information can be moved from one display to the other, i.e. for example from the second display module to the first display module.

A further subject of the present invention refers to a method for controlling at least one vehicular function and/or for displaying an information, wherein the method comprises the use of a vehicle information system for a vehicle, wherein the vehicle comprises a steering wheel, wherein the vehicle information system comprises a user interface module, a first display module and a second display module, wherein the user interface module has a sensitive interface surface, wherein the second display module has a viewable second display surface, wherein the interface surface is provided at least partly overlapping with the second display surface, wherein the first display module has a viewable first display surface, wherein the first display surface is at least partly located inside a driver's field of view usually delimited by the steering wheel, and wherein the second display module is located adjacent to or in proximity to the first display module but at least partly at a location external to the driver's field of view usually delimited by the steering wheel, wherein the method further comprises the step of displaying an information of a first kind on the first display surface and an information of a second kind on the second display surface, wherein upon a first manner of touching and/or approaching the interface surface by a hand

or a finger of a user, the user interface module is actuated such that an information of the second kind is displayed on the first display surface in an information reduced manner compared to its display on the second display surface.

According to a preferred embodiment of the present invention, it is provided that upon a second manner of touching and/or approaching the interface surface by a hand or a finger of a user, the user interface module is actuated such that the information of the second kind is displayed on both the first display surface and the second display surface, wherein the information of the second kind is displayed on the first display surface in an information reduced manner compared to the second display surface. This further provides the advantage that in the primary zone of the driver's field of view (inside of the steering wheel), the information of the second kind is displayed in a more concise manner than in the secondary zone of the drivers field of view.

According to a further preferred embodiment of the present invention, the first manner and/or the second manner of touching and/or approaching the interface surface by a hand or a finger of a user comprises a movement of the hand or a finger of the user from the location of the interface surface towards the first display surface. This advantageously enables a very intuitive control of the inventive vehicle information system.

According to still a further preferred embodiment of the present invention, the information of the first kind is a vehicle related information and/or a driving-route related information, and the information of the second kind is a telephone related information and/or an audio and/or video reproduction related information and/or a text based telecommunications related information.

According to a further preferred embodiment of the present invention, it is provided that upon a third manner of touching and/or approaching the interface surface by a hand or a finger of a user, the user interface module is actuated such that a mobile commerce transaction is executed.

A further subject of the present invention relates to the use of a vehicle information system for the execution of a mobile commerce transaction.

Other embodiments are directed to all of the possible combinations of the above listed embodiments, including use of the various features in a vehicle information system or an instrument cluster. Other embodiments are directed to the use of one or more of the above-listed features in combination with features disclosed below and/or disclosed in the drawings. Other embodiments are directed to features disclosed below and/or in the drawings but not discussed above.

Brief description of the drawings

Figure 1 shows a schematical representation of a vehicle having a vehicle information system according to the present invention.

Figure 2 shows a general schematical view of a vehicle information system or an instrument cluster according to the present invention.

Figure 3 shows a more detailed general view of a vehicle information system or an instrument cluster according to the present invention.

Figure 4 shows schematically a first example illustrative of the operation of the inventive vehicle information system.

Figure 5 shows schematically a second example illustrative of the operation of the inventive vehicle information system.

Figure 6 shows schematically a third example illustrative of the operation of the inventive vehicle information system.

Figure 7 shows schematically a fourth example illustrative of the operation of the inventive vehicle information system.

Figure 8 shows schematically a fifth example illustrative of the operation of the inventive vehicle information system.

Figure 9 shows schematically a sixth example illustrative of the operation of the inventive vehicle information system.

Figure 10 shows schematically a seventh example illustrative of the operation of the inventive vehicle information system.

Detailed description of exemplary embodiments

Referring generally to the figures and in particular to Figure 1, a vehicle 1 is shown according to an exemplary embodiment. The vehicle 1 includes at least one vehicle information system 10 or an instrument cluster 10 according to the present invention allowing especially the driver but also any other person travelling in the vehicle 1 to have access to certain pieces of information. One exemplary embodiment of a vehicle information system 10 (or an instrument cluster 10) is shown in Figure 2. While the vehicle 1 shown is a 4-door sedan, it should be understood that the vehicle information system 10 may be used in a mini-van, sport utility vehicle or any other means in or by which someone travels or something is carried or conveyed for any market or application including everything from office seating and transportation to air planes and space travel and everything in between. As shown in Figure 2, the vehicle 1 comprises a steering wheel 5. From a normal seating position of a driver (not shown) of the vehicle 1, the driver can see at least a part of the vehicle information system 10 (or instrument cluster 10) appearing to be inside of the circle of the steering wheel 5 and a part of the vehicle information system 10 appearing to be outside of the circle of the steering wheel 5. The perspective of the representation shown in Figure 2 is usually not the same as the one for the driver of the vehicle 1. A more realistic representation of the perspective on the vehicle information system 10 as usually or normally be seen by a driver of the vehicle 1 is represented in Figure 3 for the case of a vehicle 1 having its steering wheel 5 on the left hand side of the vehicle 1. As can be seen from Figure 3, the steering wheel 5 comprises a circle or at least a form approaching a circle (or an annulus) having an interior zone (designated by reference numeral 5') and an exterior zone. The interior zone 5' is called the

primary zone and the exterior zone is called the secondary zone. According to the present invention, the vehicle information system 10 comprises at least a first display module 21 having a first display surface 31 and a second display module 22 having a second display surface 32. The first display surface 31 is located (as viewed at a normal position of the drivers head) at least partly and in a preferred embodiment almost entirely in the primary zone whereas the second display surface 32 is located at least partly and in a preferred embodiment almost entirely in the second zone. The vehicle information system 10 further comprises an interface module 30 having an interface surface 33, the interface surface 33 being located at least partly overlapping with the second display surface 32. By means of the interface module 30, it is possible to provide the second display module 22 with the functionality of an interactive display device of the kind of a touch screen or a proximity sensor. Thereby, the present invention allows for the integration of driver (or passenger) interaction in different operation modes of the vehicle information system 10, especially based on (but not limited to) capacitive, resistive and/or optical sensing technologies. The vehicle information system 10 (or instrument cluster 10) preferably also comprises a third display module 15 having a pointer provided rotatable about a rotation axis. The third display module 15 is at least partly and preferably almost entirely located in the primary zone. The vehicle information system 10 (or instrument cluster 10) preferably also comprises an appliqué-like graphical element 16.

In Figures 4 to 109 a first, second, third, fourth, fifth, sixth and seventh ~~and sixth~~ example illustrative of the operation of the inventive vehicle information system 10 is schematically shown. Figure 6 comprises Figures 6a, 6b, 6c, 6d and 6e. ~~and 6e,~~ each ~~located on different drawing sheets.~~ Figure 7 comprises Figures 7a and 7b, each ~~located on different drawing sheets.~~ On Figures 4 to 7, both the first display module 21 and the second display module 22 are shown with examples of different information contents displayed. On Figures 8 and 9, only the second display module 22 is shown with examples of different information contents displayed. Figure 10 comprises Figures 10a and 10b.

In Figure 4, the vehicle information system 10 is shown according to two different display conditions, namely a first display condition shown in the upper part of Figure 4 and a second display condition shown in the lower part of Figure 4.

In Figure 5, the vehicle information system 10 is shown according to two different display conditions, namely a third display condition shown in the upper part of Figure 5 and a fourth display condition shown in the lower part of Figure 5.

In the first and third display condition, the first display surface 31 shows a certain number of driving centric information, e.g. an odometer indication (for example "ODO 12098 miles"), an indication relative to the distance travelled since lastly starting the engine (for example "TRIP 126,4 miles"), and an indication relative to the fuel consumption (miles per gallon, MPG) (for example "MPG 46 mpg"). In the second and fourth display condition, the second display surface 32 shows (e.g. in the right hand part of the second display surface 32) a certain number of infotainment information, e.g. the title list and duration information of an audio memory device such as an MP3-player, e.g. an iPod-device, (for example "One more time 2:52; Good vibrations 4:14; Seven words 8:10; Kiss me goodbye 5:12"). In the second and fourth display condition, the second display surface 32 shows (e.g. in the left hand part of the second display surface 32), e.g. a menu information, for example a certain number of graphical symbols representing different vehicle or infotainment functions like the functions associated with a audio device such as an MP3-player, or the functions associated with the use of a mobile telephone, or the functions associated with a navigation system, or the functions associated with a text messages system or functions associated with driving the vehicle. By means of a first or a second manner of touching the interface surface 33, it is possible according to the present invention to cause the vehicle information system 10 to display on the first display module 21 information corresponding to the set of functions chosen by approaching to or touching the graphical symbol representing this set of functions. The information displayed on the first display module 21 are chosen such that only a reduced amount of information is displayed such that especially the driver is not confused (and distracted from driving the vehicle 1) by seeing too many pieces of information displayed. In the first example shown in Figure 4, the first manner of touching the interface surface 33 corresponds to contacting or approaching the interface surface 33 on or in the periphery of the graphical symbol representing the functions associated with the use of a mobile phone and by moving the finger 6 or the hand of the user in the direction of the first display surface 31 (see especially the lower part of

Figure 4). The result of the first manner of touching the interface surface 33 is that different pieces of information of the second kind, i.e. infotainment information, are displayed on the first and second display module 21, 22. In the second example shown in Figure 5, the second manner of touching the interface surface 33 corresponds to contacting or approaching the interface surface 33 on or in the periphery of the graphical symbol representing the functions associated with the use of an audio device such as an MP3-player and by moving the finger 6 or the hand of the user in the direction of the first display surface 31 (see especially the lower part of Figure 5). The result of the second manner of touching the interface surface 33 is that the same information of the second kind, i.e. infotainment information, is displayed on the first and second display module 21, 22 but in a different manner, namely on the first display module 21 in a reduced compared to the second display module 22 (e.g. only the title information of the title played at that moment together with the previous and the next title but without a higher number of titles as shown on the second display module 22).

In Figure 6, comprising Figures 6a, ~~6b and 6c~~, 6c, 6d and 6e, the vehicle information system 10 is shown according to ten different display conditions, namely a fifth, a sixth and a seventh display condition shown in Figure 6a, an eighth, a ninth, a tenth and an eleventh display condition shown in Figure 6b, ~~as well as a twelfth, a thirteenth and a fourteenth display condition shown in Figure 6c~~, a fifteenth and a sixteenth display condition shown in Figure 6d, as well as a seventeenth display condition shown in Figure 6e. Figure 6 illustrates the use of the vehicle information system 10 for the execution of a mobile commerce transaction.

In the fifth display condition (shown in the upper part of Figure 6a) , the first display surface 31 (or first display module 21) shows, e.g., a piece of information related to the second kind of information, namely an infotainment information such as the title information of the title played at that moment together with the previous and the next title. As also shown in the fifth display condition, on touching the respective graphical symbol on e.g. the menu information in the left hand part of the second display surface 32, the second display surface 32 (or second display module 22) shows a navigation information such as a map of a city or a part thereof. With regard to the sixth to fourteenth display condition, only the second display surface 32 (or the

second display module 22) is shown. On touching an appropriate area of the interface surface 33, e.g. denominated by "e-Shop", it is possible to display the locations of various e-shops accessible for the vehicle information system 10. This is shown in the sixth display condition shown in the lower part of Figure 6a on the left hand side. By means of touching a representation of one e-Shop (in the example these might be parking lots, toll stations or other vehicle related points of sale) available, a transaction can be initiated. This is shown in the seventh display condition shown in the lower part of Figure 6a on the right hand side. In the eighth, ninth, tenth and eleventh display condition shown in Figure 6b, further steps of the transaction are illustrated. For example, the need for a user action like the scanning of a credit card can be transmitted to the user by means of an audible signal, represented by a loudspeaker 35 near the eighth display condition represented in the upper part of Figure 6b. In the ninth display condition, the user is prompted to select a desired credit card or an available bank. In the tenth display condition, the transaction is confirmed by the user by touching and/or approaching an appropriate part of the interface surface 33. The execution of the transaction is represented in the eleventh display condition shown in the lower part of Figure 6b on the right hand side. The result of the execution of the mobile commerce transaction is shown in Figures 6c, 6d and 6e in connection with the twelfth, thirteenth, ~~fourteenth, fifteenth, sixteenth and seventeenth~~ ~~and fourteenth~~ display condition. In the twelfth display condition, a confirmation of the successful execution of the transaction is received, especially on a mobile phone 40 of the user. Very preferably, the mobile phone can be used to display a one dimensional and/or two dimensional bar code that is possible to show at a parking lot entrance or a toll station. In the thirteenth display condition, a navigation to the selected e-Shop (for example the parking lot or the like) is initiated. In the fourteenth display condition, the navigation to the selected e-Shop is represented on the second display module 22. In the fifteenth display condition, the navigation to the selected e-Shop is only displayed on the second display module whereas in the sixteenth display condition, the navigation information is also shown on the first display module 21. In the seventeenth display condition, the confirmation of the executed mobile commerce transaction is displayed on the first display module 21.

In Figure 7, comprising Figures 7a and 7b, the vehicle information system 10 is shown according to four different display conditions, namely a ~~fifteenth-eighteenth~~ and a ~~sixteenth-nineteenth~~ display condition shown in Figure 7a as well as an ~~seventeenth-twentieth~~ and an ~~eighteenth-twenty-first~~ display condition shown in Figure 7b. Figure 7 illustrates the use of the vehicle information system 10 in the event that a text based message is received by the vehicle infotainment system and/or a mobile phone. In Figure 7, both the first display module 21 and the second display module 22 are shown. In the ~~fifteenth-eighteenth~~ display condition (upper part of Figure 7a), the driving centric information (information of the first kind) is displayed on the first display module 21 and a navigation related information is displayed on the second display module 22. In the ~~sixteenth-nineteenth~~ display condition shown in the lower part of Figure 7a, the incoming text based message is displayed both on the first and second display module 21, 22 but in a somewhat reduced manner on the first display module 21 (e.g. as a pop up message "new message") related to the representation on the second display module 22 (e.g. "Paul West; Date; New Message; Your appointment is tomorrow at 2 PM. If you have any concerns, do not hesitate to contact me!"). Additionally, the fact of an incoming message can also be transmitted to the user by means of an audible signal (loudspeaker 35) or by means of the message being read to the user. In the ~~seventeenth-twentieth~~ display condition (upper part of Figure 7b), it is shown that the vehicle information system 10 can be provided such that a template reply message is possible to be generated automatically and displayed (e.g. "Sorry, I'm driving now. I will get back to you shortly.") by the second display module 22 (while on the first display module 21 the driving centric information or information of the first kind remains). In the ~~eighteenth-twenty-first~~ display condition shown in the lower part of Figure 7b, the vehicle information system 10 is again in the state prior to the incoming text based message.

In Figure 10, comprising Figures 10a and 10b, the vehicle information system 10 is shown according to three further display conditions, namely a twenty-second display condition shown in the upper part of Figure 10a, a twenty-third display condition in the lower part of Figure 10a and a twenty-fourth display condition shown in Figure 10b.

In the twenty-second display condition, the first display module 21 shows a certain number of driving centric information, e.g. an odometer indication (for example "ODO 12098 miles"), an indication relative to the distance travelled since lastly starting the engine (for example "TRIP 126,4 miles"), and an indication relative to the fuel consumption (miles per gallon, MPG) (for example "MPG 46 mpg"). In the twenty-third and twenty-fourth display condition, the second display module 22 shows (e.g. in the right hand part of the second display surface 32) a certain number of vehicle status and/or energy status and/or battery status information, e.g. the battery input of the engine, the fuel input of the engine, the battery life, the efficiency rate, the green eco rate and/or a maintenance information. By means of a first or a second manner of touching the interface surface 33 (especially in the area of a menu region of the interface surface 33), it is possible according to the present invention to cause the vehicle information system 10 to display on the first display module 21 information corresponding to the set of functions chosen by approaching to or touching the graphical symbol representing this set of functions. The information displayed on the first display module 21 are chosen such that only a reduced amount of information is displayed such that especially the driver is not confused (and distracted from driving the vehicle 1) by seeing to many pieces of information displayed.

In Figures 8 and 9, the vehicle information system 10 is shown according to further display conditions illustrating the manipulations possible on the information content displayed on the second display module 22. For example, Figure 8 shows a possibility to scroll a list of pieces of information, e.g. a title list of audio titles of an MP3-device, by simply moving the finger of a hand of the user upwards or downwards. In a further example, Figure 9 shows the possibility to provide an alphabetical search of pieces of information in a comparably long list of information, e.g. a title list or a list of names in an address book. The switch to the successive alphabetical letter can be initiated by simply moving the finger of a hand of the user to the right hand side or to the left hand side.

List of reference signs

1	vehicle
5	steering wheel
5'	primary zone / interior zone
6	finger / hand of a user
10	vehicle information system / instrument cluster
15	third display module
16	appliqué-like graphical element
21	first display module
22	second display module
30	interface module
31	first display surface
32	second display surface
33	interface surface
35	loudspeaker

Patent Claims

1. A vehicle information system (10) for a vehicle (1), the vehicle (1) comprising a steering wheel (5), wherein the vehicle information system (10) comprises
 - a user interface module (30),
 - a first display module (21) and
 - a second display module (22),wherein the user interface module (30) has a sensitive interface surface (33), wherein the second display module (22) has a viewable second display surface (32), wherein the interface surface (33) is provided at least partly overlapping with the second display surface (32), wherein the first display module (21) has a viewable first display surface (31), wherein the first display surface (31) is at least partly located inside a driver's field of view (5') usually delimited by the steering wheel (5), and wherein the second display module (22) is located adjacent to or in proximity to the first display module (21) but at least partly at a location external to the driver's field of view (5') usually delimited by the steering wheel (5).
2. The vehicle information system (10) of claim 1 further comprising a third display module (15), the third display module (15) having a pointer provided rotatable about a rotation axis, wherein the third display module (15) is at least partly located inside a driver's field of view (5') usually delimited by the steering wheel (5).
3. The vehicle information system (10) of claim 1, wherein the interface module (30) is a touch-screen module and/or a near field sensing module.
4. The vehicle information system (10) of claims 1 or 2, wherein the vehicle information system (10) is an instrument cluster.
5. A method for controlling at least one vehicular function and/or for displaying an information, wherein the method comprises the use of a vehicle information system (10) for a vehicle (1), wherein the vehicle (1) comprises a steering

wheel (5), wherein the vehicle information system () comprises

- a user interface module (30),
- a first display module (21) and
- a second display module (22),

wherein the user interface module (30) has a sensitive interface surface (33), wherein the second display module (22) has a viewable second display surface (32), wherein the interface surface (33) is provided at least partly overlapping with the second display surface (32), wherein the first display module (21) has a viewable first display surface (31), wherein the first display surface (31) is at least partly located inside a driver's field of view (5') usually delimited by the steering wheel (5), and wherein the second display module (22) is located adjacent to or in proximity to the first display module (21) but at least partly at a location external to the driver's field of view (5') usually delimited by the steering wheel (5), wherein the method further comprises the step of displaying an information of a first kind on the first display surface (31) and an information of a second kind on the second display surface (32), wherein upon a first manner of touching and/or approaching the interface surface (33) by a hand or a finger (6) of a user, the user interface module (30) is actuated such that an information of the second kind is displayed on the first display surface (31) in an information reduced manner compared to its display on the second display surface (32).

6. The method according to claim 5, wherein upon a second manner of touching and/or approaching the interface surface (33) by a hand or a finger (6) of a user, the user interface module (30) is actuated such that the information of the second kind is displayed on both the first display surface (31) and the second display surface (32), wherein the information of the second kind is displayed on the first display surface (31) in an information reduced manner compared to the second display surface (32).
7. The method according to claim 5 or 6, wherein the first manner and/or the second manner of touching and/or approaching the interface surface (33) by a hand or a finger (6) of a user comprises a movement of the hand or a finger

- (6) of the user from the location of the interface surface (33) towards the first display surface (31).
8. The method according to claim 5 or 6, wherein the information of the first kind is a vehicle related information and/or a driving-route related information.
 9. The method according to claim 5 or 6, wherein the information of the second kind is a telephone related information and/or an audio and/or video reproduction related information and/or a text based telecommunications related information.
 10. The method according to claim 5, wherein upon a third manner of touching and/or approaching the interface surface (33) by a hand or a finger (6) of a user, the user interface module (30) is actuated such that a mobile commerce transaction is executed.
 11. The use of a vehicle information system (10) according to claim 1 for the execution of a mobile commerce transaction.

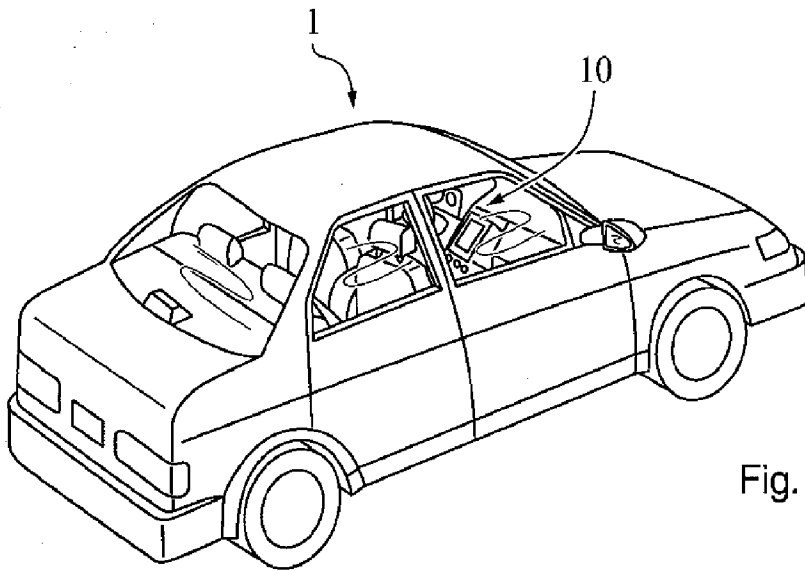


Fig. 1

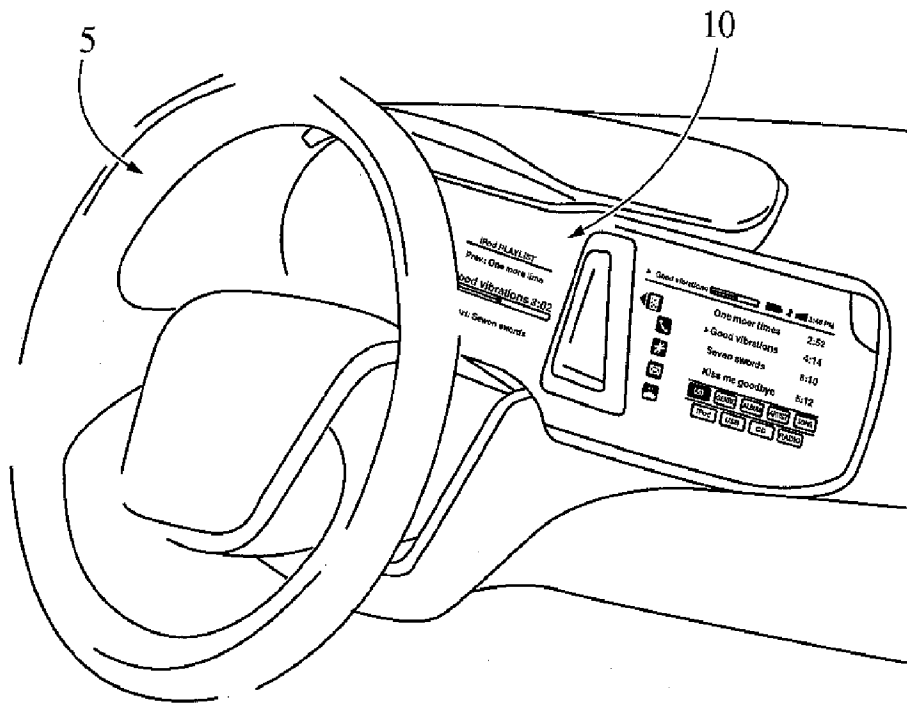


Fig. 2

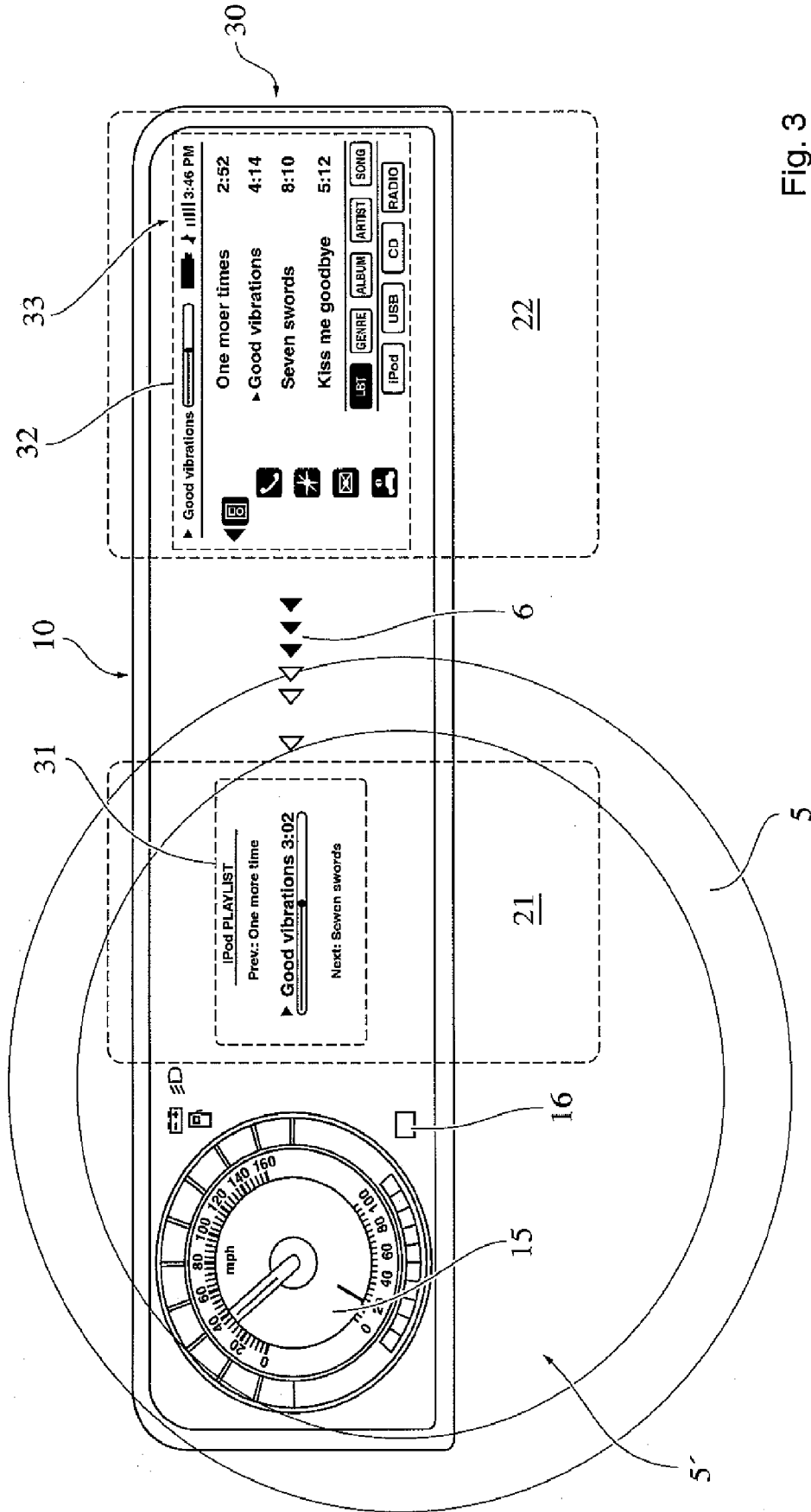
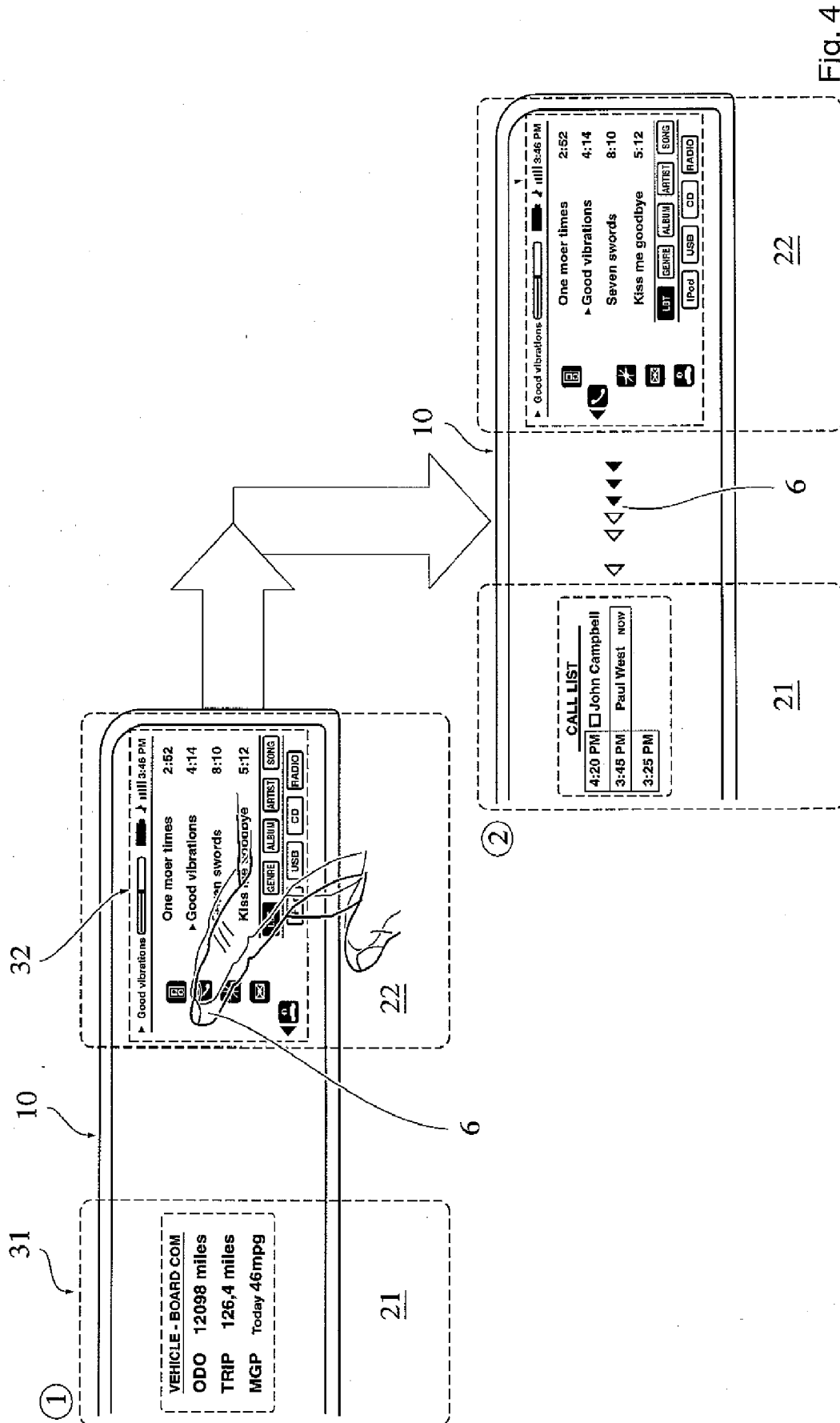


Fig. 3



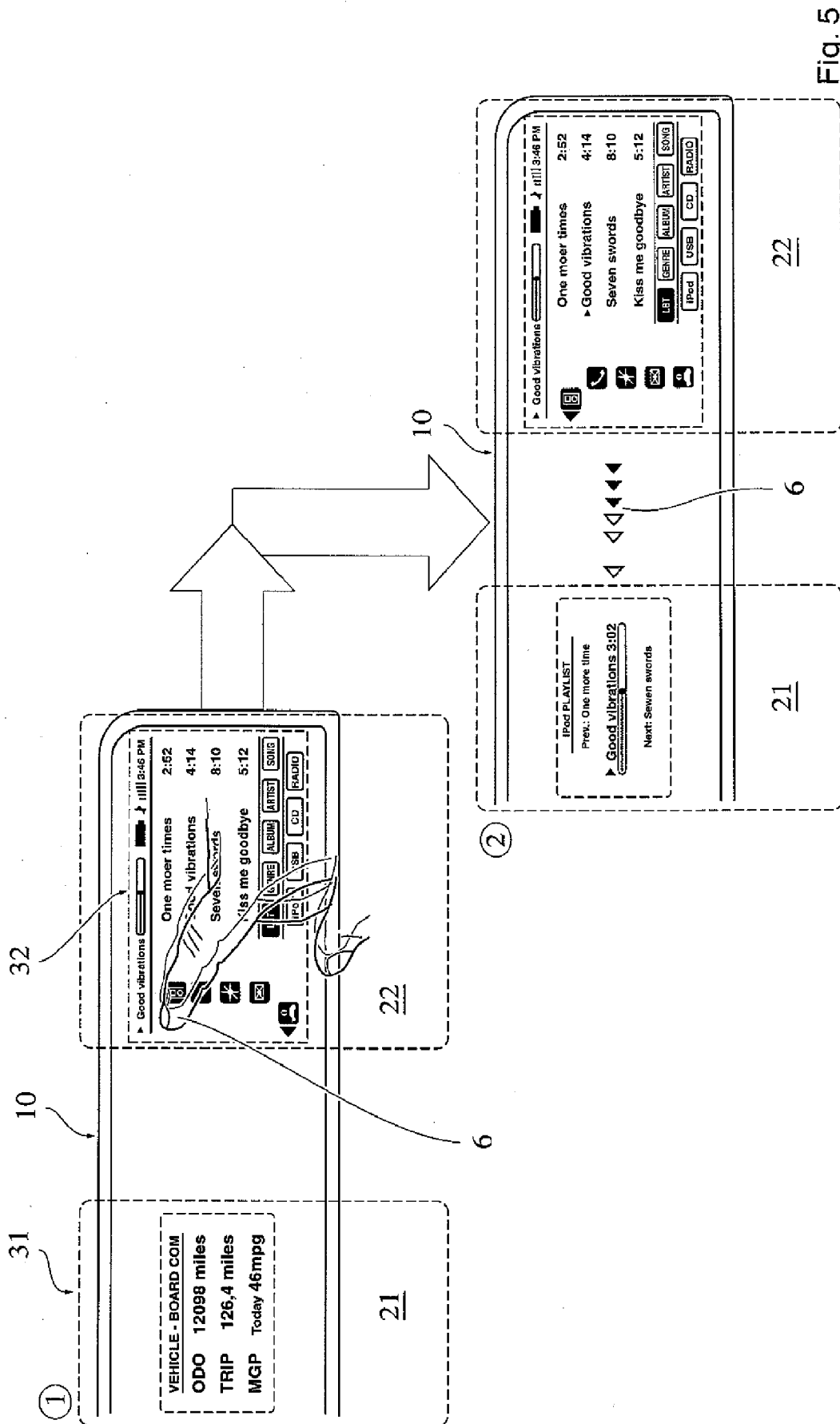


Fig. 5

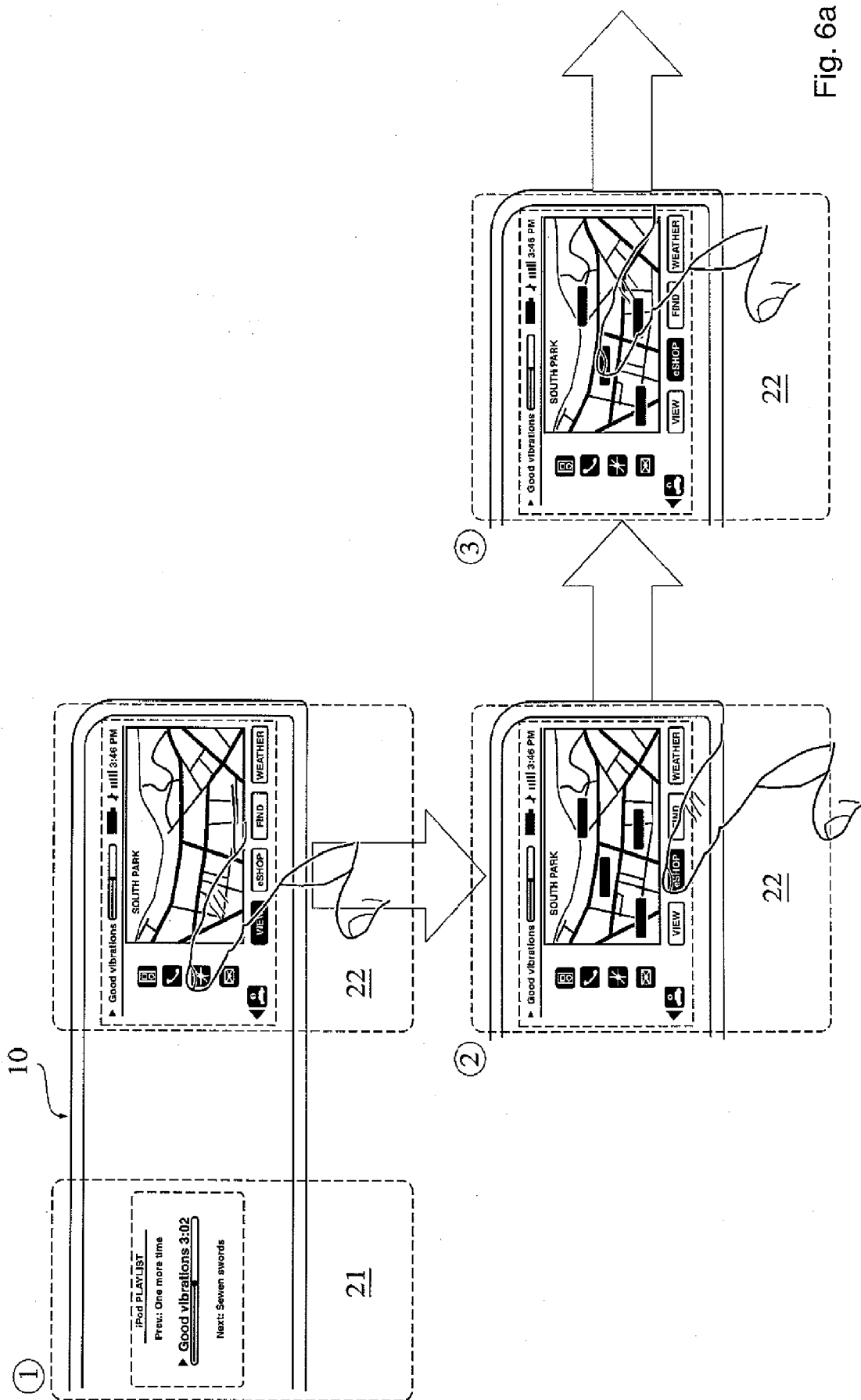


Fig. 6a

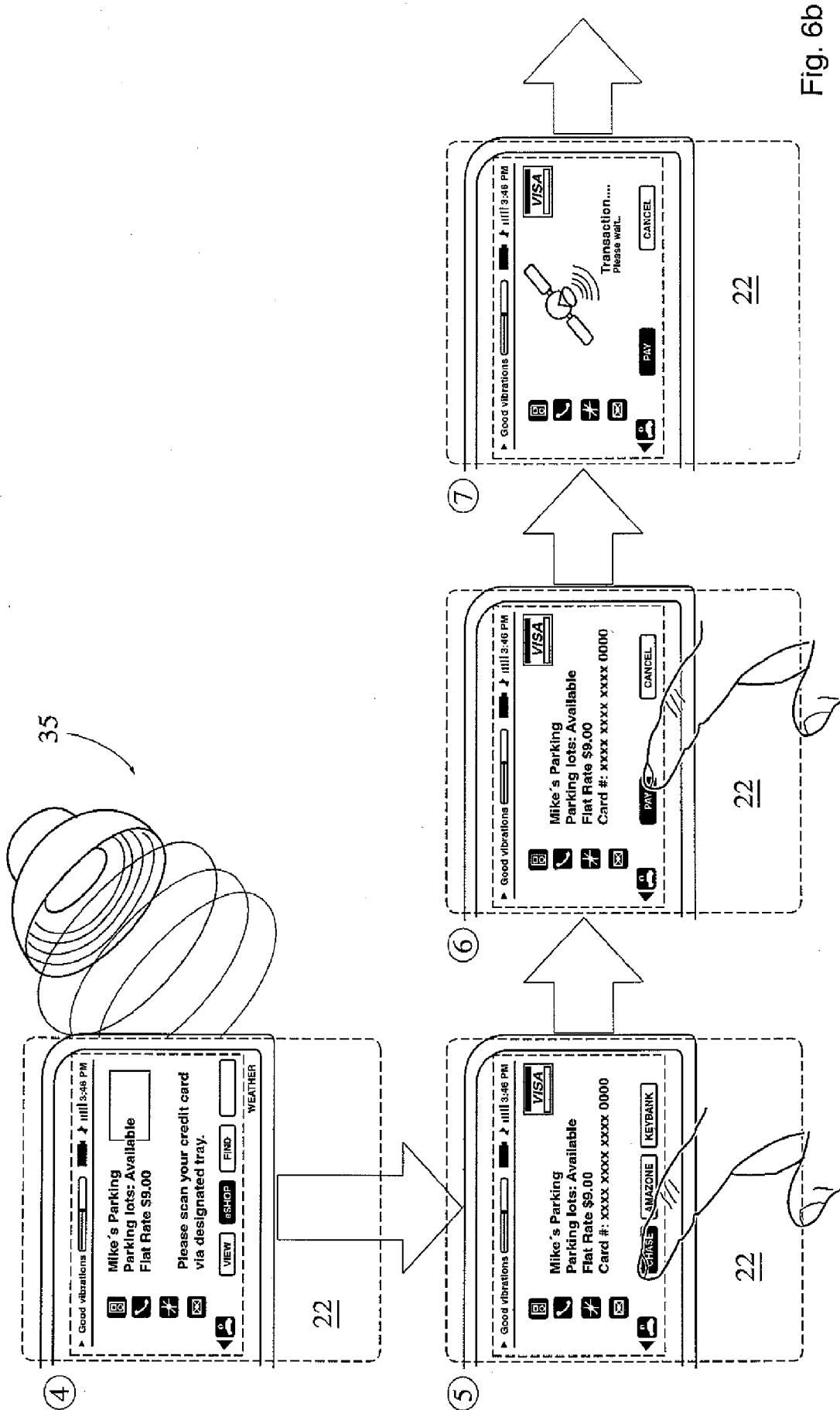


Fig. 6b

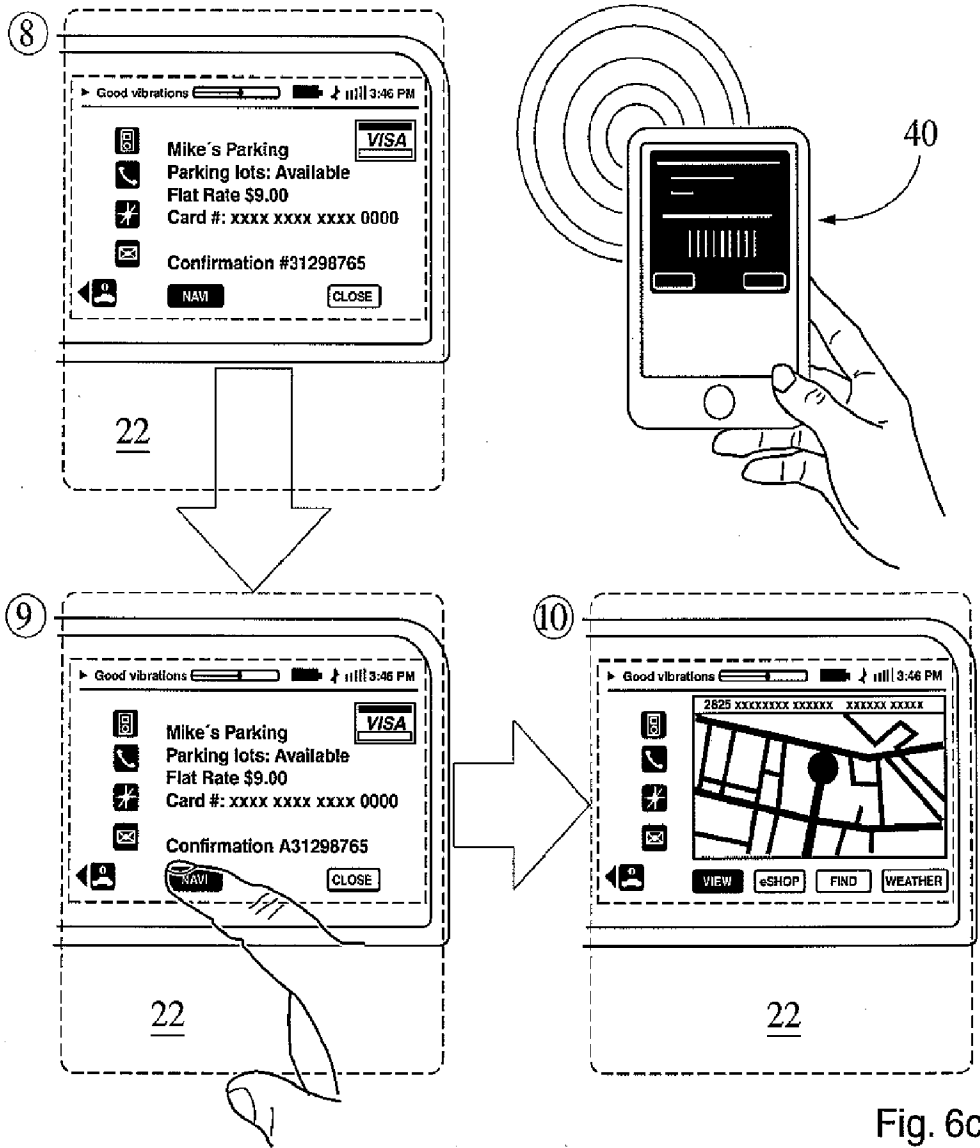


Fig. 6c

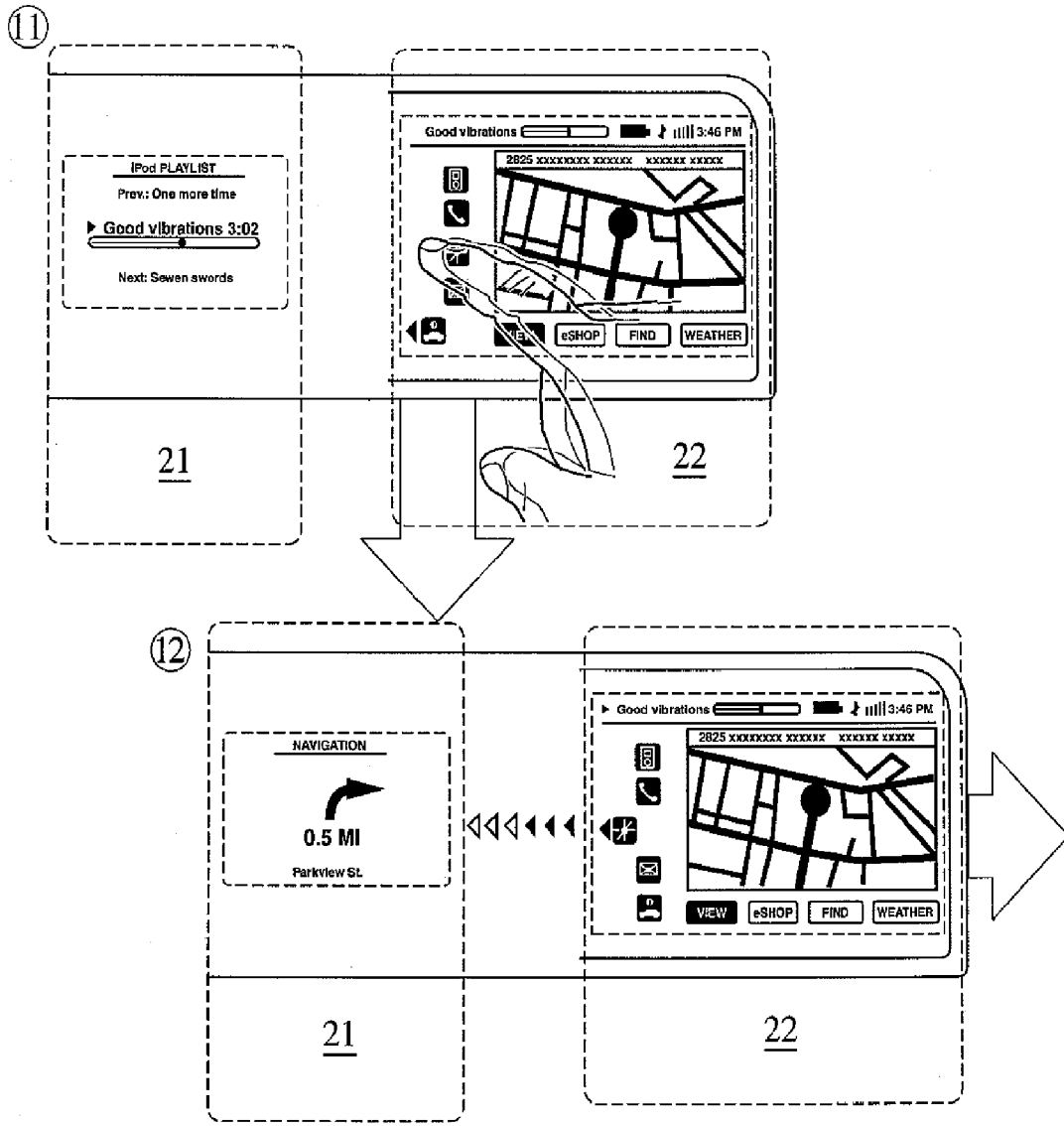


Fig. 6d

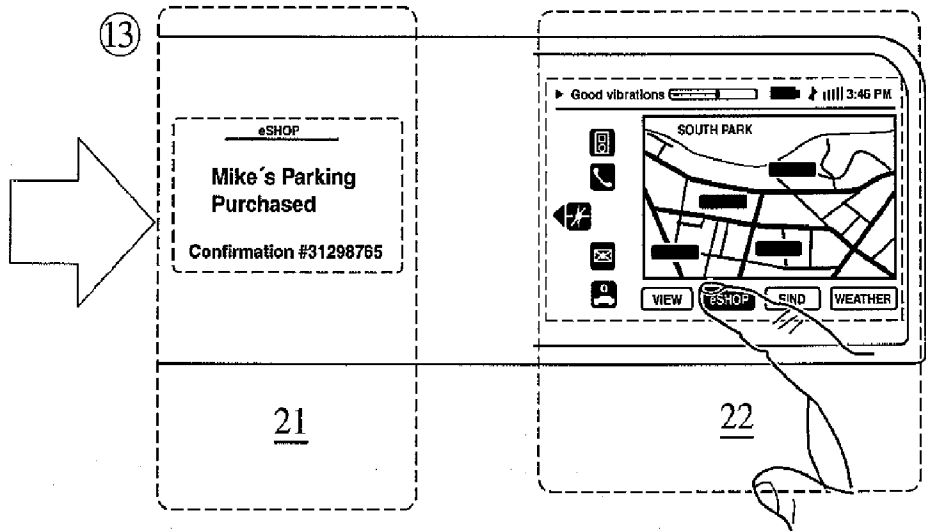


Fig. 6e

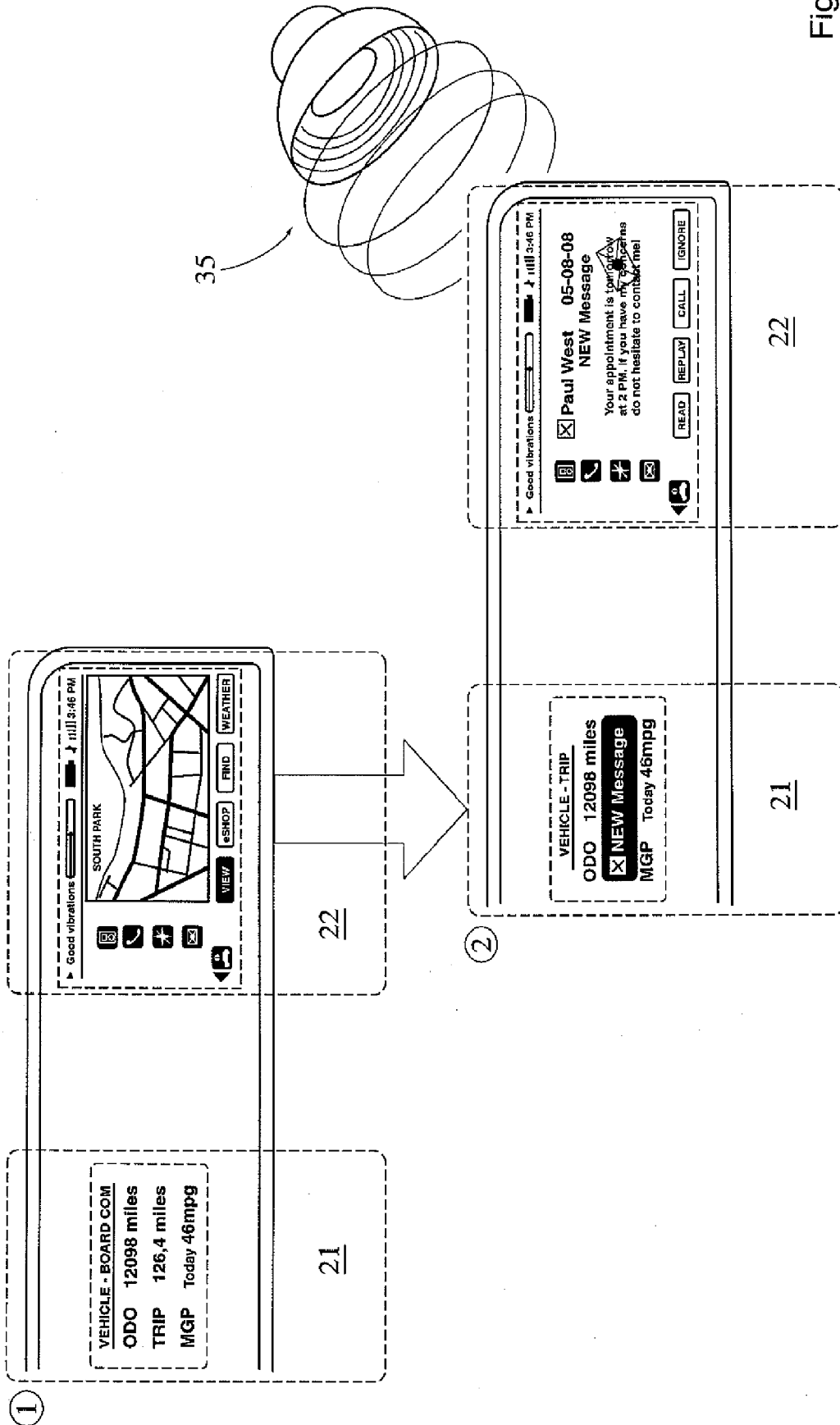


Fig. 7a

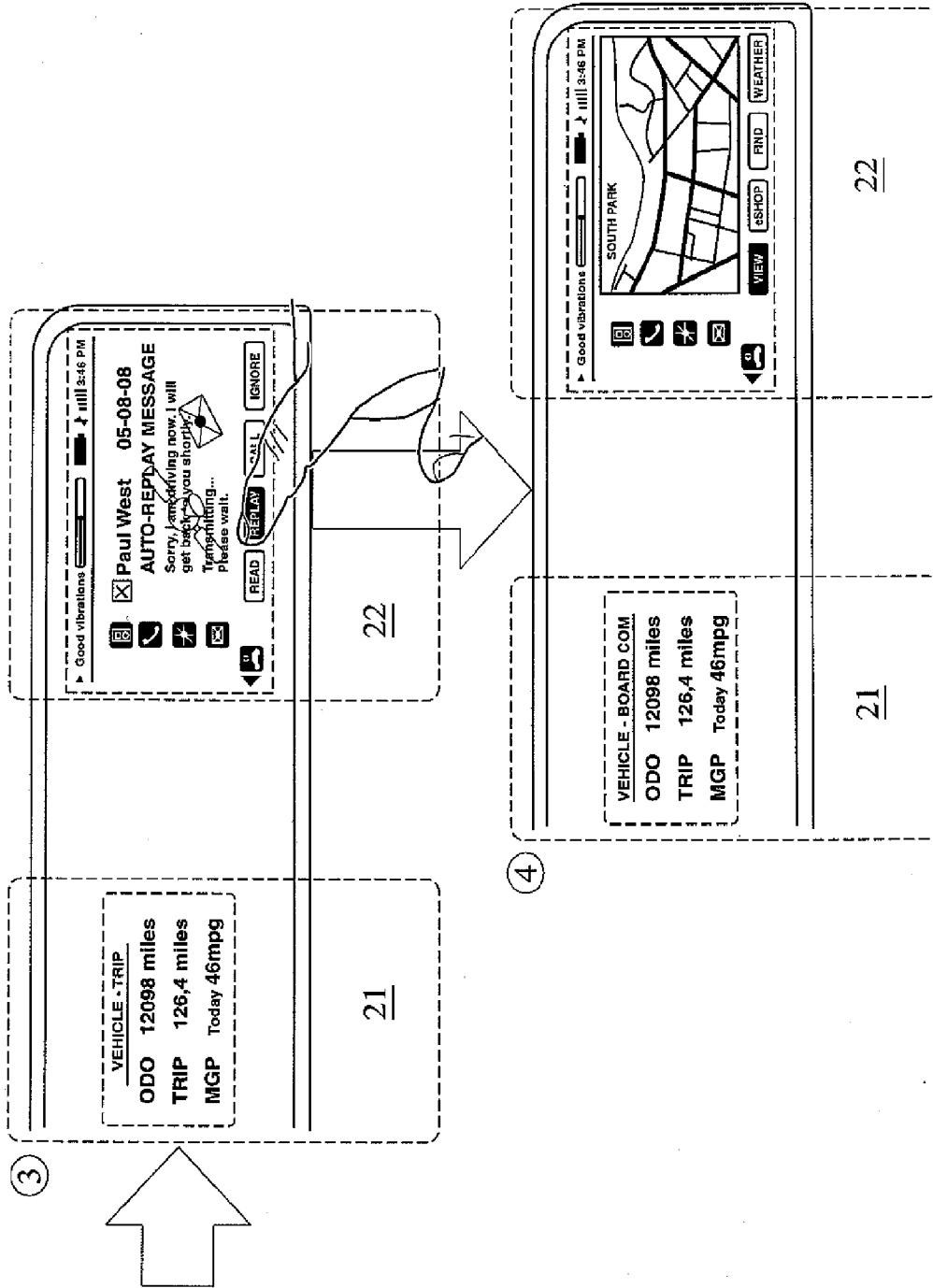


Fig. 7b

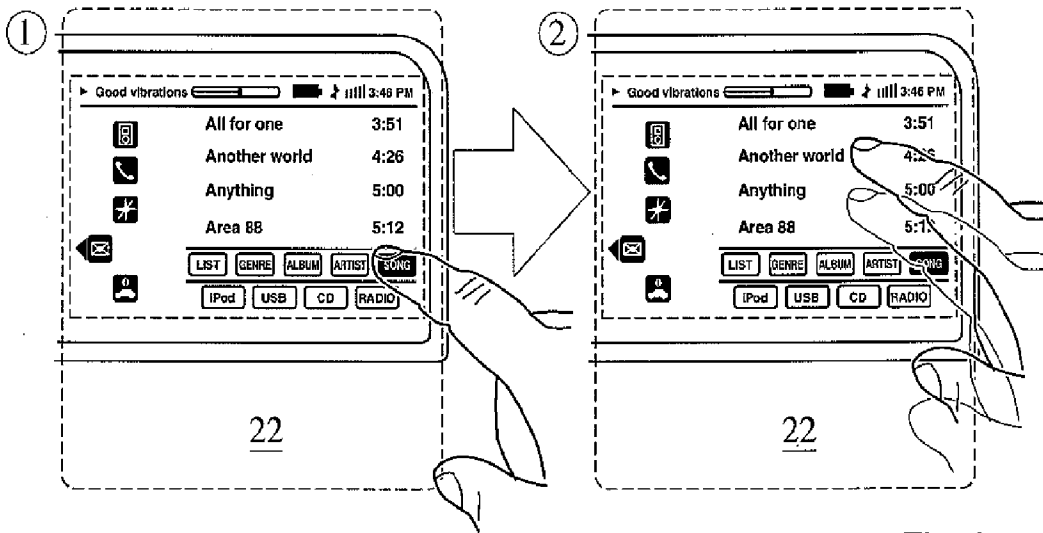


Fig. 8

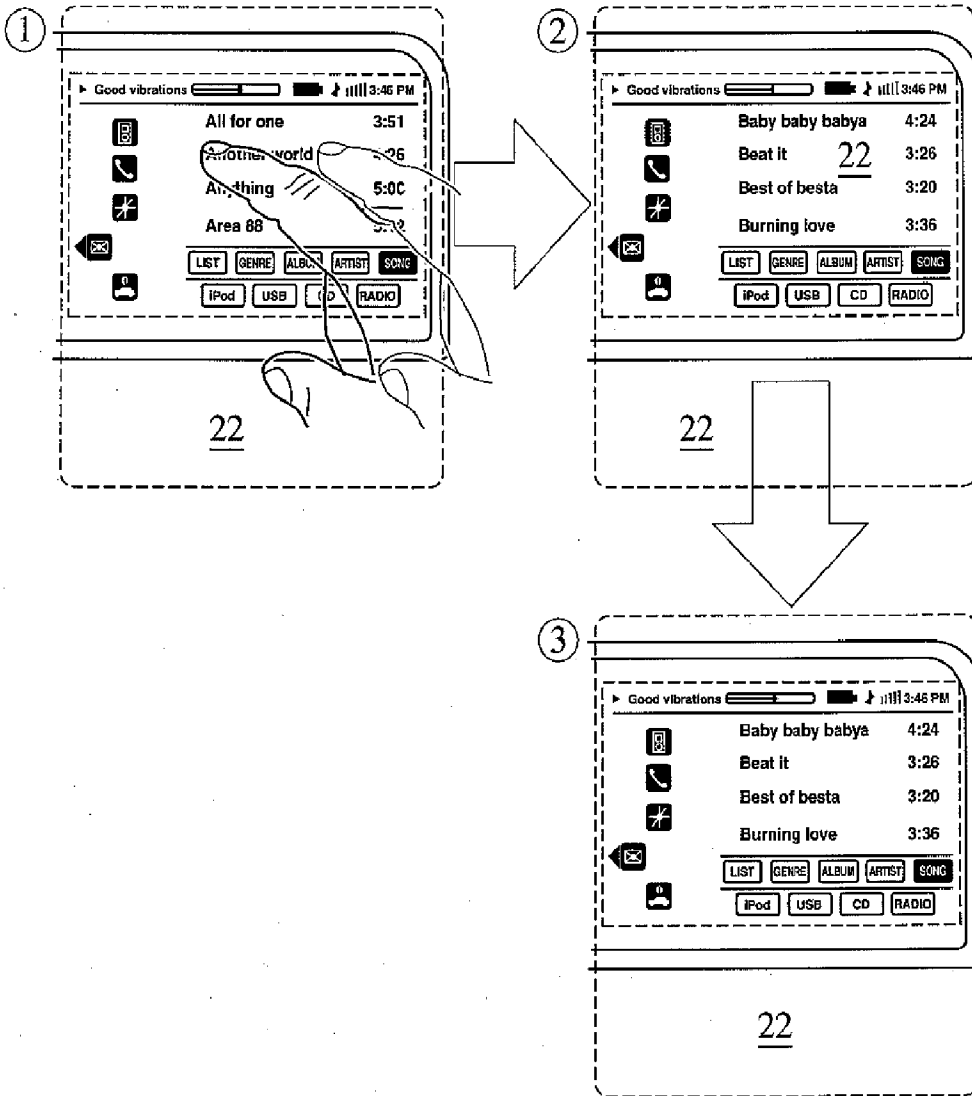


Fig. 9

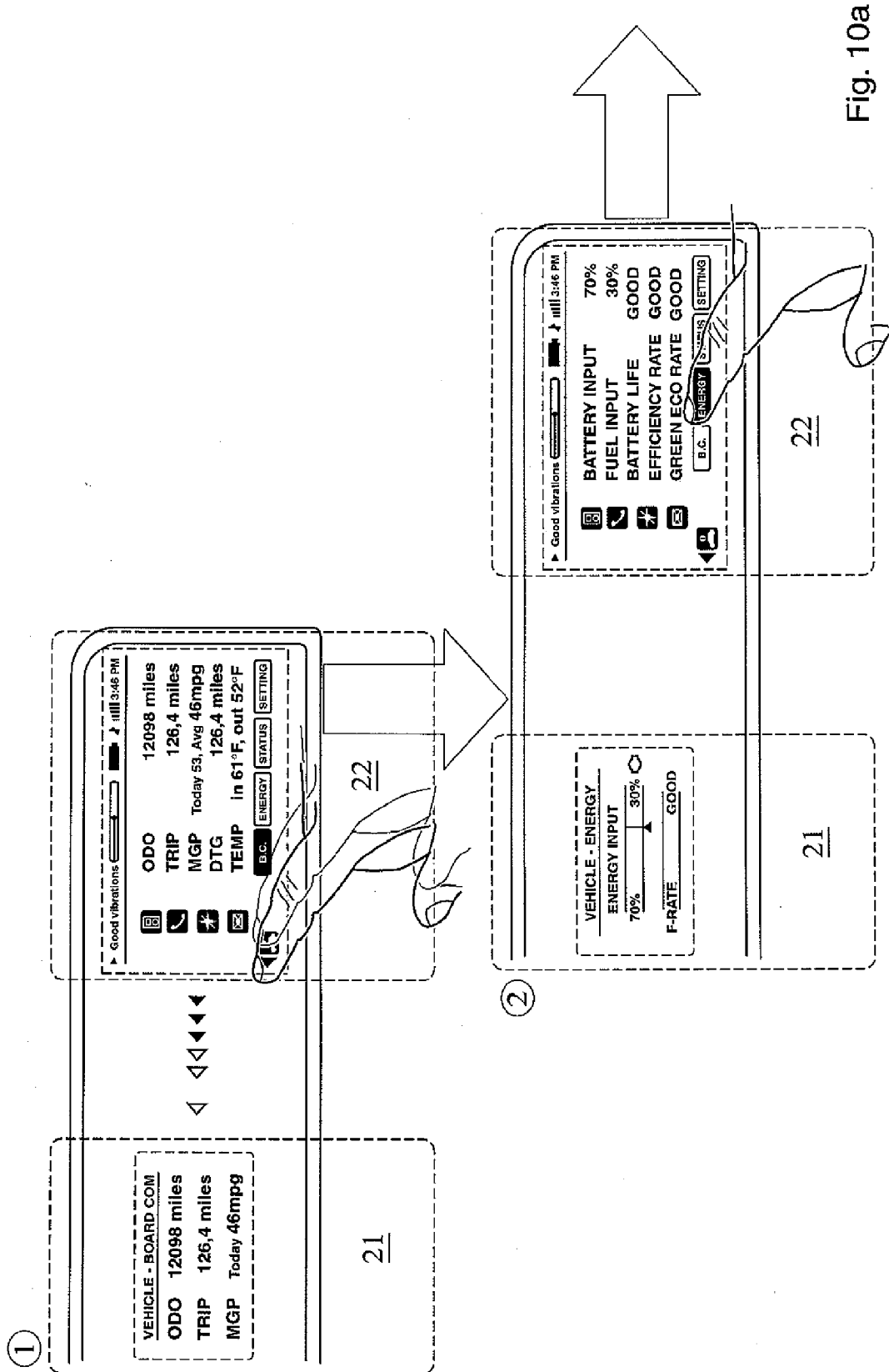


Fig. 10a

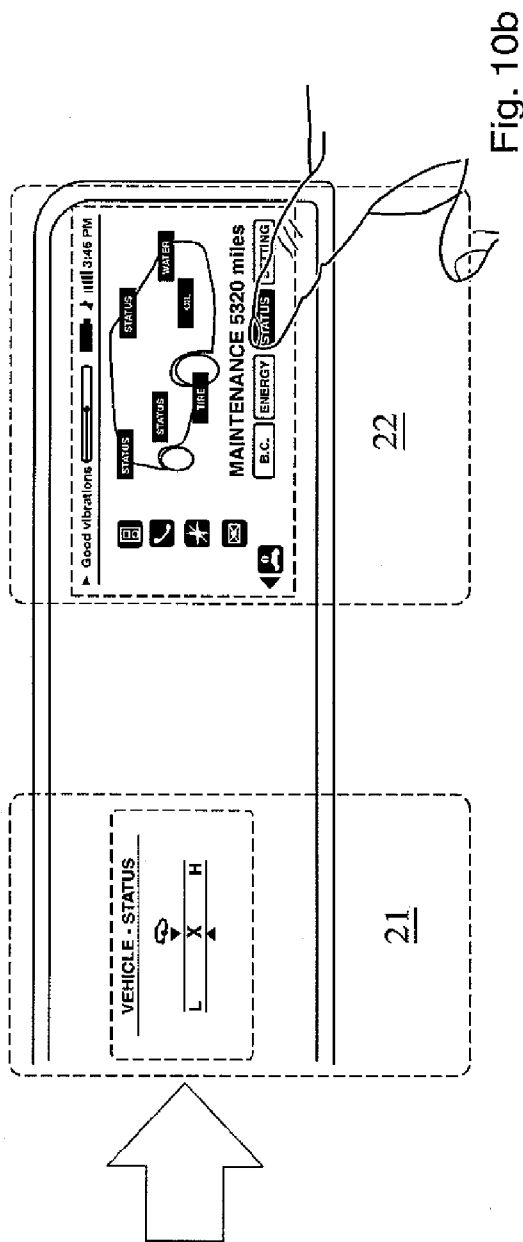


Fig. 10b

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/078941A. CLASSIFICATION OF SUBJECT MATTER
INV. B60K35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B60K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 100 56 305 C1 (VOLKSWAGEN AG [DE]) 10 January 2002 (2002-01-10) paragraphs [0020] - [0028] figures 1,2	1-11
X	WO 98/13224 A (UNITED TECHNOLOGIES AUTOMOTIVE [US]) 2 April 1998 (1998-04-02) pages 2,3 figures 1,2,5	1,5
X	JP 2000 168400 A (MAZDA MOTOR) 20 June 2000 (2000-06-20) abstract figure 1	1
A	EP 1 493 607 A (NISSAN MOTOR [JP]) 5 January 2005 (2005-01-05) the whole document	1.5.10
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Date of the actual completion of the international search

26 November 2008

Date of mailing of the international search report

03/12/2008

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Authorized officer

Verdelho, Luís

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/078941

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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