

Judgment rendered on November 30, 2011

2011 (Ne) 10004 Appeal case of seeking injunction against patent infringement (Court of prior instance: Tokyo District Court, 2009 (Wa) 35184)

Date of conclusion of oral argument: July 11, 2011

### Judgment

Appellant (Plaintiff of prior instance)	Pioneer Corporation
Appellee (Defendant of prior instance)	Navitime Japan Co., Ltd.

### Main text

1. The appeal shall be dismissed.
2. Appellant (Plaintiff of prior instance) shall bear the court costs.

### Facts and reasons

#### I. Object of the appeal

1. The judgment in prior instance shall be revoked.
2. Appellee (Defendant of prior instance) (hereinafter referred to as "Defendant") shall not use the server included in the navigation apparatus listed as 1 in the attached list of articles.
3. Defendant shall not transfer (i.e., transfer, lending, or offer through an electric telecommunication line) or offer for transfer of the program listed as 2 in the attached list of articles.
4. Defendant shall delete the program listed as 3 in the attached list of articles.
5. Defendant shall pay to Appellant (Plaintiff of prior instance) (hereinafter referred to as "Plaintiff"), a sum of 1 billion yen together with an amount thereon at the rate of 5% per annum from October 16, 2009 until full payment of such sum.
6. Defendant shall bear court costs incurred through the prior instance and the second instance.

#### II. Background

Hereinafter, this court adopts the same abbreviations as those used in the judgment in prior instance. The attached description of Defendant's apparatus and each of the attached patent gazettes quoted in this court are the same as those used in the judgment.

In this case, Plaintiff, who owns (two) patent rights of patented inventions in connection with the "on-board navigation apparatus" registered as the title of the

invention, argues that the apparatus, etc. relevant to a navigation service provided by Defendant satisfies the constituent features of each of the patented inventions, Defendant works each of Plaintiff's patented inventions and infringes each of the patent rights by allowing users to use said service or producing the apparatus used for the service, and the act of transfer, etc. of a mobile terminal program used for the service falls under indirect infringement of each of the patent rights, based on which Plaintiff demands against Defendant: [i] injunction of use of the server included in the navigation apparatus listed as 1 in the attached list of articles on the ground of working of the patented inventions resulting from the aforementioned use (patent infringement) (Article 100, paragraph (1) of the Patent Act) and disposal of the program listed as 3 in the attached list of articles (Article 100, paragraph (2) of the Patent Act); [ii] injunction of transfer, etc. and offer for transfer, etc. of the mobile terminal program listed as 2 in the attached list of articles on the ground of working of the patented inventions resulting from the aforementioned production (patent infringement) or the aforementioned indirect infringement (Article 100, paragraph (1) of the Patent Act); and [iii] payment of a total of 1 billion yen, including 200 million yen from damages amounting to 432 million yen corresponding to the amount of royalty based on infringement due to the use of the above navigation service (Article 709 of the Civil Code, Article 102, paragraph (3) of the Patent Act), and 800 million yen from damages amounting to 1.65 billion yen corresponding to the amount of royalty based on indirect infringement due to transfer, etc. of the above mobile terminal program (Article 709 of the Civil Code, Article 102, paragraph (3) of the Patent Act), together with a late charge thereon at the rate of 5% per annum as designated according to the Civil Code from October 16, 2009 following the date of delivery of complaint until full payment of such a sum.

The judgment in prior instance dismissed Plaintiff's claims entirely based on the finding that Defendant's apparatus does not satisfy the "on-board navigation apparatuses" which is a constituent feature of each of the patented inventions and does not pertain to the technical scope of each of the present patented inventions.

Plaintiff appealed against the judgment in prior instance, demanding judgment as stated in the object of the appeal.

(omitted)

### III. Judgment of this court

This court determines that Defendant's apparatus does not fall under infringement

of text of each of the patents and infringement under the doctrine of equivalents, as stated below.

1. Issue (1) A and Issue (2) A -- Presence or absence of applicability of "on-board navigation apparatus" (presence or absence of fulfillment of constituent features 1-A and 1-F and fulfillment of constituent features 2-A and 2-H)

This court determines that Defendant's apparatus does not fall under the "on-board navigation apparatus" as specified in the constituent features 1-A, 1-F, 2-A, and 2-H. The reason is as follows.

(1) Meaning of "on-board navigation apparatus" -- Statement in the scope of claims

Each of the present patented inventions involves the following constituent features.

"[Present patent invention 1]

- 1-A An on-board navigation apparatus for setting a destination and displaying navigational information from a present location to the destination on the basis of destination coordinate data representing the set destination and present location coordinate data representing the present location of a vehicle,
- 1-F the apparatus comprising:
- 1-B a memory having a plurality of storage positions for storing the destination coordinate data;
- 1-C writing means for, every time a destination is set, writing destination coordinate data representing the destination at a storage position which is different from where at least the destination coordinate data selected immediately before is stored in said memory;
- 1-D reading means for reading out said destination coordinate data stored in said memory at a time of destination setting; and
- 1-E means for selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an input instruction to thereby set a destination according to the selected one piece of destination coordinate data."

[Present patent invention 2]

- 2-A an on-board navigation apparatus to display a map on a display,
- 2-H the on-board navigation apparatus comprising:
- 2-B first memory means for previously storing display data indicative of a plurality of service facilities, and position coordinate data indicative of existing positions of the service facilities;
- 2-C means for reading said display data from said first memory means and for

- displaying said plurality of service facilities onto said display in accordance with the read display data;
- 2-D means for designating one of said plurality of service facilities displayed on said display in accordance with an operator input;
  - 2-E means for reading position coordinate data corresponding to the designated one service facility from said first memory means;
  - 2-F second memory means for storing the read position coordinate data;
  - 2-G means for reading position coordinate data from said second memory means when a map is displayed on said display and multiplexing the position indicated by the read position coordinate data onto the map by a predetermined pattern in order to display on said display.

According to the statement in the scope of claims of the present patent invention 1, "the [on-board navigation] apparatus" of the constituent feature "1-F" is specified by an essential element that is a navigation apparatus loaded onto a vehicle, including the respective means described in "1-B" to "1-E." Additionally, according to the statement in the scope of claims of the present patent invention 2, "the on-board navigation apparatus" of the constituent feature "2-H" is specified by a requirement that it is a navigation apparatus loaded onto a vehicle, including the respective means described in "2-B" to "2-G."

Meanwhile, in light of the term "on-board" meaning "stacking luggage or goods onto a vehicle," "loading luggage or goods onto a vehicle," and "stacking onto a vehicle" (Exhibit Ko 22 to Exhibit Ko 25), "the on-board navigation apparatus" is understood to mean "a navigation apparatus" that is loaded onto a vehicle and left in that state at all times. The reason is as follows.

(2) Meaning of "the on-board navigation apparatus" -- referring to the statement in each description

To investigate the details of the meaning of "the on-board navigation apparatus," the statement provided in each description is referenced.

A. The present description 1 provides the following statement in the detailed description of the invention in relation to "the on-board navigation apparatus" (Exhibit Ko 2-1).

[0002] [Background art] There is an on-board navigation apparatus known which has map information including road data acquired by digitization of individual points on roads or streets on a map stored in a storage medium such as a CD-ROM, reads from the storage medium a group of map data of a certain area containing the present location of a vehicle, while tracking the present location, and shows the data as a map

around the present vehicle location on a display as well as automatically displays the present vehicle location on the map. The type of prior art is disclosed in, for example, Japanese Provisional Patent Publication No. 1988-12096.

[0003] This on-board navigation apparatus computes the direction and distance as navigational information from the present location to the destination in accordance with the outputs of sensors such as a direction sensor and a distance sensor to display the information on a display. The destination data is input by key operation of a user such as the driver to be stored as destination coordinate data in a memory. As long as this destination coordinate data is present in the memory, the direction and distance from the present location to the destination can be computed in accordance with the destination coordinate data and displayed on the display. When the distance from the present location to the destination becomes equal to a predetermined value or smaller while the vehicle is running, however, it is judged that the vehicle has arrived at the destination so that the destination coordinate data will automatically be erased from the memory, and the direction and distance will no longer be displayed. The conventional navigation apparatus therefore requires a complicated key operation even when the same destination as the previous one is to be set as a new destination.

[0004] [Object of the Invention] It is therefore an object of the present invention to provide an on-board navigation apparatus which can allow a user to set the same destination as a formerly set destination through a simple operation.

[0005] [Features of the Invention] According to the present invention there is provided an on-board navigation apparatus which sets a destination and displays navigational information from a present location to the destination on the basis of destination coordinate data representing the set destination and present location coordinate data representing the present location of a vehicle, the apparatus comprising a memory having a plurality of storage positions for storing the destination coordinate data, reading means for reading out the destination coordinate data stored in the memory at a time of destination setting, and means for selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an operation input to thereby set a destination according to the selected one piece of destination coordinate data. According to the present invention there is provided an on-board navigation apparatus which sets a destination and displays navigational information for travel from a present location to the destination on the basis of destination coordinate data representing the set destination and present-location coordinate data representing the present location of a vehicle, the apparatus comprising: a memory having a plurality of storage positions for storing the destination coordinate data; writing means for, every

time a destination is set, writing destination coordinate data representing the destination at a storage position which is different from where at least the destination coordinate data selected immediately before is stored in the memory; reading means for reading out the destination coordinate data stored in the memory at a time of destination setting; and means for selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an operator input to thereby set a destination according to the selected one piece of destination coordinate data.

[0007] [Embodiment] Fig. 1 presents a block diagram of an on-board navigation apparatus according to one embodiment of the present invention. In the on-board navigation apparatus, a direction sensor 1 detects the running direction of a vehicle, an angular velocity sensor 2 detects the angular velocity of the vehicle, a distance sensor 3 detects the traveling distance of the vehicle, and a GPS (Global Positioning System) device 4 detects the absolute location of the vehicle on the basis of latitude and longitude information and the like. Detection outputs from these sensors and device are supplied to a system controller 5. The direction sensor 1 is, for example, a geomagnetic sensor which detects the running direction of the vehicle on the basis of geomagnetism (geomagnetic field). The distance sensor 3 comprises a pulse generator which generates a pulse for every rotation through a predetermined angle by the drive shaft (not shown) of the vehicle. ...

[0008] The system controller 5 comprises an interface 6, a CPU (Central Processing Unit) 7, a ROM (Read Only Memory) 8, and a RAM (Random Access Memory) 9. The interface 6 receives the detection outputs of the sensors 1 to 3 and GPS device 4 and performs processing such as A/D conversion. The CPU 7 computes the driving distance, driving direction, and the coordinates of the present location (longitude and latitude), etc. of the vehicle on the basis of the data from the sensors 1 to 3 and GPS device 4 which is sequentially sent from the interface 6, as well as processing a variety of image data. In the ROM 8 various processing programs for the CPU 7, and other necessary information are previously stored. The RAM 9 is to be accessed so that information necessary for executing the programs will be written therein or read out therefrom. The RAM 9 is supplied with a voltage acquired by stabilizing the output voltage of a battery (not shown), even when the navigation apparatus is powered off, so that it may be backed up to prevent data such as destination coordinate data and a destination memory flag, which will be described later, from being erased. ...

[0009] For example, a CD-ROM is used as an external storage medium and is a nonvolatile read only storage medium. The external storage medium is not limited to

a CD-ROM, but may be another nonvolatile storage medium, such as a DAT or an IC card. Map data which is acquired by digitization of individual points on roads on maps, is previously stored in the CD-ROM. The information in the CD-ROM is read out through a CD-ROM drive 10. The read information from the CD-ROM drive 10 is decoded by a CD-ROM decoder 11 to be sent on a bus line L.

[0010] A source voltage from the vehicle-battery is supplied as a power source to the individual sections of the navigation apparatus through a so-called accessory switch 12 and regulated by a regulator 13. The voltage to be supplied to the RAM 9 does not come through the accessory switch 12 and is regulated by another regulator (not shown) which is different from the regulator 13. The CPU 7 executes timer interruption to compute the direction of the vehicle on the basis of the output data of the direction sensor 1 at a given cycle. The CPU 7 also acquires longitude data and latitude data as coordinate data of the present location of the vehicle, from the covered distance and direction by the interruption of every run of a predetermined distance, based on the output data from the distance sensor 3. The CPU 7 collects the map data of an area of a certain range including the coordinates of the present location from the CD-ROM, and temporarily stores the data in the RAM 9 as well as supplying it to a display device 16.

[0011] The display device 16 comprises a display 17 such as a CRT, a graphic memory 18 constituted of a V (Video)-RAM or the like, a graphic controller 19, and a display controller 20. The graphic controller 19 writes the map data sent from the system controller 5 into the graphic memory 18 as image data and generates the data. The display controller 20 performs such control as to display a map on the display 17 in accordance with the image data generated from the graphic controller 19. An input device 21 is constituted by a keyboard or the like and issues various commands and the like to the system controller 5 by means of the key operation of a user. The keys include a set key for setting a destination, numerical keys for selecting the items displayed on the display 17, and a destination return key for returning formerly set destinations; none of which are shown.

B. The present description 2 also provides the following statement in the detailed description of the invention in relation to "the on-board navigation apparatus" (Exhibit Ko 2-2).

[0002] [Background art] There is an on-board navigation apparatus in which map data including road data which is obtained by converting each point on the roads of a map into numerical values is stored in a memory medium such as a CD-ROM or the like. A group of map data of a district of a predetermined range including the present

location is read out from the memory medium while recognizing the present location of the vehicle and is displayed on a display as a map around the present location of the vehicle, and the self vehicle position indicative of the present location of the vehicle is automatically displayed on the map. Such an on-board navigation apparatus has been disclosed in, for instance, Japanese Provisional Patent Publication No. 1988-12096 and has already been well known.

[0005] [Object of the Invention] It is an object of the invention to provide an on-board navigation apparatus which can register a user position without performing complicated operations.

[0006] [Features of the Invention] According to the invention, there is provided an on-board navigation apparatus for displaying a map on a display, comprising: first memory means in which display data indicative of a plurality of service facilities and position coordinate data indicative of existing positions of the service facilities have previously been stored; means for reading out the display data from the first memory means and for displaying the plurality of service facilities onto the display in accordance with the read display data; means for selectively designating one of the plurality of service facilities displayed on the display in accordance with an operator input; means for reading out the position coordinate data corresponding to the designated one service facility from the first memory means; second memory means for storing the read position coordinate data; means for reading out the stored position coordinate data from the second memory means when a map is displayed on the display; and means for multiplexing the position indicated by the read position coordinate data from the second memory means onto the map by a predetermined pattern in order to display on the display.

[0008] [Embodiment] FIG. 1 is a block diagram showing an embodiment of an on-board navigation apparatus according to the invention. In the on-board navigation apparatus, a direction sensor 1 detects the running direction of the vehicle, an angular velocity sensor 2 detects an angular velocity of the vehicle, and a distance sensor 3 detects a running distance of the vehicle. A GPS (Global Positioning System) 4 detects the absolute position of the vehicle from longitude and latitude information or the like. Detection outputs of those sensors 1 to 3 and the GPS 4 are supplied to a system controller 5. As the direction sensor 1, for instance, a geomagnetism sensor to detect a running direction of the vehicle by earth magnetism (earth's magnetic field) can be used. The distance sensor 3 comprises a pulse generator which generates a pulse every rotation of a predetermined angle of a drive shaft (not shown) of the vehicle. ...

[0009] The system controller 5 comprises: an interface 6 which receives the detection outputs of the sensors (system) 1 to 4 and executes processes such as A/D (analog to digital) conversion and the like; a CPU (central processing unit) 7 for executing various image data processes and for calculating the running distance, running direction, present location coordinates (longitude, latitude), and the like of the vehicle on the basis of the output data of the sensors (system) 1 to 4 which are sequentially sent from the interface 6; a ROM (read only memory) 8 in which various kinds of processing programs of the CPU 7 and other necessary information have previously been written; and a RAM (random access memory) 9 into/from which information necessary to execute the programs is written and read out. The RAM 9 is backed up by being supplied with a voltage in which an output voltage of a battery (not shown) is regulated even when a power source of the navigation system is shut out so as not to extinguish the data such as longitude and latitude data, position display pattern data, position registration flag, and the like, which will be explained later. ...

[0010] For instance, a CD-ROM is used as an external memory medium and is a non-volatile read only memory medium. The external memory medium is not limited to the CD-ROM but can also use a non-volatile memory medium such as a DAT, an IC card, or the like. In addition to the map data which is obtained by converting each point on the roads of the map into digital values (numerical values), service list display data, detailed display data, longitude and latitude data as position coordinate data, and position display pattern data, which will be explained hereinafter, have also previously been stored in the CD-ROM. Memory information in the CD-ROM is read out by a CD-ROM drive 10. A read output of the CD-ROM drive 10 is decoded by a CD-ROM decoder 11 and sent to a bus line L.

[0011] A vehicle power source voltage from a battery transmitted through what is called an accessory switch 12 of the vehicle is regulated by a regulator 13 and supplied as a power source of each section in the navigation apparatus. The power source which is supplied to the RAM 9 mentioned above is regulated by another regulator (not shown) different from the regulator 13 without passing through the accessory switch 12. When the vehicle is running, the CPU 7 calculates the running direction of the vehicle on the basis of the output data of the direction sensor 1 at a predetermined period by a timer interruption. The CPU 7 also obtains the longitude and latitude data as coordinate data of the present location of the vehicle from the running distance and the running direction by the interruption of every run of a predetermined distance based on the output data of the distance sensor 3. The CPU 7 collects the map data of the district of a predetermined range including the present position coordinates from

the CD-ROM and temporarily stores the collected data into the RAM 9 and also supplies the same to a display apparatus 16.

[0012] The display apparatus 16 is constructed by: a display 17 such as a CRT or the like; a graphic memory 18 comprising a V (Video)-RAM or the like; a graphic controller 19 for drawing the map data sent from the system controller 5 as image data into the graphic memory 18 and for generating the image data; and a display controller 20 for controlling so as to display a map on the display 17 in accordance with the image data generated from the graphics controller 19. An input device 21 comprises a keyboard or the like and generates various kinds of commands or the like to the system controller 5 by the key operation of the user. As keys which are used in the above key operations, there are provided a selection key to select items displayed on the display 17, a cancel key to switch the display content on the display 17, a position registration key to store data into the RAM 9 (all of the above keys are not shown), and the like.

C. Based on the statement in the scope of claims provided in the above (1), with reference to the statement in each of the present description 1 and the present description 2 (hereinafter, these descriptions may be collectively referred to as "each present description") as provided in A and B, the meaning of "the on-board navigation apparatus" is determined.

According to the statements in paragraphs [0003] to [0005] of the present description 1 and the statements in paragraphs [0002], [0005], and [0006] of the present description 2, the present patent invention 1 and the present patent invention 2 aim at improving further convenience and operability for the conventional on-board navigation apparatus; i.e., "There is an on-board navigation apparatus in which map data including road data which is obtained by converting each point on the roads of a map into numerical values is stored in a memory medium such as a CD-ROM or the like. A group of map data of a district of a predetermined range including the present location is read out from the memory medium while recognizing the present location of the vehicle and is displayed on a display as a map around the present location of the vehicle, and the self vehicle position indicative of the present location of the vehicle is automatically displayed on the map." That is, each of the present patented inventions is characterized by adding technical ingenuity to "allow a user to set the same destination as a formerly set destination through a simple operation" in the present patent invention 1 and by adding technical ingenuity to allow "registering a user position without performing complicated operations" in the present patent invention 2.

Meanwhile, referring to paragraphs [0005] and [0007] to [0011] of the present

description 1 and paragraphs [0006] and [0008] to [0012] of the present description 2 as well as drawings attached to each description, embodiments provided therein are based on the premise that stable power supply is required to exhibit functions of "the navigation apparatus" and the power is supplied from a vehicle into which the "apparatus" is integrated. Meanwhile, there is no statement or disclosure about a function of charging power, etc. which appears to be naturally essential when "the apparatus" is not integrated with a vehicle.

As stated above, according to the statement in each present description, the following facts are found. (i) Even though "the on-board navigation apparatus" provided in each of the present patented inventions involves additional new technical ingenuity as characterized by each of the present patented inventions in comparison with the conventional "on-board navigation apparatus" which had been publicly known before filing of the application, there is no reason to understand that such technical ingenuity is inevitably accompanied by a change in the mode of the apparatus installed all the time. [ii] There is no explicit or implicit description that sufficiently allows interpretation that a change is added to the embodiment of the apparatus installed at all times. [iii] There is no description suggesting a convenient feature of allowing the user to take the apparatus out of the vehicle when the vehicle is not used. [iv] If it is intended to include an embodiment of allowing the user to take the navigation apparatus out of the vehicle when the vehicle is not used, terms such as "navigation apparatus for vehicle" and "navigation apparatus" ought to be selected in the scope of claims. Considering the above facts comprehensively, the term "on-board" of "on-board navigation apparatus" recited in the scope of claims of each of the present patented inventions means, according to reasonable interpretation, that the apparatus is loaded onto the vehicle and placed in that state at all times, irrespective of whether or not the vehicle is used (in light of Exhibit Ko 26 (published unexamined patent application with the invention title of "on-board video playback apparatus") provided by Plaintiff, which explicitly states that a portable apparatus is inclusive in the scope of claims and also discloses that power is supplied when the apparatus is used as a portable apparatus in the detailed description of the invention, even if it is possible to interpret the term "on-board" in Exhibit Ko 26 as having some different meaning from the meaning in each of the present patented inventions according to the above interpretation, such meaning is not found to have an influence over the interpretation of each of the present patented inventions).

### (3) Defendant's apparatus

Defendant's apparatus is as follows (and there is not dispute in this regard between

the parties).

A. Defendant's apparatus comprises Defendant's server that is managed/operated by Defendant and not loaded onto a vehicle, the present mobile terminal held by a user, and other elements.

B. Defendant's server comprises a CPU, storage means, and a data transmission/reception unit. Then, the storage means stores a search engine configured to search a route, road network data, and map drawing data. The Defendant's server can create map drawing data based on the result of route search. Another storage means is also provided to store information unique to the present mobile terminal.

C. The present mobile terminal comprises a CPU, storage means, a data transmission/reception unit, a GPS reception unit, a display, and an input key. Then, in the storage means, an application including a map rendering engine configured to display map drawing data created at Defendant's server is installed.

D. Each of Defendant's server and the present mobile terminal has the following functions (entire import of the oral argument).

(a) The GPS reception unit of the present mobile terminal is used to receive a GPS signal so as to obtain present location information representing a present location of the mobile terminal and specify a destination based on key operation in the present mobile terminal.

(b) The information on the present location and destination is transferred to Defendant's server in which a route from the present location to the destination is searched based on the information, and map drawing data is created based on the search result.

(c) The map drawing data is transferred to the present mobile terminal, and the route search result is displayed on the display screen of the present mobile terminal.

(d) During travelling, the present location of the vehicle is displayed on the map and route guidance is carried out in a mode such as map mode in which the map scrolls according to the movement of the vehicle (see the attached description of Defendant's apparatus, screens 1-(12) and 1-(16)).

#### (4) Summary

As stated above, neither "Defendant's server" nor "the present mobile terminal" provided in Defendant's apparatus is loaded onto a vehicle or placed in the loaded state at all times. Thus, it should be concluded that Defendant's apparatus does not fall under "the on-board navigation apparatus." Defendant's apparatus does not satisfy the constituent features "1-A" and "1-F" of the present patent invention 1 and the

constituent features "2-A" and "2-H" of the present patent invention 2.

2. Issue (1) D -- Presence or absence of applicability of "selecting [*one piece of*] destination coordinate data" (Fulfillment of the constituent feature 1-E)

This court determines that Defendant's apparatus does not involve "selecting [*one piece of*] destination coordinate data" as specified in the constituent feature 1-E. The reason is as follows.

(1) Meaning of "selecting [*one piece of*] destination coordinate data" as specified in the constituent feature 1-E

A. The constituent feature 1-E of the present patent invention 1 is as described in the above 1(1).

B. The present description 1 provides the following statement in the detailed description of the invention in addition to the statement in paragraph [0005] as acknowledged in the above 1(2)A (Exhibit Ko 2-1).

[0006] [Effect of the invention] According to the thus designed on-board navigation apparatus, every time a destination is set, destination coordinate data representing the destination is written at a storage position in a memory being different from where previous destination coordinate data is stored to hold coordinate data of formerly set designations in the memory, the destination coordinate data stored in the memory at the time of destination setting is read out, and one piece of destination coordinate data is selected from the read destination coordinate data by an operation so that a destination can be set in accordance with the selected one piece of destination coordinate data.

[0012] The destination coordinate data writing operation which is executed by the CPU 7 will be described in accordance with the destination setting routine illustrated as flowcharts in FIGS. 3 and 4. The routine is accessed and executed when a setting menu is selected by the key operation of the user through the input device 21 during execution of the main routine (not shown). The main routine includes processes to check the present location of the vehicle on the basis of individual output data of the sensors 1 and 3, to read out groups of map data of areas of a certain range including the present location from the CD-ROM in order to display them as maps around the present location on the display 17, and to display a position indicator representing the vehicle's present location on the maps.

[0013] In the destination setting routine, the CPU 7 first requests the selection of destination setting (step S1). The CPU 7 displays, for example, "1. Selection of Registered Data; and 2. New Setting" on the display 17, and allows a user to select either option by performing the proper key operation through the input device 21.

The CPU 7 determines whether any key operation has been performed to make the selection (step S2). When the key operation has been performed, then CPU then determines whether or not the selected destination setting is "New Setting" (step S3). If the selection of "New Setting" has been made by pressing, for example, the set key or numerical key "2" of the input device 21, the CPU 7 requests the designation of the destination (step S4). This request is made by displaying a map on the display 17 together with a message instructing the user to designate the destination on the map with a cursor using the keys of the input device 21. The CPU 7 determines whether or not any designation has been made (step S5). If the destination has been designated, the CPU 7 obtains the longitude and latitude data (x, y) of the designated point from the map data, and stores the obtained data as destination coordinate data DEST in the RAM 9 (step S6).

[0014] The CPU 7 then sets a destination memory flag F to "1" (step S7), memorizing that the destination coordinate data has been set and written into the RAM 9. Further, "1" is added to a pointer P (step S8), and it is then determined if the pointer P is greater than the maximum address Amax of the registration data table in the RAM 9 (step S9). The pointer P indicates the address where the destination coordinate data, which is currently the last data written into the registration data table of the RAM 9, is stored. The initial value of the pointer P, immediately after the power is supplied to the RAM 9, is set to the maximum address Amax, for example. If  $P \leq Amax$ , the destination coordinate data DEST is written, at the storage position address designated by the pointer P, into the registration data table (step S10). If  $P > Amax$ , the pointer P is set equal to the minimum address A1 of the registration data table (step S11). The flow then advances to step S10 where the destination coordinate data DEST is written into the registration data table. ...

[0015] If the CPU 7 determines in step S3 that "Selection of Registered Data" is selected by operating the destination return key or numerical key "1" of the input device 21, for example, address Aw is set equal to the pointer P (step S12). The CPU 7 then determines whether the address Aw is smaller than the minimum address A1 of the registration data table (step S13). If  $Aw \geq A1$ , data is read out from the storage position of the registration data table which is specified by the address Aw (step S14). If  $Aw < A1$ , the address Aw is set equal to the maximum address Amax of the registration data table (step S15), and the flow moves to step S14. After the process in step S14 is performed, the next step is to determine if the read data is the destination coordinate data (step S16). ... When the read data is destination coordinate data, the CPU 7 supplies the read data to the graphic controller 19 for displaying the destination

specified by the read data on the display 17 (step S17). Through this process, the longitude and latitude of the destination are displayed on the display 17, such as "Destination: 139°30'00'E, 36°00'00'N". It is then determined if the set key of the input device 21 has been operated (step S18). ... If the set key is operated, the CPU 7 stores the read destination coordinate data as the destination coordinate data DEST into the RAM 9 (step S21), and then advances to step S7.

[0016] Every time the destination is set, therefore, the destination coordinate data for the destination is stored in the registration data table of the RAM 9. The storage of the destination coordinate data is repeated in order from the address A1 to address Amax. The address where the latest piece of destination coordinate data is stored is indicated by the pointer P. The address A1 is designated again after the address Amax, so that the destination coordinate data may be endlessly stored. In other words, pieces of newly set destination coordinate data can be stored in sequentially numbered addresses, starting from the address indicated by the pointer P. If "Selection of Registered Data" is selected, the destination coordinate data which was previously stored at the address Aw specified by the pointer P is first read out, and the longitude and latitude indicated by the read data are displayed on the display 17. When the destination return key of the input device 21 is operated, the address Aw is decreased by "1". The destination coordinate data before the previous one is thus read out, and the longitude and latitude indicated by the read data are displayed on the display 17. In this manner, therefore, the longitude and latitude of the destination, which have been set just before the setting of the currently displayed destination, are displayed upon every operation of the destination return key. When the set key is pressed in the case that the longitude and latitude of a desired destination are displayed on the display 17, the longitude and latitude data corresponding to the displayed destination are stored as the destination coordinate data DEST into the RAM 9. The pointer P is then increased by "1", and the destination coordinate data DEST is written at the address in the data table specified by the pointer P.

[0018] The computing operation for the distance and direction from the present location to the destination, which is executed by the CPU 7, will now be described in accordance with the distance and direction computing routine illustrated as a flowchart in Fig. 5. The routine is executed as a subroutine in the above-described main routine. In the distance and direction computing routine, the CPU 7 first determines whether or not the destination memory flag F is "1" (step S31). When F = 0, which means that the destination coordinate data DEST has not been written in the RAM 9, the subroutine is terminated immediately. When F = 1, indicating that the destination

coordinate data DEST is written in the RAM 9, the CPU 7 reads out the data DEST from the RAM 9 (step S32), and acquires present-location coordinate data consisting of longitude data and latitude data that represent the present location of the vehicle, on the basis of the output data of the sensors 1 and 3 (step S33). ... After execution of step S33, the CPU 7 calculates the distance D and direction  $\vartheta$  from the present location to the destination on the basis of the destination coordinate data and the present-location coordinate data (step S34). The CPU 7 then supplies data representing the calculated distance D and direction  $\vartheta$  to the graphic controller 19 to display the distance D and direction  $\vartheta$  on the display 17 for a predetermined period (step S35). ...

[0019] Although only destination coordinate data is written as data indicating a destination in the registration data table in the above embodiment, data including not only the coordinates of the destination but also the name of the destination may be written in the registration data table so that the destination name can also be displayed on the display 17. Further, a plurality of destination names and the longitudes and latitudes of the destinations may be displayed on the display 17 at a single time to permit the user to select a single desired destination from among the group of the destinations.

[0020] [Effect of the Invention]

According to the on-board navigation apparatus of the present invention, every time a destination is set, destination coordinate data representing the destination is written at a storage position in a memory. The storage position is different at least from where the immediately preceding destination coordinate data is stored, to keep coordinate data of formerly set destinations in the memory. The destination coordinate data stored in the memory at the time of destination setting is read out, and one piece of destination coordinate data is selected from the read destination coordinate data by an operation, so that a destination can be set in accordance with the selected one piece of destination coordinate data. The user can therefore easily set the same destination as a formerly set destination by only a simple selecting operation.

C. Based on the statement in the scope of claims in the above A and with reference to the statement in the description 1 as provided in B, the meaning of "selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an input instruction" in the constituent feature 1-E is determined.

(a) The present patent invention 1 is characterized by comprising means for selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an input instruction to thereby set a destination according to the selected one piece of destination coordinate data (paragraph [0005]). The term

"destination coordinate data" designates a destination having been set. When the user selects "Selection of Registered Data" as a method of destination setting, "destination coordinate data" stored in "the registration data table in the RAM 9" is read out, and one piece of "destination coordinate data" is selected from the read "designation coordinate data" in accordance with an input instruction and stored as "destination coordinate data DEST" in the RAM 9 to thereby "set" a "destination" (If "New Setting" is selected as a method of destination setting by the user, an input designating a destination is made by a cursor on the map as shown on the display to thereby "set" a "destination"). Then, "the distance  $D$  and direction  $\theta$  from the present location to the destination" required to display navigation information are calculated by "reading out the destination coordinate data DEST from the RAM 9" and on the basis of this and the present location coordinate data. Thus, the present description 1 is found to disclose in the detailed description of the invention that "destination coordinate data" stored in "the registration data table in the RAM 9" is read out prior to "selection" of one piece of destination coordinate data to "set" a "destination."

From the above, "selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an input instruction" as specified in the constituent feature 1-E refers to reading out "destination coordinate data" and "selecting" one piece of destination coordinate data from the read destination coordinate data prior to "selection" in accordance with an input operation by the user.

(b) In response, Plaintiff alleges that what is naturally assumed in the constituent feature 1-E from the statement in paragraphs [0016] and [0019] of the present description 1 is to write a destination name along with the destination coordinate data in the registration data table, display a plurality of destination names on the display based on the destination name data, and select one of the displayed destination names to select destination coordinate data of the destination and thereby set a destination.

However, Plaintiff's allegation is falsely made as explained below.

Specifically, even if the interpretation is based on the statement in paragraphs [0016] and [0019] of the present description 1, data which is read out from the "registration data table in the RAM 9" prior to "selection" according to an operation input by the user is nothing more than "destination coordinate data" or "destination coordinate data including a destination name." Certainly, "a destination name" may be displayed on the display but such display per se has no relevance to "destination coordinate data" and does not mean that a destination is "selected" directly from "a destination name." Plaintiff's allegation to this extent is inadmissible.

(2) Defendant's apparatus

Defendant's apparatus is as follows (Exhibit Ko 6, Exhibit Ko 7 and Exhibit Otsu 16, entire import of the oral argument).

To use the history of destinations having been set, transition to the "destination" screen (attached description of Defendant's apparatus, screen 2-(16)) is done by selecting information of destination name, etc. displayed on the "search history" screen (attached description of Defendant's apparatus, screen 2-(13)) (e.g. "Printemps Ginza (09/10 09:41 corrected)" without including coordinate data). On this screen, by selecting "map (confirm/correct)," a pink star mark representing a point of selected information (e.g. "Printemps Ginza (09/10 09:41 corrected)") is displayed on the map in the vicinity of the point (screen 2-(17)). In addition, by selecting "leave now" on the above "destination" screen, the mobile terminal starts receiving a GPS signal, followed by reading out coordinate data which is indicated by the selected information and stored as history and, based on the information of the present location including the longitude and latitude of the present location of the vehicle, shifting to the "screen indicating that a route from the present location to a destination has been searched." By selecting "route map confirmation" on this screen, transition is made to the "map screen showing the route" from the present location to the destination.

### (3) Summary

As stated above, Defendant's apparatus does not read out "destination coordinate data" prior to "selection" according to an input instruction by the user. Accordingly, Defendant's apparatus does not set a destination by "selecting one piece of destination coordinate data from the read destination coordinate data in accordance with an input instruction" and therefore fails to meet the constituent feature 1-E.

3. Allegations of the parties (1) added in this court -- Infringement under the doctrine of equivalents

Plaintiff alleges alternatively that "the navigation service provided by connecting a mobile telephone terminal and a server via a telephone communication line" in Defendant's apparatus is equivalent to "the on-board navigation apparatus" as specified by the constituent features 1-A and 1-F of the present patent invention 1 and by the constituent features 2-A and 2-H of the present patent invention 2.

The above Plaintiff's alternative allegation should be regarded as an attack method newly presented in the court of second instance outside the appropriate time. Setting aside this matter, Plaintiff's alternative allegation is unreasonable as explained below.

Specifically, the meaning of "on-board" of "on-board navigation apparatus" in each of the present patented inventions means, as stated above, that the apparatus is loaded onto a vehicle and placed in that state at all times, irrespective of whether or not the

vehicle is used. Because the apparatus is placed in such a state, there is an effect of preventing the user from missing the opportunity of using the apparatus by forgetting to take the apparatus even though the user wanted to use navigation. In contrast, Defendant's apparatus is a terminal or the like that is portable (held) as stated above and therefore the user is unable to use the apparatus as a navigation apparatus for vehicle unless the user brings the terminal or the like into the vehicle. Hence, even if the constituent feature "the on-board navigation apparatus" in each of the present patented inventions is replaced with "the mobile terminal comprising a transmission/reception unit" of Defendant's apparatus, it would not be possible to realize problem solving according to each of the present patented inventions by providing "the navigation apparatus being on board" or obtain functions and effects brought by "the on-board navigation apparatus" in each of the present patented inventions. As a result, the object of each of the present patented inventions would not be achievable.

As stated above, Plaintiff's allegation to the effect that the present mobile terminal held by the user in Defendant's apparatus is equivalent to "the on-board navigation apparatus" as specified by the constituent features 1-A and 1-F of the present patent invention 1 and by the constituent features 2-A and 2-H of the present patent invention 2 is inadmissible.

#### IV. Conclusion

Plaintiff's claims are entirely groundless and should be dismissed without the necessity of judging the remaining issues. The judgment in prior instance to the same effect is reasonable. Even though there are other detailed claims made by Plaintiff, these claims have no influence on the above recognition and decision.

For this reason, the appeal of this case is found groundless and dismissed and judgment shall be rendered as stated in the main text.

Intellectual Property High Court, Third Division

Presiding Judge	IMURA Toshiaki
Judge	IKESHITA Akira
Judge	TAKEMIYA Hideko

## Attachment

### List of Articles

1. Navigation apparatus for navigation service called "EZ passenger seat navigation"
2. Mobile terminal program for navigation service called "EZ passenger seat navigation"
3. Server program for navigation service called "EZ passenger seat navigation"