Claims

We claim,

1. A method for rendering a navigational direction to a user on a watch, the method comprising the steps of:

receiving inputs from the user pertaining to location information of a destination station;

determining location information of a current station of the user;

determining information pertaining to a plurality of navigational paths initiating from the current station and ending at the destination station, wherein the information pertaining to the plurality of navigational paths comprises at least one type of map comprising the destination station and the current station of the user;

rendering a plurality of pointers representing the plurality of respective navigational paths within at least an inner area of a dial of the watch and an outer periphery of the dial of the watch, wherein the plurality of pointers includes a first set of pointers rendered within the inner area of the dial of the watch and a second set of pointers rendered on the outer periphery of the dial of the watch, wherein the first set of pointers are dependent on the location information of the destination station and the current station; the second set of pointers are dependent on the current station;

receiving an input of the user regarding selection of at least one indicator from at least the first set of pointers and the second set of pointers; and

rendering at least one type of map and the navigational path corresponding to the user selected indicator within an inner area of the dial of the watch.

2. The method as claimed in claim 1, further comprising:

presenting pointing directions of an hour hand, a minute hand and a second hand of the watch as representatives of a first indicator, a second indicator and a third indicator selected from the first set of pointers;

receiving an input from the user to select at least one of the first indicator, the second indicator and the third indicator; and

controlling movement of the hour hand, the minute hand and the second hand to map the pointing directions of the user selected indicator and the respective navigational path on the at least one type of map.

3. The method as claimed in claim 2, wherein:

the first indicator indicates a shortest path between the current station and the destination station;

the second indicator indicates a fastest path between the current station and the destination station; and

the third indicator indicates a safest path between the current station and the destination station.

4. The method as claimed in claim 3, further comprising:

determining angular movements for each of the hour hand, the minute hand and the second hand required to maintain a correlation between the respective pointing directions and corresponding navigational paths on the at least one type of map; and

controlling the rotational directions of each of the hour hand, the minute hand and the second hand in accordance with respective determined angular movements.

5. The method as claimed in claim 4, further comprising:

receiving real time information regarding the shortest path, the fastest path and the safest path between the current station and the destination station; and

controlling the rotational directions of each of the hour hand, the minute hand and the second hand in accordance with the real time information.

6. The method as claimed in claim 3, further comprising:

actuating at least one of a first crown to select a first mode of operation and a second crown to select a second mode of operation,

wherein the first mode of operation renders time on the dial and the second mode of operation renders navigational path on the dial.

7. The method as claimed in claim 6, further comprising:

actuating the second crown in a predefined manner to select at least one of the first indicator, the second indicator and the third indicator.

8. The method as claimed in claim 1, further comprising:

embossing the second set of pointers on the outer periphery of the dial;

actuating at least one motor to control rotation movement of the outer periphery of the dial in accordance with movement of the user while the user passes through the rendered navigational direction path.

9. The method as claimed in claim 1, further comprising:

controlling movement of the second set of pointers on the outer periphery of the dial in accordance with movement of the user while the user passes through the rendered navigational direction path.

10. The method as claimed in claim 9, wherein the second set of pointers indicate to respective directions selected from a group of direction comprising north, south, east, west, north east, north west, south east, south west and magnetic north.

11. A system for rendering a navigational direction to a user on a watch, the system comprising the steps of:

a first user interface configured to receive inputs from the user pertaining to location information of a destination station;

a global positioning device configured to determine location information of a current station of the user;

a receiver configured to receive information pertaining to a plurality of navigational paths initiating from the current station and ending at the destination station, wherein the information pertaining to the plurality of navigational paths comprises at least one type of map comprising the destination station and the current station of the user;

a controller configured to render a plurality of pointers representing the plurality of respective navigational paths within at least an inner area of a dial of the watch and an outer periphery of the dial of the watch, wherein the plurality of pointers includes a first set of pointers are rendered within the inner area of the dial of the watch and a second set of pointers are rendered on the outer periphery of the dial of the watch, wherein the first set of pointers are dependent on the location information of the destination station and the current station; the second set of pointers are dependent on the current station;

a second user interface configured to receive an input of the user regarding selection of at least one indicator from at least the first set of pointers and the second set of pointers; and

the controller configured to render the at least one type of map and the navigational path corresponding to the user selected indicator within an inner area of the dial of the watch.

12. The system as claimed in claim 11, wherein

the controller is further configured to present pointing directions of an hour hand, a minute hand and a second hand of the watch as representatives of a first indicator, a second indicator and a third indicator selected from the first set of pointers;

a third interface is configured to receive an input from the user to select at least one of the first indicator, the second indicator and the third indicator; and

the controller is configured to control movement of the hour hand, the minute hand and the second hand to map the pointing directions of the user selected indicator and the respective navigational path on the at least one type of map.

13. The system as claimed in claim 12, wherein:

the first indicator indicates a shortest path between the current station and the destination station;

the second indicator indicates a fastest path between the current station and the destination station; and

the third indicator indicates a safest path between the current station and the destination station.

14. The system as claimed in claim 13, further comprising:

a first crown and a second crown, wherein actuation of the first crown enables the user to select a first mode of operation and actuation of the second crown enables the user to select a second mode of operation, wherein the first mode of operation renders time on the dial and the second mode of operation renders navigational path on the dial.

15. The system as claimed in claim 11, further comprising:

embossed patterns indicating the second set of pointers on the outer periphery of the dial; and

an actuator configured to actuate at least one motor to control rotation movement of the outer periphery of the dial in accordance with movement of the user while the user passes through the rendered navigational direction path.

Claims

We claim:

1. A method for rendering a navigational direction to a user on a watch (102), the method comprising the steps of:

   receiving, by a first user interface, inputs from the user pertaining to location information of a destination station;

   determining, by a global positioning device, location information of a current station of the user, characterised in that:

   determining, by a receiver, information pertaining to navigational paths initiating from the current station and ending at the destination station, wherein the information pertaining to the navigational paths comprises a map comprising the destination station and the current station of the user;

   rendering, a controller (202), pointers representing respective navigational paths within an inner area of a dial of the watch (102) and an outer periphery of the dial of the watch (102), wherein the pointers includes a first set of pointers rendered within the inner area of the dial of the watch and a second set of pointers rendered on the outer periphery of the dial of the watch (102), wherein the first set of pointers are dependent on the location information of the destination station and the current station; the second set of pointers are dependent on the current station;

   presenting, by the controller (202) pointing directions of an hour hand, a minute hand and a second hand of the watch as representatives of a first indicator, a second indicator and a third indicator selected from the first set of pointers;

   receiving, by a second user interface, an input of the user regarding selection of an indicator from the first set of pointers and the second set of pointers;

   rendering, by the controller (202), the map and the navigational path corresponding to the user selected indicator within an inner area of the dial of the watch (102);

   receiving, by a third interface, an input from the user to select one of the first indicator, the second indicator and the third indicator;

   controlling, by the controller (202), movement of the hour hand, the minute hand and the second hand to map the pointing directions of the user selected indicator and the respective navigational path on the one type of map.

2. The method as claimed in claim 1, wherein:

the first indicator indicates a shortest path between the current station and the destination station; the second indicator indicates a fastest path between the current station and the destination station; and the third indicator indicates a safest path between the current station and the destination station.

3. The method as claimed in claim 2, comprising:

   determining angular movements for each of the hour hand, the minute hand and the second hand required to maintain a correlation between the respective pointing directions and corresponding navigational paths on the map; and

   controlling the rotational directions of each of the hour hand, the minute hand and the second hand in accordance with respective determined angular movements.

4. The method as claimed in claim 3, comprising:

   receiving real time information regarding the shortest path, the fastest path and the safest path between the current station and the destination station; and

   controlling the rotational directions of each of the hour hand, the minute hand and the second hand in accordance with the real time information.

5. The method as claimed in claim 2, comprising:

   actuating a first crown to select a first mode of operation and a second crown to select a second mode of operation, wherein the first mode of operation renders time on the dial and the second mode of operation renders navigational path on the dial.

6. The method as claimed in claim 5, comprising: actuating the second crown in a predefined manner to select the first indicator, the second indicator and the third indicator.

7. The method as claimed in claim 1, comprising:

   embossing the second set of pointers on the outer periphery of the dial;

   actuating motor to control rotation movement of the outer periphery of the dial in accordance with movement of the user while the user passes through the rendered navigational direction path.

8. The method as claimed in claim 1, comprising: controlling movement of the second set of pointers on the outer periphery of the dial in accordance with movement of the user while the user passes through the rendered navigational direction path.

9. The method as claimed in claim 8, wherein the second set of pointers indicate to respective directions selected from a group of direction comprising north, south, east, west, north east, north west, south east, south west and magnetic north.

10. A system (100) for rendering a navigational direction to a user on a watch (102), the system comprising the steps of:

a first user interface configured to receive inputs from the user pertaining to location information of a destination station;

a global positioning device configured to determine location information of a current station of the user, characterised in that:

a receiver configured to receive information pertaining to navigational paths initiating from the current station and ending at the destination station, wherein the information pertaining to the navigational paths comprises map comprising the destination station and the current station of the user;

a controller (202) configured to render pointers representing the navigational paths within an inner area of a dial of the watch (102) and an outer periphery of the dial of the watch (102), wherein the pointers includes a first set of pointers are rendered within the inner area of the dial of the watch (102) and a second set of pointers are rendered on the outer periphery of the dial of the watch (102), wherein the first set of pointers are dependent on the location information of the destination station and the current station; the second set of pointers are dependent on the current station, wherein the controller (202) is configured to present pointing directions of an hour hand, a minute hand and a second hand of the watch as representatives of a first indicator, a second indicator and a third indicator selected from the first set of pointers;

a second user interface configured to receive an input of the user regarding selection of indicator from the first set of pointers and the second set of pointers; and the controller (202) configured to render the map and the navigational path corresponding to the user selected indicator within an inner area of the dial of the watch;

a third interface is configured to receive an input from the user to select the first indicator, the second indicator and the third indicator, wherein the controller (202) is configured to control movement of the hour hand, the minute hand and the second hand to map the pointing directions of the user selected indicator and the respective navigational path on the type of map.

11. The system as claimed in claim 10, wherein:

the first indicator indicates a shortest path between the current station and the destination station; the second indicator indicates a fastest path between the current

station and the destination station; and the third indicator indicates a safest path between the current station and the destination station.

12. The system as claimed in claim 11, comprising:

a first crown and a second crown, wherein actuation of the first crown enables the user to select a first mode of operation and actuation of the second crown enables the user to select a second mode of operation, wherein the first mode of operation renders time on the dial and the second mode of operation renders navigational path on the dial.

13. The system as claimed in claim 10, comprising:

embossed patterns indicating the second set of pointers on the outer periphery of the dial; and

an actuator configured to actuate a motor to control rotation movement of the outer periphery of the dial in accordance with movement of the user while the user passes through the rendered navigational direction path.