第8回知的財産翻訳検定試験<第5回和文英訳> 電気電子工学分野 【標準解答】

課題1

What is claimed is:

1. A mobile phone, comprising:

an obtaining device configured to obtain location information of the mobile phone;

a storing device configured to store phone numbers to be dialed;

a display-data selecting device configured to select a phone number in an area specified by the location information, from among the phone numbers stored by the storing device; and

a display device configured to display the phone number selected by the display-data selecting device.

2. The mobile phone of Claim 1, wherein the obtaining device includes at least one of:

 i) a device configured to obtain the location information of the mobile phone by using a signal sent from a GPS satellite;

ii) a device configured to obtain the locationinformation of the mobile phone by using longitude and latitudeinformation sent from a base station; and

iii) a device configured to obtain the location information of the mobile phone by using the location information sent from a base station.

課題2

In a lighting apparatus using a solar cell, the expense incurred in proportion to its usage is, in principle, extremely small and the majority of the expense is taken up by the initial cost of installation. Also, using a relatively large-capacity solar cell or storage battery to achieve a large lighting capability results in a high installation cost. It is therefore desirable to make the fullest possible use of the capability of the apparatus once installed.

On the other hand, from the viewpoint of functionality of the lighting apparatus, it is also important to be able to illuminate at any time as needed, without breakdowns. In this sense, a relatively large lighting capability may not be needed and even a minimal capability may generally be accepted. Thus, with a large-capacity solar cell or storage battery, the capability may be left partly unused, resulting in waste of the installation cost.

A proposal has been made for preventing over discharging of a solar cell by setting the lighting-up time in response to the remaining capacity of the solar cell (see Japanese Unexamined Utility Model Application Publication No. 12-345678, for example). This lighting apparatus, however, merely adjusts the lighting-up time and does not have functions for ensuring the ability to illuminate at any time as needed, without breakdowns. Therefore, it is considered to be an inadequate lighting device.

課題3

Fig. 2 illustrates a control procedure for lighting a backlight with a microcomputer 73. When the power switch 77 is turned on, a memory provided in the microcomputer 73 is initialized (Step 1) and then the switch 78 is closed to light a backlight 75a (Step 2).

Next, when input processing (Step 3) is performed for an operating keyboard 72, it is determined whether the input information is a communication command (Step 4). When the result is YES, the switch 78 is opened to turn off the backlight (Step 5). Thereafter, predetermined communication-command processing (Step 6) is performed, upon completion of which the backlight is lit again (Step 8). On the other hand, when the determination result at Step 4 is NO, predetermined command processing (Step 7) is performed with the backlight remaining lit.

As a result, during communication in which the power consumption is large, power saving is achieved by turning the backlight off so that the life of the battery can be extended. It should be noted that it is necessary to display something on a liquid crystal display device 71 while operating the operating keyboard 72 or after reading out data from a data carrier 1, and therefore the backlight can be turned off during communication without causing any problems.