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(71) Applicant *(for all designated States except US)*: TELIA AB [SE/SE]; Mårbackagatan 11, S–123 86 Farsta (SE).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: PARASNIS, Amalendu [SE/SE]; Krongatan 10, S–972 53 Luleå (SE). ISAKSSON, Lars–Åke [SE/SE]; Övägen 28, S–954 35 Gammelstad (SE). CHRISTIANSSON, Jonas [SE/SE]; Lingongstigen 185, S–973 33 Luleå (SE). ÖKVIST, Göran [SE/SE]; Hagaplan 7, S–974 41 Luleå (SE).

(74) Agent: PRAGSTEN, Rolf; Telia Research AB, Vitsandsgatan 9, S–123 86 Farsta (SE).

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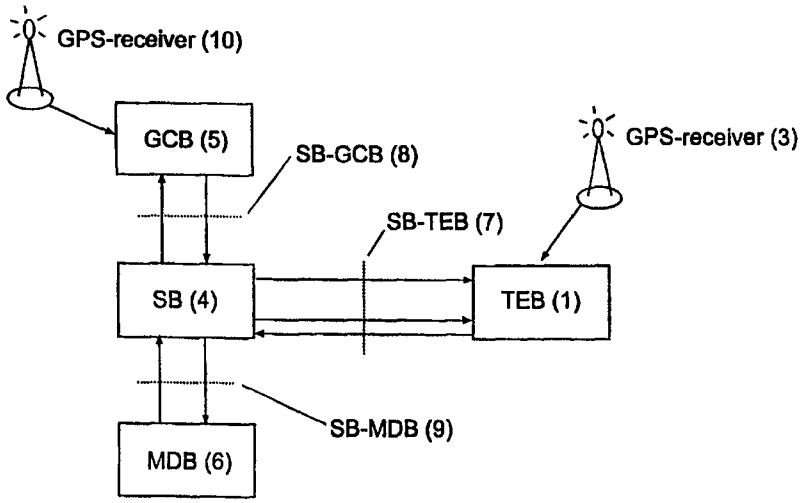

(57) Abstract

The invention describes a mobile information service that gives a user access to tailored and position adapted information. The information is adapted both to the user's position and according to special wishes regarding content of information. This is achieved by means of a www–technology, especially developed software for service logic, and software to distribute position information over Internet. The information is shown on one into two parts divided window on an ordinary portable computer, which is equipped with a GPS–receiver. The accuracy of the position information is improved by means of differential GPS, DGPS. One of the windows shows a map over the area where the user is. On the map are shown icons that indicate places of interest, cash dispensers, restaurants and traffic interchanges etc. If one clicks on one icon, there is in the other window shown information about the place, for instance menu for a near located restaurant. There also is possible to make personal adaptations, so that information is shown automatically when one is approaching a certain point. Warning information, such as traffic warnings, can automatically be shown when one is approaching an area.

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MOBILE INFORMATION SERVICE

TECHNICAL FIELD

The in the present invention described personal information service combines Internet technology, mobile communication, and an ordinary portable computer, with a GPS-receiver to a personal mobile information guide.

The information is shown on a window divided into two parts on the screen of the computer. One of the windows shows a map of the area where the user is. On the map are shown icons, which indicate places of interest, cash dispensers, restaurants, traffic interchanges etc. If one clicks on an icon, there is in the other window shown information about the place, for instance the menu of the day for a nearby restaurant. There also will be possibilities to make personal adaptations so that information is shown automatically when one is approaching a certain point.

Warning information such as traffic warnings can automatically be shown when one is approaching an area where, for instance, the roads are in a bad state, or there is a risk of game.

PRIOR ART

At a performed patent state investigation, the following documents have been found:

D1.	US,A	5 802 492
D2.	US,A	5 559 520
D3.	JP,A	10-185599
D4.	JP,A	09-311177

It is well known to utilise systems for geographical positioning, in the first place by utilisation of GPS. Such systems are i.a. included in the inventions according to the above indicated documents.

From document D1 there is known a system for planning of a car journey by means of a computer. The user makes choice of roads in order to visit interesting places along the road. The map is loaded from a CD. During the journey the user can see his/her position on the map, which is shown on the screen, at which places of interest are marked on the map and information is given about these places. A variant of the invention describes that one via a wireless interface can update the map during the journey.

It is also known how geographical information is transmitted to mobile users via radio (Document D2), or via e-mail (Document D3).

Document D4 describes a system where one is using Internet to transmit correction data from reference stations in order to improve the accuracy at positioning by means of GPS.

TECHNICAL PROBLEM

At journeys, information about the position is needed. Such position information can be obtained in different ways with different manual of automatic methods. It is, however, difficult to, on demand, get information about where one is, and at the same time get the information shown on a map. By utilising modern communication methods one can, according to this invention, get such information also during the journey, for instance shown on a portable computer that one carries with one at a car journey.

It also can be difficult, with the available support functions of today, to get sufficient accuracy of the position indication. Today existing solutions are using DGPS for correction of the position. To make these work, however, is required that a special receiver for correction data is utilised. The in the present invention described method can give a position indication with an error of less than 20 m.

To reach the destination of the journey, the user also need guiding about the further route. How to go to reach the destination can be uncertain, especially in a big city, where information about traffic flows, one-way streets etc can be important parameters to find a smart route. Also in other areas, support is needed to find the most suitable route.

When a traveller is in a place which is not well known, he/she needs to be informed about establishments that he/she needs to visit, such as department stores, shopping centres, restaurants, public authorities and organisations. He/she also needs information about these establishments in order to get answer to questions of the type:

* where is a do-it-yourself store that is selling goods of a certain make ?;

* which are the opening hours of the municipal executive office ?;

* where is the closest opened petrol station ?;

* etc

An activity based on business, need to market its services. To many activities, such as restaurants, hotels and places

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