Title: REAL-TIME NAVIGATION SYSTEM FOR MOBILE ENVIRONMENT

Abstract: A system and method using wireless carriers (204) for providing navigational information to a user connected in real-time, such as through a wireless telephone (202), PDA, or other device. The system provides navigational information to the user via wireless carriers (204) in the form most useful to the user, such as according to landmarks, or the number of blocks until the next action. The system also provides directions to points of interest along the user’s route. Further, the system allows the user to suspend and resume a session. Also, the system varies the sampling rate at which the user’s location is examined, to enhance efficiency and convenience.
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(7) : G01C 15/00
   US CL : 701/200
   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)
   U.S. : 701/200, 208, 209
   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 practicable, search terms used)
   Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT
<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 6,112,099 A (Ketola) 29 August 2000 col. 1-8.</td>
<td>1-14</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
  *A* document defining the general state of the art which is not considered to be of particular relevance
  *E* earlier application or patent published on or after the international filing date
  *L* document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
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Date of the actual completion of the international search: 25 April 2002
Date of mailing of the international search report: 12 DEC 2002

Authorized officer: Marthe Marc-Coleman
Telephone No.: (703) 305-4970

Form PCT/ISA/210 (second sheet) (July 1998)
Continuation of B. FIELDS SEARCHED Item 3:
West:
navigation, wireless, connection off, interruption, interrupt, stop, suspending, disestablished, disconnect