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- (71) Applicant (for all designated States except US): TOM
TOM INTERNATIONAL B.V. [NL/NL]; Rembrandt-
plein 35, NL-1017 CT Amsterdam (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SIEREVELD,
Martin [NL/NL]; Spui 35A, NL-2511 BL Den Haag
(NL). DE JONG, Jochem [NL/NL]; Karnemelksluis 22,

NL-1601 JR Enkhuizen (NL). TKACHENKO, Serhiy
[NL/NL]; Zomerland 37, NL-5663 HS Gelderop (NL).

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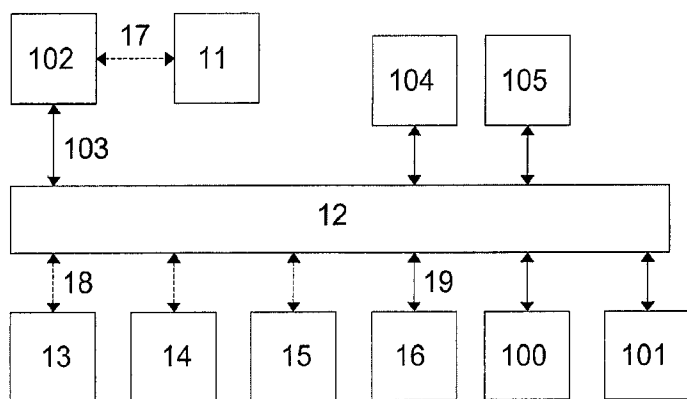
Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: PORTABLE NAVIGATION DEVICE WITH WIRELESS INTERFACE

FIGURE 1.



(57) Abstract: A portable navigation device (PND) is disclosed comprising processing means, a graphical display, memory, map data stored in said memory, user-input means, and signal reception means for receiving one or more wireless signals by means of which the processor can determine a present location of the device and in conjunction with user input desired destination information, and perform route calculation and subsequent navigation functions, such being performed by software installed on the device. The PND is additionally provided with one or more wireless signal transceivers capable of establishing wireless communications with third party devices or systems having corresponding signal transceivers. In accordance with the invention, the software on said PND is adapted to establish a wireless communication with a third party device being a

node having a corresponding wireless signal transceiver and being part of a vehicle controller area network (CAN) consisting of a plurality of nodes, each of said nodes having functionality represented by one or more signals distributed around said controller area network and received by at least said third party device, and further characterized in that said PND software includes one or more routines specific to the functionality of one or more of said nodes so as to effectively communicate with said node and utilize its functionality. Examples of third party devices include hands-free communications modules, gateway nodes, and indeed any vehicle subsystem which provides some function within the vehicle. Further examples include the stereo systems, engine management system, seat position controllers, multifunction steering wheel, dashboard and console displays, integrated navigation systems, and the like. The invention allows the PND either to interrogate the controller area network and retrieve information from one or more devices forming nodes on that network for display on the PND or improved operation thereof, or to cause control or state change of one or more of the devices forming nodes on the controller area network. Voice control of the PND is also possible in the case a voice recognition system is provided within the controller area network, and additionally, the vocal instructions issued by the PND can be caused to be replayed through the car stereo, if such is also connected to the controller area network within the vehicle.

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— *of inventorship (Rule 4.17(iv))*

(88) **Date of publication of the international search report:**
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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2007/008421

A. CLASSIFICATION OF SUBJECT MATTER
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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)

G01C G07C H04B H04L

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 practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/114980 A1 (KLAUSNER MARKUS [DE] ET AL) 19 June 2003 (2003-06-19) cited in the application	1,4,9, 15,16
Y	paragraphs [0011], [0016] - [0018], [0022] - [0024]; claims 21-26	2,3
Y	WO 00/72463 A (JOHNSON CONTROLS INTERIORS TEC [US]; WITKOWSKI TODD R [US]; DYKEMA KUR) 30 November 2000 (2000-11-30) page 11, lines 5-15; figure 8	2,3
A	EP 1 130 560 A (GRUNDIG AG [DE] DELPHI TECH INC [US]) 5 September 2001 (2001-09-05) paragraph [0025]	3

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 document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

* & * document member of the same patent family

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European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

de la Rosa Rivera, E

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2007/008421

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4, 9, 15, 16

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4,9,15,16

Fuel level detection

2. claims: 5,6

Hands free module

3. claims: 7,8

Audio reproduction system

4. claims: 10,11

Voice recognition engine

5. claim: 12

Video display device

6. claims: 13,14

Touch sensitive display means

7. claims: 17,18

Vehicle identification data storage

8. claim: 19

Operating software upgrade

9. claims: 20-30

Transfer of information from network nodes to route calculation

10. claim: 31

Remote operation of home equipment

11. claims: 32,33

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Internet access

12. claims: 34-43

User profile storage and application

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/EP2007/008421

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2003114980	A1	19-06-2003	EP 1327858 A2 JP 2003287428 A	16-07-2003 10-10-2003
WO 0072463	A	30-11-2000	EP 1194903 A2 US 2002197955 A1 US 2003228879 A1 US 2008045274 A1 US 7257426 B1	10-04-2002 26-12-2002 11-12-2003 21-02-2008 14-08-2007
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