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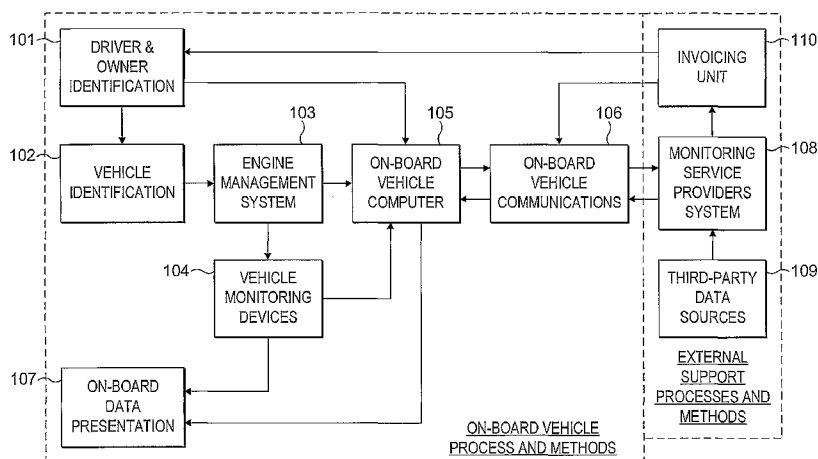
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[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR IMPLEMENTING A ROAD PRICING SCHEME



(57) **Abstract:** A vehicle monitoring device, comprising: a location device for determining location data indicating a location of a vehicle during a journey between an origin point and a destination point; a fuel consumption device for determining fuel consumption data indicating an amount of fuel consumed by the vehicle during the journey, or an emission measurement device for determining emission data indicating an amount of emission produced by the vehicle during the journey; and a vehicle monitoring processor for receiving and processing the location data and the fuel consumption data. A vehicle charging device, comprising: a vehicle charging processor for receiving and processing location data indicating a location of a vehicle comprising a vehicle monitoring device during a journey between an origin point and a destination point, and fuel consumption data indicating an amount of fuel consumed by the vehicle during the journey from the vehicle monitoring device or emission data indicating an amount of emission produced by the vehicle during the journey from the vehicle monitoring device; and a road fee calculator for calculating a fee associated with the at least one vehicle monitoring device based on the received data.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. G07C5/08

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)
G07C G07B G01C G08G

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 Y	<p>EP 1 320 075 A (PIONEER CORP [JP]) 18 June 2003 (2003-06-18)</p> <p>page 2, paragraph 8 - page 5, paragraph 44 page 5, paragraph 46 - page 13, paragraph 160 figures 1,2,4-6,8,10</p> <p style="text-align: center;">----- -/--</p>	<p>1-3, 11-27, 32-45, 87 4-10, 28-31, 92-94, 101, 106, 151, 154, 159, 160, 166</p>

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

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- *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)
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- *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
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- *&* document member of the same patent family

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/073048 A (NNT INC [US]; KAPOLKA MICHAEL [US]; CHANG SAM [US]; SMITH ANDREW [US]) 4 September 2003 (2003-09-04)	1, 13, 17-23, 25, 45, 87-90, 95, 98, 104, 105, 108, 117-120, 152, 153, 163-165
Y	abstract page 3, line 13 - page 4, line 23 page 10, line 3 - page 18, line 21 figures 1, 3-9	91-94, 96, 97, 99-103, 106, 107, 109-116, 151, 154-162, 166-169
X	US 2001/018628 A1 (JENKINS PAUL C [US] ET AL) 30 August 2001 (2001-08-30)	1, 11, 13, 17-26, 32, 39-42, 44, 45, 87 99, 100
Y	page 2, paragraph 32 - page 4, paragraph 52 figures 10, 11A-13	
X	EP 1 387 333 A (KRAEUTLER GMBH & CO [AT]) 4 February 2004 (2004-02-04)	1, 2, 13, 17, 18, 21, 32, 87
	column 1, paragraph 6 - paragraph 7 column 2, paragraph 16 - paragraph 17 column 4, paragraph 27 - column 5, paragraph 48	
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	abstract page 2, line 4 - line 26 page 5, line 12 - page 7, line 16	
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INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2007/003476

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 96/10807 A (QUALCOMM INC [US]) 11 April 1996 (1996-04-11) page 8, line 34 - page 9, line 39	28-31
Y	US 2004/243285 A1 (GOUNDER MANICKAM A [US]) 2 December 2004 (2004-12-02) abstract page 1, paragraph 9 - page 2, paragraph 10 page 3, paragraph 35 - page 10, paragraph 80	96,97, 102,103
Y	US 5 343 906 A (TIBBALS III HARRY F [US]) 6 September 1994 (1994-09-06) column 1, line 46 - column 2, line 20 column 3, line 4 - column 5, line 61 column 7, line 4 - column 8, line 11	107, 110-113, 161,162, 167,169
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A	WO 03/041030 A (VOLVO TRUCKS NORTH AMERICA INC [US]) 15 May 2003 (2003-05-15) page 2, line 13 - page 3, line 4 page 5, line 5 - page 6, line 18	12,28, 29,163
A	EP 0 365 097 A (LOCS BV [NL]) 25 April 1990 (1990-04-25) column 3, line 8 - column 5, line 19 figure 1	28,31
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A	EP 1 162 560 A (NOKIA MOBILE PHONES LTD [FI] NOKIA CORP [FI]) 12 December 2001 (2001-12-12) column 9, paragraph 42 - paragraph 43	34

INTERNATIONAL SEARCH REPORT

International application No.
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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.:

1-45, 87-120, 151-169

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.:

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: 1-45,87

Vehicle monitoring device monitoring the location of a vehicle during a journey and the amount of fuel consumed by the vehicle during that journey.

2. claims: 46-87

Vehicle monitoring device monitoring the location of a vehicle during a journey and the emission produced by the vehicle during that journey.

3. claims: 88-120,151-169

Vehicle charging device calculating a fee that is based on the monitored locations of a vehicle during a journey and the amount of fuel consumed by the vehicle during that journey + associated method of calculating a road usage fee.

4. claims: 121-151,170-184

Vehicle charging device calculating a fee that is based on the monitored locations of a vehicle during a journey and the emission produced by the vehicle during that journey + associated method of calculating a road usage fee.

5. claim: 185

Method of calculating a road usage fee based on any operating credits and debits due for a journey of the vehicle. (Note : subject-matter under Article 17(2)(a)(i) and Rule 39.1(iii) PCT)

INTERNATIONAL SEARCH REPORT

International application No

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