



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G08G 1/017, B60R 25/00, G08G 1/123	A3	(11) International Publication Number: WO 95/09408 (43) International Publication Date: 6 April 1995 (06.04.95)
---	----	---

(21) International Application Number: PCT/GB94/02125

(22) International Filing Date: 28 September 1994 (28.09.94)

(30) Priority Data:
9320045.9 29 September 1993 (29.09.93) GB

(71) Applicant (for all designated States except US): SENSORED SECURITY SYSTEMS LIMITED [GB/GB]; Highfield, Hawsker, Whitby, North Yorkshire YO2 13SD (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): VENTRESS, Jonathan [GB/GB]; Lowlands Farm, West Barnby, Whitby, North Yorkshire YO2 13SD (GB).

(74) Agents: FRANKS, Robert, Benjamin et al.; Appleyard Lees, 15 Clare Road, Halifax, West Yorkshire HX1 2HY (GB).

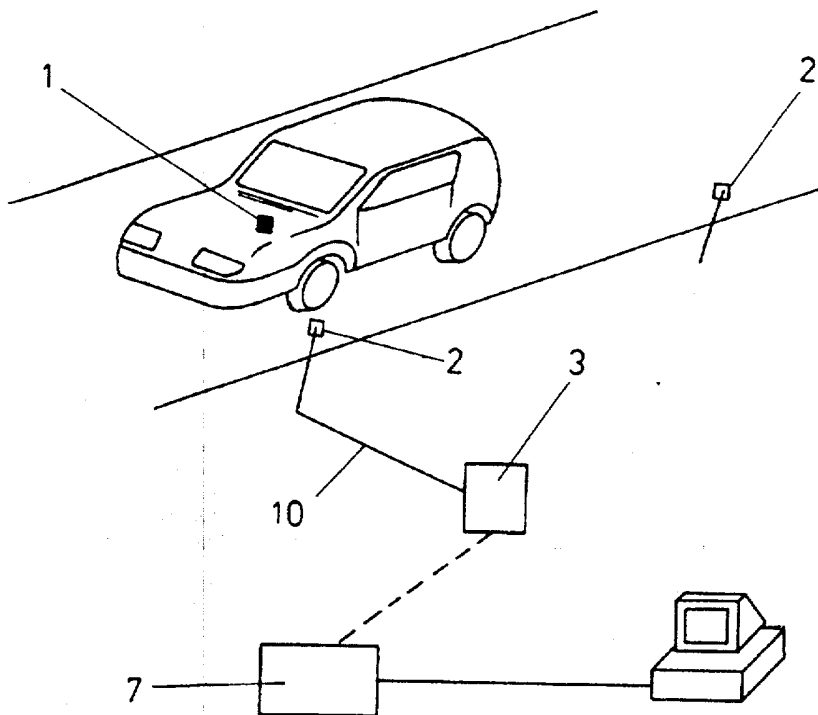
(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ).

Published*With international search report.**Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.*(88) Date of publication of the international search report:
22 June 1995 (22.06.95)

(54) Title: TRACKING SYSTEM

(57) Abstract

A monitoring network, particularly for monitoring the movement of vehicles, comprises a plurality of transponders (1), a plurality of road side sensors (2), a local computer (3) for receiving information transmitted from the transponders to the road side sensors, the road side sensors being in communication with the local computer by a conventional telephone network (10) which also provides power supply to the road side sensors. Information transmitted by the transponder to the road side sensors uniquely characterises each vehicle.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 94/02125

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G08G1/017 B60R25/00 G08G1/123

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)
IPC 6 G08G G08B

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP,A,0 252 773 (DISSUAVOL) 13 January 1988 see the whole document	1-20,27 21,22, 24-26
X	GB,A,2 218 243 (LIONEL LESLIE NEWBY) 8 November 1989 see the whole document	1-9, 13-17, 20,27
P,X	EP,A,0 573 320 (THOMSON-CSF) 8 December 1993 see the whole document	1-9,13, 16-18, 20,27
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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

Date of the actual completion of the international search

8 May 1995

Date of mailing of the international search report

22.05.95

Name and mailing address of the ISA

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

Reekmans, M

INTERNATIONAL SEARCH REPORT

Int. l. Application No

PCT/GB 94/02125

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR,A,2 619 944 (BERCKMANS) 3 March 1989 see the whole document	1-5,13, 20,27
Y	see page 3, line 19 - page 5, line 30; figures 1-3 ---	21-26
P,Y	GB,A,2 270 182 (PILKINGTON MICRO-ELECTRONICS LIMITED) 2 March 1994 see claims; figure 1 ---	21-26
Y	FR,A,2 667 554 (PARIENTI) 10 April 1992 see the whole document ---	21,22, 24-26
Y	US,A,4 633 235 (DEGENNARO) 30 December 1986 see abstract ---	23,24
A	GB,A,2 251 503 (INTELEPLEX CORPORATION) 8 July 1992 see abstract; figure 5 ---	21,22, 24-26
A	US,A,5 086 288 (STRAMER) 4 February 1992 see the whole document ---	21,22
A	EP,A,0 269 965 (F+G MEGAMOS SICHERHEITSELEKTRONIK GMBH) 8 June 1988 see the whole document -----	21,25,26

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB94/02125

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

see annexed sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

1. Claims 1-20, 27: Monitoring of articles and collecting data via a conventional telephone network.

2. Claims 21-26: Vehicle security apparatus comprising means for immobilising the vehicle after tampering with the identification means.

The special technical feature of the first invention is monitoring a plurality of articles (e.g. vehicles) and collecting data via sensors and a conventional telephone network.

According to Rule 13 PCT non-unity a priori is detected for invention two which mainly deals with a vehicle security apparatus comprising means for immobilising the vehicle after detection of tampering with identification means.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 94/02125

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP-A-252773	13-01-88	FR-A- 2601462 AU-B- 591281 AU-A- 7266187 DE-A- 3779821 JP-A- 63029287 ZA-A- 8703423	15-01-88 30-11-89 14-01-88 23-07-92 06-02-88 03-11-87
GB-A-2218243	08-11-89	US-A- 4990890	05-02-91
EP-A-573320	08-12-93	FR-A- 2691813 JP-A- 6048269	03-12-93 22-02-94
FR-A-2619944	03-03-89	NONE	
GB-A-2270182	02-03-94	AU-B- 4487993 CA-A- 2105011 EP-A- 0586192 JP-A- 7002058	21-04-94 01-03-94 09-03-94 06-01-95
FR-A-2667554	10-04-92	NONE	
US-A-4633235	30-12-86	NONE	
GB-A-2251503	08-07-92	US-A- 5229648 DE-A- 4123666	20-07-93 09-07-92
US-A-5086288	04-02-92	NONE	
EP-A-269965	08-06-88	DE-C- 3641230	28-04-88