

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 December 2007 (13.12.2007)

PCT

(10) International Publication Number
WO 2007/143238 A3

(51) International Patent Classification:
G01S 13/87 (2006.01)

(21) International Application Number:
PCT/US2007/061913

(22) International Filing Date: 9 February 2007 (09.02.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/785,513 24 March 2006 (24.03.2006) US
60/801,011 17 May 2006 (17.05.2006) US

(71) Applicant (for all designated States except US): SENSIS CORPORATION [US/US]; 85 Collamer Crossings, East Syracuse, NY 13057 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PERL, Elyahu [US/US]; C/o Sensis Corporation, 85 Collamer Crossings, East Syracuse, NY 13057 (US).

(74) Agents: BURR, Stephen, P. et al.; Burr & Brown, P.O. Box 7068, Syracuse, NY 13261-7068 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

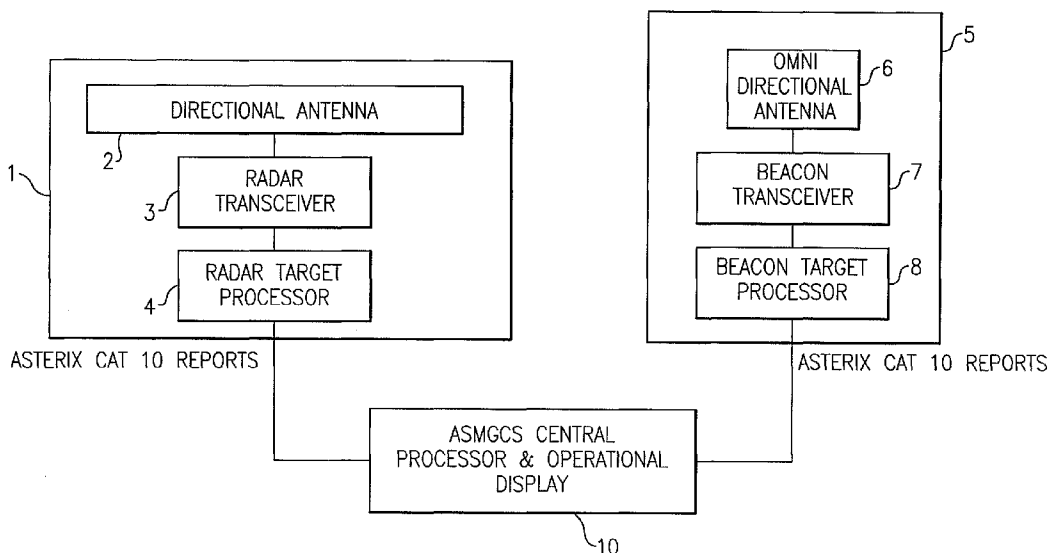
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
19 June 2008

(54) Title: METHOD AND SYSTEM FOR CORRELATING RADAR POSITION DATA WITH TARGET IDENTIFICATION DATA, AND DETERMINING TARGET POSITION USING ROUND TRIP DELAY DATA



(57) Abstract: A method and system for using a single transceiver to correlate radar position data with target identification data. Two transceivers, operating in round trip delay mode, can be used to provide two possible positions for a given target when radar coverage is lost or unavailable. Three transceivers can be used to provide actual position of a given target using round trip delay data only.

WO 2007/143238 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/061913

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01S13/87

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)
G01S

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 999 116 A (EVERS CARL A [US]) 7 December 1999 (1999-12-07) abstract; figure 1 column 2, line 48 - column 3, line 4 column 3, line 23 - column 4, line 10	1-32
Y	US 2005/035897 A1 (PERL ELYAHU [US] ET AL) 17 February 2005 (2005-02-17) abstract; figure 3 paragraph [0037] - paragraph [0039] paragraph [0047] paragraph [0107] paragraph [0112] paragraph [0144]	1-32

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

Date of the actual completion of the international search

17 April 2008

Date of mailing of the international search report

25/04/2008

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

Niemeijer, Reint

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/061913

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/255865 A1 (SILLASTO EERO [FI] ET AL) 17 November 2005 (2005-11-17) abstract; figure 3A paragraph [0045]	1-32
A	US 2003/142002 A1 (WINNER KARL [US] ET AL) 31 July 2003 (2003-07-31) paragraph [0044] paragraph [0046] paragraph [0050] - paragraph [0051] paragraph [0059]	1,10,16, 22,26-30
A	US 2005/140540 A1 (REES BERNARD [US] ET AL) 30 June 2005 (2005-06-30) paragraph [0023] - paragraph [0027] paragraph [0038] - paragraph [0039]	1,10,16, 22,26-30
A	HERRERO J. G ET AL: "ASDE AND MULTILATERATION MODE-S DATA FUSION FOR LOCATION AND IDENTIFICATION ON AIRPORT SURFACE" RECORD OF THE 1999 IEEE RADAR CONFERENCE. WALTHAM, MA, APRIL 20 - 22, 1999, IEEE RADAR CONFERENCE, NEW YORK, NY : IEEE, US, 20 April 1999 (1999-04-20), pages 315-320, XP000895764 ISBN: 0-7803-4978-4 Section 4.4, page 317 abstract	1,10,16, 22,26-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/061913

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5999116 A	07-12-1999	US 6211811 B1	03-04-2001
US 2005035897 A1	17-02-2005	NONE	
US 2005255865 A1	17-11-2005	CN 1985186 A EP 1756616 A1 WO 2005111652 A1 KR 20070015615 A	20-06-2007 28-02-2007 24-11-2005 05-02-2007
US 2003142002 A1	31-07-2003	NONE	
US 2005140540 A1	30-06-2005	NONE	