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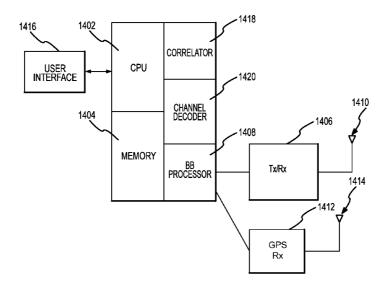
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Declarations under Rule 4.17:

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[Continued on next page]

(54) Title: SYSTEM AND/OR METHOD FOR DETERMINING SUFFICIENCY OF PSEUDORANGE MEASUREMENTS



(57) **Abstract:** The subject matter disclosed herein relates to a system and method for determining a sufficiency of measurements for locating positions. In one example, although claimed subject matter is not so limited, a process to improve accuracy of pseudorange measurements may be terminated in response to a weighting of quantitative assessments of at least some of such pseudorange measurements.



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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(Ui))
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A. CLASSIFICATION OF SUBJECT MATTER INV. GOISI/OO According to International Patent Classification (IPC) orto both national classification and IPC B. RELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) GOIS 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 C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. 1-7 X US 2002/050944 A1 (SHEYNBLAT LEONID [US] 9-15. ET AL) 2 May 2002 (2002-05-02) 17-23. 25-31, 33-38 Υ 8, 16, 24, figures 1,10 32, 39 paragraph [0037] paragraph [0107] - paragraph [0109] 8, 16, 24, Υ US 6 452 545 B2 (ARAKI MIKIO [JP] ET AL) 17 September 2002 (2002-09-17) 32, 39 column 6, line 24 - line 45 -/~ X Further documents are listed in the continuation of Box C. X See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but 'A' document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the invention 'E' earlier document but published on or after the international 'X* document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to document which may throw doubts on priority clarn(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 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 'O* document referring to an oral disclosure, use, exhibition or other means in the art. 'P' document published prior to the International filing date but later than the priority date claimed '&' document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 19 June 2008 26/06/2008 Authorized officer Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswi|k Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Niemeijer, Reint

INTERNATIONAL SEARCH REPORT

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C(Continua	ttlon). DOCUMENTS CONSIDERED TO BE RELEVANT	
ategory*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	US 2003/151547 A1 (MAURO ANTHONY [US] ET AL)- 14 August 2003 (2003-08-14)	1,8,9, 16,17, 24-26, 32,33,39
	figure 8 paragraph [0080] - paragraph [0082]	
A	US 6 535 163 B1 (SAHAI ANANT [US] ET AL) 18 March. 2003 (2003-03-18)	1,8,9, 16,17, 24-26, 32,33,39
	column 6, line 54 - line 58 column 10, line 25 - line 64	
A	US 2004/078140 Al (ROWITCH DOUGLAS N [US] ET AL) 22 April 2004 (2004-04-22) cited in the application	1,8,9, 16,17, 24-26, 32,33,39
	paragraph [0038] paragraph [0046]; figure 10	
		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2007/069306

Patent document cited in search report		Publication Patent family date member(s)		Publication date		
US 2002050944	Al	02-05-2002	NON	E		
US 6452545	в2	17-09-2002	ΕP	1109033	Al	20-06-2001
			WO	0077538	Al	21-12-2000
			US	2001005811	Al	28-06-2001
US 2003151547	Al	14-08-2003	AU	2003209074	Al	02-09-2003
			BR	PI0307483	A	04-04-2006
			TW	274174	В	21-02-2007
			WO	03067279	A 2	14-08-2003
US 6535163	вl	18-03-2003	AU	2002349799	Al	08-01-2003
	•		ΕP	1449005	A 2	25-08-2004
			WO	03001235	A2	03-01-2003
US 2004078140	Al	22-04-2004	AU	2003286637	Al	13-05-2004
			BR	0315529	A	23-08-2005
			CA	2499419	Al	06-05-2004
		-	CN	1705895	A	07-12-2005
			ΕP	1554601	Al	20-07-2005
			JP	2006504097	T	02-02-2006
			KR	20050055030	A	10-06-2005
			MX	PA05004309	A	02-08-2005
			US	2005101272	Al	12-05-2005
			WO	2004038451	Al	06-05-2004