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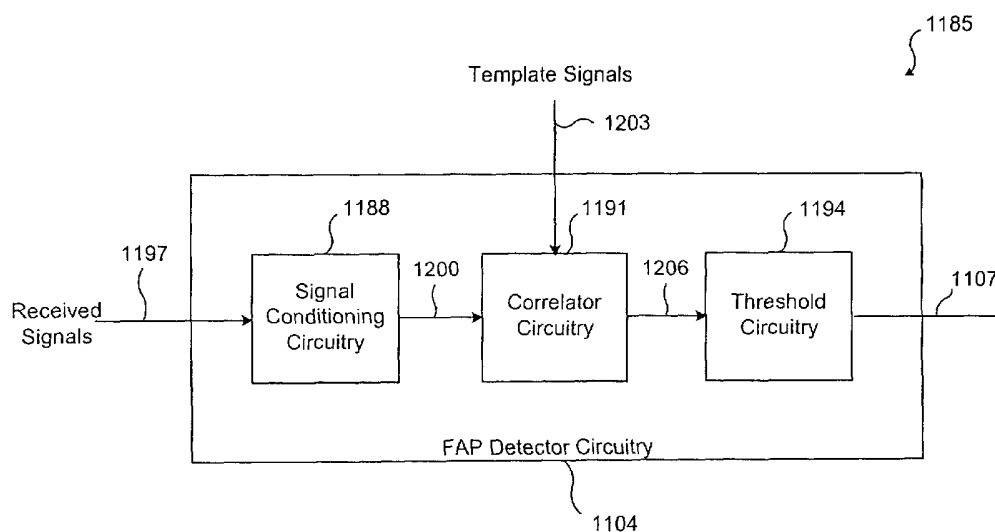
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(54) Title: FIRST-ARRIVING-PULSE DETECTION APPARATUS AND ASSOCIATED METHODS



(57) Abstract: First-arriving-pulse detector (FAP) circuitry (1104) includes a correlator circuitry (1191) and a threshold circuitry (1194). The correlator circuitry correlates a received signal (1197) with a template signal (1203) to provide an output signal (1206). The threshold circuitry (1194) provides a first-arriving-pulse signal (1107) depending on the relative values of the output signal (1206) of the correlator circuitry (1191) and a threshold signal.

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : G01S 13/00
 US CL : 342/198
 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)
 U.S. : 342/198, 91, 93, 189, 194

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 practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,832,035 A (FULLERTON) 3 November 1998 (12.11.1998), Abstract, col. 2 lines 29-48, col. 4 lines 59-65, col. 5 lines 8-12, col. 6 lines 54-60, col. 10 lines 1-7 and 54-57, col. 11 lines 1-5, col. 12 lines 1-7.	11-15, 20-24, 52-56 ----- 1-7, 16, 25, 42-48, 57
Y	US 5,445,029 A (FALSETTI ET AL.) 29 August 1995 (29.08.1995), Abstract, col. 10 lines 31-34.	1-7, 16, 25, 42-48, 57
A	US 5,920,278 A (TYLER ET AL.) 06 July 1999 (06.07.1999), Abstract, column 1 - column 2 line 10.	1-60
A	US 6,122,224 A (HIGGINS) 19 September 2000 (19.09.2000), Abstract, column 1-3.	1-60
A	US 5,488,662 A (FOX ET AL.) 30 January 1996 (30.01.1996). Abstract, column 2.	1-60

Further documents are listed in the continuation of Box C. See patent family annex.

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Continuation of B. FIELDS SEARCHED Item 3:

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search terms: correlator, detector, first arriving pulse, template, threshold circuit.