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11364 East Appaloosa Place, Scottsdale, AZ 85259 (US).
KIAEI, Sayfe,; 14405 N. 110th Place, Scottsdale, AZ 85259 (US).

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(74) Agents: MANCINI, Brian M., et al.; MOTOROLA, INC., Intellectual Property Dept., 1303 East Algonquin Road, Schaumburg, IL 60196 (US).

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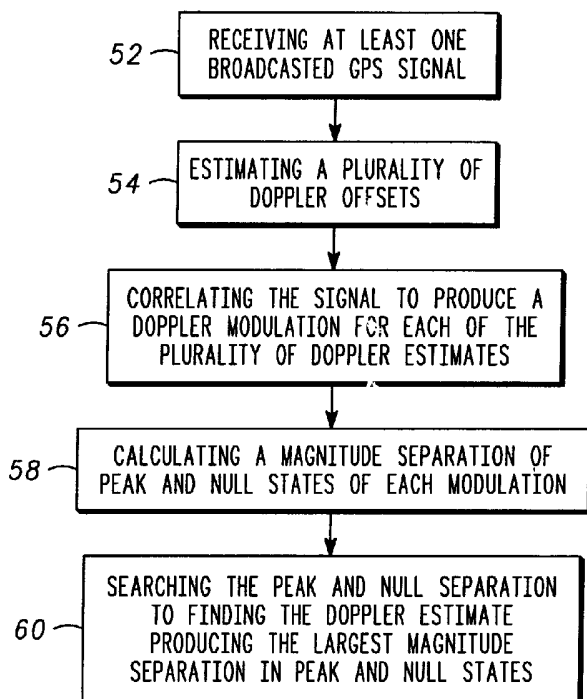
(71) Applicant: MOTOROLA, INC., A CORPORATION OF THE STATE OF DELAWARE [US/US]; 1303 East Algonquin Road, Schaumburg, IL 60196 (US).

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(72) Inventors: KING, Thomas M.,; 9283 South Stanley Place, Tempe, AZ 85284 (US). GEIER, George J.,;

[Continued on next page]

(54) Title: OSCILLATOR FREQUENCY CORRECTION IN GPS SIGNAL ACQUISITION



(57) Abstract: A method (50) for correcting oscillator frequency error in GPS signal acquisition includes a first step (52) of receiving at least one broadcasted GPS signal. A next step (54) includes estimating a plurality of Doppler offsets. A next step (56) includes correlating the signal to produce a Doppler modulation for each of the plurality of Doppler estimates. A next step (58) includes calculating a magnitude separation of peak and null states of each modulation. A next step (60) includes searching the peak and null separation to finding the Doppler estimate producing the largest magnitude separation in peak and null states. The found Doppler estimate defines a frequency error estimate for the at least one broadcasted GPS signal, which will be common across all satellites.

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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01S 5/14
 US CL : 342/357.02, 357.05, 357.12

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. : 342/357.02, 357.05, 357.12, 357.15

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)
 EAST (USPAT, USPGPub, EPO, JPO, DERWENT)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,133,873 A (KRASNER) 17 October 2000 (17.10.2000), see Figures 5 and 6.	1-10
A	US 6,005,889 A (CHUNG et al) 21 December 1999 (21.12.1999), see col. 3, lines 55-67, Figures 3 and 4.	1-10
A	US 5,943,606 A (KREMM et al) 24 August 1999 (24.08.1999), see entire document.	1-10
A	US 5,798,732 A (ESHENBACH) 25 August 1998 (25.08.1998), see col. 7, line 35 - col. 10, line 14.	1-10
A	US 4,578,678 A (HURD) 25 March 1986 (25.03.1986), see Figures 3 and 4	1-10

Further documents are listed in the continuation of Box C.

See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Gregory C. Issing Telephone No. (703) 308-1113