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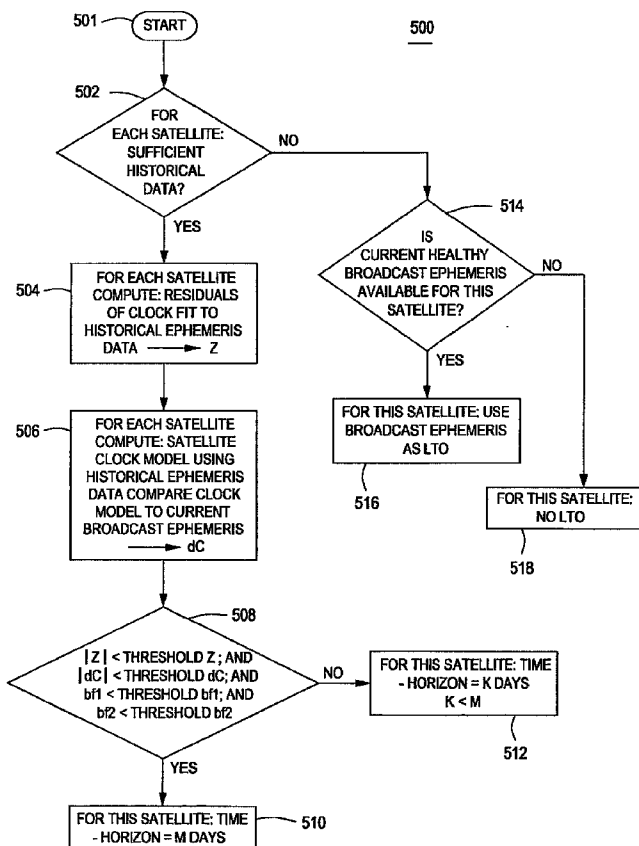
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(54) Title: COMPUTING LONG TERM ORBIT AND CLOCK MODELS WITH VARIABLE TIME-HORIZONS



(57) Abstract: A method and apparatus for determining long term orbit (LTO) models using variable time-horizons to improve the orbit and clock model accuracy. The method and apparatus use either historic ephemeris or historic measurements for at least one satellite to produce an orbit parameter prediction model (an LTO model). The parameter predicted by the model is compared to an orbit parameter of a current broadcast ephemeris. The result of the comparison (an indicia of accuracy for the model) is used to establish a time-horizon for the orbit parameter prediction model for that particular satellite. Such a time-horizon may be established in this manner for each satellite within a satellite constellation.

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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2007/003307**

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
<i>G01C 21/24(2006.01)i, G01C 21/00(2006.01)i</i>		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC8 : G01C, G01S, G06F, G08G		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility Models and Applications for Utility Models since 1975 Japanese Utility Models and Applications for Utility Models since 1975		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKIPASS(KIPO internet) & Keywords : "satellite", "orbit", "position", "valid", "period", "time"		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 06211819 B1 (TOMAS MICHAEL KING ET AL.) 3 APRIL 2001 See the whole document.	1-25
A	US 06285315 B1 (ANTHONY RICHARD PRATT) 4 SEPTEMBER 2001 See the whole document.	1-25
A	US 06133874 A (NORMAN K. KRANSER) 17 OCTOBER 2000 See the whole document.	1-25
A	US 06058338 A (AGASHE PARAG, A. ET AL.) 2 MAY 2000 See the whole document.	1-25
A	US 20020188403 A1 (JAMES W. LAMANCE ET AL.) 12 DECEMBER 2002 See the whole document.	1-25
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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