



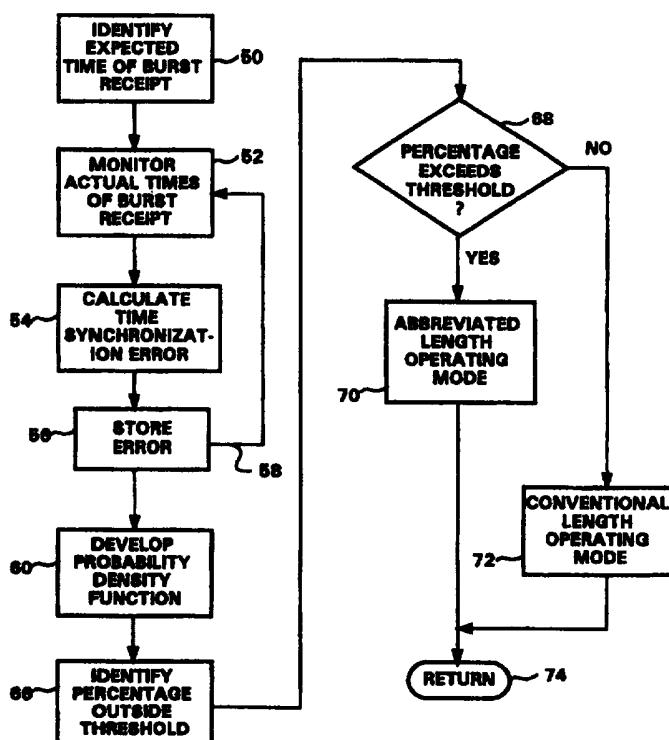
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(21) International Application Number: PCT/SE97/00267 (22) International Filing Date: 18 February 1997 (18.02.97) (30) Priority Data: 08/603,860 22 February 1996 (22.02.96) US (71) Applicant: TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-126 25 Stockholm (SE). (72) Inventor: WÅRD, Torbjörn; 137 St. Pierre 308, Montreal, Quebec H2Y 3T5 (CA). (74) Agents: BANDELIN, Hans et al.; Telefonaktiebolaget LM Ericsson, Patent and Trademark Dept., S-126 25 Stockholm (SE).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 23 October 1997 (23.10.97)

(54) Title: METHOD AND APPARATUS FOR DYNAMICALLY SELECTING THE LENGTH OF MOBILE STATION BURST COMMUNICATIONS ON THE REVERSE DIGITAL CONTROL CHANNEL

(57) Abstract

The time division multiple access (TDMA) frame time synchronization error for received mobile station burst communications transmitted on the reverse digital control channel is monitored by the receiving base station (14). A probability density function (62) is then prepared by the base station reflecting the number of instances of each determined length of time synchronization error monitored over a predetermined time period. The probability density function is then processed to identify the percentage of burst communications during that predetermined time period that exceed (76) a synchronization error threshold (64). If the determined percentage exceeds a given percentage, then abbreviated length burst communication operating mode (70) is ordered by the base station for all mobile stations operating within the cell. Otherwise, conventional length burst communication operating mode (72) is ordered by the base station. The measured time synchronization error is continuously processed to effectuate dynamic control over the specified length of mobile station burst communications.



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INTERNATIONAL SEARCH REPORT

Internat Application No

PCT/SE 97/00267

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H04B7/26

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)

IPC 6 H04B H04J

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 578 506 A (NIPPON ELECTRIC CO) 12 January 1994 see column 2, line 36 - column 3, line 29 ---	1,10,15, 18,20
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☒ Patent family members are listed in annex.

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