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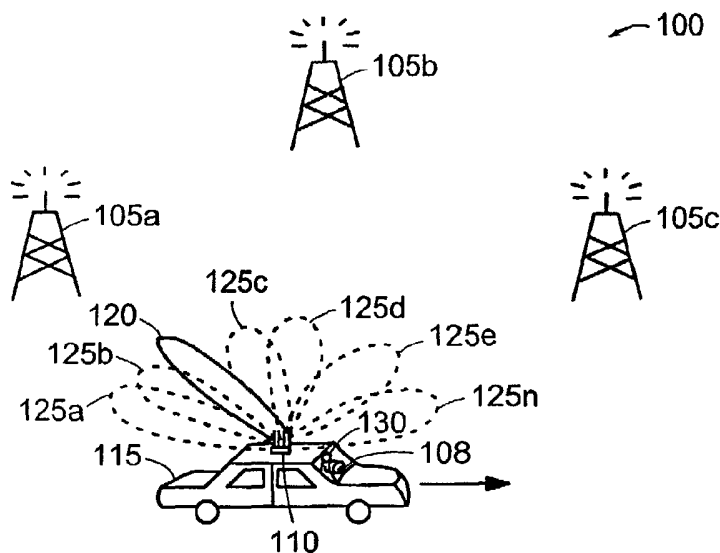
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[Continued on next page]

(54) Title: ANTENNA ADAPTATION COMPARISON METHOD FOR HIGH MOBILITY



(57) Abstract: A system (115) causes a scan angle of a directional antenna (110) to change temporarily from a current scan angle to at least one trial scan angle during reception of predetermined portions of an information carrying signal. At the trial scan angle(s), a trial metric associated with each trial scan angle (125) is determined by the system (115). The system (115) then selects a next scan angle based on the trial metrics. Examples of predetermined portions of the information carrying signal include the Power Control Bit (PCB) and certain symbol periods of the Forward Error Correction (FEC) block.

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**INTERNATIONAL SEARCH REPORT**

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PCT/US03/07339

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(7) : H04M 1/00; H04Q 7/20  
 US CL : 455/422.1, 423, 424, 425, 561, 562.1  
 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. : 455/422.1, 423, 424, 425, 561, 562.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 WEBSTER'S DICTIONARY

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.
Y	US 2001/0031648 A1 (PROCTOR, JR. et al) 18 October 2001 (18.10.2001), figs. 1-8, abstract, pages 1-10.	1-38.
Y	US 5,303,240 (BORRAS et al) 12 April 1994 (12.04.1994), figs. 3-6, col. 1 lines 54-61, col. 3 line 38 to col. 5 line 32.	1-38.
Y	US 6,304,215 B1 (PROCTOR, JR. et al) 16 October 2001 (16.10.2001), figs. 1-4, abstract, col. 2 line 30 to col. 3 line 40, col. 3 line 43 to col. 4 line 46, col. 5 line 48 to col. 9 line 23.	1-38.

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

* Special categories of cited documents:	"T"
"A" document defining the general state of the art which is not considered to be of particular relevance	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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 in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 17 November 2003 (17.11.2003)	Date of mailing of the international search report <b>08 DEC 2003</b>
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 Tuan Tran <i>Peggy Harrod</i> Telephone No. (703)605-4255

# INTERNATIONAL SEARCH REPORT

PCT/US03/07339

**Continuation of B. FIELDS SEARCHED Item 3:**

EAST, WEST, EPO, JPO, DERWENT

Search terms: scan angle, trial, metric, signal quality, antenna, directional antenna, base station, mobile, select, scan, information, parameters