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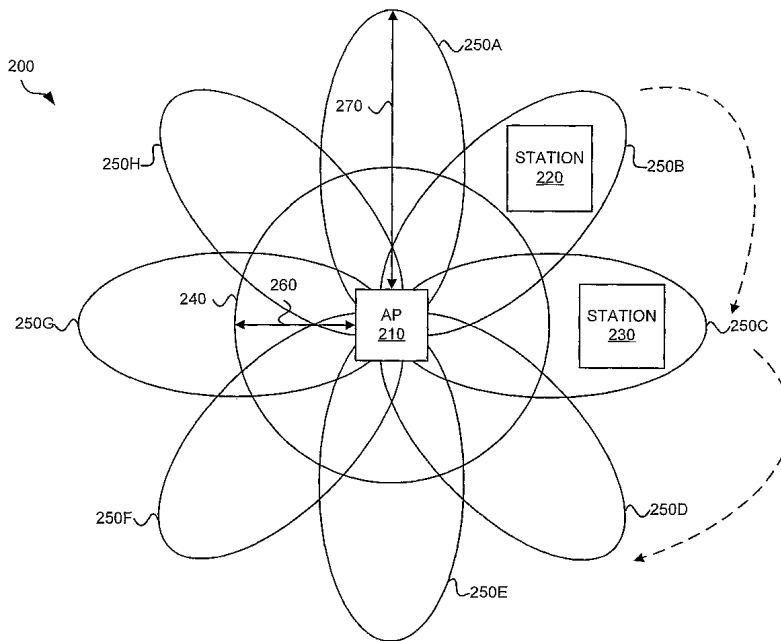
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(54) Title: COVERAGE ENHANCEMENT USING DYNAMIC ANTENNAS



(57) Abstract: Mechanisms for wireless local area network coverage enhancement using dynamic antennas are provided. The dynamic antennas may be used, for example, in an antenna apparatus of an access point. The access point maps a plurality of virtual access points (VAPs), each VAP corresponding to at least one of a plurality of directional antenna patterns of the antenna apparatus. The processor transmits broadcast communication on each of the VAPs a further distance from the access point as compared to transmitting on an omnidirectional antenna pattern of the antenna apparatus.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/26418

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H04B 7/00(2006.01),1/00(2006.01),1/30(2006.01);H04M 3/00(2006.01),1/00(2006.01)**

USPC: 370/310.2,328,329,334,338,339;455/418,419,420,422.1,446,63.4,561,562.1

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. : 370/310.2,328,329,334,338,339;455/418,419,420,422.1,446,63.4,561,562.1

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)

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 6,266,537 B1 (KASHITANI et al.) 24 July 2001 (24.07.2001), columns 5-6.	1,3-6,8,9,12-14,17,19,20 ----- 2,10,11,15-18,21-23
Y	US 2005/0032531 A1 (GONG et al) 10 February 2005 (10.02.2005), page 2, paragraph 13)	2,17,18
Y	US 5,940,771 (GOLLNICK et al) 17 August 1999 (17.08.1999), column 53, lines 52-67)	10,11,15,16,21-23

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
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"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	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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