Title: METHOD FOR OPERATING A SMART ANTENNA IN A WLAN USING MEDIUM ACCESS CONTROL INFORMATION

Abstract: A communications device with a switched beam antenna operates in a wireless local area network (WLAN) that includes a plurality of transmitters. The switched beam antenna generates a plurality of antenna beams. A method for operating the communications device includes receiving signals from the plurality of transmitters operating within the WLAN, identifying the received signals comprising medium access control (MAC) information, and determining a quality metric for each received signal comprising MAC information (104). A transmitter is selected based on the quality metrics. The antenna beams are scanned for receiving from the selected transmitter the signals comprising MAC information. A quality metric (105) associated with each scanned antenna beam is determined. One of the scanned antenna beams is then selected for communicating with the selected transmitter based on the quality metrics.
Declaration under Rule 4.17:
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: H04Q 7/24(2006.01)
USPC: 370/338,349
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)
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

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>A</td>
<td>US 2004/0114535 A1 (HOFFMANN et al) 17 June 2004 (17.06.2004), see entire reference.</td>
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<td>A,P</td>
<td>US 2005/0075140 A1 (FAMOLARI) 07 April 2005 (07.04.2005), see figs.5A,5B.</td>
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☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search
15 April 2006 (15.04.2006)

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