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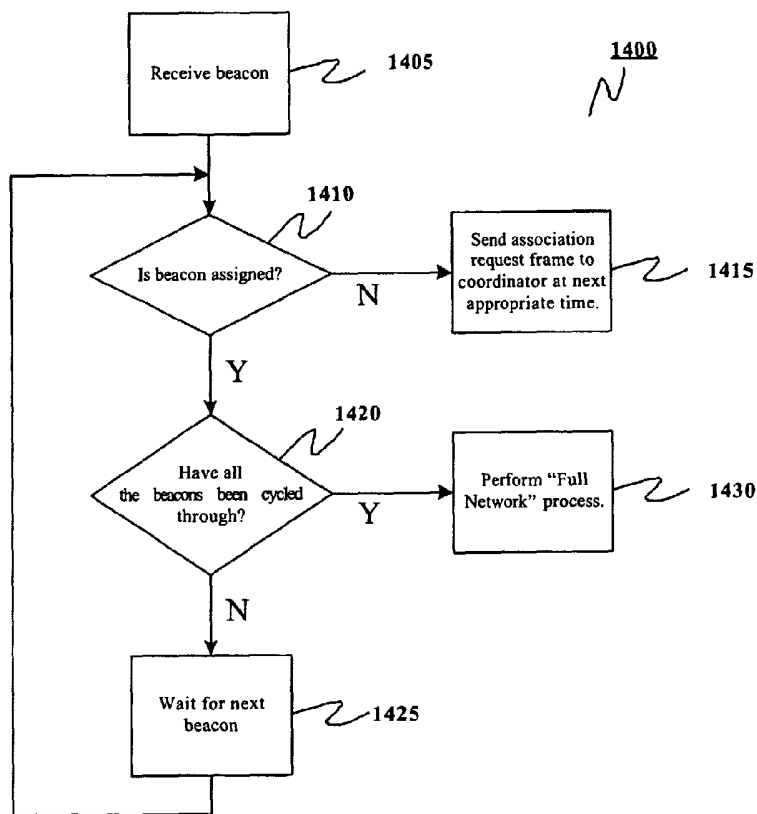
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(54) Title: METHOD OF OPERATING A MEDIA ACCESS CONTROLLER



(57) Abstract: A method is provided for a remote device to monitor and communicate with a wireless network using cyclic beacons. The remote device receives a beacon (1405), which beacon includes beacon information that defines a superframe. From the beacon information, the remote device determines whether the received beacon and the associated superframe are assigned to a network device or are unassigned (1410). By receiving as many beacons as there are allowable devices in the network, the remote device can determine if the network is full (1430). If the remote device runs through all of the beacons and all indicate that their associated superframes are assigned, then the remote device determines that the network is full and performs a network-full function. If the remote device receives a beacon that indicates that its associated superframe is unassigned, it determines that the network is not full and performs an association request during the unassigned superframe (1415).

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INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 02/31552

| <p>A. CLASSIFICATION OF SUBJECT MATTER<br/>IPC 7 H04L12/28 H04L12/56</p>   |   |  |
|--|---|--|
| <p>According to International Patent Classification (IPC) or to both national classification and IPC</p>   |   |  |
| <p>B. FIELDS SEARCHED</p>  |   |  |
| <p>Minimum documentation searched (classification system followed by classification symbols)<br/>IPC 7 H04L H04Q</p>   |   |  |
| <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p>   |   |  |
| <p>Electronic data base consulted during the international search (name of data base and, where practical, search terms used)<br/>EPO-Internal, WPI Data</p>   |   |  |
| <p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p>  |   |  |
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.  |
| X  | <p>US 6 175 739 B1 (ISHII KENICHI ET AL)<br/>16 January 2001 (2001-01-16)<br/>abstract<br/>column 1, line 5 -column 2, line 17<br/>column 5, line 5 -column 7, line 12<br/>column 8, line 5 - line 11<br/>column 9, line 42 -column 10, line 52<br/>figures 1-5,12,13</p> | 1-20   |
| A  | <p>US 6 272 117 B1 (CHOI KWOK ET AL)<br/>7 August 2001 (2001-08-07)<br/>abstract<br/>column 3, line 18 -column 5, line 38<br/>figures 2A,2B,7C</p>  | 1-20   |
| <p>---<br/>-/--</p>  |   |  |
| <p><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.      <input checked="" type="checkbox"/> Patent family members are listed in annex.</p>  |   |  |
| <p>* Special categories of cited documents :</p>   |   |  |
| <p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*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)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p> |   | <p>*T* 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</p> <p>*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</p> <p>*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.</p> <p>*G* document member of the same patent family</p> |
| <p>Date of the actual completion of the international search<br/><br/>25 March 2003</p>  |   | <p>Date of mailing of the international search report<br/><br/>31/03/2003</p>  |
| <p>Name and mailing address of the ISA<br/>European Patent Office, P.B. 5818 Patentlaan 2<br/>NL - 2280 HV Rijswijk<br/>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br/>Fax: (+31-70) 340-3016</p>  |   | <p>Authorized officer<br/><br/>Vaskimo, K</p>  |

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |   |                       |
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| Category °   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
| A  | US 5 815 811 A (HEIMAN FREDERIC ET AL)<br>29 September 1998 (1998-09-29)<br>abstract<br>column 1, line 20 -column 4, line 49<br>figures 2B,3<br>----- | 1-20                  |

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

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