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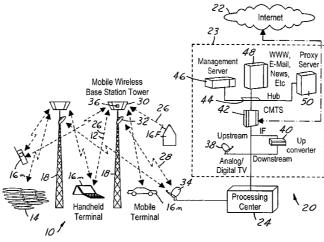
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(54) Title: MULTIPLE BASESTATION COMMUNICATION SYSTEM HAVING ADAPTIVE ANTENNAS



(57) Abstract: A communication system (10) has a first plurality of wireless basestations (18) having adaptive antennas with a plurality of main array antenna elements (56) for generating a plurality of communication beams. The system (10) further includes a gateway station (20) coupled to the first plurality of wireless basestations. Tha gateway station (20) forms a plurality of beams commands by communicating plurality of a control signals to the first plurality of wireless base stations (18) having a second plurality of adaptive antennas with a second plurality of main array antenna elements for generating a plurality of communication beams to communicate with said mobile user. A gateway station coupled to said first plurality of wireless base stations and said second plurality of wireless base stations through a plurality of multiple dynamic links, said gateway station forming a plurality of beams with a plurality of data packets by communicating plurality of a control signals to the base station to form the communication beams using at least one link from a first base station and a second link through a second of the base station.



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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04Q7/36 H01Q1/24 H04Q7/30H01Q3/26 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 7 H01Q H04Q 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) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° 1 - 10EP 0 860 952 A (HUGHES ELECTRONICS CORP) Υ 26 August 1998 (1998-08-26) the whole document US 5 734 982 A (ENDO HIROYA ET AL) 1 - 10Υ 31 March 1998 (1998-03-31) column 1, line 1 -column 2, line 20; figure 8 1,10 US 6 308 085 B1 (SHOKI HIROKI) P,A 23 October 2001 (2001-10-23) column 1, line 56 -column 2, line 15 column 3, line 63 -column 6, line 61 -& JP 11 261474 A (TOSHIBA CORP) 1,10 Α 24 September 1999 (1999-09-24) Patent family members are listed in annex. Further documents are listed in the continuation of box C. χ Special categories of cited documents: "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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "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) involve an inventive step when the document is taken alone "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 docudocument referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled in the art. *P* document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 31/07/2002 24 July 2002 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Baas, G

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