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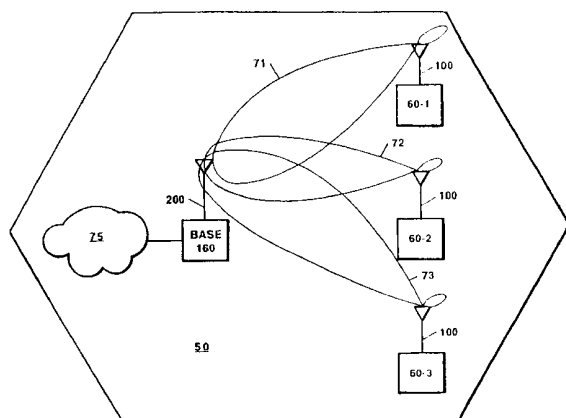
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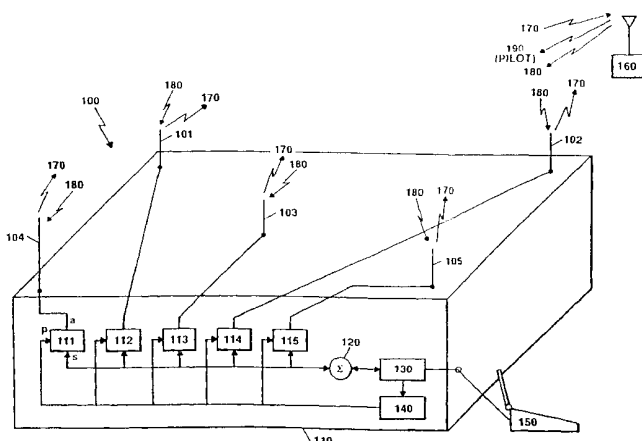
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(54) Title: ADAPTIVE ANTENNA FOR USE IN SAME FREQUENCY NETWORKS



(57) Abstract: An antenna apparatus which can increase capacity in a cellular communication system. The antenna operates in conjunction with a mobile subscriber unit and provides a plurality of antenna elements, each coupled to a respective signal control component such as a switch. The switch position of each antenna element is programmed for optimum reception during, for example, an idle mode which receives a pilot signal. The antenna array creates a beamformed for signals to be transmitted from the mobile subscriber unit, and a directional receiving array to more optimally detect and receive signals transmitted from the base station. By directionally receiving and transmitting signals, multipath fading is greatly reduced as well as intercell interference. Various techniques for determining the proper arrangement of signal control components for each antenna element are accommodated.



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A. CLASSIFICATION OF SUBJECT MATTER

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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)

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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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	EP 0 899 894 A (SAMSUNG ELECTRONICS CO LTD) 3 March 1999 (1999-03-03) abstract column 1, line 3 - column 2, line 8 column 2, line 21 - column 4, line 15; figures 1,2 --- -/--	1-8, 12-23



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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