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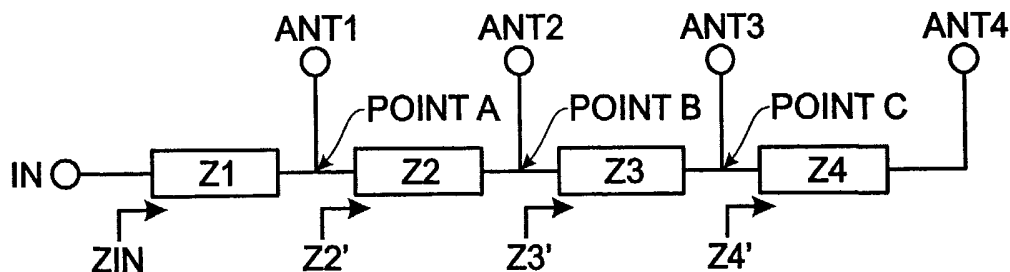
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: QUADRIFILAR ANTENNA SERIAL FEED NETWORK



(57) Abstract: A circuit for supplying signals to a quadrifilar antenna that has an input port for receiving a first signal, a first transmission line connected at one end to the input port, and a first connection point. The first connection point is connected to another end of the first transmission line. The first connection point provides a path to a first antenna port. A second transmission line is connected at one end to the first connection point. A second connection point is connected to another end of the second transmission line. The second connection point provides a path to a second antenna port. A third transmission line is connected at one end to the second connection point. A third connection point is connected to another end of the third transmission line. The third connection point provides a path to a third antenna port. A fourth transmission line is connected at one end to the third connection point. A fourth connection point is connected to another end of the third transmission line. The fourth connection point provides a path to a fourth antenna port.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/23549

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H01Q 1/36 US CL : 343/853, 895 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. : 343/853, 895, 860, 850; 333/124, 136, 25, 26 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet									
C. DOCUMENTS CONSIDERED TO BE RELEVANT									
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.							
X	US 6,421,028 B1 (OHGREN et al) 16 July 2002 (16.07.2002), see column 3, lines 49-57.	1							
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Y		2-4							
Y	US 5,594,461 A (O'NEILL, JR.) 14 January 1997 (14.01.1997), see figures 1 and 5.	2-4							
☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex. <table border="0" style="width: 100%; font-size: small;"> <tr> <td style="width: 33%; vertical-align: top;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international 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) "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 </td> <td style="width: 33%; vertical-align: top;"> "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 "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 "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 "&" document member of the same patent family </td> <td style="width: 33%;"></td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%; padding: 5px;"> Date of the actual completion of the international search 11 September 2003 (11.09.2003) </td> <td style="width: 50%; padding: 5px;"> Date of mailing of the international search report 25 FEB 2004 </td> </tr> <tr> <td style="width: 50%; padding: 5px;"> Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 </td> <td style="width: 50%; padding: 5px;"> Authorized officer Hien H. Phan Telephone No. (703) 308-2043 </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international 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) "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	"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 "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 "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 "&" document member of the same patent family		Date of the actual completion of the international search 11 September 2003 (11.09.2003)	Date of mailing of the international search report 25 FEB 2004	Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Hien H. Phan Telephone No. (703) 308-2043
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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

USPAT EAST

search terms: antenna, feed, network, quadrifilar, serial