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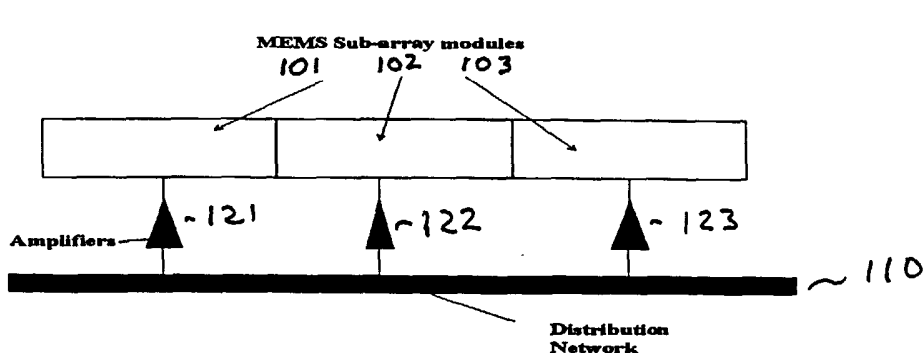
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(54) Title: WIDE-BAND MODULAR MEMS PHASED ARRAY



A Structure of Full Phased Array

(57) **Abstract:** A phased array antenna (100) comprising a planar array having a plurality of modules (101,102,103). Each module comprises an integrated multilayer structure having a plurality of radiating elements (215), at least one of the layers is produced using MEMS technology. Further, each module has at least one of a plurality of phase shifters (220,221,222), a plurality of power dividers (230,231,232), a plurality of polarization circuits (and a plurality of filters(240,241,242)). The modules are coupled, both mechanically and electrically, to a distribution network (110) for distribution of DC signals and RF signals. At least one amplifier (121,122,123) is connected between the distribution network and the modules or a single amplifier is connected to the whole array.



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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01Q 1/38, 21/10

US CL : 343/700ms, 850, 853; 342/368, 372; 455/562

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. : 343/700ms, 850, 853; 342/368, 372; 455/562

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)

BRS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,724,666 A (DENT) 03 March 1998 (03.03.1998), see entire document.	1-3,5-18,20-24
Y,P	US 6,366,259 B1 (PRUETT et al.) 02 April 2002 (02.04.2002), see entire document.	4,19

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Further documents are listed in the continuation of Box C.

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See patent family annex.

* 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 invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
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"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		

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