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(11) Publication number:

0 432 729 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **90123813.9**(51) Int. Cl.⁵: **H01P 1/213, H01P 7/10**(22) Date of filing: **11.12.90**

(30) Priority: **14.12.89 JP 325536/89**
21.12.89 JP 331611/89

(43) Date of publication of application:
19.06.91 Bulletin 91/25

(84) Designated Contracting States:
DE FR GB

(86) Date of deferred publication of the search report:
15.07.92 Bulletin 92/29

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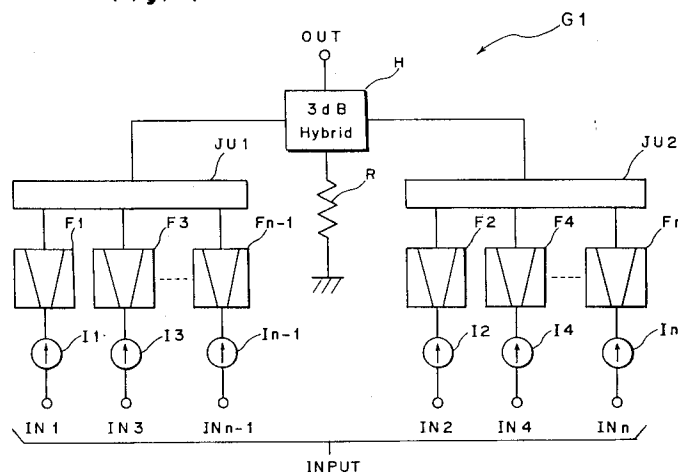
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(54) **Radio frequency signal combining/sorting apparatus.**

(57) A radio frequency signal combining/sorting apparatus which includes a plurality of channel filters (F1, --- and F64) which allow band regions of respective transmission channels to pass through them, isolators (IN1, --- and IN64) connected to respective inputs of the channel filters, a plurality of sets of power composing circuits (JU1, JU2, JU3, JU4) each including branch lines for composing outputs of

the channel filters as one output, and hybrid circuits (H1 to H3) arranged to compose outputs per two sets of the power composing circuits (JU1, JU2, JU3, JU4). The band regions of the respective channel filters are selected in such relation that the band regions of the respective channel filters of the same power composing circuit are spaced from each other to a largest extent.

Fig. 1



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EUROPEAN SEARCH REPORT

Application Number

EP 90 12 3813

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	MICROWAVE JOURNAL, vol. 32, no. 6, June 1989, DEDHAM US pages 99 - 112; LEVINSON AND BENNETT: 'Multiplexing with High Performance Directional Filters' * page 108 - page 110; figure 8 * ---	1,2	H01P1/213 H01P7/10
Y	DE-A-1 963 422 (NIPPON ELECTRIC) * page 12, paragraph 2 - page 15; figure 9 * ---	1,2	
A	MICROWAVE JOURNAL, vol. 30, no. 11, November 1987, DEDHAM US pages 79 - 86; LEVY: 'A New Adaptive Filter/IFM Receiver System' * the whole document * ---	1,2	
A	39TH IEEE VEHICULAR TECHNOLOGY CONFERENCE vol. I, May 1989, SAN FRANCISCO, US pages 353 - 358; CLARK: 'CELLULAR RURAL STATISTICAL AREA (RSA) TRANSMIT AND COMBINING' * page 355 * ---	1,2	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	GB-A-2 203 898 (MURATA MANUFACTURING) * claims 1-5 * -----	1,2	H01P H03H H01Q
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 MAY 1992	Examiner ANGRABEIT F. F. K.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			