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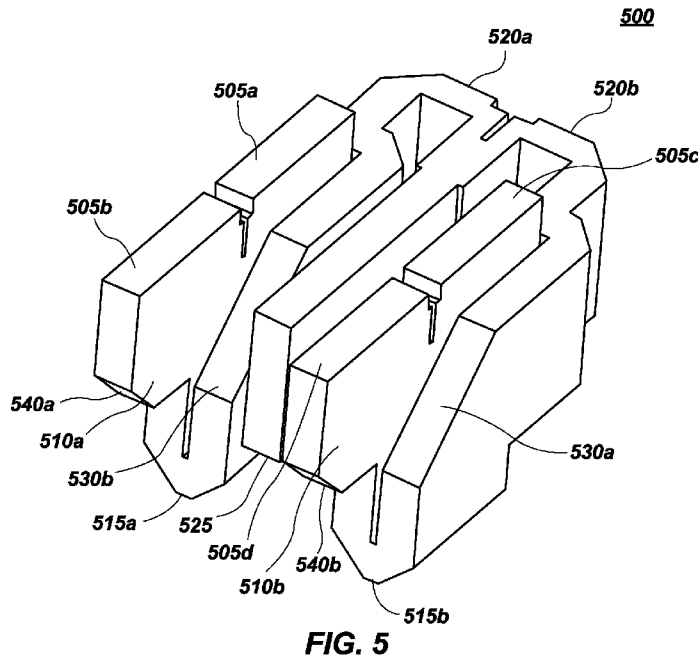
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(54) Title: INTEGRATED TRACKING ANTENNA ARRAY COMBINER NETWORK



(57) Abstract: A combiner network is provided. The combiner network may include a combiner of a first type. The combiner network may further include a combiner of a second type. The combiner of a first type includes a first plurality of waveguide ports and an H-plane combiner connected to an E-plane combiner. The combiner of the second type includes a second plurality of waveguide ports and an H-plane combiner including a U-bend.



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INTERNATIONAL SEARCH REPORT

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PCT/US 18/66923

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC - H01P 1/02; H01P 3/12; H01P 5/12 (2019.01)  
 CPC - H01P 1/025; H01P 1/027; H01P 3/12; H01P 5/12

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)  
 See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 See Search History document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,504,805 A (EKELMAN, JR. et al.) 12 March 1985 (12.03.1985) Fig 1, abstract, col 4, ln 19- col 5, ln 51, col 7, ln 37-57	1-3, 8-10, 14-18, 23-26, 31
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Y		4-7, 11-13, 15, 19-22, 27- 30
Y	US 9,142,872 B1 (GOOGLE INC.) 22 September 2015 (22.09.2015) Fig 1, abstract, col 3, ln 17- 22, col 4, ln 6-15	4
Y	US 9,559,428 B1 (VIASAT, INC.) 31 January 2017 (31.01.2017) Fig 4, abstract, col 1, ln 7-9, col 8, ln 64-col 9, ln 31	5-7, 11-13, 15
Y	US 2017/0047661 A1 (VIASAT, INC.) 16 February 2017 (16.02.2017) Fig 1A, 1B, abstract, para [0017], [0033]	19, 21, 22, 27, 29, 30
Y	US 7,750,763 B2 (PRABMAYER et al.) 06 July 2010 (06.07.2010) Fig 1, 2, abstract, col 4, ln 13 -36	20, 28
Y	US 9,112,255 B1 (HOLLENBECK et al.) 18 August 2015 (18.08.2015) abstract, col 9, ln 43-65	7, 13

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