

Title (en)
DEVICE FOR THE COMBINATION WITHOUT R.F. POWER LOSS OF TWO OR MORE MICROWAVE TRANSMITTERS RUNNING IN PARALLEL AND WITHOUT ANY POWER RATIO

Publication
EP 0196081 A3 19880824 (EN)

Application
EP 86104135 A 19860325

Priority
IT 4788185 A 19850327

Abstract (en)
[origin: EP0196081A2] The invention relates to a device for the combination without r.f. power loss of two or more microwave transmitters running in parallel and with any power ratio, comprising as basic components in cascade connection and with the interposition of rotative joints and, where necessary, of transition connections with the rotative joints, a first orthogonal mode input transducer (OMT1), a first rotative polarizer (P1) which can receive at the input an elliptically polarized field and supply at the output a linearly polarized field, a second rotative polarizer (P2) which can receive at the input a linearly polarized field and supply at the output a linearly polarized field which, however, in an intermediate part has got a transformation into a circular polarization, a second orthogonal mode output transducer (OMT2) and two motors (M1, M2) commanding the rotational motions of said two polarizers (P1, P2) and being controlled by a computer which gets monitoring data from a detector diode (DR) connected with the transversal branch of said output transducer.

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H01P 1/161

IPC 8 full level
H01P 1/161 (2006.01)

CPC (source: EP)
H01P 1/161 (2013.01)

Citation (search report)
• [A] US 4233576 A 19801111 - PELCHAT GUY M
• [A] GB 767518 A 19570206 - BRITISH THOMSON HOUSTON CO LTD
• [X] PATENT ABSTRACTS OF JAPAN ; vol. 4, no. 83 (E-15)[565], 14th June 1980; & JP-A-55 049 052 (MITSUBISHI DENKI K.K.) 08-04-80
• [A] IEE PROCEEDINGS SECTIONS A - I, vol. 130, no. 5, part H, August 1983, pages 305-308, Old Woking, Surrey, GB; J. CLARKE et al.: "Experimental study of orthomode couplers for use in power combining and distribution"
• [A] PATENT ABSTRACTS OF JAPAN; vol. 6, no. 52 (E-100)[930], 7th April 1982; & JP-A-56 165 405 (NIPPON DENKI K.K.) 19-12-1981

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