

Title (en)
MICROWAVE ROTATING COUPLING FOR RECTANGULAR WAVEGUIDE

Title (de)
MIKROWELLEN-DREHKUPPLUNG FÜR RECHTECKHOHLLEITER

Title (fr)
JOINT TOURNANT MICRO-ONDES POUR GUIDE D'ONDES RECTANGULAIRE

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Abstract (en)
[origin: WO2010076016A1] The invention relates to a rotating coupling (10, 40) for rectangular waveguides for connecting high-frequency components, comprising an input component (12, 42) and an output component (14, 44), wherein each component (12, 14, 42, 44) has a rectangular connecting piece (16, 18, 46, 48) at one end and a circular waveguide (28, 30, 54, 56) at the other end. Both components (12, 14, 42, 44) are arranged such that the circular waveguides (28, 30; 54, 56) facing each other are rotatably mounted in a coupling transition coaxially about the common axis (A) thereof. The invention is characterized in that a polarizer (20, 22, 50, 52), by which at least one linearly polarized wave can be converted into a circularly polarized or at least one circularly polarized wave can be converted into a linearly polarized wave, is provided between the rectangular connecting piece (16, 18; 46, 48) and circular wave guide (28, 30, 54, 56). Furthermore, the rectangular connecting pieces (16, 18, 46, 48) are arranged axially to the circular wave guides (28, 30, 54, 56) and at least one rectangular wave guide can be connected in parallel to the axis (A).

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