

Title (en)

ANTENNA SYSTEM FOR TRANSMITTING CIRCULARLY OR LINEARLY POLARIZED MICROWAVES

Publication

**EP 0023933 B1 19840613 (DE)**

Application

**EP 79102937 A 19790813**

Priority

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Abstract (en)

[origin: EP0023933A1] 1. An antenna arrangement (1) for the radiation of circularly or linearly polarised microwaves, consisting of a horn radiator (3; 6) the inside of which is grooved and the, for example elliptical, cross-sections of which, consecutive in the longitudinal direction, are geometrically similar, a connecting wave guide (2; 5) the inside cross-section of which has a different axis ratio and/or a different, for example circular (2), square or rectangular (5), contour shape from the cross-sections of the horn radiator, and a transition piece (AA'-BB') for simple conversion of the wave propagation mode in the connecting wave guide into the desired mode in the horn radiator, characterised in that the transition piece is so formed, without intercalation of a specific transition element, that the walls of the horn radiator (3; 6) itself and those of the connecting wave guide (2; 5) itself extend on their contour, at each point, without change of the contour shape linearly and respectively as far as to where they encounter the other wall along with the formation of a corresponding curve of intersection.

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**H01Q 13/02**

IPC 8 full level

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