

Title (en)

ARRANGEMENT FOR RADIATING ELECTROMAGNETIC WAVES WHILE USING A COAXIAL CABLE

Title (de)

ANORDNUNG ZUR ABSTRAHLUNG ELEKTROMAGNETISCHER WELLEN UNTER VERWENDUNG EINES KOAXIALKABELS

Title (fr)

SYSTEME POUR EMETTRE DES ONDES ELECTROMAGNETIQUES A L'AIDE D'UN CABLE COAXIAL

Publication

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Application

**EP 03788809 A 20031121**

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Abstract (en)

[origin: WO2004068737A1] The invention relates to an arrangement for radiating electromagnetic waves while using a coaxial cable (1) whose outer conductor (2) has openings and in which electromagnetic signals that are transmitted in frequency ranges greater than the lower limit frequency  $f_g$  of the coaxial cable (1) can be fed into the inner conductor (3) of the coaxial cable (1). The invention is characterized in that an isolating circuit is provided on the input side and contains a parallel connection consisting of a low-pass filter (5) and of a high-pass filter (6). In the isolating circuit, the output of the high-pass filter (6) is connected to the inner conductor (3), and the output of the low-pass filter (5) is connected to the outer conductor (2) of the coaxial cable (1) so that electromagnetic signals, which are transmitted in frequency ranges greater than the lower limit frequency  $f_g$ , are transmitted into the inner conductor (3), and electromagnetic signals, which are transmitted in frequency ranges less than the lower limit frequency  $f_g$  of the coaxial cable (1), can be fed into the outer conductor (2) of the coaxial cable (1).

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