Title (en)

ANTENNA CHARACTERISATION IN A WAVEGUIDE

Title (de)

ANTENNENCHARAKTERISIERUNG IN EINEM WELLENLEITER

Title (fr)

CARACTÉRISATION D'ANTENNE DANS UN GUIDE D'ONDES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2011018206A1] The invention relates to a method for determining at least one characteristic of an antenna (8), comprising the following steps: a) positioning an antenna (8), of which at least one characteristic is to be determined, in a space surrounded by a waveguide (1), b) feeding an electric excitation signal (utx(t)) into a feed connection (4) of the waveguide (1), c) picking up the electric response signal (urx(t)) emitted by the antenna (8) as a result of the excitation signal (utx(t)), d) determining at least one characteristic of the antenna from at least one portion of the response signal (urx(t)) and a corresponding portion of the excitation signal (utx(t)), wherein the portion of the response signal (urx(t)) is a period of time evaluated in the time domain and satisfies the following conditions: i) only one or more waves of the electromagnetic field caused by the excitation signal (utx(t)) and running from the feed connection (4) towards the antenna (8) exist at the location of the antenna, ii) the electromagnetic field at the location of the antenna (8) is a TEM field. This permits a time-saving and cost-saving determination of at least one characteristic of an antenna. The invention further relates to a measuring device for carrying out the method.

IPC 8 full level

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CPC (source: EP KR US)

G01R 29/0828 (2013.01 - EP KR US); **G01R 29/105** (2013.01 - EP KR US); **H01Q 17/00** (2013.01 - KR)

Citation (search report)

See references of WO 2011018206A1

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