

Title (en)

METHOD AND DEVICE FOR MEASURING THE RADIATION PATTERN OF A RADIATIVE SOURCE IN AN ECHOGENIC MEDIUM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MESSUNG DES STRAHLENMUSTERS EINER STRAHLUNGSQUELLE IN EINEM ECHOGENEN MEDIUM

Title (fr)

PROCEDE ET DISPOSITIF DE MESURE DE DIAGRAMME DE RAYONNEMENT DE SOURCE RADIATIVE EN MILIEU ECHOGENE

Publication

**EP 3204781 A2 20170816 (FR)**

Application

**EP 15788153 A 20151008**

Priority

- FR 1459768 A 20141010
- FR 2015052704 W 20151008

Abstract (en)

[origin: WO2016055739A2] The device for measuring a radiation pattern of a radiative source (103) of maximum linear size  $a$  emitting radiation in a frequency range  $F_i$  corresponding to a wavelength range  $\lambda_i$  comprises parallel reflective plates (101, 102) oriented along a longitudinal axis Y, between which plates is placed centrally the radiative source (103). The distance  $d$  between the radiative source (103) and each of the plates (101, 102) is larger than or equal to each of the wavelengths  $\lambda$ . At least one probe (104) that is sensitive to the far-field amplitude and phase of the radiation of the radiative source (103) is also placed between the plates (101, 102) at a distance  $DR$  from the radiative source (103), the probe furthermore being shifted from the radiative source along a transverse axis X perpendicular to the longitudinal axis Y by a value  $e$  larger than or equal to  $A_i/10$ . The distance  $DR$  is larger than or equal to  $2a^2\lambda_i$ . A device (105, 106) is provided to move the probe (104) stepwise in the transverse direction X. The probe (104) is connected to a vector network analyser (111). A processing unit (110) receives data from the vector network analyser (111), controls the device (105, 106) to move the probe (104) stepwise and acquires, on each step, data from the vector network analyser (111) for a plurality of frequencies  $F_i$  separated by a frequency step size of  $\Delta F$ .

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2016055739A2

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