

Title (en)

DEVICE AND METHOD FOR ELECTRICALLY CHARACTERIZING PROPERTIES OF MATERIALS, ASSEMBLIES, AND/OR COMPONENTS IN AN ENVIRONMENT WITH A HIGH TEMPERATURE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ELEKTRISCHEN CHARAKTERISIERUNG VON EIGENSCHAFTEN VON STOFFEN, BAUGRUPPEN UND/ODER BAUTEILEN IN EINER UMGEBUNG MIT HOHER TEMPERATUR

Title (fr)

DISPOSITIF ET PROCÉDÉ DE CARACTÉRISATION ÉLECTRIQUE DE PROPRIÉTÉS DE MATÉRIAUX, D'ENSEMBLES ET/OU DE COMPOSANTS DANS UN ENVIRONNEMENT À HAUTE TEMPÉRATURE

Publication

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Application

**EP 22743485 A 20220711**

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Abstract (en)

[origin: WO2023001608A1] The invention relates to a device and a method for electrically characterizing properties of materials, assemblies, and/or components in an environment with a high temperature, for example in order to characterize electromechanical SAW components with respect to the function thereof under action of temperature. The aim of the invention is to develop a device which allows a fail-proof positioning of a measuring object, a quick and simple change of the measuring object, and a reliable characterization at high temperatures. This is achieved by a device containing a sample holder which has means for a galvanic or capacitive in-coupling and/or out-coupling of electric signals, at least one support element, at least one high-temperature waveguide, at least one low-temperature waveguide, wherein at least the high-temperature waveguide(s) is/are designed as a coaxial conductor with solid dielectricum elements made of electrically non-conductive ceramic, at least one coupling component, at least one heat shield, at least one temperature sensor which is arranged in the support element, and at least one flange part.

IPC 8 full level

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