

Title (en)
MEASURING DEVICE AND METHOD FOR DETERMINING A DIELECTRIC PROPERTY, PARTICULARLY HUMIDITY AND/OR DENSITY, OF A PRODUCT

Title (de)
MESSVORRICHTUNG UND -VERFAHREN ZUR BESTIMMUNG EINER DIELEKTRISCHEN EIGENSCHAFT, INSBESONDERE DER FEUCHTE UND/ODER DICHT, EINES PRODUKTS

Title (fr)
DISPOSITIF ET PROCEDE DE MESURE DESTINES A DETERMINER UNE CARACTERISTIQUE DIELECTRIQUE, NOTAMMENT L'HUMIDITE ET/OU LA DENSITE D'UN PRODUIT

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Application
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Priority

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Abstract (en)
[origin: WO2006069721A2] The invention relates to a measuring device (10) for determining a dielectric property, particularly humidity and/or density, of a product (12; 312), particularly tobacco, cotton or another fiber product, comprising a measuring capacitor (11; 311), a device (13) for the production of a high-frequency field in the measuring capacitor (11; 311), influenced by a product (12; 312) that is arranged in a measuring volume (46) of the measuring device (10), and a switching device (28) which comprises the measuring capacitor (11; 311) and which is configured in order to determine the suitable measuring variables of the high-frequency field influenced by the product (12; 312) . The invention is characterized in that the switching device (28) is configured as a substantially non-resonant device at the measuring frequency of the high-frequency field and in that measurement is best on the propagation of a running high frequency wave in the measuring capacitor (11) and in that the switching device (28) is configured for determining two measuring variables which are alternately independent and dependent upon the amplitude and phase of the high frequency wave influenced by the product (12; 312). The influence also relates to a corresponding measurement method.

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