

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

Publication  
**EP 1836482 A2 20070926 (DE)**

Application  
**EP 05821925 A 20051217**

Priority

- EP 2005013831 W 20051217
- DE 102004063228 A 20041222

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.

IPC 8 full level  
**G01N 27/22** (2006.01); **A24C 5/34** (2006.01); **G01R 27/28** (2006.01)

CPC (source: EP US)  
**A24C 5/3412** (2013.01 - EP US); **G01N 27/221** (2013.01 - EP US)

Citation (search report)  
See references of WO 2006069721A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102004063228 A1 20060706**; **DE 102004063228 B4 20070628**; CN 101088008 A 20071212; EP 1836482 A2 20070926; JP 2008524614 A 20080710; JP 4526043 B2 20100818; US 2008164887 A1 20080710; US 7679377 B2 20100316; WO 2006069721 A2 20060706; WO 2006069721 A3 20061019

DOCDB simple family (application)  
**DE 102004063228 A 20041222**; CN 200580044248 A 20051217; EP 05821925 A 20051217; EP 2005013831 W 20051217; JP 2007547352 A 20051217; US 79394705 A 20051217