

Title (en)

SENSOR DEVICE

Title (de)

SENSORVORRICHTUNG

Title (fr)

DISPOSITIF DE DÉTECTION

Publication

**EP 2494343 A2 20120905 (DE)**

Application

**EP 10787257 A 20101029**

Priority

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Abstract (en)

[origin: WO2011050381A1] A sensor for determining the humidity of materials, especially of gases, preferably of air humidity, comprises a support body (2) which is impinged upon by a substance (3) that reversibly absorbs humidity from the surroundings and/or gives it off to the surroundings, and at least two interspaced electrodes (4). According to the invention, the support body (2) is produced of or comprises an open-pored porous, air-humidity invariant, non-hygroscopic support material which has a high inner rigidity. At least the pores (21) of the support material comprising the substance (3) which reversibly or reproducibly absorbs and/or gives off humidity water from the material or the gas or air space that is brought in contact or that is in contact with the support material of the support body (2), are filled with or at least their surfaces or walls (22) are coated with preferably such an inorganic salt (3') in a dissolved, liquid, solid or crystalline form. The conductance and/or electrical permittivity of the said substance (3), especially of the salt (3'), functionally depends in a reproducible manner on the humidity of the material that is brought in contact or that is in contact with the support material of the support body (2) impinged with the humidity, especially the humidity of the surrounding air.

IPC 8 full level

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CPC (source: EP US)

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