

Title (en)
ELECTRONIC LEVEL SENSOR

Title (de)
ELEKTRONISCHER FÜLLSTANDSSENSOR

Title (fr)
CAPTEUR DE NIVEAU ELECTRONIQUE

Publication
EP 1834159 A1 20070919 (DE)

Application
EP 05784780 A 20050912

Priority
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Abstract (en)
[origin: WO2006029427A1] The invention relates to a device (1) for measuring the level (2) of fluids (gases, liquids) in containers. The ratio of a measuring capacity in relation to a reference capacity is measured. Said device uses the different dielectric properties of two different fluids in order to electronically determine the level. As a result, no displaceable parts, such as a float and similar are necessary. A multi-layered, constructed reference capacitor (5) is completely filled with the measuring fluid (3) in the intermediate chamber of the electrode surfaces (13-16) which are arranged in pairs. The capacitor is used to detect the media specific and temperature-dependent dielectricity constants. The intermediate chamber of the measuring capacitor is filled with the measuring fluid but only in proportion to the filling level, the remainder with a freely selectable expanding agent (9) (preferably air) having a dielectric constant determined by known or via a second reference capacitor (26). The filling level over each volume part in the measuring capacitor is ratiometrically determined from the measuring signal and the reference signal by electronically processing with the aid of a microprocessor (31), said volume part being provided by the measuring fluid.

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Citation (search report)
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