

Title (en)

DEVICE FOR DETERMINING OR MONITORING THE FILL LEVEL OF A MEDIUM IN A CONTAINER

Title (de)

VORRICHTUNG ZUR BESTIMMUNG ODER ÜBERWACHUNG DES FÜLLSTANDS EINES MEDIUMS IN EINEM BEHÄLTER

Title (fr)

DISPOSITIF DE DÉTERMINATION OU DE SURVEILLANCE DU NIVEAU DE REMPLISSAGE D'UN FLUIDE DANS UN RÉSERVOIR

Publication

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Application

EP 14755827 A 20140828

Priority

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- EP 2014068206 W 20140828

Abstract (en)

[origin: WO2015062765A1] The invention relates to a device for determining or monitoring the fill level (h, H) or a specified limit level of a medium (3) in a container (2), comprising a self-excited system, which consists of an oscillation generation unit for generating electromagnetic waves within a specified frequency band, at least one sensor (1) having an electrode (4), which sensor is arranged at a specified angle to the longitudinal axis of the container (2), wherein the electromagnetic waves are applied to the electrode (4), wherein the at least one sensor (1) is arranged in relation to the medium (3) in such a way that the phase position of the electromagnetic waves reflected at the boundary surface of the medium (3) changes under the influence of the medium (3), and a feedback circuit, which feeds the electromagnetic waves back to the at least one sensor (1), whereby the frequency of the self-excited system is determined, comprising a frequency detector, which detects the frequency of the electromagnetic waves, and comprising an evaluating unit (28, 29), which determines the relative permittivity (DKmess) dependent on the particular fill level (h) and/or determines the permeability of the medium (3) on the basis of the detected frequency and which determines the fill level (h) or the reaching of the specified limit level of the medium (3) in the container (2) on the basis of the determined relative permittivity (DKmess) or the permeability of the medium (3).

IPC 8 full level

G01F 23/284 (2006.01)

CPC (source: EP US)

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Citation (search report)

See references of WO 2015062765A1

Citation (examination)

- US 2008184795 A1 20080807 - WOODARD STANLEY E [US]
- US 2012266689 A1 20121025 - SCHIFERLI WOUTER [NL]

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DOCDB simple family (application)

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