Title (en)

MEASURING TUBE FOR MAGNETOINDUCTIVE FLOWMETER SYSTEMS

Title (de

MÉSSROHR FÜR MAGNETISCH-INDUKTIVE DURCHFLUSSMESSSYSTEME

Title (fr)

TUBE DE MESURE POUR SYSTÈMES DE MESURE DE DÉBIT MAGNÉTO-INDUCTIFS

Publication

EP 3058318 A1 20160824 (DE)

Application

EP 14809288 A 20141016

Priority

- DE 102013017286 A 20131017
- DE 102013019182 A 20131118
- EP 2014002785 W 20141016

Abstract (en)

[origin: WO2015055309A1] The invention describes and presents a measuring tube (1) for magnetoinductive flowmeter systems, wherein the flowmeter systems have the measuring tube (1) for the flow of an electrically conductive medium and a magnetic field generating device for generating a magnetic field running at least also perpendicular to the longitudinal axis of the measuring tube (1), at least two measuring electrodes (3, 4) which tap off the measurement voltage induced in the electrically conductive medium and preferably an evaluation unit, wherein the measuring electrodes (3, 4) have measuring contacts (5, 6) which are accessible on the outside of the measuring tube (1), wherein the measuring tube (1) forms a first functional unit with the measuring electrodes (3, 4), and mating contacts corresponding to the measuring contacts (5, 6) of the measuring electrodes (3, 4), the magnetic field generating device and the evaluation unit, if such an evaluation unit is present, form a second functional unit, and wherein the mating contacts (5, 6), the magnetic field generating device and the evaluation unit, if such an evaluation unit is present, are provided in a measuring system housing. According to the invention, the measuring contacts (5, 6) of the measuring electrodes (3, 4) are designed and provided on the measuring tube (1) in such a manner that the measuring contacts can be brought into electrically conductive contact with the mating contacts by means of a movement which runs substantially perpendicular to the direction of the magnetic field and is substantially only translational.

IPC 8 full level

G01F 1/58 (2006.01)

CPC (source: EP US)

G01F 1/584 (2013.01 - EP US)

Citation (search report)

See references of WO 2015055309A1

Citation (examination)

- US 5450758 A 19950919 SMOLL OWEN C [US]
- WO 0213676 A2 20020221 SAM TECH INC [US], et al
- US 5220841 A 19930622 BROWN SAMUEL D [US], et al
- DE 3818259 C1 19890907

Designated contracting state (EPC)

ÁL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015055309 A1 20150423; CA 2927663 A1 20150423; CA 2927663 C 20170926; CN 105637328 A 20160601; DE 102013019182 A1 20150507; EP 3058318 A1 20160824; MX 2016004888 A 20161012; MX 357757 B 20180724; US 2016245679 A1 20160825; US 9534943 B2 20170103

DOCDB simple family (application)

EP 2014002785 W 20141016; CA 2927663 A 20141016; CN 201480057010 A 20141016; DE 102013019182 A 20131118; EP 14809288 A 20141016; MX 2016004888 A 20141016; US 201415030145 A 20141016