

Title (en)

METHOD AND DEVICE FOR ASCERTAINING A FLOW PARAMETER USING A CORIOLIS FLOW METER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERMITTLUNG EINES STRÖMUNGSPARAMETERS MITTELS EINES CORIOLIS-DURCHFLUSSMESSGERÄTS

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTERMINATION D'UN PARAMÈTRE D'ÉCOULEMENT AU MOYEN D'UN DÉBITMÈTRE À EFFET CORIOLIS

Publication

EP 3987253 A1 20220427 (DE)

Application

EP 20760755 A 20200624

Priority

- DE 102019116872 A 20190624
- DE 2020100543 W 20200624

Abstract (en)

[origin: WO2020259762A1] The invention relates to a method for ascertaining a flow parameter of a medium, in particular the mass flow rate, using a Coriolis flow meter of a specified measurement device type and to a device which is suitable for said method. According to the method, the medium, which has a medium viscosity, flows through at least one measurement tube piece that is mechanically vibrated by a respective excitation signal, at least one measurement signal dependent on the flow parameter, in particular a phase shift, is ascertained in the vibration behavior of the respective measurement tube piece, and the flow parameter is determined from the at least one measurement signal while taking into consideration the dependency of the flow parameter on the medium viscosity, wherein a data field which is ascertained using an interpolation method, in particular a kriging method, and which indicates the dependency of the flow parameter on the medium viscosity is used in order to determine the flow parameter.

IPC 8 full level

G01F 1/84 (2006.01); **G01F 15/02** (2006.01); **G01F 25/00** (2022.01); **G01N 9/00** (2006.01); **G01N 11/00** (2006.01)

CPC (source: EP KR US)

G01F 1/84 (2013.01 - KR); **G01F 1/8413** (2013.01 - US); **G01F 1/8422** (2013.01 - US); **G01F 1/8436** (2013.01 - EP); **G01F 1/8468** (2013.01 - US); **G01F 15/02** (2013.01 - EP KR); **G01F 25/10** (2022.01 - KR US); **G01N 9/00** (2013.01 - KR); **G01N 9/002** (2013.01 - US); **G01N 11/00** (2013.01 - KR); **G01N 11/02** (2013.01 - US); **G01N 11/16** (2013.01 - US); **G01F 25/10** (2022.01 - EP); **G01N 11/16** (2013.01 - EP); **G01N 2009/006** (2013.01 - EP US); **G01N 2011/0073** (2013.01 - US)

Citation (examination)

EP 1055102 B1 20030326 - FLOWTEC AG [CH]

Designated contracting state (EPC)

AL 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)

DE 102019116872 A1 20201224; CN 114286926 A 20220405; EP 3987253 A1 20220427; KR 20220024747 A 20220303; US 2022244084 A1 20220804; WO 2020259762 A1 20201230

DOCDB simple family (application)

DE 102019116872 A 20190624; CN 202080059693 A 20200624; DE 2020100543 W 20200624; EP 20760755 A 20200624; KR 20227001926 A 20200624; US 202017621808 A 20200624