

Title (en)
METHOD AND DEVICE FOR DETERMINING THE TRANSPORT PARAMETERS OF A PARTICLE TRANSPORTING FLUID FLOWING IN A LINE

Title (de)
VERFAHREN UND VORRICHTUNG ZUM ERMITTELN DER FÖRDERPARAMETER EINES PARTIKEL FÜHRENDEN, DURCH EINE LEITUNG STRÖMENDE FLUIDUMS

Title (fr)
PROCEDE ET DISPOSITIF POUR DETERMINER LES PARAMETRES DE TRANSPORT D'UN FLUIDE S'ECOULANT DANS UNE CANALISATION ET COMPORTANT DES PARTICULES

Publication
EP 1957944 A1 20080820 (DE)

Application
EP 06804342 A 20061010

Priority
• AT 2006000414 W 20061010
• AT 16812005 A 20051013

Abstract (en)
[origin: WO2007041735A1] The invention relates to a method and a device for determining the transport parameters of a particle transporting fluid flowing in a line, comprising an electrode arrangement with at least two electrodes, wherein the coupled capacitance between at least two electrodes arranged around the circumferential region of the line is measured and at least the flow speed of recorded particles is determined from the measured values, said measured values are subjected to a fast Fourier transform and a selected number n of obtained frequency components are summated to give a particle speed value. A device for determining the transport parameter of a particle-transporting fluid flowing in a line (LEI) comprises an electrode arrangement arranged in the circumferential region of the line with at least two electrodes (E₁ ... E₈; E_{1a}, E_{1b} ... E_{8a}, E_{8b}/ E_a, E_b, E_o, E_u), a measuring device (CME) for the real-time measurement of the coupled capacitance between the at least two electrodes and an analytical unit (AWE), to which the measured values from the measuring device are supplied. The analytical unit (AWE) subjects the measured values to a fast Fourier transform and a selected number n of the frequency components obtained are subjected to a summation to give a particle speed or density value.

IPC 8 full level
G01F 1/56 (2006.01); **G01F 1/704** (2006.01); **G01F 1/74** (2006.01)

CPC (source: EP)
G01F 1/56 (2013.01); **G01F 1/704** (2013.01); **G01F 1/74** (2013.01)

Citation (search report)
See references of WO 2007041735A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007041735 A1 20070419; AT 505032 A4 20081015; AT 505032 B1 20081015; EP 1957944 A1 20080820

DOCDB simple family (application)
AT 2006000414 W 20061010; AT 16812005 A 20051013; EP 06804342 A 20061010