

Title (en)

NON-INTRUSIVE METHOD AND DEVICE FOR CHARACTERISING FLOW PERTURBATIONS OF A FLUID INSIDE A PIPE

Title (de)

VERFAHREN UND NICHT-INVASIVES GERÄT ZUM NACHWEIS VON DURCHFLUSS-STÖRUNGEN EINES FLUIDUMS IM INNEREN EINER KANALISATION

Title (fr)

PROCEDE ET DISPOSITIF NON INTRUSIF POUR CARACTERISER LES PERTURBATIONS D'ECOULEMENT D'UN FLUIDE A L'INTERIEUR D'UNE CANALISATION

Publication

EP 1254359 A1 20021106 (FR)

Application

EP 01907731 A 20010208

Priority

- FR 0100365 W 20010208
- FR 0001755 A 20000211

Abstract (en)

[origin: WO0159427A1] The invention concerns a non-intrusive method for characterising flow perturbations of a fluid inside a cylindrical pipe (2), which consists in: using as first indicator for determining the flow perturbations the variation of the fluid pressure: by providing around the pipe, at least a clamping ring, provided with a deformation sensor sensitive to deformations to which the pipe is subjected following fluid pressure variations, by measuring the deformation variations detected by the deformation sensor, and determining the pressure variations inside the pipe on the basis of the measurements of deformation variations detected by said sensor.

IPC 1-7

G01N 9/36; G01N 11/16

IPC 8 full level

G01N 9/36 (2006.01); **G01N 11/16** (2006.01)

CPC (source: EP US)

G01N 9/36 (2013.01 - EP US); **G01N 11/167** (2013.01 - EP US)

Citation (examination)

- US 4404854 A 19830920 - KREMPL PETER [AT], et al
- EP 0720006 A1 19960703 - PRINCIPIA RECH DEV [FR]
- US 4433329 A 19840221 - STREIB STEPHEN F [US]

Cited by

CN100414279C

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0159427 A1 20010816; AU 3562901 A 20010820; BR 0108201 A 20021029; CA 2399615 A1 20010816; EP 1254359 A1 20021106; FR 2805042 A1 20010817; FR 2805042 B1 20020906; NO 20023205 D0 20020702; NO 20023205 L 20020808; NO 319683 B1 20050905; US 2003010126 A1 20030116

DOCDB simple family (application)

FR 0100365 W 20010208; AU 3562901 A 20010208; BR 0108201 A 20010208; CA 2399615 A 20010208; EP 01907731 A 20010208; FR 0001755 A 20000211; NO 20023205 A 20020702; US 18192402 A 20020729