

Title (en)
ULTRASOUND FLOW SENSOR WITH A MODULO-2PI FOR A REMAINING PART TRACING

Title (de)
ULTRASCHALLSTRÖMUNGSSENSOR MIT MODULO-2PI-RESTNACHFÜHRUNG

Title (fr)
CAPTEUR D'ÉCOULEMENT À ULTRASON À AJUSTEMENT MODULO-2PI DE PARTIE RESTANTE

Publication
EP 1846734 A1 20071024 (DE)

Application
EP 05816309 A 20051206

Priority
• EP 2005056520 W 20051206
• DE 102005004331 A 20050131

Abstract (en)
[origin: DE102005004331A1] An ultrasonic signal travel time determination procedure measures the phase difference using quadrature demodulation for partial inversion of the received signal using a clock (8) and phase shifted clock (9) and integration with the remainder determined from signal characteristics. Independent claims are included for ultrasonic flow rate sensors using the procedure.

IPC 8 full level
G01F 1/7082 (2022.01)

CPC (source: EP US)
G01F 1/667 (2013.01 - EP US); **G01F 1/7082** (2013.01 - EP US); **G01N 29/024** (2013.01 - EP US); **G01N 29/38** (2013.01 - EP US); **G01N 29/4472** (2013.01 - EP US); **G01P 5/245** (2013.01 - EP US); **G01N 2291/02836** (2013.01 - EP US)

Citation (search report)
See references of WO 2006081887A1

Designated contracting state (EPC)
DE FR

DOCDB simple family (publication)
DE 102005004331 A1 20060803; **DE 102005004331 B4 20160504**; EP 1846734 A1 20071024; JP 2008528980 A 20080731; JP 4904289 B2 20120328; US 2008250868 A1 20081016; US 7614310 B2 20091110; WO 2006081887 A1 20060810

DOCDB simple family (application)
DE 102005004331 A 20050131; EP 05816309 A 20051206; EP 2005056520 W 20051206; JP 2007552537 A 20051206; US 57628405 A 20051206