

Title (en)

ZERO CROSSING DETECTION OF AN ULTRASOUND SIGNAL WITH A VARIABLE THRESHOLD

Title (de)

NULLDURCHGANGSDETEKTION EINES ULTRASCHALLSIGNALS MIT VARIABLEM SCHWELLENWERT

Title (fr)

DETECTION DE PASSAGE PAR ZERO D'UN SIGNAL ULTRASONORE AVEC VALEUR SEUIL VARIABLE

Publication

EP 1733193 A1 20061220 (DE)

Application

EP 05701608 A 20050126

Priority

- EP 2005050319 W 20050126
- DE 102004014674 A 20040325

Abstract (en)

[origin: WO2005093379A1] The invention relates to an ultrasound flow sensor provided with at least one ultrasound converter (A,B) for transmitting and receiving ultrasound signals (A0,B0) and a receiver (4) which is connected to the ultrasound converter (A,B) and which determines a zero crossing (N) of the ultrasound signal (A0,B0) as a reception moment (to) after the ultrasound signal (A0,B0) exceeds a given threshold (SW). Measuring accuracy can be improved substantially if the receiver (E) determines information on the amplitude (Amp) of the ultrasound signal (A0,B0) and varies the threshold (SW) according to the information thus determined.

IPC 8 full level

G01F 1/66 (2006.01); **G01P 5/24** (2006.01)

CPC (source: EP KR US)

G01F 1/66 (2013.01 - EP KR US); **G01F 1/667** (2013.01 - EP US); **G01P 5/00** (2013.01 - KR); **G01P 5/24** (2013.01 - KR); **G01P 5/245** (2013.01 - EP US)

Citation (search report)

See references of WO 2005093379A1

Cited by

CN109738015A; CN109186693A

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

DE 102004014674 A1 20051013; EP 1733193 A1 20061220; JP 2007530933 A 20071101; KR 20060134114 A 20061227; US 2008190213 A1 20080814; US 7543508 B2 20090609; WO 2005093379 A1 20051006

DOCDB simple family (application)

DE 102004014674 A 20040325; EP 05701608 A 20050126; EP 2005050319 W 20050126; JP 2007504386 A 20050126; KR 20067019521 A 20060922; US 58504905 A 20050126