

Title (en)

ULTRASONIC FLOW SENSOR FOR DETECTING A FLOW OF A FLUID MEDIUM

Title (de)

ULTRASCHALLSTRÖMUNGSSENSOR ZUR ERFASSUNG EINER STRÖMUNG EINES FLUIDEN MEDIUMS

Title (fr)

DÉTECTEUR DE FLUX PAR ULTRASONS POUR DÉTECTER LE FLUX D'UNE SUBSTANCE FLUIDE

Publication

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Application

**EP 10751861 A 20100818**

Priority

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- EP 2010062046 W 20100818

Abstract (en)

[origin: WO2011045107A1] The invention relates to an ultrasonic flow sensor (110) for detecting a flow of a fluid medium in a flow tube (112). The ultrasonic flow sensor (110) comprises at least one first ultrasonic transducer (116) and at least one second ultrasonic transducer (118) and at least one wave guide (122). The wave guide (122) is designed to conduct ultrasonic waves between the at least one first ultrasonic transducer (116) and the at least one second ultrasonic transducer (118) by means of reflection on walls (126) of the wave guide (122). The wave guide (122) is further designed for the fluid medium to flow through. The ultrasonic flow sensor (110) is equipped such that the ultrasonic waves can propagate between the first ultrasonic transducer (116) and the second ultrasonic transducer (118) on at least two ultrasonic paths (124). The ultrasonic waves are reflected on the different ultrasonic paths (124) with varying frequencies. Sound energies of the ultrasonic waves transmitted on the at least two different ultrasonic paths (124) differ from each other by no more than a factor of 100.

IPC 8 full level

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CPC (source: EP US)

**G01F 1/662** (2013.01 - EP US); **G01F 1/667** (2013.01 - EP US)

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