

Title (en)  
METHOD AND MEASUREMENT SYSTEM FOR DETERMINING AND/OR MONITORING THE FLOW OF A MEASUREMENT MEDIUM THROUGH A MEASURING TUBE

Title (de)  
VERFAHREN UND MESSSYSTEM ZUR BESTIMMUNG UND/ODER ÜBERWACHUNG DES DURCHFLUSSES EINES MESSMEDIUMS DURCH EIN MESSROHR

Title (fr)  
PROCÉDÉ ET SYSTÈME DE MESURE POUR DÉTERMINER ET/OU SURVEILLER LE DÉBIT D UN MILIEU À MESURER À TRAVERS UN TUBE DE MESURE

Publication  
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Application  
**EP 09769099 A 20090602**

Priority  
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Abstract (en)  
[origin: WO2009156250A1] Measurement system (1) and method for determining and/or monitoring the flow of a measurement medium (5) through a measuring tube (4), comprising a first ultrasound sensor (2) and at least one second ultrasound sensor (3), said first ultrasound sensor (2) comprising at least one electromechanical ultrasound converter element (6.1-6.6) and said second ultrasound sensor (3) comprising at least two electromechanical ultrasound converter elements (7.1-7.6). The ultrasound signals sendable by the first ultrasound sensor (2) through the measurement medium (5) can be received by the second ultrasound sensor (3) and the ultrasound signals sendable by the second ultrasound sensor (3) through the measurement medium can be received by the first ultrasound sensor (2). At least one control/evaluation unit determines the volumetric and/or mass flow of the measurement medium (5) flowing in the measurement tube (4) by way of a run-time difference method. During a diagnosis phase, ultrasound signals are sent from the first ultrasound sensor (2) through the measurement medium (5) to the second ultrasound sensor (3) and at least one process parameter is determined from the ultrasound signals received for each electromechanical ultrasound converter element (7.1-7.6) of the second ultrasound sensor (3), and the electromechanical ultrasound converter element (7.1-7.6) of the second ultrasound sensor (3) active in a subsequent measurement phase is selected based on the process parameter of the received ultrasound signals.

IPC 8 full level  
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CPC (source: EP US)  
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