

Title (en)

SIGNAL PROCESSING AND FIELD PROVING METHODS AND CIRCUITS FOR A CORIOLIS MASS FLOW METER

Title (de)

VERFAHREN ZUR SIGNALVERARBEITUNG UND KALIBRIERUNG VON ORT SOWIE SCHALTUNGEN FÜR EINEN CORIOLIS-
MASSENDURCHFLUSSMESSER

Title (fr)

PROCEDES DE TRAITEMENT DE SIGNAUX ET DE VERIFICATION SUR PLACE, ET CIRCUITS POUR DEBITMETRE-MASSE A
ACCELERATION DE CORIOLIS

Publication

EP 0929797 A1 19990721 (EN)

Application

EP 97903005 A 19970116

Priority

US 9700837 W 19970116

Abstract (en)

[origin: WO9831990A1] A signal processing apparatus and method for measuring a mass flow rate of a fluid flowing in conjunction with a surface of a Coriolis mass flow meter and a field-provable Coriolis mass flow meter. The apparatus includes: (1) a driver for creating a prescribed vibration in the surface, (2) a motion sensor for measuring a motion of the surface, (3) response characteristic determination circuitry, coupled to the motion sensor, for determining a response characteristic of the surface and (4) flow rate calculation circuitry, coupled to the response characteristic determination circuitry, for calculating a measured mass flow rate of the fluid as a function of the motion and the response characteristic. The field-provable meter employs the response characteristic to monitor or compare meter performance without requiring a separate proving device.

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G01F 1/84

IPC 8 full level

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CPC (source: EP)

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