

Title (en)  
APPARATUS FOR MASS FLOW RATE AND DENSITY MEASUREMENT.

Title (de)  
VORRICHTUNG ZUM MESSEN DER MASSENFLUSSRATE UND -DICHT.

Title (fr)  
APPAREIL DE MESURE DE LA DENSITE ET DE LA VITESSE DE DEBIT-MASSE.

Publication  
**EP 0185709 A4 19871102 (EN)**

Application  
**EP 85902919 A 19850603**

Priority  
US 61680884 A 19840604

Abstract (en)  
[origin: WO8505677A1] A Coriolis mass flow rate measuring apparatus including at least one helically configured loop (30) of conduit, a drive mechanism (42) for causing oscillatory movement of a portion of the loop in a direction normal to the direction of flow through the conduit portion and generally parallel to the central axis of the loop, and one or more detectors (46), (48), (56) for detecting the motion resulting from the Coriolis forces exerted on other portions of the loop as a result of the mass flow therethrough and the oscillatory translation thereof. A strain gage (208) and associated processing electronics are also used in combination with the mass flow rate information to determine the density of the flow.

IPC 1-7  
**G01F 1/84**

IPC 8 full level  
**G01F 1/84** (2006.01); **G01N 9/00** (2006.01)

CPC (source: EP)  
**G01F 1/8413** (2013.01); **G01F 1/8422** (2013.01); **G01F 1/8427** (2013.01); **G01F 1/8436** (2013.01); **G01F 1/8481** (2013.01); **G01F 1/8486** (2013.01); **G01N 9/002** (2013.01); **G01N 2009/006** (2013.01)

Citation (search report)

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- [X] GB 964447 A 19640722 - WILFRED ROTH
- [Y] EP 0109218 A2 19840523 - MICRO MOTION INC [US]
- [Y] US 4127028 A 19781128 - COX BRUCE M, et al
- See references of WO 8505677A1

Cited by  
DE4124296A1; DE4016907A1; DE4016907C3

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 8505677 A1 19851219**; AU 4409585 A 19851231; AU 584903 B2 19890608; EP 0185709 A1 19860702; EP 0185709 A4 19871102; JP H0718734 B2 19950306; JP S61502281 A 19861009

DOCDB simple family (application)  
**US 8501046 W 19850603**; AU 4409585 A 19850603; EP 85902919 A 19850603; JP 50252485 A 19850603