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(54) **LOW MASS CORIOLIS MASS FLOWMETER HAVING A LOW MASS DRIVE SYSTEM**

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(58) **Field of Classification Search** None
See application file for complete search history.

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(57) **ABSTRACT**

A Coriolis mass flowmeter (300) having a low mass drive system comprising a driver coil (D) for vibrating flow tube means (102). The Coriolis mass flowmeter does not use a magnet affixed to the flow tube means. Instead, the flow tube means is coated with or is integral to magnetic material (103) that responds to the magnetic fields generated by the driver coil to vibrate the flow tube means. The flow tube means may comprise one (102) or more (1402C1, 1402C2) flow tubes. The magnetic material may be ferrous material devoid of an internal magnetic field. Alternatively the magnetic material may be steel or stainless steel having internal magnetic fields.

42 Claims, 8 Drawing Sheets

