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Huber et al.

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(54) **MEASURING TRANSDUCER OF VIBRATION-TYPE WITH FOUR CURVED MEASURING TUBES**

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See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 12 days.

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This patent is subject to a terminal disclaimer.

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(65) **Prior Publication Data**

(57) **ABSTRACT**

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The measuring transducer comprises: a transducer housing (7₁), of which an inlet-side, housing end is formed by means of an inlet-side, flow divider (20₁) having four flow openings (20_{1A}, 20_{1B}, 20_{1C}, 20_{1D}) and an outlet-side, housing end is formed by means of an outlet-side, flow divider (20₂) having four flow openings (20_{2A}, 20_{2B}, 20_{2C}, 20_{2D}); as well as a tube arrangement having four, curved, or bent, measuring tubes (18₁, 18₂, 18₃, 18₄) connected to the flow dividers (20₁, 20₂) for guiding flowing medium along flow paths connected in parallel, wherein each of the four measuring tubes opens with an inlet-side, measuring tube end into one of the flow openings of the flow divider (20₁) and with an outlet-side, measuring tube end into one the flow openings of the flow divider (20₂). The transducer further comprises an exciter mechanism for exciting oscillations of said measuring tube. The tube arrangement exhibits a natural bending oscillation mode, called V-Mode, and the exciter mechanism is adapted to excite bending oscillation in said V-mode.

Related U.S. Application Data

(63) Continuation of application No. 12/971,515, filed on Dec. 17, 2010, now Pat. No. 8,695,436, and a continuation of application No. 12/970,072, filed on Dec. 16, 2010, now Pat. No. 8,613,227.

(60) Provisional application No. 61/344,561, filed on Aug. 20, 2010, provisional application No. 61/282,132, filed on Dec. 22, 2009.

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G01F 1/84 (2006.01)

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(58) **Field of Classification Search**
CPC G01F 1/84

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