

Title (en)

DEVICE FOR DETERMINING AND/OR MONITORING THE VOLUME FLOW RATE AND/OR MASS FLOW RATE OF A MEDIUM TO BE MEASURED

Title (de)

VORRICHTUNG ZUR BESTIMMUNG UND/ODER BERWACHUNG DES VOLUMEN- UND/ODER MASSENDURCHFLUSSES EINES MESSMEDIUMS

Title (fr)

DISPOSITIF POUR DETERMINER ET/OU SURVEILLER LE DEBIT VOLUMIQUE ET/OU MASSIQUE D'UNE SUBSTANCE A MESURER

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Application

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Priority

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Abstract (en)

[origin: WO2005064284A2] The invention relates to an ultrasonic flow meter (1) which is characterized in that it uses a low amount of power. According to the invention, a control/evaluation unit (11) determines several sampled values ([coded mathematical formula], wherein $i = 1, 2, 3, \dots$) of a received test signal at defined points in time (t) within a given interval and interpolates the sampled values by means of a constant function (f(t)), said constant function (f(t)) being formed by the sum of a given number (n [encoded mathematical formula] N) of wavelets (W). Each wavelet (W) corresponds to the product of a sampled value and a fractional function ([coded mathematical formula]) with a Gaussian curve ([coded mathematical formula], [coded mathematical formula] [coded mathematical formula] R).

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