Title (en)

METHOD FOR THE MAGNETIC-INDUCTIVE DETERMINATION OF THE FLOW RATE OF A MEDIUM

Title (de)

VERFAHREN ZUR MAGNETISCH-INDUKTIVEN BESTIMMUNG DER DURCHFLUSSRATE EINES MEDIUMS

Title (fr)

PROCEDE DE DETERMINATION MAGNETO-INDUCTIVE DU DEBIT D'UN AGENT

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Application

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Abstract (en)

[origin: WO2005012842A1] The invention relates to a magnetic-inductive method for determining the flow rate of a medium that penetrates a measuring tube (2) in the direction of the axis thereof. In order to be able to detect the formation of a coating at an early stage and with great reliability, a test pulse (Up) having a defined duration (tp) is applied to the measuring electrode (3, 4); at least one response signal to the test pulse (Up) is determined at least at two measurement times (t1, t2) located within a time slot (tend tbegin) which is selected such that no foreseeable unwanted signals occur at the measuring electrode (3, 4) during said time slot (tend tbegin); the relaxation period (t) or the time it takes the measuring electrode (3, 4) to reach a predefined discharged state (Ui) is determined based on the response signal determined at the measurement times (t1, t2); a malfunction of the measuring electrode (3, 4) is or can be detected based on the determined relaxation period (t) or the time it takes the measuring electrode (3, 4) to reach the defined discharged state (Ui).

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