

Title (en)

Method for determining the fouling tendency of a liquid and quartz microbalance for using the method

Title (de)

Verfahren zur Feststellung der Verschmutzungsanfälligkeit von Flüssigkeiten und Quarzmikrowaage zu deren Durchführung

Title (fr)

Procédé de mesure du pouvoir entartrant d'un liquide et microbalance à quartz pour la mise en oeuvre de ce procédé

Publication

EP 1217359 A9 20020904 (FR)

Application

EP 01403308 A 20011220

Priority

FR 0016696 A 20001220

Abstract (en)

[origin: EP1217359A1] Measuring the furring capacity of a liquid in contact with a substantially hotter wall, e.g. of a heat exchanger pipe, uses a micro-balance (10) with a quartz vane (11) and two electrodes - an upper excitation electrode (12) or working electrode, and a lower excitation electrode (14). The two electrodes are connected to an oscillator (55) which vibrates the quartz vane at one of its resonance frequencies. The micro-balance, located in a cell through which the furring liquid is continuously circulated, also has a heating system (20, 22, 56) for the lower electrode, a system (12, 24, 58) for continuously measuring the temperature of the working electrode, a heat regulator (61) to maintain its temperature at the actual temperature of the liquid employed, and a continuous vibration frequency meter for the quartz vane. The temperature measuring system comprises a thermocouple with two electrodes, one being the working electrode (12) and the other of a different metal forming a junction with it.

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CPC (source: EP)

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Cited by

CN115479932A; EP3605056A4; CN109142517A; IT201900006274A1; CN113785194A; AU2020261165B2; US10718735B2; WO2020216469A1

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