

Title (en)

ACOUSTIC SENSOR FOR OBSTRUCTION IN A DEVICE CIRCULATING VORTEX-FLOW FLUID

Title (de)

AKUSTISCHER VERSTOPFUNGSDETEKTOR IN EINER FLÜSSIGKEITSDURCHFLUSSWIRBELVORRICHTUNG

Title (fr)

DETECTEUR ACOUSTIQUE D'OBSTRUCTION DANS UN DISPOSITIF D'ECOULEMENT DE FLUIDE PAR VORTEX

Publication

EP 1478467 A1 20041124 (FR)

Application

EP 02702192 A 20020225

Priority

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Abstract (en)

[origin: WO03070377A1] The invention concerns an acoustic sensor (44) for identifying obstruction of a circular grit trap for recycling fine sand in an industrial water clarifying plant. The circular grit trap comprises a cylindrical body having an outer wall and having at one first end a first sand-containing fluid inlet for receiving sludge and fine sand and a first overflow outlet of fluid not containing sand orthogonal to the fluid inlet, to evacuate said sludge, and at a second end a second sand-containing fluid underflow outlet coaxial with the first fluid outlet, to recover said sand. The acoustic sensor is sensitive to the noise radiated by the flow of the sand-containing fluid in the circular grit trap and is applied against the outer wall of the cylindrical body of the circular grit trap, in the plane of the fluid inlet but not coaxially therewith. Said acoustic sensor transmits a warning signal when an abnormal amplitude variation of sound level is measured in the bands of 1/3 octave centered on frequencies of 25 Hz or 200 Hz.

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Citation (search report)

See references of WO 03070377A1

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