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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G01N 29/02 — A1

(11) International Publication Number: WO 97/40372

(43) International Publication Date: 30 October 1997 (30.10.97)

(21) International Application Number: PCT/EP97/02071

(22) International Filing Date: 23 April 1997 (23.04.97)

(30) Priority Data:
MI96A000812 24 April 1996 (24.04.96) IT

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(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
With international search report.

(54) Title: DEVICE TO DETECT THE SPEED PROFILE OF CONCRETE FLOWING INTO A PIPELINE

(57) Abstract

A device to detect the speed profile of concrete flowing through a pipeline with radial symmetry comprises acoustical probe means, apt to send through said pipeline and the concrete a supersonic ray inclined in respect of the pipeline axis and to receive a disturbed supersonic ray in response, as well as an electronic circuit apt to analyse the signals sent by said probe means and obtain therefrom a diagram showing the speed profile of the concrete. According to the invention, said probe means make use of a supersonic ray of frequency between 20 and 500 KHz, and said electronic circuit processes the signals sent by the probe means, indicating the speed, with an updating frequency from 10 to 70 times per second and deprives said signals from their components derived from the propagation rate in the concrete, to obtain a measurement of the speed along the acoustical axis, which is not relative and has its own sign.

