Title (en)

RHEOMETER FOR HIGH SOLIDS SUSPENSIONS

Title (de)

RHEOMETER FÜR SUSPENSIONEN MIT HOHEM FESTSTOFFGEHALT

Title (fr)

RHEOMETRE DESTINE A DES SUSPENSIONS A FORTE TENEUR EN PARTICULES SOLIDES

Publication

EP 0894258 A4 20000510 (EN)

Application

EP 97920406 A 19970407

Priority

- US 9706263 W 19970407
- US 1556496 P 19960418

Abstract (en)

[origin: WO9739332A1] A rheometer (10) for measuring viscosity at near-zero shear rate, for predicting stiffness or slump resistance of a free-standing paste at rest with high suspended solids therein, is provided that has a moving rod (42) with a ball-shaped tip (40) fastened at the end thereof, travelling vertically downwards at a preselected constant speed via a linearly moveable slide member (16) mounted on a slide guide bearing rail (20, 22) into a pool of paste placed in a container (C), while a digital force gauge (38) attached to such a rod (42) monitors, measures and records the maximum force exerted on the ball tip (40) during its impingement and subsequent travel downward thru the paste pool at such preselected constant speed as maintained by a controller module (34), ball screw means (28) and stepper motor (30).

IPC 1-7

G01N 3/34; G01N 11/12; G01N 3/48; C03C 8/16; G01N 11/10

IPC 8 full level

G01N 11/00 (2006.01); **C03C 8/16** (2006.01); **G01N 3/34** (2006.01); **G01N 3/48** (2006.01); **G01N 11/10** (2006.01); **G01N 11/12** (2006.01)

CPC (source: EP KR)

C03C 8/16 (2013.01 - KR); **G01N 3/34** (2013.01 - KR); **G01N 3/48** (2013.01 - KR); **G01N 11/10** (2013.01 - EP); **G01N 11/12** (2013.01 - KR)

Citation (search report)

- [A] CHEE K K ET AL: "FALLING COAXIAL CYLINDER VISCOMETER WITH WIDE SHEAR RATE RANGE", RHEOLOGICA ACTA,DE,DIETRICH STEINKOPFF VERLAG, DARMSTADT, vol. 16, no. 6, 1 January 1977 (1977-01-01), pages 635 - 642, XP000652416, ISSN: 0035-4511
- [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 082 (P - 116) 20 May 1982 (1982-05-20)
- See references of WO 9739332A1

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DE NL

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WO 9739332 A1 19971023; CN 1216610 A 19990512; EP 0894258 A1 19990203; EP 0894258 A4 20000510; JP 2000508772 A 20000711; KR 20000005528 A 20000125; TW 344794 B 19981111

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US 9706263 W 19970407; CN 97193896 A 19970407; EP 97920406 A 19970407; JP 53731697 A 19970407; KR 19980708324 A 19981017; TW 86105088 A 19970414