

Title (en)
DOSING APPARATUS FOR DETERGENT PASTE

Title (de)
DOSIERUNG VON WASCHMITTELPASTEN

Title (fr)
DISPOSITIF DE DOSAGE DE PATE DE LAVAGE

Publication
EP 0931191 A1 19990728 (DE)

Application
EP 97912090 A 19971001

Priority
• DE 19641742 A 19961010
• EP 9705400 W 19971001

Abstract (en)
[origin: US6241378B1] The invention relates to a dosing apparatus for pastelike substances and mixtures thereof with a solvent by means of an injector, comprising an integrated shutoff device. The apparatus contains a detection device which detects the amount of paste according to conductimetry. The shutoff device is a dual piston valve closing an opening between the paste supply tube and an injector suction chamber as well as an opening between the solvent supply tube and an injector pre-chamber. The invention also relates to a method for dosing pastelike substances and the mixtures thereof with a solvent by means of such a device. By opening a shut-off device in a supply tube for a pressurized solvent, a dual piston valve moves against an opposing force. This releases a connection between a paste supply tube and an injection suction chamber, followed by a connection between the solvent supply tube and the injector pre-chamber. The paste is suctioned by an injector operating according to the hydraulic pump principle and mixed with released solvent. The mixture is injected into a measuring section wherein a conductimetry device measures the amount of paste dissolved in the mixture. The shut-off device is closed when the required dose of paste is obtained, whereupon the circuit which was previously in an open position is shifted in reverse order to a closed position.

IPC 1-7
D06F 39/02

IPC 8 full level
D06F 39/02 (2006.01); **D06F 33/37** (2020.01)

CPC (source: EP US)
D06F 39/022 (2013.01 - EP US); **D06F 33/37** (2020.02 - EP US)

Citation (search report)
See references of WO 9815682A1

Cited by
CN108193442A

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)
US 6241378 B1 20010605; AT E200316 T1 20010415; DE 19641742 A1 19980423; DE 59703308 D1 20010510; DK 0931191 T3 20010605; EP 0931191 A1 19990728; EP 0931191 B1 20010404; ES 2155676 T3 20010516; GR 3035779 T3 20010731; NO 991682 D0 19990409; NO 991682 L 19990409; PT 931191 E 20010928; WO 9815682 A1 19980416

DOCDB simple family (application)
US 28426699 A 19990510; AT 97912090 T 19971001; DE 19641742 A 19961010; DE 59703308 T 19971001; DK 97912090 T 19971001; EP 9705400 W 19971001; EP 97912090 A 19971001; ES 97912090 T 19971001; GR 20010400628 T 20010423; NO 991682 A 19990409; PT 97912090 T 19971001