

Title (en)

Apparatus for placing an additive

Title (de)

Vorrichtung zum Einbringen von Zusatzmaterial

Title (fr)

Dispositif pour introduire un matériau additif

Publication

**EP 0903441 B1 20030618 (DE)**

Application

**EP 98117622 A 19980917**

Priority

DE 29716935 U 19970920

Abstract (en)

[origin: EP0903441A2] The arrangement is in the form of a transfer vibrator (13) with a transfer pipe (28). A hopper (27) with charging opening (30) is connected at the bottom area, to a vertical transfer pipe with a lower outlet (33). The vibrator mechanism (29) is housed in the bottom part of the pipe. Inside the pipe, a loosening rod (36) moves periodically in the lengthwise direction. The rod may extend from the hopper to the top end of the vibrator mechanism, and protruding transverse spikes (37) or hooks can be mounted on it. It can be actuated directly by a double-acting ram (35) or by a rotary crankshaft. Its bottom end can work in a lengthwise guide (38).

IPC 1-7

**E02D 3/12**; **E02D 3/10**

IPC 8 full level

**E02D 3/10** (2006.01); **E02D 3/12** (2006.01)

CPC (source: EP)

**E02D 3/08** (2013.01); **E02D 3/123** (2013.01); **E02D 7/14** (2013.01)

Designated contracting state (EPC)

AT BE DE FR GB IT

DOCDB simple family (publication)

**EP 0903441 A2 19990324**; **EP 0903441 A3 19990506**; **EP 0903441 B1 20030618**; AT E243285 T1 20030715; DE 29716935 U1 19980212; DE 59808740 D1 20030724

DOCDB simple family (application)

**EP 98117622 A 19980917**; AT 98117622 T 19980917; DE 29716935 U 19970920; DE 59808740 T 19980917