

Title (en)

Device for automatically performing ground consolidation steps of the jet grouting type

Title (de)

Vorrichtung zur automatischen Durchführung von Bodenverbesserungsschritten mit Düsenstrahlenverfahren

Title (fr)

Dispositif pour effectuer automatiquement les étapes de consolidation du sol du type cimentation par injection

Publication

EP 1832682 A2 20070912 (EN)

Application

EP 07103529 A 20070305

Priority

IT PR20060022 A 20060309

Abstract (en)

The invention deals with the field of devices for performing ground consolidation steps of the Jet grouting type and more precisely refers to a device that is inserted at the end of a rod before the drilling tool in order to supply water or concrete mixture according to the consolidation process steps. The device provides for a connecting body of the drilling tool with the rod, in which first nozzles (6) and second nozzles (9) are inserted, of which the first ones are always in communication with the ground and the second ones can be clogged in certain operating steps. A valve (50) is provided, inside the body, that, according to the pressure of liquid sent to the rod, assumes three different positions, respectively for supplying water to drilling tool during a drilling step, for supplying high-pressure water to the first nozzles during a pre-cutting and crushing step, and for supplying grouting mixture to first and second nozzles for a grouting step.

IPC 8 full level

E02D 3/12 (2006.01); **E02D 5/46** (2006.01); **E02D 5/68** (2006.01)

CPC (source: EP)

E02D 3/12 (2013.01); **E02D 5/46** (2013.01); **E02D 5/68** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1832682 A2 20070912; **EP 1832682 A3 20120620**; IT PR20060022 A1 20070910

DOCDB simple family (application)

EP 07103529 A 20070305; IT PR20060022 A 20060309