

Title (en)

Method and equipment for constructing micropiles in soil

Title (de)

Verfahren und apparatus zur Herstellung eines Mikropfahls im Erdboden

Title (fr)

Procédé et dispositif de fabrication Micropieu

Publication

**EP 1719841 A1 20061108 (EN)**

Application

**EP 06007033 A 20060403**

Priority

IT PC20050020 A 20050408

Abstract (en)

This invention relates to a method and the corresponding equipment for constructing concrete micropiles of the type used for soil consolidation, which involves the use of a drilling rod which also acts as reinforcement for the pile, and injection of cement grout directly during drilling, the injection being performed from the surface downwards, that includes the following stages: #c soil drilling with a rod consisting of a drilling bar fitted at the tip with a bit equipped with nozzles, and simultaneous high-pressure injection of grout through said nozzles; #c when the bar has fully penetrated into the soil, connection of a second bar by means of a sleeve coupling and continuance of drilling with simultaneous grout injection; #c when the design depth has been reached, detachment of said rod, which is left in the ground to act as reinforcement for the pile thus constructed.

IPC 8 full level

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CPC (source: EP)

**E02D 5/46** (2013.01); **E02D 5/80** (2013.01); **E02D 15/04** (2013.01); **E02D 5/808** (2013.01)

Citation (search report)

- [X] US 5256004 A 19931026 - GEMMI BRUNO [IT], et al
- [A] US 2001048854 A1 20011206 - CARTER ERNEST E [US]
- [A] US 2002108752 A1 20020815 - MOREY JACQUES [FR], et al

Cited by

EP3240931B1; JP2015203266A; EP1959057A3; ITPR20080080A1; CN111827294A; CN103953051A; CN104895062A; JP2016006264A; EP3037586A1; US8066452B2; EP1959057A2

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