

Title (en)
Boring method and apparatus

Title (de)
Bohrverfahren und Vorrichtung

Title (fr)
Méthode de forage et dispositif

Publication
EP 1520936 A2 20050406 (EN)

Application
EP 04012264 A 20040524

Priority
JP 2003379126 A 20031002

Abstract (en)
A boring method that is able to construct piles of a prescribed diameter and enables mud waste generated in the formation process to be disposed of as surplus earth. Upper and lower jetting units with jetting nozzles are provided on the lower end of a multi-cylinder rod. Compressed air and water are jetted from the upper jetting unit (61,62) to cut a ground improvement region and drain away mud waste produced in the process. The lower jetting unit (71,72) has jetting nozzles oriented in mutually opposite directions. One nozzle jets into cement milk into the ground to harden the earth, and the other nozzle supplies a reagent that hardens the cement milk, to accelerate the ground hardening and construct a pile of the prescribed diameter.

IPC 1-7
E02D 3/12

IPC 8 full level
E02D 3/12 (2006.01); **E02D 5/46** (2006.01)

CPC (source: EP)
E02D 3/12 (2013.01); **E02D 5/46** (2013.01)

Cited by
CN115198739A; JP2017172279A; FR3088942A1; EP3744902A3; US11982064B2; WO2020109682A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1520936 A2 20050406; EP 1520936 A3 20060315; JP 2005113647 A 20050428; JP 3626972 B1 20050309

DOCDB simple family (application)
EP 04012264 A 20040524; JP 2003379126 A 20031002