

Title (en)

EARTH AUGER DRILLING DEVICE AND METHOD FOR AUTOMATIC DRILLING OF HOLES IN THE GROUND

Title (de)

ERDBOHRGERÄT UND VERFAHREN ZUM AUTOMATISCHEN BOHREN VON LÖCHERN IN DEN BODEN

Title (fr)

DISPOSITIF ET PROCEDE DE PERÇAGE AUTOMATIQUE DE TROUS DANS LE SOL

Publication

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Application

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Priority

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Abstract (en)

The invention relates to an earth drilling device for automatically performing a drilling operation, comprising:- an earth drill comprising one or more earth drill pipes;- a drive;- a rotatable storage device for storing the earth drill pipes which are provided with a connecting end having an end diameter greater than a pipe diameter of a main part of the earth drill pipe, and provided with:~ a central shaft;~ at least one holder arranged on the central shaft and extending to a peripheral edge provided with receiving openings for receiving an earth drill pipe;- at least one displacing arm provided with a gripper hand with fingers;characterized in that a distance between the receiving openings, as seen in a direction along the peripheral edge, and a thickness of the fingers are equal to the difference between the diameter of the connecting end and the diameter of the main part.The invention further relates to a method for automatically performing a ground drilling.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] US 2012103623 A1 20120503 - WIJNING DIEDERICK BERNARDUS [NL], et al
- [X] US 10260294 B2 20190416 - ROODENBURG JOOP [NL], et al
- [X] US 9045948 B2 20150602 - ROODENBURG JOOP [NL], et al
- [X] US 2017074056 A1 20170316 - ROODENBURG JOOP [NL], et al
- [X] US 2001020550 A1 20010913 - CASAGRANDE MAURO [IT]
- [X] US 10975638 B2 20210413 - ROODENBURG JOOP [NL], et al
- [I] CN 112647870 A 20210413 - UNIV CHINA GEOSCIENCES WUHAN
- [A] US 4445579 A 19840501 - BELLO PAUL [US]
- [A] CN 110656893 A 20200107 - WANG HAIFENG
- [A] GB 2155974 A 19851002 - BELLO PAUL

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