

Title (en)

Method and apparatus for installing a house service connection using directional drilling

Title (de)

Verfahren und Vorrichtung zur Erstellung eines Hausanschlusses mittels gerichteten Bohrens

Title (fr)

Procédé et dispositif pour l'installation d'un branchement domestique au moyen d'un forage dirigé

Publication

EP 0955444 A3 20020925 (DE)

Application

EP 99108573 A 19990506

Priority

DE 19820483 A 19980507

Abstract (en)

[origin: EP0955444A2] The outer wall (20) of the building (10) is drilled through, using a drilling device with a controllable rock and concrete drill head. A completely controlled bore is made up to the main conduit (16). The conduit to be laid is connected to the drill rod (42). The drill rod is then drawn backwards to the drilling apparatus until the conduit in the building is reached. The bore crown for concrete and rock drilling can be replaced by one (38) for soft soil which is remotely controlled. The main conduit (16) is accessible via a connecting ditch (28).

IPC 1-7

E21B 7/06; **E21B 7/18**; **E21B 10/38**; **E21B 10/40**; **E21B 10/42**; **E21B 10/26**; **E21B 10/60**; **E21B 47/01**; **E21B 7/28**

IPC 8 full level

E21B 7/06 (2006.01); **E21B 7/18** (2006.01); **E21B 10/26** (2006.01); **E21B 10/38** (2006.01); **E21B 10/40** (2006.01); **E21B 10/42** (2006.01); **E21B 10/60** (2006.01); **E21B 47/022** (2012.01)

CPC (source: EP US)

E21B 7/06 (2013.01 - EP); **E21B 7/064** (2013.01 - EP); **E21B 7/18** (2013.01 - EP); **E21B 10/38** (2013.01 - EP); **E21B 10/40** (2013.01 - EP US); **E21B 10/60** (2013.01 - EP); **E21B 47/0232** (2020.05 - EP); **E21B 10/26** (2013.01 - EP US); **E21B 10/42** (2013.01 - EP US)

Citation (search report)

- [Y] CH 683116 A5 19940114 - PETER SCHENK
- [A] US 4384624 A 19830524 - DUKE JOHN W [US], et al
- [A] US 5282696 A 19940201 - SOLOMON JIM [US], et al
- [A] EP 0494408 A1 19920715 - TERRA AG TIEFBAUTECHNIK [CH]
- [A] DE 1811421 A1 19700618 - THALER JAKOB
- [Y] DE 4423670 A1 19960104 - BANNWARTH EGON DIPL ING [DE]
- [Y] US 3473616 A 19691021 - JOHANSSON FRITZ AGNE
- [Y] DE 285283 C
- [Y] GB 2172225 A 19860917 - DOBSON PARK IND
- [A] FR 2377519 A1 19780811 - SALZGITTER MASCHINEN AG [DE]
- [Y] GAEBELEIN W: "NEUENTWICKLUNG IN DER GRABENLOSEN AUSWECHSLUNG VON TRINKWASSER- HAUSANSCHLUSSLEITUNGEN AUS STAHL UND BLEI NEW DEVELOPMENTS IN NON-DIGGING REPLACEMENT OF STEEL AND LEAD DOMESTIC DRINKING WATER SERVICE PIPING", 3R INTERNATIONAL, VULKAN-VERLAG, ESSEN, DE, vol. 35, no. 1, 1996, pages 39 - 44, XP000641691, ISSN: 0340-3386
- [Y] "WORLD OIL'S 1994 DRILL BIT CLASSIFIER", WORLD OIL, GULF PUBLISHING CO. HOUSTON, US, vol. 215, no. 9, 1 September 1994 (1994-09-01), pages 69 - 70, XP000474190, ISSN: 0043-8790

Cited by

EP1803892A3; AT18014U1; CN105804659A; GB2412935A; GB2412935B; WO03001021A1; WO2004053285A1

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