

Title (en)

BORING RAM FOR LAYING SERVICE LINES WITHOUT EXCAVATION

Publication

EP 0356666 A3 19910130 (DE)

Application

EP 89112633 A 19890711

Priority

DE 3829628 A 19880901

Abstract (en)

[origin: EP0356666A2] A boring ram (1, 101) for laying service lines in the ground without excavation, with a percussion piston (3, 103) axially displaceable in a tubular housing (2, 102) and operated by means of a pressure medium via a supply hose (7, 107) connected to the housing (2, 102), the supply hose (7, 107) being connected to the end of the housing (2, 102) at the front in the direction of advance (5, 105), does not impede work on new pipes pushed into the ground conduit produced or drawn in immediately afterwards by the boring ram (1, 101). <IMAGE>

IPC 1-7

E21B 4/14; E21B 7/26

IPC 8 full level

E21B 7/26 (2006.01); **E21B 4/14** (2006.01); **E21B 7/30** (2006.01)

CPC (source: EP US)

E21B 4/145 (2013.01 - EP US); **E21B 7/30** (2013.01 - EP US)

Citation (search report)

- [X] EP 0190933 A2 19860813 - BRICKHOUSE DUDLEY PLC [GB]
- [Y] US 4070948 A 19780131 - TKACH KHAIM BERKOVICH, et al
- [Y] US 4749050 A 19880607 - RITTER LESTER L [US]
- [X] EP 0182551 A2 19860528 - ALH SYST LTD [GB]
- [A] US 4596292 A 19860624 - CROVER STEPHEN E [US]
- [AD] DE 2634066 A1 19780202 - SCHMIDT PAUL

Designated contracting state (EPC)

BE CH FR GB IT LI NL

DOCDB simple family (publication)

EP 0356666 A2 19900307; EP 0356666 A3 19910130; EP 0356666 B1 19931013; DE 3829628 A1 19900315; DE 3829628 C2 19900816; JP H02101281 A 19900413; US 4981181 A 19910101

DOCDB simple family (application)

EP 89112633 A 19890711; DE 3829628 A 19880901; JP 21588389 A 19890822; US 38733589 A 19890728