

Title (en)
PROCESS FOR REMOVING THE CORE OF EARTH FROM A PIPE LAID WITHOUT EXCAVATION AND SCRAPER FOR IMPLEMENTING SAID PROCESS

Title (de)
VERFAHREN ZUM AUSBAU EINES ERDKERNS AUS EINEM GRABENLOS VERLEGTEM ROHR UND MOLCH ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)
PROCEDE PERMETTANT D'EXTRAIRE UN NOYAU DE TERRE HORS D'UNE CANALISATION POSEE SANS EXCAVATION ET ECOUVILLON DE MISE EN OEUVRE DUDIT PROCEDE

Publication
EP 0745175 B1 19990428 (DE)

Application
EP 95909623 A 19950209

Priority
• DE 9500159 W 19950209
• DE 4404712 A 19940215

Abstract (en)
[origin: US5758730A] PCT No. PCT/DE95/00159 Sec. 371 Date Aug. 14, 1996 Sec. 102(e) Date Aug. 14, 1996 PCT Filed Feb. 9, 1995 PCT Pub. No. WO95/21984 PCT Pub. Date Aug. 17, 1995A go-devil (1) is inserted into a pipe end of a pipe (5) laid in place in trenchless manner by ramming or pressing and of which the earth core (7) shall be removed by a method of the invention, said go-devil being displaced longitudinally through said pipe and forcing the said earth core out at the other pipe end. The advance of the go-devil (1) takes place step by step by means of a length-variable actuator (10) bracing itself against the inside wall (4) of the pipe (5), said actuator after each forward stroke being returned into its initial position and its bracing being made to follow in the direction of advance by the amount of the step taken. The go-devil (1) is composed of a head plate (2), a length-variable actuator (10) and bracing systems (11, 22), the head plate (2) being linked to one end of the actuator (10) and to a first bracing system (11) and the other end of the actuator (10) being linked to a second bracing system (22), these bracing systems (11, 22) being alternatively displaceable into one bracing position wherein they can be forced against the inside wall (4) of a pipe or into a disengaged position wherein they are off the inside wall (4) of the pipe.

IPC 1-7
E21B 7/00; **E21B 7/20**; **E21B 4/18**

IPC 8 full level
E21B 7/04 (2006.01); **B08B 9/04** (2006.01); **E21B 4/18** (2006.01); **E21B 7/00** (2006.01); **E21B 7/20** (2006.01); **E21B 7/26** (2006.01); **E21B 37/04** (2006.01); **E21D 9/087** (2006.01)

CPC (source: EP US)
B08B 9/049 (2013.01 - EP US); **E21B 4/18** (2013.01 - EP US); **E21B 37/04** (2013.01 - EP US)

Designated contracting state (EPC)
AT CH DE ES FR IT LI LU NL

DOCDB simple family (publication)
US 5758730 A 19980602; AT E179487 T1 19990515; AU 1804395 A 19950829; DE 19580049 D2 19961219; DE 4404712 A1 19950817; DE 59505779 D1 19990602; EP 0745175 A1 19961204; EP 0745175 B1 19990428; JP H10503814 A 19980407; WO 9521984 A1 19950817

DOCDB simple family (application)
US 68744296 A 19960814; AT 95909623 T 19950209; AU 1804395 A 19950209; DE 19580049 T 19950209; DE 4404712 A 19940215; DE 59505779 T 19950209; DE 9500159 W 19950209; EP 95909623 A 19950209; JP 52090295 A 19950209