

Title (en)
DATA TRANSMISSION DEVICE

Title (de)
VORRICHTUNG ZUR DATENÜBERTRAGUNG

Title (fr)
DISPOSITIF DE TRANSMISSION DE DONNÉES

Publication
EP 1570157 B1 20150812 (FR)

Application
EP 03789526 A 20031128

Priority
• FR 0303526 W 20031128
• FR 0215608 A 20021210

Abstract (en)
[origin: FR2848363A1] The device has a cavity (13) defined under-ground starting from a surface of a soil (17). The cavity is equipped with a tubular unit (21,25), which conducts electricity. A cable (3) is deposited in the unit between a point at the surface and another point within the cavity for transmitting electrical signals between the points. The cable has a part of loop for conducting the signals between a transmitting (9) and receiving unit (11).

IPC 8 full level
E21B 47/12 (2006.01)

CPC (source: EP KR US)
E21B 47/13 (2020.05 - EP KR US)

Citation (examination)
• US 6392561 B1 20020521 - DAVIES EVAN L [CA], et al
• EP 0773345 A1 19970514 - SCHLUMBERGER TECHNOLOGY BV [NL], et al
• US 5394141 A 19950228 - SOULIER LOUIS [FR]
• US 5048603 A 19910917 - BELL LARRY M [US], et al
• GB 2101178 A 19830112 - OTIS ENG CO [US]
• WO 0186831 A1 20011115 - BAKER HUGHES INC [US]
• US 4876539 A 19891024 - FARQUE CLAUDE A [US]
• US 3453530 A 19690701 - ATTALI GEORGES
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• US 4532614 A 19850730 - PEPPERS JAMES M [US]
• WO 9504290 A1 19950209 - MOORE BOYD B [US]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
FR 2848363 A1 20040611; FR 2848363 B1 20050311; AU 2003294106 A1 20040810; AU 2003294106 B2 20090312; BR 0316582 A 20051004; CN 100393980 C 20080611; CN 1735741 A 20060215; DK 1570157 T3 20151130; EP 1570157 A1 20050907; EP 1570157 B1 20150812; JP 2006509941 A 20060323; JP 3984995 B2 20071003; KR 100721165 B1 20070525; KR 20050105976 A 20051108; MX PA05006037 A 20050818; NZ 540635 A 20061130; US 2006044155 A1 20060302; US 7652592 B2 20100126; WO 2004063528 A1 20040729

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