

Title (en)

Hydraulic percussive device with infinitely variable number of impacts and impact energy

Title (de)

Hydraulisches Schlaggerät mit stufenlos regelbarer Schlagzahl und Schlagenergie

Title (fr)

Dispositif à percussion hydraulique avec réglage continu du nombre et de l'intensité des coups

Publication

EP 0685301 B1 19991229 (DE)

Application

EP 95108205 A 19950530

Priority

DE 4419499 A 19940603

Abstract (en)

[origin: EP0685301A1] The hydraulic pile drive assembly, for driving and rotating a pipe length, has the cylindrical rotary valve (15) and rotary motor (16) at or in the housing (3) independent of the beating piston (25). They are connected to the pump and tank connections (21,23) and the two piston surfaces (A1, A2) only through channels (20,22,24). <IMAGE>

IPC 1-7

B25D 9/22; **B25D 9/14**; **B25D 9/26**; **B25D 17/26**; **E21B 6/00**; **E21B 44/00**

IPC 8 full level

E21B 17/00 (2006.01); **B25D 9/14** (2006.01); **B25D 9/22** (2006.01); **B25D 9/26** (2006.01); **B25D 17/26** (2006.01); **E21B 6/00** (2006.01); **E21B 6/02** (2006.01); **E21B 44/00** (2006.01); **E21B 44/06** (2006.01)

CPC (source: EP US)

B25D 9/145 (2013.01 - EP US); **B25D 9/22** (2013.01 - EP US); **B25D 9/26** (2013.01 - EP US); **B25D 17/26** (2013.01 - EP US); **E21B 6/00** (2013.01 - EP US); **E21B 44/06** (2013.01 - EP US)

Cited by

CN107743424A; CN104145121A; WO2013143520A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0685301 A1 19951206; **EP 0685301 B1 19991229**; AT E188159 T1 20000115; DE 4419499 A1 19951207; DE 59507505 D1 20000203; DK 0685301 T3 20000613; ES 2142425 T3 20000416; JP 3419591 B2 20030623; JP H0886182 A 19960402; PL 177496 B1 19991130; PL 308855 A1 19951211; PT 685301 E 20000531; US 5667022 A 19970916

DOCDB simple family (application)

EP 95108205 A 19950530; AT 95108205 T 19950530; DE 4419499 A 19940603; DE 59507505 T 19950530; DK 95108205 T 19950530; ES 95108205 T 19950530; JP 13537995 A 19950601; PL 30885595 A 19950531; PT 95108205 T 19950530; US 46021995 A 19950602