

Title (en)  
DOWN-THE-HOLE DRILL HAMMER.

Title (de)  
SENKBOHRHAMMER

Title (fr)  
MARTEAU DE FORAGE POUR FONDS DE TROU

Publication  
**EP 1463868 B1 20070815 (EN)**

Application  
**EP 02786339 A 20021210**

Priority  
• SE 0202276 W 20021210  
• SE 0104377 A 20011221

Abstract (en)  
[origin: WO03062586A1] The present invention relates to an arrangement pertaining to down-the-hole hammers in which a driver (7) is adapted to transfer torsion forces between a rotating outer tube (10) and a drill bit (1) of the hammer, wherein the outer tube (10) surrounds all of the driver (7).

IPC 8 full level  
**E21B 4/06** (2006.01); **E21B 4/20** (2006.01); **E21B 17/046** (2006.01)

CPC (source: EP US)  
**E21B 4/20** (2013.01 - EP US); **E21B 17/046** (2013.01 - EP US)

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

DOCDB simple family (publication)  
**WO 03062586 A1 20030731**; AT E370305 T1 20070915; CA 2470227 A1 20030731; DE 60221899 D1 20070927; DE 60221899 T2 20080313; EP 1463868 A1 20041006; EP 1463868 B1 20070815; ES 2291520 T3 20080301; SE 0104377 D0 20011221; SE 0104377 L 20030622; SE 523946 C2 20040608; US 2005045385 A1 20050303; ZA 200404801 B 20050829

DOCDB simple family (application)  
**SE 0202276 W 20021210**; AT 02786339 T 20021210; CA 2470227 A 20021210; DE 60221899 T 20021210; EP 02786339 A 20021210; ES 02786339 T 20021210; SE 0104377 A 20011221; US 49915004 A 20041104; ZA 200404801 A 20040617