Title (en)
METHOD AND ARRANGEMENT IN ROCK DRILLING RIG

Title (de)
VERFAHREN UND ANORDNUNG IN EINEM GESTEINSBOHRGESTELL

Title (fr)
PROCÉDÉ ET AGENCEMENT DANS UNE INSTALLATION DE FORAGE DE ROCHE

Publication
EP 2328723 A4 20170524 (EN)

Application
EP 09817334 A 20090930

Priority
• FI 2009050781 W 20090930
• FI 20085926 A 20080930

Abstract (en)
[origin: WO2010037905A1] A rock drilling rig (1) is provided with a rock drilling machine (6) comprising an impact device (4), a feed device (9) and a tool (7) with a drill bit (8) at the end thereof for breaking rock. The impact device is arranged to cause a stress wave to the tool and from there further to the rock to be drilled. During drilling at least some of the compressive stress wave (si) caused to the tool is reflected as a stress wave (sr) from the rock back to the tool. The method comprises determining a momentum (Pr) of the stress wave (sr) reflected from the rock to the tool and adjusting the operation of the impact device and/or that of the feed device on the basis of the momentum.

IPC 8 full level
B25D 9/26 (2006.01); **E21B 44/00** (2006.01)

CPC (source: EP FI US)
B25D 9/26 (2013.01 - FI); **E21B 7/022** (2013.01 - EP FI US); **E21B 44/00** (2013.01 - FI); **E21B 44/08** (2013.01 - EP)

Citation (search report)
• [X] WO 2007082997 A1 20070726 - SANDVIK MINING & CONSTR OY [FI], et al
• [A] WO 2006003259 A1 20060112 - SANDVIK TAMROCK OY [FI], et al
• [A] WO 03033873 A1 20030424 - SANDVIK TAMROCK OY [FI], et al
• See also references of WO 2010037905A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
WO 2010037905 A1 20100408; AU 2009299713 A1 20100408; AU 2009299713 B2 20130829; CA 2735772 A1 20100408; CA 2735772 C 20131112; CL 2011000680 A1 20111007; CN 102164714 A 20110824; CN 102164714 B 20140507; EP 2328723 A1 20110608; EP 2328723 A4 20170524; EP 2328723 B1 20180530; FI 122300 B 20111130; FI 20085926 A0 20080930; FI 20085926 A 20100331; JP 2012504197 A 20120216; JP 5399498 B2 20140129; ZA 201101642 B 20120125

DOCDB simple family (application)
FI 2009050781 W 20090930; AU 2009299713 A 20090930; CA 2735772 A 20090930; CL 2011000680 A 20110329; CN 200980138577 A 20090930; EP 09817334 A 20090930; FI 20085926 A 20080930; JP 2011528381 A 20090930; ZA 201101642 A 20110303