

Title (en)
Hammer drill

Title (de)
Marteau perforateur

Title (fr)
Bohrhammer

Publication
EP 2236249 A3 20111228 (EN)

Application
EP 10002955 A 20100319

Priority
JP 2009089461 A 20090401

Abstract (en)
[origin: EP2236249A2] In a hammer drill (1), a torque limiter includes: a cam ring (14) adjacent to a gear (13), and configured to be provided onto a tool holder (6) so as to be unitarily rotatable with the tool holder (6) and to have cam projections (18) on a surface facing to the gear (13); rollers (21) received in corresponding through-holes (20) formed in the gear (13) and engageable with the cam projections (18) in their rotational directions; and urging means (washer (16) and coil spring (17)) configured to urge the rollers (21) toward the cam ring (14) so that the rollers (21) are brought into engagement with the cam projections (18), and when a torque applied to the tool holder (6) exceeds a setting torque, the rollers (21) pass the cam projections (18) within the through-holes (20) against the urging means and roll on the cam ring (14), so that the gear (13) slips on the cam ring (14) to thereby uncouple the torque transmission to the cam ring (14).

IPC 8 full level
B25D 16/00 (2006.01)

CPC (source: EP)
B25D 16/003 (2013.01); **B25D 2211/061** (2013.01); **B25D 2216/0015** (2013.01); **B25D 2216/0023** (2013.01); **B25D 2216/0038** (2013.01); **B25D 2250/165** (2013.01)

Citation (search report)

- [XPLI] EP 2140981 A1 20100106 - MAKITA CORP [JP]
- [A] GB 2392966 A 20040317 - BLACK & DECKER INC [US]
- [AD] US 5373905 A 19941220 - BLEICHER MANFRED [DE], et al

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CN112112878A; CN113165152A; JP2016060034A; EP2700478A4

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

Designated extension state (EPC)
AL BA ME RS

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 10002955 A 20100319; CN 201010141248 A 20100325; JP 2009089461 A 20090401