

Title (en)  
A Lubricant System for a Hammer Drill

Title (de)  
Schmiersystem für einen Bohrhammer

Title (fr)  
Système lubrifiant pour marteau perforateur

Publication  
**EP 1872908 A3 20110504 (EN)**

Application  
**EP 07111194 A 20070627**

Priority  
• GB 0613181 A 20060701  
• GB 0613323 A 20060705

Abstract (en)  
[origin: EP1872908A2] A hammer drill comprising: a piston (50) slideably mounted within a housing; a drive mechanism which converts the rotary output of the motor (32) into a reciprocating motion of the piston (50); lubrication fluid covering at least part of the drive mechanism; wherein the drive mechanism comprises: A) a crank mechanism comprising: a crank shaft (38) rotationally driven by the motor (32); and a drive pin (40) eccentrically mounted via a support structure (42) on the drive shaft (38); B) a con rod (48), one end of which being connected to the drive pin (40) via a bearing (334), the other end being connected to the piston (50); wherein there is further provided a guide mechanism (318), in the form of a groove in the support structure which extends away from the base of the drive pin (40) towards the longitudinal axis (46) of rotation of the crank shaft (38), to direct the movement of a part of some of the lubricating fluid towards the bearing (334), the movement of that lubrication fluid being caused by the centrifugal forces acting on that lubrication fluid generated by the rotation of the crank shaft (38).

IPC 8 full level  
**B25D 11/12** (2006.01); **B25D 17/26** (2006.01); **F16C 3/14** (2006.01)

CPC (source: EP)  
**B25D 11/125** (2013.01); **B25D 17/26** (2013.01); **B25D 2211/068** (2013.01)

Citation (search report)  
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• [A] US 3162268 A 19641222  
• [A] US 2239090 A 19410422 - EVERETT LUCIUS T  
• [A] GB 290611 A 19281122 - GIUSTINO CATTANEO

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US10302598B2

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

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 1872908 A2 20080102**; **EP 1872908 A3 20110504**; **EP 1872908 B1 20120815**; AU 2007202966 A1 20080117; JP 2008012663 A 20080124

DOCDB simple family (application)  
**EP 07111194 A 20070627**; AU 2007202966 A 20070627; JP 2007168738 A 20070627