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(54) **A Lubricant System for a Hammer Drill**

(57) 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).

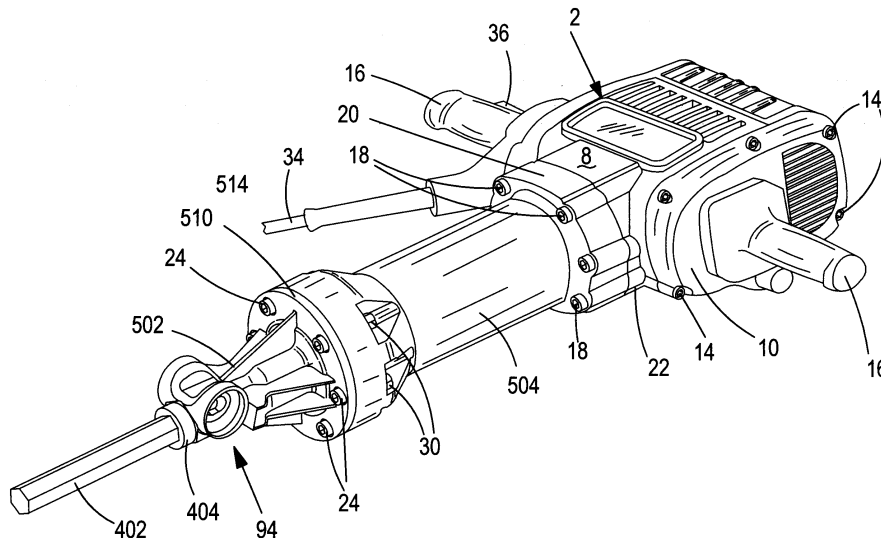


FIG. 7

**EP 1 872 908 A3**



EUROPEAN SEARCH REPORT

Application Number  
EP 07 11 1194

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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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