

Title (en)
RECIPROCATING COMPRESSOR WRIST PIN BEARING AND LUBRICATION PASSAGEWAY

Title (de)
KOLBENBOLZENLAGER UND SCHMIERUNGSDURCHGANG FÜR EINEN HUBKOLBENVERDICHTER

Title (fr)
COUSSINET D'AXE DE PISTON DE COMPRESSEUR ALTERNATIF ET PASSAGE LUBRIFIANT

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Application
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Abstract (en)
[origin: WO2010138511A2] Reciprocating compressors (10) are disclosed that provide enhanced wear characteristics for wrist pins (16) and connecting rods (13) with small pistons (15) such as reciprocating compressors (10) for higher pressure working fluids like CO₂. One disclosed compressor (10) includes at least one eccentric (11) and a connecting rod (13) comprising a proximal end (12) and a distal end (14). The proximal end (12) of the connecting rod (13) includes a proximal through opening (26) providing a proximal bearing surface (28, 29) that is connected around the eccentric (11). The distal end (14) of the connecting rod (13) includes a distal through opening (27) forming a distal bearing surface (27a) lined with a bearing insert (37) that is connected around a wrist pin (16). The wrist pin (16) is connected to an interior (15) of the piston (15). The distal end (14) of the connecting rod (13) also includes a lubricant passageway (39, 38) extending through the distal end (14) of the connecting rod (13) and through the bearing insert (37) to the wrist pin (16). The piston (15) is movable within a cylinder (23) to compress a working fluid.

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