

Title (en)
Piston compressor for compressing gas

Title (de)
Kolbenverdichter für Gasverdichtung

Title (fr)
Compresseur à piston pour comprimer un gaz

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Application
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• EP 12724749 A 20120502

Abstract (en)
[origin: WO2012150862A2] The invention pertains to a horizontal piston compressor, which is provided with a piston rod external surface cooling system for cooling the piston rod external surface with a cooling liquid, which cooling system comprises: - a piston rod cooling unit (60;200), that is arranged adjacent the side of the set of one or more packing rings (51) remote from the first compression chamber, - a cooling liquid source (61) that is adapted to provide a flow of cooling liquid to the cooling unit; wherein the piston rod cooling unit comprises: -a housing (70;210), -a ring member (75;205) having a bore (76;206) through which the piston rod (30) extends, the diameter of said bore being larger than the diameter of the piston rod, such that an annular space (77;207) is present between the piston rod and the ring member, -a cooling liquid supply channel (80;85;220), which extends from an inlet (81;221) thereof to one or more supply ports (86;226) in communication with the bore (76;206) so as to pass the cooling liquid to the annular space (77;207) between the ring member and the piston rod, thereby allowing to establish a flow of cooling liquid in contact with the external surface of the piston rod (30) and through said annular space causing the removal of heat from the external surface of the piston rod, wherein the ring member (75;205) is movably supported relative to the housing (70;210) such as to allow for motions of the ring member (75;205) in radial directions that follow and/or compensate for piston rod motions and deflections in radial directions in order to maintain the annular space.

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