Title (en)
SIMPLIFIED CONSTRUCTION MULTISTAGE RECIPROCATING VOLUMETRIC COMPRESSOR

Title (de)
MEHRSTUFIGER VOLUMETRISCHER HUBKOLBENVERDICHTER MIT VEREINFACHTER KONSTRUKTION

Title (fr)
COMPRESSEUR VOLUMÉTRIQUE À MOUVEMENT ALTERNATIF À PLUSIEURS ÉTAGES D'UNE CONSTRUCTION SIMPLIFIÉE

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Application
EP 13747505 A 20130613

Priority
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Abstract (en)
[origin: WO2014033563A2] A simplified construction multistage reciprocating volumetric compressor (1) comprising a plurality of compression stages (2, 3), each of which includes a movable piston (4) slidingly coupled with reciprocating swinging motion into a compression chamber of a fluid defined inside an outer cylinder (5), motorization means (6), operatively connected with a movable piston (4) of each of the compression stages (2, 3) through transmission means (7), and sealing means (8) interposed between the movable piston (4) and the outer cylinder (5) which the outer wall cooperate by contact with. In particular, the sealing means (8) comprise an elastic memory main ring (9) made of composite material, coupled with the outer wall (4a) of the movable piston (4) through joint means (10) and cooperating with an auxiliary radial thrust ring (11), interposed between the elastic memory main ring (9) and the outer wall (4a) of the movable piston (4) in such a way as oppose the structural deformations due to overheating suffered by the elastic memory main ring (9) during operation, thus preventing these the deformations become permanent, and keep the structural integrity of the elastic memory main ring (9) unchanged, increasing fluid pressure inside the compression chamber.

IPC 8 full level
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