

Title (en)

COMPRESSOR WITH ADJUSTABLE GEAR RATIO TO THE DRIVING MEANS

Title (de)

KOMPRESSOR MIT ANPASSBARER ÜBERSETZUNG ZUR ANTRIEBSQUELLE

Title (fr)

COMPRESSEUR AVEC RAPPORT DE TRANSMISSION AJUSTABLE ENVERS LES MOYENS D'ENTRAÎNEMENT

Publication

EP 3221584 B1 20200115 (DE)

Application

EP 15794204 A 20151116

Priority

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Abstract (en)

[origin: WO2016079031A1] In the context of the invention, a compressor has been developed. This compressor has a crankcase in which a crankshaft is rotatably mounted in a crankspace. The crankcase contains at least one cylinder space in which a piston, mounted eccentrically on the crankshaft by means of a connecting rod, can be driven in reciprocating motion. The crankshaft is connected, via a gearing having a modulus m , to a motive source, wherein the gear wheel arranged on the crankshaft engages with the gear wheel on the motive source. According to the invention, the axis of rotation of the crankshaft is offset with respect to the center axis of the cylinder space by an amount dl which is a whole multiple of $m/2$. The center axis of the cylinder space is understood as the axis which proceeds from the center point of the base area of the cylinder space, perpendicular to this base area, and along which the piston moves. It has been recognized that it is thus possible to change the transmission ratio of the gearing within an advantageous range, without it being necessary to undertake modifications to the external dimensions of the compressor or to the motive source. In particular, the gear wheel of the motive source need not be altered. Depending on the transmission ratio, it is possible to reduce the operating noise of the compressor or to increase the air capacity.

IPC 8 full level

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