Title (en)

DIAPHRAGM COMPRESSOR

Title (de)

MEMBRANVERDICHTER

Title (fr)

COMPRESSEUR À MEMBRANE

Publication

EP 3408535 B1 20200129 (DE)

Application

EP 16805854 A 20161206

Priority

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Abstract (en)

[origin: WO2017129295A1] Diaphragm compressors having an electric motor (10) with a drive shaft (18), movement transmission means (32, 42, 50, 52) which can be set in motion by way of the drive shaft (18) and via which a rotational movement of the drive shaft (18) can be converted, a piston rod (58) which is coupled to an output member (40) of the movement transmission means (32, 42, 50, 52) and to a diaphragm (72, 74), a compressor chamber (80, 82) which is delimited by way of the diaphragm (72, 74) and a compressor head (76, 78), and the volume of which can be varied by way of the movement of the diaphragm (72, 74), are known. In order to avoid damaging tumbling work of the diaphragm, it is proposed according to the invention that the movement transmission means (32, 42, 50, 52) are formed by way of an epicyclic gear mechanism (44), the output member (40) of which is configured as a crank (42), the input shaft (48) of which is guided eccentrically with respect to the rotational axis of the drive shaft (18), and the output shaft (38) of which has an axial offset (A) with respect to the input shaft (48), which axial offset (A) corresponds to an eccentricity (E) of the input shaft (48) with respect to the rotational axis of the drive shaft (18).

IPC 8 full level

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CPC (source: EP US)

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