

Title (en)

SPIRAL COMPRESSOR, USEFUL IN PARTICULAR TO GENERATE COMPRESSED AIR FOR RAIL VEHICLES

Title (de)

SPIRALVERDICHTER, INSBESONDERE ZUM EINSATZ BEI DER DRUCKLUFTERZEUGUNG FÜR SCHIENENFAHRZEUGE

Title (fr)

COMPRESSEUR A SPIRALES, SERVANT NOTAMMENT A GENERER DE L'AIR COMPRIME DANS DES VEHICULES SUR RAILS

Publication

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Application

EP 96925640 A 19960719

Priority

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Abstract (en)

[origin: US6017204A] PCT No. PCT/DE96/01329 Sec. 371 Date Dec. 23, 1997 Sec. 102(e) Date Dec. 23, 1997 PCT Filed Jul. 19, 1996 PCT Pub. No. WO97/05389 PCT Pub. Date Feb. 13, 1997In a totally oil-free spiral compressor (1) with high suction volume flows and compression ratio, useful in particular to generate compressed air for rail vehicles, the spirals are arranged on one side only and measures are taken to compensate for the high axial forces that act on the spiral bearings. Compression chambers (35) arranged with an axial gap between the spirals (7, 9) of the spiral compressor (1) are fed by compression pockets (45) and support the nested spirals against each other. The compression chambers (35) are preferably arranged between a compression crown (15) joined to the driving spiral (7) and a ring wheel (37) of the forcibly driven second spiral (9), so that axial counterforces compensate for the axial forces that act upon the bearings (29, 33) of both spirals.

IPC 1-7

F04C 18/02; F01C 17/06; F04C 27/00

IPC 8 full level

F01C 17/06 (2006.01); **F04C 18/02** (2006.01); **F04C 27/00** (2006.01)

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