

Title (en)

SCREW COMPRESSOR HAVING SLIDE VALVE WITH FLEXIBLE VOLUME RATIO

Title (de)

SCHNECKENVERDICHTER MIT SCHIEBERVENTIL MIT FLEXIBLEM VOLUMENVERHÄLTNIS

Title (fr)

COMPRESSEUR À VIS AYANT UNE SOUPAPE COULISSANTE À RAPPORT DE VOLUME SOUPLE

Publication

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Application

EP 11844007 A 20110516

Priority

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Abstract (en)

[origin: EP2662569A1] Disclosed is a screw compressor having a slide valve with a flexible volume ratio, which includes: a casing, a screw, an air entry, an air outlet, a slide valve, a first air cylinder and a second air cylinder. The slide valve is disposed between the first air cylinder and the second air cylinder, and includes a slide valve main body. Two ends of the slide valve are respectively a first end surface and a second end surface, and the first end surface and the second end surface seal the first air cylinder and the second air cylinder respectively. The first air cylinder is connected to the air outlet of the compressor through a first connection pipe, and the second air cylinder is connected to a last closed spiral flute through a second connection pipe. The slide valve searches for balance under the driving of pressures in the first air cylinder and the second air cylinder. The screw compressor having a slide valve with a flexible volume ratio provided by the present invention can enable the volume ratio of the compressor to be automatically adjusted to an optimal state, thus reducing power consumption and noise.

IPC 8 full level

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CPC (source: EP US)

F04C 18/00 (2013.01 - US); **F04C 18/16** (2013.01 - EP US); **F04C 28/12** (2013.01 - EP US)

Citation (search report)

- [A] EP 0488043 A1 19920603 - CARRIER CORP [US]
- [A] US 4678406 A 19870707 - PILLIS JOSEPH W [US], et al
- See references of WO 2012092739A1

Cited by

CN110925199A; CN105715548A

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