

Title (en)

Rotary screw compressor with improved volume ratio regulation means

Title (de)

Rotationsschraubenverdichter mit Mitteln zur verbesserten Volumenverhältnisregulierung

Title (fr)

Compresseur rotatif à vis doté d'un moyen amélioré de régulation du rapport

Publication

EP 2287444 A1 20110223 (EN)

Application

EP 09168164 A 20090819

Priority

EP 09168164 A 20090819

Abstract (en)

A rotary screw compressor with improved volume ratio regulation means, comprising a pair of rotors provided in the interior of a compressor casing and being capable of rotating intermeshingly, and a slide valve provided in parallel with rotating shafts of the rotors and being capable of axially moving back and forth so as to control the volume ratio of discharge gas, the slide valve being provided at one end thereof with a slide stop for adjustment of the position of axial movement thereof, characterized in that , for the slide stop, the elements used for restricting the sway or rotation, generated along with the motion thereof comprise an eccentric support shaft driving the slide stop to move back and forth axially, and a set of plate-shaped bushings provided above the slide stop as well as manufactured and assembled precisely with ease.

IPC 8 full level

F01C 21/02 (2006.01); **F04C 18/16** (2006.01); **F04C 28/12** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)

F01C 21/02 (2013.01); **F04C 18/16** (2013.01); **F04C 28/12** (2013.01); **F04C 29/124** (2013.01); **F04C 2240/50** (2013.01); **F04C 2270/12** (2013.01); **F04C 2270/13** (2013.01)

Citation (applicant)

US 6409490 B1 20020625 - NEMIT JR PAUL [US], et al

Citation (search report)

- [X] GB 2156438 A 19851009 - SABROE & CO AS
- [XA] GB 2282642 A 19950412 - HOWDEN COMPRESSORS LTD [GB]
- [IA] WO 2007128308 A1 20071115 - YORK DENMARK APS [DK], et al
- [A] EP 1553300 A1 20050713 - DAIKIN IND LTD [JP]
- [A] US 5044894 A 19910903 - FIELD MICHAEL G [US], et al

Cited by

CN103104495A; EP3351801A4; US10487834B2; WO2021031488A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2287444 A1 20110223

DOCDB simple family (application)

EP 09168164 A 20090819