Title (en)

SCREW COMPRESSOR CAPACITY CONTROL

Title (de)

LEISTUNGSSTEUERUNG EINES SCHRAUBENVERDICHTERS

Title (fr)

COMMANDE DE CAPACITÉ DE COMPRESSEUR À VIS

Publication

EP 2047103 A4 20120627 (EN)

Application

EP 07799872 A 20070727

Priority

- US 2007074548 W 20070727
- US 82051106 P 20060727

Abstract (en)

[origin: WO2008014433A1] A screw compressor has a housing (22; 302) having first (53; 330) and second (58; 340) ports along a flowpath. A first rotor (26; 306) has a lobed body. A second rotor (28; 308, 310) has a lobed body enmeshed with the first rotor body. The rotors and housing cooperate to define a compression path between suction (60; 332) and discharge (62; 342) locations along the flowpath. Means (100, 110, 120; 200, 210, 220; 370, 380, 390) provide relative longitudinal movement between a blocking portion (57; 352) of the housing and at least one of the first rotor and second rotor between: a first condition wherein a pocket of the first and second rotors is closed by the blocking portion; and a second condition wherein the blocking portion does not close the pocket. To provide capacity control, a control system (110; 390) is configured to provide duty cycle control of the movement.

IPC 8 full level

F04C 18/16 (2006.01); **F04C 27/00** (2006.01); **F04C 28/00** (2006.01); **F04C 28/26** (2006.01)

CPC (source: EP US)

F04C 18/16 (2013.01 - EP US); **F04C 27/006** (2013.01 - EP US); **F04C 28/265** (2013.01 - EP US)

Citation (search report)

- [XI] WO 8703651 A1 19870618 - SVENSKA ROTOR MASKINER AB [SE]
- [XI] JP H02301691 A 19901213 - SUMITOMO HEAVY INDUSTRIES
- [XI] US 4119392 A 19781010 - BRECKHEIMER HANS
- [XI] US 6003324 A 19991221 - SHAW DAVID N [US]
- See references of WO 2008014433A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008014433 A1 20080131; AU 2007279212 A1 20080131; AU 2007279212 B2 20120216; BR PI0715186 A2 20130611; CN 101600884 A 20091209; CN 101600884 B 20130619; EP 2047103 A1 20090415; EP 2047103 A4 20120627; US 2009311119 A1 20091217

DOCDB simple family (application)

US 2007074548 W 20070727; AU 2007279212 A 20070727; BR PI0715186 A 20070727; CN 200780028648 A 20070727; EP 07799872 A 20070727; US 30780507 A 20070727