

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)  
• [X1] WO 8703651 A1 19870618 - SVENSKA ROTOR MASKINER AB [SE]  
• [X1] JP H02301691 A 19901213 - SUMITOMO HEAVY INDUSTRIES  
• [X1] US 4119392 A 19781010 - BRECKHEIMER HANS  
• [X1] US 6003324 A 19991221 - SHAW DAVID N [US]  
• See references of WO 2008014433A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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