

Title (en)
Dual scroll machine with anti-thrust ring

Title (de)
Doppel- Spiralverdichter mit einem anti-schub Ring

Title (fr)
Double machine à spirales avec anneau anti-poussée

Publication
EP 1701040 A3 20061115 (EN)

Application
EP 05254846 A 20050803

Priority
US 7515405 A 20050308

Abstract (en)
[origin: EP1701040A2] A compressor system includes a pair of compressors located in a common shell. A common drive shaft drives both compressors and the drive shaft is powered by a single motor. One or both of the compressors can be equipped with a pulse width modulated capacity control system and a vapor injection system. When one compressor is equipped with these systems, the capacity can be varied between 50% and 110%. When both compressors are equipped with these systems, the capacity can be varied between 0% and 120%. When operating in the reduced capacity mode, a biasing member positions the non-orbiting scroll and an anti-thrust ring (400) positions the orbiting scroll to reduce noise created during the operation of the compressor.

IPC 8 full level
F04C 18/02 (2006.01); **F04C 27/00** (2006.01)

CPC (source: EP KR US)
F04C 18/0215 (2013.01 - EP KR US); **F04C 27/005** (2013.01 - EP KR US); **F04C 29/0035** (2013.01 - KR); **F04C 2210/26** (2013.01 - KR); **F04C 2230/602** (2013.01 - EP KR US); **F04C 2240/40** (2013.01 - KR); **F04C 2240/50** (2013.01 - EP KR US); **Y10S 415/00** (2013.01 - KR); **Y10S 417/00** (2013.01 - KR)

Citation (search report)

- [Y] EP 1489308 A2 20041222 - COPELAND CORP [US]
- [A] US 6814554 B1 20041109 - CHANG LUNG-TSAI [TW], et al
- [XY] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 10 31 August 1999 (1999-08-31)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 10 31 October 1996 (1996-10-31)
- [X] PATENT ABSTRACTS OF JAPAN vol. 014, no. 416 (M - 1021) 7 September 1990 (1990-09-07)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 02 31 March 1995 (1995-03-31)

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1701040 A2 20060913; EP 1701040 A3 20061115; AU 2005203754 A1 20060928; BR PI0503794 A 20061031; CN 1831338 A 20060913; KR 20060099379 A 20060919; TW 200632216 A 20060916; US 2006204378 A1 20060914

DOCDB simple family (application)
EP 05254846 A 20050803; AU 2005203754 A 20050819; BR PI0503794 A 20050915; CN 200510098125 A 20050907; KR 20050082525 A 20050906; TW 94125393 A 20050727; US 7515405 A 20050308