

Title (en)

Scroll compressor with bypass ports driven by a line fed permanent magnet synchronous type motor.

Title (de)

Spiralverdichter mit Bypass-Anschlüssen angetrieben von einem netzgespeisten Synchronmotor mit Permanentmagnet.

Title (fr)

Compresseur à spirales avec connections de by-pass entraîné par un moteur synchrone à aimants permanents alimenté par le secteur.

Publication

**EP 2149708 A3 20110629 (EN)**

Application

**EP 09251430 A 20090528**

Priority

US 18314908 A 20080731

Abstract (en)

[origin: EP2149708A2] A scroll compressor is provided with some capacity reduction technique such as a bypass port. The electric motor for driving the scroll compressor is not an induction motor, but rather a line fed permanent magnet synchronous motor is utilized. Such motors have a higher overall efficiency, and thus will be more efficient at reduced capacity operation.

IPC 8 full level

**F04C 18/02** (2006.01); **F04C 29/00** (2006.01)

CPC (source: EP KR US)

**F04C 18/02** (2013.01 - KR); **F04C 18/0215** (2013.01 - EP US); **F04C 29/00** (2013.01 - KR); **F04C 29/0085** (2013.01 - EP US); **F04C 27/005** (2013.01 - EP US); **F04C 28/26** (2013.01 - EP US)

Citation (search report)

- [XY] US 2007145851 A1 20070628 - KIKUCHI SATOSHI [JP], et al
- [X] JP 2007330060 A 20071220 - HITACHI APPLIANCES INC
- [X] US 2007284961 A1 20071213 - TAKAHASHI AKESHI [JP], et al
- [X] JP 2005117771 A 20050428 - HITACHI LTD
- [Y] US 2005019176 A1 20050127 - SHIN DONG KOO [KR], et al
- [Y] US 2006051227 A1 20060309 - TARNG GUANG-DER [TW]
- [Y] US 2002001532 A1 20020103 - CHANG YONG IL [KR]

Cited by

EP2622224A4

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2149708 A2 20100203**; **EP 2149708 A3 20110629**; CN 101639066 A 20100203; JP 2010038154 A 20100218; KR 20100014104 A 20100210; US 2010028182 A1 20100204

DOCDB simple family (application)

**EP 09251430 A 20090528**; CN 200910147498 A 20090616; JP 2009164611 A 20090713; KR 20090042618 A 20090515; US 18314908 A 20080731