

Title (en)
SCREW COMPRESSOR AND REFRIGERATION CYCLE DEVICE

Title (de)
SCHRAUBENVERDICHTER UND KÜHLKREISVORRICHTUNG DAMIT

Title (fr)
COMPRESSEUR À VIS ET DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication
EP 3199814 A4 20180509 (EN)

Application
EP 14902615 A 20140924

Priority
JP 2014075230 W 20140924

Abstract (en)
[origin: EP3199814A1] A screw compressor includes a casing (1), a screw rotor (3) rotatable in the casing (1), a compression chamber (5) defined between the casing (1) and the screw rotor (3) to compress refrigerant gas, a slide groove (1a) disposed on the inner peripheral surface of the casing (1) and extending along the direction of the rotational axis of the screw rotor (3), an economizer gas passage (1b) extending through the casing (1) to communicate the outside of the casing (1) with the slide groove (1a), a slidable valve (8) disposed in the slide groove (1a) so as to be slidable along the direction of the rotational axis of the screw rotor (3), and an economizer port (8a) penetrating through the slidable valve (8) to communicate the economizer gas passage (1b) with the compression chamber (5) depending on the position of the slidable valve (8), wherein the slidable valve (8) moves between a first position, which allows the economizer gas passage (1b) to communicate with the compression chamber (5), and a second position, which prevents the economizer port (8a) from communicating with the compression chamber (5).

IPC 8 full level
F04C 18/16 (2006.01); **F04C 18/52** (2006.01); **F04C 29/00** (2006.01); **F04C 29/04** (2006.01); **F25B 1/047** (2006.01)

CPC (source: EP)
F04C 18/16 (2013.01); **F04C 18/52** (2013.01); **F04C 29/0014** (2013.01); **F04C 29/042** (2013.01); **F25B 1/047** (2013.01)

Citation (search report)

- [I] EP 2166229 A1 20100324 - DAIKIN IND LTD [JP]
- [E] EP 3006740 A1 20160413 - MITSUBISHI ELECTRIC CORP [JP]
- See references of WO 2016046907A1

Cited by
EP3225848A4; CN107525319A

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3199814 A1 20170802; EP 3199814 A4 20180509; EP 3199814 B1 20210106; CN 106605069 A 20170426; CN 106605069 B 20190712; JP 6177449 B2 20170809; JP WO2016046907 A1 20170427; WO 2016046907 A1 20160331

DOCDB simple family (application)
EP 14902615 A 20140924; CN 201480080608 A 20140924; JP 2014075230 W 20140924; JP 2016549696 A 20140924