Title (en)

VARIABLE DISPLACEMENT TYPE RECIPROCATING COMPRESSOR

Title (de)

HUBKOLBENVERDICHTER MIT VARIABLER POSITIONIERUNG

Title (fr)

COMPRESSEUR ALTERNATIF DE TYPE À DÉPLACEMENT VARIABLE

Publication

EP 2354548 A4 20120613 (EN)

Application

EP 09829040 A 20091120

Priority

- JP 2009069713 W 20091120
- JP 2008299351 A 20081125

Abstract (en)

[origin: EP2354548A1] The power conversion mechanism of a variable displacement reciprocating compressor includes a joint shaft (54) that is fitted to a drive shaft (30) through a bearing (56) and supported by an inner circumferential face of a support hole (58) formed in the cylinder block (20) so as not to be relatively rotatable but to be slidable relative to the inner circumferential face; a joint case (66) that is integrally and tiltably formed in the conversion mechanism (38); and a plurality of balls (74) rollably held between JS-side protrusions that are integrally formed in the joint shaft (54) and JC-side protrusions (62) that are integrally formed in the join case (66). The variable suction throttle mechanism of the compressor uses the sliding movement of the joint shaft (54) to change air-flow resistance in a valve chamber (101) communicating with the support hole (58).

IPC 8 full level

F04B 27/08 (2006.01); **F04B 39/10** (2006.01)

CPC (source: EP US)

F04B 27/1072 (2013.01 - EP US); **F04B 27/1081** (2013.01 - EP US)

Citation (search report)

- [Y] JP 2008138637 A 20080619 - SANDEN CORP
- [Y] JP H08159026 A 19960618 - TOYODA AUTOMATIC LOOM WORKS
- [Y] JP 2000136776 A 20000516 - SANDEN CORP
- See references of WO 2010061792A1

Cited by

CN104686082A

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 SM TR

DOCDB simple family (publication)

EP 2354548 A1 20110810; **EP 2354548 A4 20120613**; **EP 2354548 B1 20130821**; JP WO2010061792 A1 20120426; US 2011229348 A1 20110922; WO 2010061792 A1 20100603

DOCDB simple family (application)

EP 09829040 A 20091120; JP 2009069713 W 20091120; JP 2010540465 A 20091120; US 200913131206 A 20091120