

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À SPIRALES

Publication
EP 2980408 A4 20161221 (EN)

Application
EP 13880382 A 20130329

Priority
JP 2013059444 W 20130329

Abstract (en)
[origin: EP2980408A1] The purpose of the present invention is to suppress the contact between the wrap tooth tip and the tooth bottom by enlarging the tooth bottom step, and to reduce the loss owing to the gap as a result of enlarging the tooth bottom step. The fixed scroll includes a fixed scroll-side flat plate and a fixed-side wrap standing on one surface of the fixed-side plate while retaining the spiral shape. The orbiting scroll includes an orbiting-side plate and an orbiting-side wrap standing on one surface of the orbiting-side plate while retaining the spiral shape. The orbiting-side wrap orbits with respect to the fixed scroll while being in mesh with the fixed-side wrap to form a compression chamber. Each of the fixed-side plate and the orbiting-side plate has the step on the tooth bottom at the inner periphery deeper than the step on the tooth bottom at the outer periphery. The step at the outer or the inner periphery, which is formed on the tooth bottom of the orbiting-side plate, has the depth smaller than the one on the tooth bottom of the fixed-side plate.

IPC 8 full level
F04C 18/02 (2006.01)

CPC (source: EP US)
F04C 18/0215 (2013.01 - EP US); **F04C 18/0269** (2013.01 - US); **F04C 18/0276** (2013.01 - EP US); **F04C 29/005** (2013.01 - US); **F04C 29/0085** (2013.01 - US); **F04C 2230/602** (2013.01 - EP US)

Citation (search report)

- [XYI] US 2007178002 A1 20070802 - HIWATA AKIRA [JP], et al
- [YA] EP 2538083 A1 20121226 - DAIKIN IND LTD [JP]
- See references of WO 2014155646A1

Cited by
EP3483447A4

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 2980408 A1 20160203; EP 2980408 A4 20161221; CN 105074218 A 20151118; CN 105074218 B 20171013; JP 6081577 B2 20170215; JP WO2014155646 A1 20170216; US 2016003247 A1 20160107; WO 2014155646 A1 20141002

DOCDB simple family (application)
EP 13880382 A 20130329; CN 201380073432 A 20130329; JP 2013059444 W 20130329; JP 2015507853 A 20130329; US 201314768958 A 20130329