

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À SPIRALES

Publication
EP 3199753 A1 20170802 (EN)

Application
EP 17153568 A 20170127

Priority
JP 2016015829 A 20160129

Abstract (en)
The present invention aims to reduce wear of a key of an Oldham link and a key groove in which the key slides. A scroll compressor (1) includes: a fixed scroll (2), an orbiting scroll (3) revolved relative to the fixed scroll (2); a shaft bearing (6) fixed to a housing (8) and supporting the orbiting scroll (3); and an Oldham link (10) interposed between the orbiting scroll (3) and the shaft bearing (6) and restricting rotation of the orbiting scroll (3). The Oldham link (10) has a first key (11) that slides in a radial direction of a rotating shaft (5) along a wall (21) of a key groove (20) provided in the orbiting scroll (3), and a second key (12) that slides in the radial direction of the rotating shaft (5) along a wall (31) of another key groove (30) provided in the shaft bearing (6). On the assumption of a flat reference surface (210) in the wall (21) of the key groove (20), the wall (21) has an offset portion (21A) that is gradually offset from the reference surface (210) while extending toward at least one of an outer peripheral-side end (20A) and an inner peripheral-side end (20B) of the key groove (20).

IPC 8 full level
F01C 17/06 (2006.01); **F04C 18/02** (2006.01)

CPC (source: EP)
F01C 17/066 (2013.01); **F04C 18/0215** (2013.01); **F04C 2240/802** (2013.01); **F04C 2270/16** (2013.01); **F05C 2251/00** (2013.01)

Citation (applicant)
JP H08189480 A 19960723 - HITACHI LTD

Citation (search report)
• [XAY] JP 2015101985 A 20150604 - MITSUBISHI ELECTRIC CORP
• [XAY] JP 2005054744 A 20050303 - MATSUSHITA ELECTRIC IND CO LTD
• [XAY] US 5516267 A 19960514 - IKEDA KIYOHARU [JP], et al
• [IAY] JP 2000274361 A 20001003 - HITACHI LTD
• [IAY] US 2008050260 A1 20080228 - IWANAMI SHIGEKI [JP], et al
• [A] JP H03267501 A 19911128 - DAIKIN IND LTD

Cited by
US11454238B2; US2019211679A1; US11008867B2; EP3567213A1; US11401937B2

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3199753 A1 20170802; EP 3199753 B1 20210120; JP 2017133466 A 20170803; JP 6630580 B2 20200115

DOCDB simple family (application)
EP 17153568 A 20170127; JP 2016015829 A 20160129