

Title (en)
REFRIGERANT COMPRESSOR AND REFRIGERATION APPLIANCE USING SAME

Title (de)
KÄLTEMITTELVERDICHTER UND KÄLTEGERÄT DAMIT

Title (fr)
COMPRESSEUR DE RÉFRIGÉRANT ET APPAREIL DE RÉFRIGÉRATION L'UTILISANT

Publication
EP 3159540 A4 20171018 (EN)

Application
EP 15808895 A 20150618

Priority
• JP 2014125906 A 20140619
• JP 2014230818 A 20141113
• JP 2015003052 W 20150618

Abstract (en)
[origin: US2017009759A1] A synthetic resin film is formed on a region of a valve plate (117) which is brought into contact with an arm portion of a suction valve (120) or a region of the valve plate (117) which is brought into contact with an arm portion of a discharge valve (121). With such a configuration, delay in opening of the suction valve (120) or the discharge valve (121) caused by adhesion force of refrigerating oil is suppressed so that a pressure loss in a suction stroke or a discharge stroke can be reduced whereby compressor efficiency is enhanced. Further, a striking sound generated at the time of closing the suction valve (120) or the discharge valve (121) is reduced by an elastic effect of the synthetic resin film so that the reduction of noises is realized.

IPC 8 full level
F04B 39/10 (2006.01); **F04B 35/04** (2006.01); **F04B 39/02** (2006.01); **F04B 39/12** (2006.01)

CPC (source: EP US)
F04B 35/04 (2013.01 - EP US); **F04B 39/023** (2013.01 - EP US); **F04B 39/1066** (2013.01 - EP US); **F04B 39/1073** (2013.01 - EP US);
F04B 39/123 (2013.01 - EP US)

Citation (search report)
• [X] JP H09280167 A 19971028 - SANDEN CORP
• [X] EP 2395244 A1 20111214 - SANDEN CORP [JP]
• [X] JP H0599149 A 19930420 - MATSUSHITA REFRIGERATION
• See references of WO 2015194181A1

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)
US 2017009759 A1 20170112; CN 105980707 A 20160928; EP 3159540 A1 20170426; EP 3159540 A4 20171018;
JP WO2015194181 A1 20170420; WO 2015194181 A1 20151223

DOCDB simple family (application)
US 201515120673 A 20150618; CN 201580008641 A 20150618; EP 15808895 A 20150618; JP 2015003052 W 20150618;
JP 2016529056 A 20150618