

Title (en)
CONDENSER

Title (de)
KONDENSATOR

Title (fr)
CONDENSEUR

Publication
EP 2886864 A4 20160921 (EN)

Application
EP 13823006 A 20130723

Priority
• JP 2012165128 A 20120725
• JP 2012288002 A 20121228
• JP 2013004489 W 20130723

Abstract (en)
[origin: EP2886864A1] An area of an inlet end (51) of the discharge port (50) is A_i ; a peripheral length of the inlet end (51) is L_i ; and a hydraulic diameter of the inlet end (51) is defined by $D_i = 4(A_i/L_i)$. A peripheral length of the outlet end (52) of the discharge port (50) is L_o ; a reference lift amount of the valve body (61) is h_o ; a cross sectional area of an outlet side flow path (70) formed between the outlet end (52) of the discharge port (50) and the valve body (61) is defined by $A_o = L_o \times h_o$; and a hydraulic diameter of the outlet side flow path (70) is defined by $D_o = 4(A_o/2L_o)$. A ratio (D_o/D_i) of the hydraulic diameter D_o of the outlet side flow path (70) to the hydraulic diameter D_i of the inlet end (51) of the discharge port (50) is 0.5 or less. As a result, the lift amount of the valve body (61) is optimized, thereby improving the efficiency of the compressor.

IPC 8 full level
F04B 39/10 (2006.01); **F04B 53/10** (2006.01); **F04C 18/32** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP US)
F04B 39/10 (2013.01 - EP US); **F04B 39/108** (2013.01 - EP US); **F04B 39/1086** (2013.01 - US); **F04B 53/1085** (2013.01 - EP US); **F04C 29/12** (2013.01 - US); **F04C 29/128** (2013.01 - EP US); **F04B 2201/06** (2013.01 - US); **F04C 18/322** (2013.01 - EP US); **F04C 18/3564** (2013.01 - EP US); **F04C 2250/102** (2013.01 - US); **Y10T 137/7891** (2015.04 - EP US)

Citation (search report)
• [A] EP 2441960 A1 20120418 - MITSUBISHI ELECTRIC CORP [JP]
• [A] EP 1160447 A2 20011205 - TOYODA AUTOMATIC LOOM WORKS [JP]
• [A] EP 0926345 A2 19990630 - SANDEN CORP [JP]
• [A] JP 2011043084 A 20110303 - FUJITSU GENERAL LTD
• See references of WO 2014017081A1

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 2886864 A1 20150624; **EP 2886864 A4 20160921**; **EP 2886864 B1 20180307**; CN 104487708 A 20150401; CN 104487708 B 20160120; ES 2672321 T3 20180613; JP 2014040827 A 20140306; JP 5429353 B1 20140226; US 2015211508 A1 20150730; WO 2014017081 A1 20140130

DOCDB simple family (application)
EP 13823006 A 20130723; CN 201380039340 A 20130723; ES 13823006 T 20130723; JP 2012288002 A 20121228; JP 2013004489 W 20130723; US 201314417144 A 20130723