

Title (en)  
COMPRESSOR

Title (de)  
VERDICHTER

Title (fr)  
COMPRESSEUR

Publication  
**EP 2578887 A4 20160127 (EN)**

Application  
**EP 11792135 A 20110606**

Priority  
• JP 2010129745 A 20100607  
• JP 2011003184 W 20110606

Abstract (en)  
[origin: EP2578887A1] A single-component refrigerant mainly comprising hydrofluoroolefin having a carbon-carbon double bond or a mixture refrigerant including this refrigerant is used as a refrigerant. An axial length L of a discharge port 14 is set to be less than a thickness H of a member in which the discharge port 14 is formed, thereby making it possible to reduce a length of the discharge port in a direction of a flow passage to reduce a pressure loss and restrain an unnecessary pressure increase in a compression mechanism 4 to reduce a temperature increase of the refrigerant. At the same time, because a volume of the discharge port 14 filled with a high-pressure gas refrigerant can be made smaller, the high-pressure gas refrigerant remaining in the discharge port 14 after completion of a discharge process in the compression mechanism 4 is restrained from flowing back toward a low-pressure side compression chamber 9. Accordingly, a temperature increase of the refrigerant caused by re-expansion and re-compression can be also restrained.

IPC 8 full level  
**F04C 29/12** (2006.01); **F04B 39/10** (2006.01); **F04C 18/356** (2006.01)

CPC (source: EP)  
**F04B 39/0055** (2013.01); **F04B 39/1066** (2013.01); **F04B 39/1073** (2013.01); **F04C 23/008** (2013.01); **F04C 29/12** (2013.01); **F04C 18/3564** (2013.01); **F04C 22/10/263** (2013.01); **F04C 2250/102** (2013.01)

Citation (search report)  
• [X1] WO 2009116237 A1 20090924 - DAIKIN IND LTD [JP], et al  
• [X1] JP 2009228471 A 20091008 - DAIKIN IND LTD

Citation (examination)  
• US 2007148026 A1 20070628 - HIGASHI HIROFUMI [JP]  
• JP S61138881 U 19860828  
• See also references of WO 2011155176A1

Cited by  
CN105041649A

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 2578887 A1 20130410**; **EP 2578887 A4 20160127**; CN 102933851 A 20130213; CN 102933851 B 20150722;  
JP WO2011155176 A1 20130801; WO 2011155176 A1 20111215

DOCDB simple family (application)  
**EP 11792135 A 20110606**; CN 201180027767 A 20110606; JP 2011003184 W 20110606; JP 2012519241 A 20110606