

Title (en)  
FLUID MACHINE

Title (de)  
FLUIDMASCHINE

Title (fr)  
MACHINE À FLUIDE

Publication  
**EP 2177767 A1 20100421 (EN)**

Application  
**EP 09742613 A 20090430**

Priority  
• JP 2009001973 W 20090430  
• JP 2008121944 A 20080508

Abstract (en)  
A sub-compressor (23) is provided between a compressor (22) and a power-recovery device (24). A refrigerant after preliminarily being compressed by the sub-compressor (23) is allowed to flow into the compressor (22). Since the sub-compressor (23) and the power-recovery device (24) have approximately the same temperature, heat transfer hardly occur therebetween. Heat transfer occurs between the compressor (22) at high temperature and the sub-compressor (23) at low temperature. However, even if the heat from the compressor (22) heats the refrigerant in the sub-compressor (23), the refrigerant discharged from the sub-compressor (23) is delivered to the compressor (22), and thus the temperature of the sub-compressor (23) scarcely increases.

IPC 8 full level  
**F04C 23/00** (2006.01); **F01C 13/04** (2006.01); **F04C 23/02** (2006.01)

CPC (source: EP US)  
**F01C 13/04** (2013.01 - EP US); **F04C 18/0215** (2013.01 - EP US); **F04C 18/3564** (2013.01 - EP US); **F04C 23/006** (2013.01 - EP US); **F04C 23/008** (2013.01 - EP US)

Citation (search report)  
See references of WO 2009136488A1

Cited by  
EP3179181A4

Designated contracting state (EPC)  
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 SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2177767 A1 20100421**; CN 101688537 A 20100331; JP WO2009136488 A1 20110908; US 2010275638 A1 20101104; WO 2009136488 A1 20091112

DOCDB simple family (application)  
**EP 09742613 A 20090430**; CN 200980000534 A 20090430; JP 2009001973 W 20090430; JP 2010511015 A 20090430; US 66831009 A 20090430