

Title (en)
BOOSTER PUMP AND STORAGE TANK FOR LOW-TEMPERATURE FLUID COMPRISING SAME

Title (de)
DRUCKERHÖHUNGSPUMPE UND DIESE UMFASSENDE SPEICHERTANK FÜR FLUIDE AUF NIEDRIGEN TEMPERATUREN

Title (fr)
POMPE DE SURPRESSION ET RÉSERVOIR POUR LIQUIDE BASSE TEMPÉRATURE MUNI DE CETTE POMPE

Publication
EP 1767783 A4 20080730 (EN)

Application
EP 05755797 A 20050628

Priority

- JP 2005011783 W 20050628
- JP 2004194641 A 20040630
- JP 2004302048 A 20041015
- JP 2004377938 A 20041227
- JP 2005003993 A 20050111

Abstract (en)
[origin: EP1767783A1] A low-temperature-fluid storage tank capable of efficiently increasing the pressure of fluid without heating the fluid is provided. There is provided a booster pump which includes a piston having a piston head and a piston rod and a cylinder having a compression chamber that accommodates the piston head so that a fluid is compressed by one end surface of the piston head. The piston head is provided with a bellows for separating a space adjacent to the piston rod from a space adjacent to the cylinder in the compression chamber.

IPC 8 full level
F04B 53/02 (2006.01); **F04B 15/06** (2006.01); **F04B 23/02** (2006.01); **F04B 45/02** (2006.01)

CPC (source: EP US)
F04B 1/141 (2013.01 - EP US); **F04B 15/06** (2013.01 - EP US); **F04B 15/08** (2013.01 - EP US); **F04B 23/02** (2013.01 - EP US); **F04B 45/02** (2013.01 - EP US); **F04B 53/02** (2013.01 - EP US)

Citation (search report)

- [X] GB 702746 A 19540120 - SELF PRIMING PUMP & ENG CO LTD, et al
- [A] US 6729860 B1 20040504 - MARKHAM TREVOR K [US], et al
- [A] EP 0255993 A2 19880217 - GRILLINI MARCO
- [A] GB 535977 A 19410429 - HARRY DA COSTA, et al
- [A] GB 1279418 A 19720628 - GEN ENG RADCLIFFE
- See references of WO 2006003871A1

Cited by
EP3951178A4; WO2016073075A1; WO2017215820A1; WO2009026991A1

Designated contracting state (EPC)
DE FR

DOCDB simple family (publication)
EP 1767783 A1 20070328; **EP 1767783 A4 20080730**; **EP 1767783 B1 20100421**; DE 602005020794 D1 20100602; EP 2071190 A1 20090617; EP 2071190 B1 20120926; JP WO2006003871 A1 20080417; US 2009165640 A1 20090702; WO 2006003871 A1 20060112

DOCDB simple family (application)
EP 05755797 A 20050628; DE 602005020794 T 20050628; EP 09157231 A 20050628; JP 2005011783 W 20050628; JP 2006528677 A 20050628; US 63090005 A 20050628