

Title (en)  
PUMP WITH HEATING ELEMENT

Title (de)  
PUMPE MIT HEIZELEMENT

Title (fr)  
POMPE AVEC ÉLÉMENT CHAUFFANT

Publication  
**EP 2937571 B1 20190116 (DE)**

Application  
**EP 15162316 A 20150402**

Priority  
DE 102014207562 A 20140422

Abstract (en)  
[origin: JP2015206363A] PROBLEM TO BE SOLVED: To press a created connection part to a jacket or a jacket wall continuously over the whole circumference by an effective sealing method for proper sealing and stable and permanent fixing. SOLUTION: A pump 11a has a pump cover 16a having an inlet 17a to a pump chamber, a pump bottom, and a jacket 20a having a jacket wall between the pump bottom and the pump cover, and the pump chamber is substantially disposed in the jacket or the jacket wall. The jacket is constituted to be continuously annularly extended to the circumference, and holds at least one heating element 21a directly unreleasably fixed thereto. The jacket has an orifice as an outlet from the pump chamber, and the orifice is joined to a delivery connection part 25a of the pump, so that the orifice completely exists in the jacket wall of the jacket.

IPC 8 full level  
**F04D 29/42** (2006.01); **F04D 29/58** (2006.01); **F04D 29/62** (2006.01); **A47L 15/42** (2006.01); **D06F 39/04** (2006.01); **D06F 39/08** (2006.01); **F04D 1/00** (2006.01)

CPC (source: EP US)  
**F04D 29/086** (2013.01 - EP); **F04D 29/4266** (2013.01 - EP US); **F04D 29/4293** (2013.01 - EP); **F04D 29/586** (2013.01 - EP); **F04D 29/628** (2013.01 - EP); **A47L 15/4225** (2013.01 - EP); **A47L 15/4285** (2013.01 - EP); **D06F 39/04** (2013.01 - EP US); **D06F 39/085** (2013.01 - EP US); **F04D 1/00** (2013.01 - EP); **F05D 2250/52** (2013.01 - EP)

Citation (examination)  
• EP 2366905 A2 20110921 - CALPEDA A SPA [IT]  
• US 2009214332 A1 20090827 - TOWSLEY GREG [US], et al

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 2937571 A1 20151028; EP 2937571 B1 20190116**; DE 102014207562 A1 20151022; ES 2718881 T3 20190705; JP 2015206363 A 20151119; JP 6570299 B2 20190904; PL 2937571 T3 20190731; SI 2937571 T1 20190531; TR 201904773 T4 20190521

DOCDB simple family (application)  
**EP 15162316 A 20150402**; DE 102014207562 A 20140422; ES 15162316 T 20150402; JP 2015084264 A 20150416; PL 15162316 T 20150402; SI 201530707 T 20150402; TR 201904773 T 20150402