

Title (en)  
PUMP

Title (de)  
PUMPE

Title (fr)  
POMPE

Publication  
**EP 2980415 B1 20200902 (EN)**

Application  
**EP 14775949 A 20140203**

Priority  
• JP 2013071064 A 20130329  
• JP 2014000544 W 20140203

Abstract (en)  
[origin: EP2980415A1] A pump (1) includes: a casing (30) forming an outer shell of a suction flow passage (35a), of a pump chamber (131) communicating with the suction flow passage (35a), and of a discharge flow passage (36a) communicating with the pump chamber (131); and a volute unit (130) including a volute flow passage communicating with the suction flow passage (35a) and with the discharge flow passage (36a). The volute portion (130) is provided in the pump chamber (131) as a component independent of the casing (30).

IPC 8 full level  
**F04D 13/06** (2006.01); **F04D 29/42** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP)  
**F04D 13/0633** (2013.01); **F04D 29/426** (2013.01); **F04D 29/4286** (2013.01); **F04D 29/628** (2013.01)

Cited by  
CN112469901A; US11506216B2; WO2020011316A1

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 2980415 A1 20160203; EP 2980415 A4 20160309; EP 2980415 B1 20200902**; JP 2014194189 A 20141009; WO 2014155925 A1 20141002

DOCDB simple family (application)  
**EP 14775949 A 20140203**; JP 2013071064 A 20130329; JP 2014000544 W 20140203