

Title (en)
PUMP ROTOR AND PUMP COMPRISING A PUMP ROTOR OF SAID TYPE

Title (de)
PUMPENLAUFRAD UND PUMPE UMFASSEND EIN DERARTIGES PUMPENLAUFRAD

Title (fr)
ROUE À AUBES DE POMPE ET POMPE COMPRENANT UNE TELLE ROUE À AUBES DE POMPE

Publication
EP 2188532 B1 20111012 (DE)

Application
EP 08787296 A 20080818

Priority
• EP 2008060814 W 20080818
• EP 07114479 A 20070816
• EP 08787296 A 20080818

Abstract (en)
[origin: WO2009022019A1] The pump rotor (1) comprises a first blade (3), wherein the first blade (3) comprises a first helical-gear blade part (3a) and, adjoining the latter, a first centrifugal-wheel blade part (3b), and said pump rotor (1) comprises a hub (2) with a rotational axis (D), wherein the centrifugal-wheel blade part (3b) is fixedly connected to the hub (2), wherein at least one second blade (4) is provided which comprises a second helical-gear blade part (4a) and, adjoining the latter, a second centrifugal-wheel blade part (4b), wherein the first and the second blades (3,4) have in each case one outer edge (3c,4c), wherein a connecting means (5) connects the first and second blades (3,4) to one another in the region of the outer edge (3c,4c), and wherein the second centrifugal-wheel blade part (4b) is arranged so as to run relative to the hub (2) in such a way that an opening (6) which runs continuously in the rotational direction (D1) is formed between said second centrifugal-wheel blade part (4b) and hub (2), since the second centrifugal-wheel blade part (4b) is not directly connected to the hub (2).

IPC 8 full level
F04D 7/04 (2006.01); **F04D 29/22** (2006.01); **F04D 29/24** (2006.01)

CPC (source: EP US)
F04D 7/045 (2013.01 - EP US); **F04D 29/2288** (2013.01 - EP US); **F04D 29/242** (2013.01 - EP US)

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2009022019 A1 20090219; AT E528511 T1 20111015; CN 101779043 A 20100714; CN 101779043 B 20130327; DK 2188532 T3 20120130; EP 2188532 A1 20100526; EP 2188532 B1 20111012; JP 2010537097 A 20101202; JP 5238809 B2 20130717; RU 2010109741 A 20110927; RU 2470191 C2 20121220; US 2010215504 A1 20100826; US 8511966 B2 20130820

DOCDB simple family (application)
EP 2008060814 W 20080818; AT 08787296 T 20080818; CN 200880102353 A 20080818; DK 08787296 T 20080818; EP 08787296 A 20080818; JP 2010520601 A 20080818; RU 2010109741 A 20080818; US 67375608 A 20080818