

Title (en)
MANUFACTURING METHOD FOR CLOSED IMPELLERS

Title (de)
HERSTELLUNGSVERFAHREN FÜR GESCHLOSSENE LAUFRÄDER

Title (fr)
PROCÉDÉ DE FABRICATION DE ROUES FERMÉES

Publication
EP 2349625 A1 20110803 (DE)

Application
EP 09756271 A 20091020

Priority
• EP 2009063705 W 20091020
• EP 08167041 A 20081020
• EP 09756271 A 20091020

Abstract (en)
[origin: EP2177298A1] The method involves forming blade channels (3) between blades (2, 2a), and forming blank shape-openings for blade channels using a program-controlled machining device e.g. fivefold-computer numerical control-milling machine. Electrodes of an electric discharge machining device or an electrochemical spark machining device are introduced in the openings, which are permanent. A part of predetermined shape of the blade channels is formed using electric discharge machining or electrochemical spark machining.

IPC 8 full level
B23H 9/10 (2006.01); **B23C 3/18** (2006.01)

CPC (source: EP US)
B23C 3/18 (2013.01 - EP US); **B23H 9/00** (2013.01 - EP US); **B23H 9/10** (2013.01 - EP US); **B23P 15/006** (2013.01 - EP US); **F04D 29/023** (2013.01 - EP US); **F04D 29/026** (2013.01 - EP US); **F04D 29/227** (2013.01 - EP US); **F04D 29/284** (2013.01 - EP US); **B23C 2215/48** (2013.01 - EP US); **F05D 2230/11** (2013.01 - EP US); **F05D 2230/12** (2013.01 - EP US)

Citation (search report)
See references of WO 2010046353A1

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 SM TR

DOCDB simple family (publication)
EP 2177298 A1 20100421; EP 2349625 A1 20110803; US 2011255976 A1 20111020; WO 2010046353 A1 20100429

DOCDB simple family (application)
EP 08167041 A 20081020; EP 09756271 A 20091020; EP 2009063705 W 20091020; US 200913124186 A 20091020