

Title (en)  
COOLANT PUMPS WHICH CAN BE COUPLED

Title (de)  
KOPPELBARE KÜHLMITTELPUMPEN

Title (fr)  
POMPES A LIQUIDE DE REFROIDISSEMENT POUVANT ETRE COUPLEES

Publication  
**EP 1529157 A1 20050511 (DE)**

Application  
**EP 03747878 A 20030806**

Priority  
• DE 10237778 A 20020817  
• EP 0308678 W 20030806

Abstract (en)  
[origin: WO2004022939A1] The invention relates to a first coolant pump (1) of an internal combustion engine, with which a second coolant pump (2) is associated. Said two coolant pumps (1, 2) are actively connected by means of a coupling (3) with which a step-up gear (4) is associated.

IPC 1-7  
**F01P 7/16**; **F01P 5/12**

IPC 8 full level  
**F01P 5/12** (2006.01); **F01P 7/16** (2006.01); **F04D 13/02** (2006.01); **F04D 13/14** (2006.01); **F01P 5/10** (2006.01)

CPC (source: EP US)  
**F01P 5/12** (2013.01 - EP US); **F01P 7/161** (2013.01 - EP US); **F01P 7/162** (2013.01 - EP US); **F04D 13/021** (2013.01 - EP US);  
**F04D 13/14** (2013.01 - EP US); **F04D 15/0072** (2013.01 - EP); **F01P 2005/105** (2013.01 - EP US)

Citation (search report)  
See references of WO 2004022939A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**DE 10237778 A1 20040304**; **DE 10237778 B4 20100512**; EP 1529157 A1 20050511; US 2005188927 A1 20050901; US 7032546 B2 20060425;  
WO 2004022939 A1 20040318; WO 2004022939 B1 20040513

DOCDB simple family (application)  
**DE 10237778 A 20020817**; EP 0308678 W 20030806; EP 03747878 A 20030806; US 6230705 A 20050215