

Title (en)  
ARRANGEMENT WITH A VENTILATOR AND A PUMP

Title (de)  
ANORDNUNG MIT EINEM LUEFTER UND EINER PUMPE

Title (fr)  
ENSEMBLE COMPRENANT UN VENTILATEUR ET UNE POMPE

Publication  
**EP 1812714 B1 20080326 (DE)**

Application  
**EP 05783017 A 20050906**

Priority  
• EP 2005009543 W 20050906  
• DE 202004018458 U 20041119

Abstract (en)  
[origin: US2009074594A1] A compact arrangement features a fan (42'), a fluid pump (134), and an electric drive motor (106). The latter has a stator (22) having a stator winding (118) that is configured to generate a rotating field. The stator (22) has associated with it a permanent-magnet external rotor (106) for driving the fan (42'), and a permanent-magnet internal rotor (140) for driving the fluid pump (134). The stator winding (118) thus drives not only the rotor (106) of the drive motor and hence the fan (42'), but also the internal rotor (140) and hence the fluid pump (134). The arrangement is very well suited for combination with a fluid cooler (90).

IPC 8 full level  
**F04D 29/16** (2006.01); **F01P 5/04** (2006.01); **F01P 5/12** (2006.01)

CPC (source: EP US)  
**F01P 5/02** (2013.01 - EP US); **F01P 5/04** (2013.01 - EP US); **F01P 5/12** (2013.01 - EP US); **F04D 25/064** (2013.01 - EP US); **F04D 25/0646** (2013.01 - EP US); **F04D 31/00** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2006056249 A1 20060601**; AT E390562 T1 20080415; DE 502005003509 D1 20080508; EP 1812714 A1 20070801; EP 1812714 B1 20080326; US 2009074594 A1 20090319

DOCDB simple family (application)  
**EP 2005009543 W 20050906**; AT 05783017 T 20050906; DE 502005003509 T 20050906; EP 05783017 A 20050906; US 71985205 A 20050906