

Title (en)
LIQUID-AIR COOLING SYSTEM

Title (de)
FLÜSSIGKEITS-LUFT-KÜHLSYSTEM

Title (fr)
SYSTÈME DE REFROIDISSEMENT PAR AIR ET PAR LIQUIDE

Publication
EP 2659146 A2 20131106 (DE)

Application
EP 11801609 A 20111217

Priority
• DE 102010056567 A 20101230
• EP 2011006396 W 20111217

Abstract (en)
[origin: WO2012089316A2] A liquid-air cooling system (1) has at least one fan device (2) that consists of at least one variable-speed fan motor (3) driving a fan impeller (4) to create a cooling power for a fluid (5) in a fluid cycle (6). In order to regulate the speed of the fan motor (3) by means of a control and/or regulation device (24), at least one actual value (tist) downstream of the segmented heat exchanger (19) is compared to a predefined desired value (tsoll), and the control and/or regulation device (24) adjusts the cooling power according to the current power values of the respective machine unit (9).

IPC 8 full level
F04D 27/00 (2006.01); **F01P 1/00** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)
F01P 7/048 (2013.01 - EP US); **F04D 27/004** (2013.01 - EP US); **F04D 29/5826** (2013.01 - EP US); **F28F 27/00** (2013.01 - US); **F01P 2025/36** (2013.01 - EP US); **Y02B 30/70** (2013.01 - EP)

Citation (search report)
See references of WO 2012089316A2

Citation (examination)
DE 10058374 A1 20020606 - ROBERT SEUFFER GMBH & CO [DE], et al

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)
WO 2012089316 A2 20120705; **WO 2012089316 A3 20120907**; CN 103328825 A 20130925; CN 103328825 B 20160224; DE 102010056567 A1 20120705; EP 2659146 A2 20131106; JP 2014507587 A 20140327; US 2013306300 A1 20131121; US 9267746 B2 20160223

DOCDB simple family (application)
EP 2011006396 W 20111217; CN 201180063249 A 20111217; DE 102010056567 A 20101230; EP 11801609 A 20111217; JP 2013546610 A 20111217; US 201113261679 A 20111217