

Title (en)

LUBRICATING AND COOLING SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

SCHMIERUNGS- UND KÜHLSYSTEM FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)

SYSTÈME DE LUBRIFICATION ET DE REFROIDISSEMENT POUR UN MOTEUR À COMBUSTION INTERNE

Publication

EP 3382170 B1 20191225 (EN)

Application

EP 18165241 A 20180329

Priority

IT 201700034652 A 20170329

Abstract (en)

[origin: EP3382170A1] Lubricating and cooling system for an internal combustion engine, comprising a multitude of oil consumers grouped into a first and a second group, the system comprising a main oil circuit with a respective main pump (MP), comprising connecting means for being directly driven by said internal combustion engine, wherein said main pump is a controllable variable flow pump arranged to feed oil to said first group of oil consumers (CB-RA, CM, CR) and an auxiliary oil circuit with an electrical auxiliary pump (AP) arranged to feed oil to said second group of oil consumers (NZ); the system being arranged, during engine brake operation, to command an interconnection of said main and auxiliary circuits, to control said main pump to provide for a relative maximum oil flow and to control said auxiliary pump to extract energy from said oil flow provided by said main pump, thereby generating electric energy.

IPC 8 full level

F01M 1/16 (2006.01); **F04C 28/04** (2006.01); **F01M 1/02** (2006.01); **F01M 1/12** (2006.01)

CPC (source: EP)

F01M 1/16 (2013.01); **F01M 2001/0215** (2013.01); **F01M 2001/0238** (2013.01); **F01M 2001/0246** (2013.01); **F01M 2001/123** (2013.01); **F04C 11/003** (2013.01); **F04C 14/04** (2013.01)

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)

EP 3382170 A1 20181003; **EP 3382170 B1 20191225**; ES 2778705 T3 20200811; IT 201700034652 A1 20180929

DOCDB simple family (application)

EP 18165241 A 20180329; ES 18165241 T 20180329; IT 201700034652 A 20170329