

Title (en)
A LUBRICATION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
SCHMIERSYSTEM FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
SYSTÈME DE LUBRIFICATION POUR MOTEUR À COMBUSTION INTERNE

Publication
EP 3425178 A1 20190109 (EN)

Application
EP 17179555 A 20170704

Priority
EP 17179555 A 20170704

Abstract (en)
A lubrication system (1) for an internal combustion engine comprises an oil pump (2) for circulating oil through the system (1), an oil sump (3) and a suction pipe (6) for drawing oil from the oil sump (3) and transporting the oil to the oil pump (2). The oil sump (3) includes a first compartment (4) and a second compartment (5), which communicate with each other via a closeable first passage (12, 13, 14). The system (1) also comprises a return flow collector (9) for receiving and transporting a return flow of oil towards the first compartment (4), wherein the first compartment (4) is provided with an overflow outlet (11) for transferring overflow oil to the second compartment (5), a closable second passage (12, 13) through which the second compartment (5) communicates with the suction pipe (6) and a third passage (14) through which the first compartment (4) communicates with the suction pipe (6) and a control device for controlling the system (1), wherein the control device is configured such that during a heating-up period after a cold start of the engine the first passage (12, 13, 14) and the second passage (12, 13) are closed and the suction pipe (6) communicates with the first compartment (4) only and after reaching a predetermined oil temperature in the first compartment (4) at least the second passage (12, 13) is opened such that the suction pipe (6) communicates with at least the second compartment (5). At least the second passage (12, 13) is closeable independent from the oil temperature.

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CPC (source: EP)
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Citation (applicant)
DE 3235292 A1 19840329 - GONTSCHAROW WALDEMAR

Citation (search report)
• [AD] DE 3235292 A1 19840329 - GONTSCHAROW WALDEMAR
• [A] DE 3318460 A1 19841122 - MAY MICHAEL G
• [A] JP S5776217 A 19820513 - NISSAN MOTOR
• [A] WO 2006095880 A1 20060914 - TOYOTA MOTOR CO LTD [JP], 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

Designated extension state (EPC)
BA ME

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