

Title (en)  
COOLANT CIRCUIT IN A VEHICLE

Title (de)  
KÜHLMITTELKREISLAUF IN EINEM FAHRZEUG

Title (fr)  
CIRCUIT D'AGENT DE REFROIDISSEMENT DANS UN VÉHICULE

Publication  
**EP 3935269 A1 20220112 (DE)**

Application  
**EP 20704799 A 20200205**

Priority  
• DE 102019105505 A 20190305  
• EP 2020052796 W 20200205

Abstract (en)  
[origin: WO2020177963A1] A coolant circuit (10, 10', 10", 10''') in a vehicle has a pump (18), an engine (12) to be cooled, and a radiator (14), and is characterized in that a first throughflow regulating unit (22) is provided in a main duct (20) between the engine (12) and the radiator (14), which first throughflow regulating unit (22) comprises a first valve (32) and a first actuator (30) and thermostatically controls a throughflow of the coolant in open-loop or closed-loop fashion in an infinitely variable manner as a function of a temperature of a coolant, and in that a bypass duct (24) branches off from the main duct (20) between the engine (12) and the first throughflow regulating unit (22), which bypass duct (24) is connected in parallel with respect to the radiator (14) in terms of flow and opens into the main duct (20) downstream of the radiator (14), wherein a second throughflow regulating unit (26) is provided in the bypass duct (24), which second throughflow regulating unit (26) comprises a second valve (34) and is configured in such a way that it opens or closes the bypass duct (24) as a function of the temperature of the coolant.

IPC 8 full level  
**F01P 7/16** (2006.01); **F01P 3/20** (2006.01); **F01P 7/14** (2006.01)

CPC (source: EP US)  
**F01P 3/20** (2013.01 - EP US); **F01P 5/10** (2013.01 - US); **F01P 7/16** (2013.01 - EP US); **F01P 2007/146** (2013.01 - EP US); **F01P 2025/08** (2013.01 - US); **F01P 2025/32** (2013.01 - EP); **F01P 2060/04** (2013.01 - EP US)

Citation (search report)  
See references of WO 2020177963A1

Designated contracting state (EPC)  
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