

Title (en)
COOLING DEVICE FOR COOLING AT LEAST ONE ELECTRIC LINE WHICH IS CONNECTED TO A PLUG CONNECTOR PART

Title (de)
KÜHLEINRICHTUNG ZUM KÜHLEN ZUMINDEST EINER MIT EINEM STECKVERBINDE RTEIL VERBUNDENEN ELEKTRISCHEN LEITUNG

Title (fr)
DISPOSITIF DE REFROIDISSEMENT POUR REFROIDIR AU MOINS UNE LIGNE ÉLECTRIQUE QUI EST RACCORDÉE À UNE PARTIE CONNECTEUR MÂLE

Publication
EP 4301620 A1 20240110 (DE)

Application
EP 22711893 A 20220221

Priority
• BE 202105164 A 20210304
• EP 2022054257 W 20220221

Abstract (en)
[origin: WO2022184489A1] A cooling device (5) for cooling at least one electric line (41) which is connected to a plug connector part (40) comprises a cooling module (50) that can be placed on the at least one electric line (41) and has a cooling channel (503) through which a coolant can flow. The cooling module (50) has two housing assemblies (53, 54), each of which has a respective connection section (564) and a flow opening (568) molded onto the connection section (564), wherein the housing assemblies (53, 54) are separate in a preassembly state and can be connected together in order to be placed on the at least one electric line (41) such that the at least one electric line (41) is received between the housing assemblies (53, 54), and the flow openings (568) of the connection sections (564) of the housing assemblies (53, 54) are fluidically connected together in order to form the cooling channel (503).

IPC 8 full level
B60L 53/16 (2019.01); **B60L 53/302** (2019.01); **H01B 7/42** (2006.01); **H01R 9/11** (2006.01); **H02G 3/03** (2006.01); **H05K 7/20** (2006.01)

CPC (source: EP US)
B60L 53/16 (2019.02 - EP US); **B60L 53/302** (2019.02 - EP US); **H02G 3/03** (2013.01 - EP); **H01R 13/533** (2013.01 - EP); **Y02T 10/70** (2013.01 - EP); **Y02T 10/7072** (2013.01 - EP); **Y02T 90/14** (2013.01 - EP)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022184489 A1 20220909; BE 1029163 A1 20220927; BE 1029163 B1 20221003; CN 117120294 A 20231124; EP 4301620 A1 20240110; US 2024157827 A1 20240516

DOCDB simple family (application)
EP 2022054257 W 20220221; BE 202105164 A 20210304; CN 202280018712 A 20220221; EP 22711893 A 20220221; US 202218548239 A 20220221