

Title (en)
MONITORING AN ELECTRICAL ENERGY TRANSMISSION DEVICE

Title (de)
ÜBERWACHEN EINER ELEKTROENERGIEÜBERTRAGUNGSVORRICHTUNG

Title (fr)
SURVEILLANCE D'UN DISPOSITIF DE TRANSFERT D'ÉNERGIE ÉLECTRIQUE

Publication
EP 4115484 A1 20230111 (DE)

Application
EP 21715144 A 20210310

Priority

- DE 102020204609 A 20200409
- EP 2021056022 W 20210310

Abstract (en)
[origin: WO2021204486A1] The invention relates to a method for monitoring an electrical energy transmission device (1), wherein time-resolved operating state data (3, 4) relating to current, past and/or future operating states of the electrical energy transmission device (1), environment status data (5, 6) relating to current, past and/or future environment statuses in an environment of the electrical energy transmission device (1), and/or sensor data (7) detected by at least one sensor of the electrical energy transmission device (1) is recorded. By means of a computational model (9) processing the operating state data (3, 4), environment status data (5, 6) and/or sensor data (7), a temperature curve (10) of current, past and/or future temperatures of at least one module (2, 2.1, 2.2, 2.3) of the electrical energy transmission device (1) is calculated and, based on the calculated temperature curve (10), a thermal load capacity of the module (2, 2.1, 2.2, 2.3) is determined according to a thermal load threshold for the module (2, 2.1, 2.2, 2.3).

IPC 8 full level
H02J 3/00 (2006.01); **H02J 13/00** (2006.01)

CPC (source: EP US)
G01K 3/10 (2013.01 - US); **H02J 3/001** (2020.01 - EP); **H02J 13/00002** (2020.01 - EP US); **H02J 13/00022** (2020.01 - US); **H02J 2203/10** (2020.01 - EP); **Y02E 60/00** (2013.01 - EP); **Y04S 10/30** (2013.01 - EP)

Citation (search report)
See references of WO 2021204486A1

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)
DE 102020204609 A1 20211014; CN 115516727 A 20221223; EP 4115484 A1 20230111; US 2023168131 A1 20230601; WO 2021204486 A1 20211014

DOCDB simple family (application)
DE 102020204609 A 20200409; CN 202180034097 A 20210310; EP 2021056022 W 20210310; EP 21715144 A 20210310; US 202117918269 A 20210310