

Title (en)  
NETWORK FOR DISTRIBUTING ELECTRICAL ENERGY

Title (de)  
NETZ ZUR VERTEILUNG ELEKTRISCHER ENERGIE

Title (fr)  
RÉSEAU DE DISTRIBUTION D'ÉNERGIE ÉLECTRIQUE

Publication  
**EP 4176504 A1 20230510 (DE)**

Application  
**EP 21720781 A 20210427**

Priority  
• CH 8252020 A 20200703  
• EP 2021060982 W 20210427

Abstract (en)  
[origin: CA3160582A1] A network (1) for distributing electrical energy comprises a first network area (10) consisting of a plurality of local, self-regulating functional groups (11.1?8) having first sources, loads, lines and/or sensor, switching or converter components, wherein each of the functional groups (11.1?8) is designed for complying with assigned regulation limits for voltage quality variables in the network (1), and wherein the first network area (10) has a first size, and a second network area (20) having second sources, loads, lines and/or sensor, switching or converter components, wherein an estimated total variance of the voltage quality variables is assigned to the second network area (20), and wherein the second network area (20) has a second size. The regulation limits of the functional groups (11.1?8) and the first size are chosen such that, taking account of the second size and the estimated total variance, predefined target operating range limits for the entire network (1) are complied with.

IPC 8 full level  
**H02J 3/38** (2006.01); **G06F 30/18** (2020.01); **H02J 3/24** (2006.01)

CPC (source: CH EP US)  
**G06F 30/18** (2020.01 - CH); **G06Q 50/06** (2013.01 - CH); **H02J 3/144** (2020.01 - US); **H02J 3/381** (2013.01 - CH EP US);  
**H02J 13/00** (2013.01 - CH); **H02J 13/00004** (2020.01 - EP US); **H02J 3/24** (2013.01 - EP); **H02J 2203/20** (2020.01 - EP);  
**Y02E 40/70** (2013.01 - EP); **Y04S 10/12** (2013.01 - EP)

Citation (search report)  
See references of WO 2022002458A1

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)  
**CH 717615 A1 20220114**; AU 2021302159 A1 20220623; CA 3160582 A1 20220106; CN 115136441 A 20220930; EP 4176504 A1 20230510;  
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**CH 8252020 A 20200703**; AU 2021302159 A 20210427; CA 3160582 A 20210427; CN 202180007804 A 20210427; EP 2021060982 W 20210427;  
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