

Title (en)
CIRCUIT FOR LIMITING THE INRUSH CURRENT

Title (de)
SCHALTUNG ZUR EINSCHALTSTROMBEGRENZUNG

Title (fr)
CIRCUIT POUR LIMITER LE COURANT D'APPEL

Publication
EP 4128511 A1 20230208 (DE)

Application
EP 21716972 A 20210325

Priority
• DE 102020108780 A 20200330
• EP 2021057692 W 20210325

Abstract (en)
[origin: WO2021197997A1] The invention relates to a circuit for limiting the inrush current, said circuit comprising a voltage input (1), a voltage output (2) for a load, and a rectifier (3). An input side of the rectifier (3) is connected to the voltage input (1) and an output side of the rectifier (3) is connected to the voltage output (2). An output capacitor (C9) is located between a first pole (2a) and a second pole (2b) of the voltage output (2) or the output side of the rectifier (3). The circuit comprises a control group (4), wherein the control group (4) has a control element (T3) for limiting the charging current of the output capacitor (C9). The control element (T3) has at least one control input (14) and a two-pole power path. The control group (4) comprises an actuator (5) for influencing the control element (T3), wherein the actuator (5) is connected to the control input (14). The control group (4) has a sensor element (6), wherein an output of the sensor element (6) is connected to an input of the actuator (5). An input of the sensor element (6) is associated with the output side of the rectifier (3).

IPC 8 full level
H02M 7/06 (2006.01); **H02M 1/32** (2006.01); **H02M 1/36** (2006.01)

CPC (source: EP)
H02M 1/32 (2013.01); **H02M 1/36** (2013.01); **H02M 7/062** (2013.01)

Citation (search report)
See references of WO 2021197997A1

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 102020108780 A1 20210930; EP 4128511 A1 20230208; WO 2021197997 A1 20211007

DOCDB simple family (application)
DE 102020108780 A 20200330; EP 2021057692 W 20210325; EP 21716972 A 20210325