

Title (en)
CONVERTER ASSEMBLY HAVING MULTI-STEP CONVERTERS CONNECTED IN PARALLEL AND METHOD FOR CONTROLLING SAID MULTI-STEP CONVERTERS

Title (de)
UMRICHTERANORDNUNG MIT PARALLEL GESCHALTEHEN MEHRSTUFEN-UMRICHTERN SOWIE VERFAHREN ZU DEREN STEUERUNG

Title (fr)
ENSEMBLE MUTATEUR À MUTATEURS MULTI-ÉTAGES CÂBLÉS EN PARALLÈLE ET SON PROCÉDÉ DE COMMANDE

Publication
EP 2992595 A1 20160309 (DE)

Application
EP 14730120 A 20140605

Priority
• DE 102013212426 A 20130627
• EP 2014061703 W 20140605

Abstract (en)
[origin: WO2014206704A1] The invention relates to a method for controlling a plurality of multi-step converters (2), which are closed in parallel at alternating-voltage connections (21) thereof and which each have a series arrangement of two-pole sub-modules. Each of the sub-modules comprises at least two controllable electronic switches and an energy store, wherein the controllable electronic switches are connected in series forming a series arrangement and the series arrangement is connected in parallel with the energy store. In the method according to the invention, a stepped voltage curve is produced at the particular alternating-voltage connection (21) of the multi-step converters (2). The voltage curve of a second multi-step converter is offset in time in relation to the voltage curve of a first multi-step converter. The invention further relates to a converter assembly (1), which comprises means for the time delay of the alternating-voltage curve of at least one multi-step converter (2) in relation to the alternating-voltage curve of a further multi-step converter (2).

IPC 8 full level
H02M 1/12 (2006.01); **H02M 7/483** (2007.01)

CPC (source: EP RU US)
H02M 1/12 (2013.01 - EP US); **H02M 7/44** (2013.01 - US); **H02M 7/483** (2013.01 - EP US); **H02M 7/4835** (2021.05 - EP US);
H02M 7/493 (2013.01 - EP US); **H02M 1/12** (2013.01 - RU); **H02M 7/483** (2013.01 - RU)

Citation (search report)
See references of WO 2014206704A1

Citation (examination)
US 5933339 A 19990803 - DUBA GREG A [US], et al

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

DOCDB simple family (publication)
DE 102013212426 A1 20141231; CN 205657581 U 20161019; EP 2992595 A1 20160309; KR 20160013176 A 20160203;
RU 2016102320 A 20170801; RU 2629005 C2 20170824; US 2016380551 A1 20161229; WO 2014206704 A1 20141231

DOCDB simple family (application)
DE 102013212426 A 20130627; CN 201490000849 U 20140605; EP 14730120 A 20140605; EP 2014061703 W 20140605;
KR 20157036648 A 20140605; RU 2016102320 A 20140605; US 201414901500 A 20140605