

Title (en)

TWO-STAGE CLOCKED ELECTRONIC ENERGY CONVERTER

Title (de)

ZWEISTUFIGER GETAKTETER ELEKTRONISCHER ENERGIEWANDLER

Title (fr)

CONVERTISSEUR D'ÉNERGIE ÉLECTRONIQUE CYCLIQUE À DEUX ÉTAGES

Publication

EP 3036824 A1 20160629 (DE)

Application

EP 14749856 A 20140811

Priority

- DE 102013216878 A 20130823
- EP 2014067189 W 20140811

Abstract (en)

[origin: WO2015024808A1] The invention relates to a two-stage clocked electronic energy converter (20) for converting an electric power, comprising a first connection (38, 40) for connecting an electrical energy source, a second connection (42, 44) for connecting a consumer (46) and a DC link capacitor (28), wherein a first stage (1) of the two-stage clocked electronic energy converter (20) has a first converter in the boost operating mode which converts an electric voltage at the first connection (38, 40) into an electric DC link voltage at the DC link capacitor (28), and wherein the DC link capacitor (28) supplies a second stage (2) of the two-stage clocked electronic energy converter (20), said second stage supplying electrical energy to the consumer (46) in power-controllable fashion. In accordance with the invention, the energy converter has a control unit which is designed to set the power drawn from the DC link capacitor (28) by the second stage (2) such that an instantaneous minimum of the DC link voltage, which instantaneous minimum is effected by the power consumption, is greater than a preset voltage comparison value (50, 54).

IPC 8 full level

H02M 3/158 (2006.01); **H02M 1/00** (2007.01); **H02M 1/42** (2007.01); **H02M 7/217** (2006.01); **H02M 1/36** (2007.01)

CPC (source: EP US)

H02M 1/4208 (2013.01 - US); **H02M 1/4225** (2013.01 - EP US); **H02M 3/1582** (2013.01 - EP US); **H02M 1/007** (2021.05 - EP US);
H02M 1/36 (2013.01 - EP US); **Y02B 70/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2015024808A1

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)

WO 2015024808 A1 20150226; CN 105474525 A 20160406; DE 102013216878 A1 20150226; EP 3036824 A1 20160629;
US 2016204693 A1 20160714

DOCDB simple family (application)

EP 2014067189 W 20140811; CN 201480046587 A 20140811; DE 102013216878 A 20130823; EP 14749856 A 20140811;
US 201414913408 A 20140811