

Title (en)

SURGE PROTECTION CIRCUIT AND POWER SUPPLY FOR OPERATING FROM A DC GRID

Title (de)

ÜBERSpannungsschutzschaltung und Stromversorgung zum Betrieb aus einem Gleichstromnetz

Title (fr)

CIRCUIT DE PROTECTION CONTRE LES SURTENSIONS ET ALIMENTATION ÉLECTRIQUE POUR FONCTIONNER À PARTIR D'UN RÉSEAU À COURANT CONTINU

Publication

**EP 4387399 A1 20240619 (EN)**

Application

**EP 22213166 A 20221213**

Priority

EP 22213166 A 20221213

Abstract (en)

The invention is in the field of DC power supply and concerns building infrastructure systems, e.g. lighting devices. A surge protection circuit for a power supply interface of a DC-to-DC converter device comprises a serial circuit element connected between the DC input voltage lines configured to implement a low-pass filter, and a linear regulator circuit element including at least one transistor. The invention concerns a DC-to-DC converter device for generating a load current for an electric load, e.g. a LED current for at least one lighting module, from a DC supply voltage. The DC-to-DC converter device comprises a converter circuit configured to generate the load current and to output the load current via an output interface to the electric load, and the surge protection circuit connected between a DC grid interface for obtaining the DC supply voltage and the converter circuit.

IPC 8 full level

**H05B 47/24** (2020.01)

CPC (source: EP)

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Citation (search report)

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Designated contracting state (EPC)

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