

Title (en)

Inrush current limiting circuit

Title (de)

Einschaltstrombegrenzungsschaltung

Title (fr)

Circuit limiteur de courant d'appel

Publication

**EP 0895443 A1 19990203 (FR)**

Application

**EP 98410084 A 19980728**

Priority

FR 9710034 A 19970731

Abstract (en)

The lamp (L) is series-connected, across the AC e.g. mains supply (P,N), with a single-pole switch and a peak-clamping circuit based on two MOSFET transistors (M1,M2). The load-carrying current connection between MOSFETs includes a resistance (Rm) providing current-related input levels to bipolar transistors (T1,T2) controlling the MOSFETs. Bypass diodes (D1,D2) ensure one MOSFET is inoperative during positive current half-cycles. The other during negative half-cycles. The series resistor provides current measurement for the relevant control transistor in both half-cycles. In one variant, a single peak-clammer is used, with a full-wave rectifier. In another, a MOSFET is used in a chopping mode. Optionally, IGBTs replace MOSFETs.

Abstract (fr)

L'invention concerne un circuit limiteur de courant d'appel d'une lampe (L) à filament, destiné à être connecté en série entre le filament et un interrupteur (K) d'alimentation par une tension alternative (Vac), comportant au moins un élément actif commandable, de limitation du courant à une valeur seuil pré-déterminée. <IMAGE>

IPC 1-7

**H05B 39/02**

IPC 8 full level

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CPC (source: EP US)

**H05B 39/02** (2013.01 - EP US)

Citation (search report)

- [A] EP 0735798 A1 19961002 - KORTE HEINRICH [DE]
- [A] EP 0240402 A1 19871007 - BENDIX ELECTRONICS SA [FR]
- [A] WO 9215052 A1 19920903 - BAYVIEW TECH GROUP INC [US]

Cited by

EP3297112A1; FR3056346A1; US10474172B2

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DOCDB simple family (publication)

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