Title (en)

SOFT START SOLID STATE SWITCH

Publication

EP 0285417 A3 19890301 (EN)

Application

EP 88302885 A 19880330

Priority

- GB 8707636 A 19870331
- US 16353488 A 19880317

Abstract (en)

[origin: EP0285417A2] The junction temperature rise of a power MOSFET (12;202;402) serially connected to a lamp (32;204;404) whose resistance nonlinearly increases during turn-on is moderated by the use of control circuitry which initially sets up a relatively low essentially constant current flow through the lamp and transistor and then automatically after the lamp resistance reaches a preselected level, the lamp is allowed to draw significantly more current. Alternatively, there is initially an essentially constant flow of current to the MOSFET gate, causing a gradual turn-on, until the lamp resistance reaches the preselected level. The size and therefore cost of the power MOSFET is reduced significantly because the magnitude of the current spike generated by turning on the lamp is significantly reduced by the use of the novel control circuitry.

IPC 1-7

H05B 39/02

IPC 8 full level

H03K 17/16 (2006.01); **H03K 17/687** (2006.01); **H05B 39/02** (2006.01)

CPC (source: EP)

H05B 39/02 (2013.01)

Citation (search report)

- [A] WO 8400463 A1 19840202 - STROEDE AAKE, et al
- [A] US 4390812 A 19830628 - SEIDLER ROBERT L [US]

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DE3839761A1; EP0432847A3; GB2288890A; US6583974B1; US8237382B2; WO2008098613A1

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0285417 A2 19881005; **EP 0285417 A3 19890301**; CA 1314070 C 19930302; JP S63308409 A 19881215

DOCDB simple family (application)

EP 88302885 A 19880330; CA 563177 A 19880331; JP 7667688 A 19880331