

Title (en)  
CURRENT-LIMIT CIRCUIT

Title (de)  
STROMBEGRENZUNGSSCHALTUNG

Title (fr)  
CIRCUIT LIMITEUR DE COURANT

Publication  
**EP 0965169 A1 19991222 (DE)**

Application  
**EP 98907873 A 19980129**

Priority  
• DE 9800262 W 19980129  
• DE 19707708 A 19970226

Abstract (en)  
[origin: DE19707708A1] The present invention relates to a current-limit circuit for controlled semiconductor power components (60), specially a current-limit circuit for power transistors, which are independent from its voltage supply. This is achieved by a current-limit circuit for controlled semiconductor power components (60), specially for power transistors, provided with a sensing resistor (20) which is series connected to the main voltage path of the controlled semiconductor (60) to produce a voltage drop reproducing the voltage flowing through the controlled semiconductor power element (60). Said current-limit circuit also comprises a current balancing limiting device having a first power source device (31) to produce a first current between a first and a second reference potential, as well as a second power source device (32) to produce a second current between the control potential of the gate terminal of the semiconductor power element and a third reference potential. Further included is a power source coupling circuit (33) to couple the first and second power source devices (31, 32) responding to the voltage drop of the sensing resistor, so that once the voltage drop exceeds a given value, the second current is increased in order to lower the control potential so that the current flowing through the semiconductor power element (6) can be limited.

IPC 1-7  
**H03K 17/082**

IPC 8 full level  
**H03K 17/08** (2006.01); **G05F 3/26** (2006.01); **H03K 17/082** (2006.01)

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