

Title (en)
Current limiting circuit

Title (de)
Strombegrenzungsschaltung

Title (fr)
Circuit de limitation de courant

Publication
EP 1160642 B1 20110525 (DE)

Application
EP 01109666 A 20010419

Priority
DE 10026793 A 20000531

Abstract (en)
[origin: EP1160642A1] The circuit provides current limiting for varying load currents in circuits with a current supply for a series circuit including a load current control FET and a load. A differential amplifier (3) is provided. A reference voltage source is connected to the second input of the amplifier. The output is connected to the gate of the FET. A current mirror including a mirror control FET and the load current control FET (1) is arranged such that the sources of both FETs are connected to an operating voltage source (9). The mirror is in a control path comprising a current mirror coupling FET whose source is connected to the drain of the mirror control FET, and whose drain is connected to the first input of the amplifier (3). The drain of the coupling FET is connected in series with a current limiting resistor (6) to earth. The amplifier output is connected to the gate of the mirror control FET. A second differential amplifier (7) is provided. The first input is connected to the source of the coupling FET. The second input is connected to the load (2) and to the drain of the load FET (1). The output is connected to the gate of the coupling FET.

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G05F 3/26 (2006.01)

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Cited by
US8786359B2; DE102020209371A1; WO2009076304A1

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