

Title (en)  
Current limiter.

Title (de)  
Strombegrenzer.

Title (fr)  
Limiteur de courant.

Publication  
**EP 0025918 A1 19810401 (DE)**

Application  
**EP 80105295 A 19800904**

Priority  
DE 2937490 A 19790917

Abstract (en)

[origin: US4367508A] A current limiter which is electrically arranged in series with a circuit breaker, the current limiter having contacts which are movable with respect to one another in an axial direction. A spring having a nonlinear characteristic is provided for producing a force which tends to counteract the motion of the contacts away from one another. While the contacts are in a closed position, the spring exerts a small closing force, thereby permitting the contacts to open by the force of overcurrent. Such opening produces an arc which causes a wall of arcing chamber to emit gas, thereby pressurizing the arcing chamber and causing further opening of the contacts. As the contacts are opened, the nonlinear spring characteristic increasingly tends to prevent the motion of the contacts, thereby reducing mechanical stress within the limiter.

Abstract (de)

Strombegrenzer, der in Reihe mit einem Leistungsschalter in einem Stromkreis angeordnet ist und in axialer Richtung relativ zueinander bewegliche Kontakte (2,4) enthält, von den einer mit einer Druckfeder(8) versehen ist. Es ist eine Druckfeder (8) mit nichtlinearer Federcharakteristik vorgesehen. Der Strombegrenzer hat einen einfachen Aufbau und wird im Kurzschlußfall wegen der zunächst geringen Federkraft durch die Stromengenkräfte geöffnet. Mit zunehmendem Kontaktweg nimmt auch die Federkraft entsprechend zu, so daß die mechanische Beanspruchung des Schalters gering ist.

IPC 1-7

**H01H 81/00**

IPC 8 full level

**H01H 33/08** (2006.01); **H01H 33/77** (2006.01); **H01H 77/10** (2006.01); **H01H 81/04** (2006.01)

CPC (source: EP US)

**H01H 33/77** (2013.01 - EP US); **H01H 77/10** (2013.01 - EP US)

Citation (search report)

- DE 2358368 A1 19750515 - BBC BROWN BOVERI & CIE
- [D] CH 566640 A5 19750915 - BBC BROWN BOVERI & CIE
- [A] DE 2162269 B2 19730927
- [A] DE 1038640 C
- [A] DE 1954979 B2 19711028
- [A] US 3909676 A 19750930 - MCCONNELL LORNE D

Cited by

EP2814049A1; US6046423A; DE10118746A1; DE10118746B4; US6295192B1; US7259944B2

Designated contracting state (EPC)

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DOCDB simple family (application)

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