

Title (en)  
LATCH ARRANGEMENT FOR A HIGH-SPEED CIRCUIT BREAKER

Publication  
**EP 0300270 B1 19930120 (DE)**

Application  
**EP 88110748 A 19880706**

Priority  
CH 277687 A 19870722

Abstract (en)  
[origin: JPS6441125A] PURPOSE: To speed up the breaking speed of a contact bridge by forming a connecting ring so as to compensate the friction force of a contact bridge to effect a roller in the condition that the contact bridge is closed. CONSTITUTION: A front surface part of a locking bar 15 formed as a connecting ring 16 is partially formed into the outline of a roller 14, and a part of the connecting ring 16 started from a point A, of which shape is followed to the outline of the roller, is moved so as to have a cross section extended in the tangent direction in relation to the roller 14, and the cross section of the connecting ring 16 extended in the tangent direction in relation to the roller 14 is inclined at 90 deg.- $\alpha$  in relation to the closing direction, and the angle  $\alpha$  is determined as an angle formed by a connecting line 29 for connecting the point A to an intermediate point Z of an axis 13 and the closing direction. With this structure, the connecting ring 16 works so as to compensate the friction force for driving the roller 14 in the condition that a contact bridge 4 is closed, and accelerates the movement of the locking bar.

IPC 1-7  
**H01H 71/50**

IPC 8 full level  
**H01H 5/08** (2006.01); **H01H 3/42** (2006.01); **H01H 3/46** (2006.01); **H01H 9/20** (2006.01); **H01H 33/42** (2006.01); **H01H 71/10** (2006.01); **H01H 71/50** (2006.01)

CPC (source: EP KR US)  
**H01H 9/00** (2013.01 - KR); **H01H 71/10** (2013.01 - KR); **H01H 71/505** (2013.01 - EP US); **H01H 2071/506** (2013.01 - EP US)

Cited by  
CN110199080A; CN110931317A; US11274482B2; WO9819367A1; WO2007045656A1

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