

Title (en)  
CIRCUIT BREAKER WITH VACUUM SWITCH

Publication  
**EP 0070794 A3 19841107 (DE)**

Application  
**EP 82730094 A 19820705**

Priority  
JP 11115281 A 19810716

Abstract (en)  
[origin: ES8305529A1] A load switch includes a vacuum switch in series with an air disconnecting switch. The vacuum switch comprises a fixed electrode, a movable electrode attached to one end of an axially movable control rod and a retaining spring which exerts a resilient force on the control rod tending to separate the electrodes. The air disconnecting switch comprises a conically shaped male contact and an opposing female contact shaped to permit insertion of the male contact therein. The male contact has a relatively large diameter base portion attached to the other end of the control rod and forming a step with the control rod. The female contact has spring loaded locking projections for releasably engaging the step of the male contact and a stopper for exerting a force on the control rod sufficient to close the electrodes of the vacuum switch when the male contact is moved against the stopper after engagement with the female contact. The spring loading of the locking projections of the female contact, the shape of the male contact and the spring constant of the retaining spring are selected such that the force on the control rod during engagement of the male and female contacts is not sufficient to close the electrodes of the vacuum switch, while the force on the control rod during disengagement of those contacts acts to fully separate the electrodes of the vacuum switch prior to the release of the male contact.

IPC 1-7  
**H01H 33/66**

IPC 8 full level  
**H01H 33/66** (2006.01); **H01H 33/12** (2006.01); **H01H 33/666** (2006.01); **H01H 9/10** (2006.01)

CPC (source: EP US)  
**H01H 33/127** (2013.01 - EP US); **H01H 33/6661** (2013.01 - EP US); **H01H 9/102** (2013.01 - EP US)

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**EP 82730094 A 19820705**; DK 317682 A 19820715; ES 514070 A 19820716; JP 11115281 A 19810716; NO 822420 A 19820713; PT 7523882 A 19820713; US 39865582 A 19820715