

Title (en)
Reinforcement of the sectioning mechanism of a multi-modular electrical appliance such as a circuit breaker

Title (de)
Verstärkung des Trennmechanismus eines multimodulären Elektrogerätes vom Typ Trennschalter

Title (fr)
Renforcement du mécanisme de sectionnement d'un appareil électrique multimodulaire du type disjoncteur.

Publication
EP 2575151 A1 20130403 (FR)

Application
EP 11306242 A 20110929

Priority
EP 11306242 A 20110929

Abstract (en)
The apparatus comprises modules, where each module comprises a control lever cooperating with a moveable contact holder (5a-5d) driven by a mechanical lock and by a unit for restoring the contact holder towards or away from a fixed contact. The control levers are linked by a single operating member. Rigid linking units are provided between the adjacent contact holders. Each of the rigid linking unit comprises a rigid male part belonging to the first contact holder cooperating without any degree of freedom with a female part belonging to the contact holder adjacent to the first contact holder. The apparatus comprises modules, where each module comprises a control lever cooperating with a moveable contact holder (5a-5d) driven by a mechanical lock and by a unit for restoring the contact holder towards or away from a fixed contact. The control levers are linked by a single operating member. Rigid linking units are provided between the adjacent contact holders. Each of the rigid linking unit comprises a rigid male part belonging to the first contact holder cooperating without any degree of freedom with a female part belonging to the contact holder adjacent to the first contact holder. The male parts are sectile, and comprise strips (10a-10d) fitted in slits (11a-11d) consisting of the female parts. The rigid linking units are localized and leveled with lateral walls of each contact holder. Each contact holder is equipped the sectile strip covering one of the two lateral walls and the slit arranged in the other lateral wall. The sectile strips prolong a pin orthogonally extending from one of the lateral walls. A lower surface of the pin performs a mechanical connection between the apparatus and an adjacent apparatus placed on a same line. The strips are L-shaped and comprise two sectile zones to detach the strips from the contact holders. The first zone is connected to the pin. The second zone is fixed directly at one of the lateral walls.

Abstract (fr)
Appareil (1) électrique de coupure, de type modulaire, dont chaque module (2a, 2b, 2c, 2d) comporte un levier de commande (4) coopérant avec un porte-contact (5) mobile entraîné par une serrure mécanique et par des moyens de rappel (9) du porte-contact (5) vers ou à distance d'un contact fixe (7), tous les leviers (4) de l'appareil (1) étant reliés par un unique organe de manoeuvre (3), des moyens de liaison rigide étant prévus entre les porte-contacts (5) adjacents. Cet appareil est caractérisé en ce que lesdits moyens de liaison rigide consistent en au moins une partie mâle rigide appartenant à un premier porte-contact (5) coopérant sans degré de liberté avec au moins une partie femelle appartenant à un porte-contact (5) adjacent au premier porte-contact (5), chaque partie mâle étant sécable.

IPC 8 full level
H01H 9/26 (2006.01); **H01H 71/10** (2006.01); **H01H 73/04** (2006.01)

CPC (source: EP)
H01H 9/26 (2013.01); **H01H 71/1027** (2013.01); **H01H 73/045** (2013.01); **H01H 2009/265** (2013.01); **H01H 2071/1036** (2013.01)

Citation (search report)
• [Y] FR 2892852 A1 20070504 - HAGER ELECTRO S A S SOC PAR AC [FR]
• [Y] US 2002050877 A1 20020502 - SWARTZENTRUBER BRENT JAMES [US], et al
• [A] EP 0351724 A2 19900124 - ASEA BROWN BOVERI [DE]

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CN108807095A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2575151 A1 20130403; **EP 2575151 B1 20171115**; CN 103959415 A 20140730; CN 103959415 B 20170308; WO 2013045856 A1 20130404

DOCDB simple family (application)
EP 11306242 A 20110929; CN 201280058870 A 20120928; FR 2012052199 W 20120928