

Nicolas Vargas

1) Family number: 60746658 (WO15177817A1)

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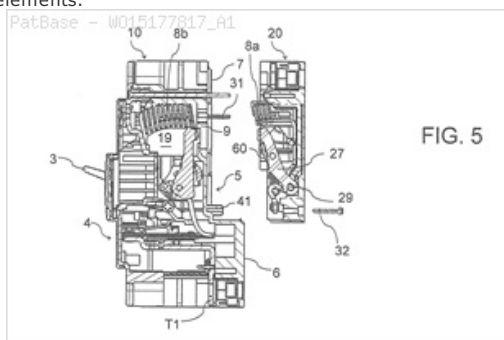
Title: **CIRCUIT BREAKER** WITH **ARC** EXTINGUISHING BARRIER

Abstract: A **circuit breaker** (1) is described, comprising: - at least a first contact branch (C1) comprising at least a first contact element (P1) and at least a first support element (S1) of the first contact element (P1), at least a first connection terminal (T1) electrically connected to, or integrated into, the first support element (S1); - an actuating mechanism (15) of the first support element (S1) adapted to move the latter so that the first contact element (P1) can be moved from a rest position to a working position and vice versa; - a second contact branch (C2) comprising at least a second contact element (P2), adapted to be contacted by the first contact element (P1) when this is in the working position, at least a second support element (S2) of the second contact element (P2) and at least a second connection terminal (T2) electrically connected to, or integrated into, the second support element (S2); characterized in that the **circuit breaker** (1) further comprises an electrically **insulating** mobile barrier (60) adapted to be moved between: a first operating position wherein the mobile barrier (60) allows the second contact element (P2) to be contacted by the first contact element (P1); and a second operating position wherein the mobile barrier (60) is at least partially operatively interposed between the first contact element (P1) and the second contact element (P2) to interfere, in the passage of the first contact element (P1) from the working position to the rest position, with an electric **arc** that extends between said contact elements.

Classifications:

International (IPC 8-9): H01H69/00 H01H71/02 H01H71/08
H01H73/18 H01H83/22 H01H9/32 (Advanced/Invention)

CPC: H01H71/0221 H01H83/226 H01H9/32

**Family:**

Publication number	Publication date	Application number	Application date
CL2016002813 A1	20170217	CL20160002813	20161107
CL2016002814 A1	20170224	CL20160002814	20161107
CN105097369 A	20151125	CN201510115338	20150316
CN105097376 A	20151125	CN201510114401	20150316
CO20160003728 A2	20170331	CO20160003728	20161101
CO20160003896 A2	20170331	CO20160003896	20161108
EP3140846 A1	20170315	EP20150736654	20150420
EP3140847 A1	20170315	EP20150736655	20150422
IN201617036579 A	20170324	IN201617036579	20161025
IN201617036906 A	20170331	IN201617036906	20161027
WO15170354 A1	20151112	WO2015IT00108	20150420
WO15177817 A1	20151126	WO2015IT00110	20150422

Priority:

IT2014RM00227 20140507 IT2014RM00318 20140616 WO2015IT00108 20150420
WO2015IT00110 20150422

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Assignee(s): BTICINO S P A

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Agent(s): ALESSANDRI Y COMPANIA; LUZ HELENA ADARVE GOMEZ; CARANGELO PIERLUIGI; CARANGELO PIERLUIGI ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

2) Family number: 15699035 (US6573815B)

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Title: **Circuit breaker**

Abstract: Source: US6573815B [EN] The **circuit breaker** includes a stationary contact member having a stationary contact, a movable contact member having at one end a movable contact contacting and separating from the stationary contact and having at the other end a rotational center, a case surrounding the stationary contact and the movable contact and defining a pressure accumulating space at one side of an **arc** generation position at which an electric **arc** is generated for temporarily storing a pressurized **gas** pressurized by the **arc** generated between the stationary and the movable contact upon a current interruption, and an exhaust port disposed at the other end of the **arc** generation position in the case so that

the pressurized **gas** stored within the accumulation space upon the current interruption is exhausted by passing between the stationary contact and the movable contact.

Classifications:

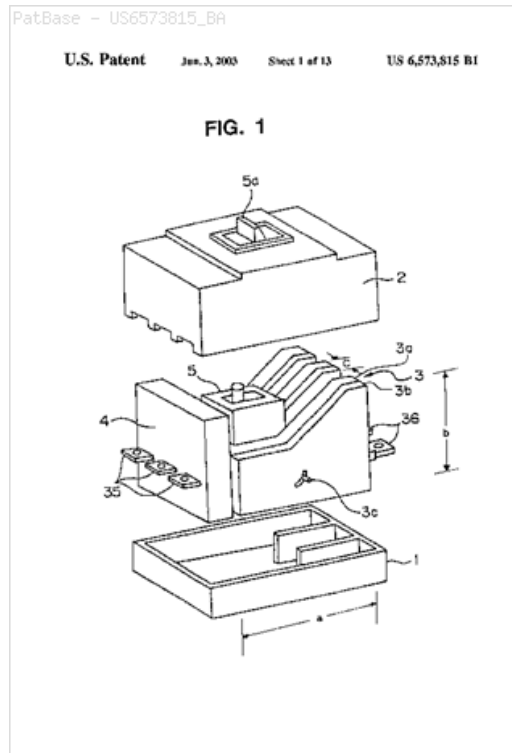
International (IPC 8-9): H01H33/98 H01H71/02 H01H73/18 H01H9/30 H01H9/34 (Advanced/Invention); H01H73/18 (Advanced/Non-invention); H01H71/02 H01H9/30 (Core/Invention); H01H73/00 (Core/Non-invention)

International (IPC 1-7): H01H13/04 H01H33/98 H01H73/18 H01H9/30 H01H9/34

CPC: H01H1/2058 H01H9/342 H01H71/0257 H01H2009/348 H01H73/18

European: H01H71/02C1 H01H9/34C T01H1/20D4 T01H73/18 T01H9/34G

US: 218/22 335/132 335/16 335/202



Family:

Publication number	Publication date	Application number	Application date
CN1222966 C	20051012	CN20008004753	20000630
CN1343367 A	20020403	CN20008004753	20000630
DE60030840 D1	20061102	DE20006030840	20000630
DE60030840 T2	20070315	DE20006030840T	20000630
EP1152440 A1	20011107	EP20000942428	20000630
EP1152440 A4	20040421	EP20000942428	20000630
EP1152440 B1	20060920	EP20000942428	20000630
ES2272295 T3	20070501	ES20000942428T	20000630
JP2001041168 A1	20030603	JP20010542345T	20000630
JP4376483 B1	20091202	JP20010542345T	20000630
JP4376483 B2	20091202	JP20010542345T	20000630
KR100439389 B1	20040709	KR20017009717	20010801
KR20010093310 A	20011027	KR20017009717	20000630
TW451238 B	20010821	TW20000112955	20000630
US6573815 BA	20030603	US20010890234	20010927
WO0141168 A1	20010607	WO2000JP04363	20000630

Priority:

JP19990343269 19991202 WO2000JP04363 20000630

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Agent(s): SOGA MICHITERU; SOGA MICHIHARU

Designated states: AT BE CH CN CY DE DK ES FI FR GB GR IE IN IT JP KR LU MC NL PT SE US

3) Family number: 24157676 (US4845460A)

Title: Multipole low-voltage **circuit breaker** with an **insulating** material housing and **arc**-quenching chambers

Abstract: Source: US4845460A [EN] A multipole low-voltage **circuit breaker** with an **insulating** material housing and **arc** quenching chambers. By a new mechanical design, the installation of the **arc** quenching devices is to be facilitated. All **arc** quenching chambers of a switchgear are arranged in a quenching chamber housing which is subdivided by partitions and is fastened to the **insulating** material housing of a **circuit breaker**. The quenching baffles are fastened directly to the walls of the **arc** quenching chambers. A low-voltage **circuit breaker** with an **insulating** material housing of compact design is thus provided.

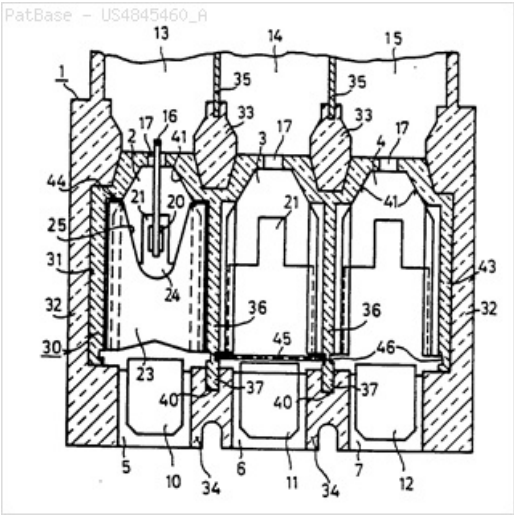
Classifications:

International (IPC 8-9): H01H9/00 H01H9/34 (Advanced/Invention); H01H71/02 (Advanced/Non-invention); H01H9/00 H01H9/30 (Core/Invention); H01H71/02 (Core/Non-invention)

International (IPC 1-7): H01H33/10 H01H33/60 H01H9/30 H01H9/34 H01H9/36

CPC: H01H9/0072 H01H9/34 H01H71/02

European: H01H9/00D H01H9/34 T01H71/02



Family:

Publication number	Publication date	Application number	Application date
DE3732472 A1	19890406	DE19873732472	19870923
DE3877879 A1	19930311	DE19883877879	19880907
DE3877879 D1	19930311	DE19883877879	19880907
EP0309386 A1	19890329	EP19880730207	19880907
EP0309386 B1	19930127	EP19880730207	19880907
US4845460 A	19890704	US19880248779	19880923

Priority:

DE19873732472 19870923 DE19883877879 19880907

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Assignee(s): (std): SIEMENS AG

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Designated states: DE FR IT

4) Family number: 3871593 (US5241294A) © PatBase

Title: VARISTOR AND RESISTOR DEVICE FOR THE INTERRUPTING CHAMBER OF **CIRCUIT BREAKER**

Abstract: Source: US5241294A [EN] A varistor and resistor device for incorporating in the interrupting chamber of a dielectric **gas circuit breaker**, the varistor and resistor components being connected in series and being housed in an **insulating** tube. The varistor components and the resistor components are firstly superposed with superposed components being separated from one another by **insulating** components, and are secondly juxtaposed with juxtaposed components being electrically interconnected by conductor components interposed between the ends of the superposed components and the **insulating** components.

Classifications:

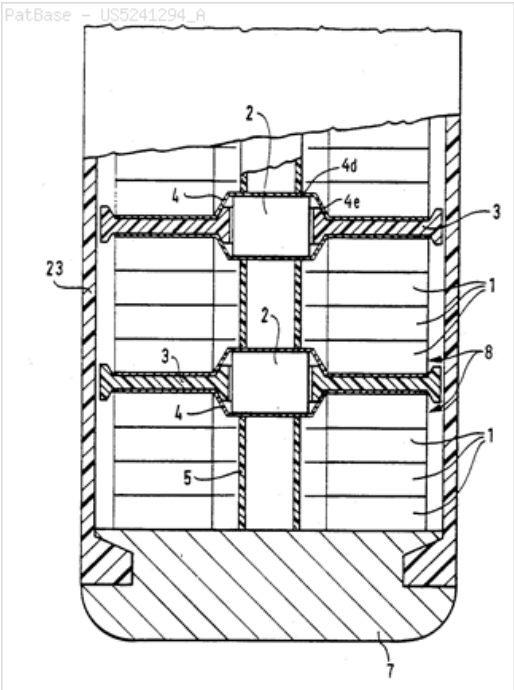
International (IPC 8-9): H01H33/16 H01H33/60 (Advanced/Invention); H01H33/04 (Core/Invention)

International (IPC 1-7): H01C7/10 H01H33/16 H01H33/60 H01H71/02

CPC: H01H33/161

European: H01H33/16B

US: 200/144AP 218/143 338/21 361/127



Family:

Publication number	Publication date	Application number	Application date
CA2062921 AA	19920914	CA19922062921	19920312
CA2062921 C	19950905	CA19922062921	19920312
FR2674064 A1	19920918	FR19910003034	19910313
FR2674064 B1	19930604	FR19910003034	19910313
US5241294 A	19930831	US19920846610	19920305

Priority:

CA19922062921 19920312 FR19910003034 19910313

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Agent(s): ROBIC

5) Family number: 58284734 (US2015014277A)

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Title: INTERCHANGEABLE SWITCHING MODULE AND ELECTRICAL SWITCHING APPARATUS INCLUDING THE SAME

Abstract: Source: US2015014277A [EN] An interchangeable switching module is for an electrical switching apparatus including a first enclosure, separable contacts and an operating mechanism structured to open and close the separable contacts. The interchangeable switching module includes a second enclosure structured to fit within the first enclosure of the electrical switching apparatus; and an interchangeable electrical circuit and/or mechanical mechanism within the second enclosure and being structured to cooperate with switching of the separable contacts.

Classifications:

International (IPC 8-9): H01H33/02 H01H71/02

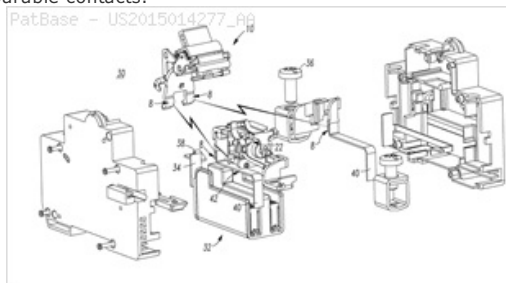
H01H9/34 (Advanced/Invention);

H01H1/00 H01H11/00 H01H71/46 (Advanced/Non-invention)

CPC: H01H33/02 H01H9/34 H01H11/0006 H01H71/0228 H01H71/465

H01H2001/001 H01H2011/0037 H01H2009/544 H01H9/542

US: 218/1



Family:

Publication number	Publication date	Application number	Application date
CA2910979 AA	20151029	CA20142910979	20140630
MX2016000575 A1	20170501	MX20160000575	20140630
US2015014277 AA	20150115	US20130942083	20130715
WO15009434 A2	20150122	WO2014US44802	20140630
WO15009434 A3	20150507	WO2014US44802	20140630

Priority:

US20130942083 20130715 WO2014US44802 20140630

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Agent(s): BERESKIN AND PARR LLP SENCRL SRL; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW