

Title (en)
CIRCUIT BREAKER

Title (de)
SCHUTZSCHALTER

Title (fr)
COUPE CIRCUIT

Publication
EP 2605265 A4 20140910 (EN)

Application
EP 11816196 A 20110608

Priority
• JP 2010180988 A 20100812
• JP 2011003241 W 20110608

Abstract (en)
[origin: EP2605265A1] To provide a circuit breaker that is capable of appropriately moving an arc, which is generated between contact points, toward an arc-extinguishing device, even in a relatively small current region, without enlarging equipment having the circuit breaker. The circuit breaker includes, in each of poles, a pair of front/rear fixed contacts (2, 3) disposed facing each other, a movable contact (4) formed as a bridge between the fixed contacts (2, 3), and a pair of front/rear magnetic drive yokes (10) made from permanent magnets and disposed so as to hold side surface parts on both ends of the movable contact (4) therebetween. In a closed state, the movable contact (4) closes a current feed path of each pole by being pressed against the fixed contacts (2, 3) by a contact spring (5). In an open state, the movable contact (4) opens the current feed paths by being pressed back toward the contact spring (5) by an opening/closing mechanism to separate from the fixed contacts (2, 3).

IPC 8 full level
H01H 73/18 (2006.01); **H01H 1/20** (2006.01); **H01H 9/44** (2006.01); **H01H 77/10** (2006.01)

CPC (source: EP KR)
H01H 9/443 (2013.01 - EP); **H01H 9/446** (2013.01 - EP); **H01H 73/18** (2013.01 - KR); **H01H 77/108** (2013.01 - EP); **H01H 1/20** (2013.01 - EP)

Citation (search report)

- [I] EP 1671344 A1 20060621 - SIEMENS AG [DE]
- [YD] US 6456176 B1 20020924 - FUJIHIRA TAKUMI [JP], et al
- [Y] EP 0359467 A2 19900321 - WESTINGHOUSE ELECTRIC CORP [US]
- [Y] EP 1168392 A1 20020102 - MATSUSHITA ELECTRIC WORKS LTD [JP]
- [A] US 4013984 A 19770322 - WAFER JOHN A
- See references of WO 2012020526A1

Cited by

CN110945615A; EP3229250A4; US9406465B1; US2016217951A1; US9991073B2; GB2624720A; US9601297B2; US10636607B2;
WO2016144610A1; US10854414B2; WO2024110063A1; US9552951B2; US9881761B2; US10224169B2; US10381186B2

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

DOCDB simple family (publication)

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KR 20130044319 A 20130502; TW 201230118 A 20120716; TW I446392 B 20140721; WO 2012020526 A1 20120216

DOCDB simple family (application)

EP 11816196 A 20110608; CN 201180039200 A 20110608; JP 2010180988 A 20100812; JP 2011003241 W 20110608;
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