

Title (en)  
CIRCUIT BREAKER FOR OPTIMIZING SPACE ALLOCATION

Title (de)  
SCHUTZSCHALTER ZUR OPTIMIERUNG EINER RAUMZUWEISUNG

Title (fr)  
COUPE-CIRCUIT POUR OPTIMISER L'ATTRIBUTION D'ESPACE

Publication  
**EP 2685484 B1 20180117 (EN)**

Application  
**EP 12754514 A 20120308**

Priority  

- CN 201110056458 A 20110309
- CN 201110055929 A 20110309
- CN 2012072078 W 20120308

Abstract (en)  
[origin: EP2685484A1] A breaker with optimized space allocation is disclosed in the invention, the breaker comprises a first overcurrent protection pole, a second overcurrent protection pole and a leakage protection device. The first overcurrent protection pole has a first input wire terminal and a first output wire terminal, a first contact is in serial connection with the first overcurrent protection pole, the first overcurrent protection pole further includes a first operation mechanism. The second overcurrent protection pole has a second input wire terminal and a second output wire terminal, a second contact is in serial connection with the second overcurrent protection pole, the second overcurrent protection pole further includes a second operation mechanism. The leakage protection device comprises a instrument transformer, a electromagnetic release and a leakage release mechanism, the leakage protection device further comprises a test circuit having test button. The test circuit is in serial connection with the test resistor, one terminal of the test circuit is in parallel connected with the first input wire terminal, and the other terminal of the test circuit is in parallel connection with the second output wire terminal. The instrument transformer detects leakage current and initiates the electromagnetic release to release the first operation mechanism and the second operation mechanism through the leakage release mechanism, thereby the first contact and the second contact are disconnected to realize the leakage protection.

IPC 8 full level  
**H01H 83/04** (2006.01); **H01H 71/24** (2006.01); **H01H 83/22** (2006.01)

CPC (source: EP)  
**H01H 83/04** (2013.01); **H01H 83/226** (2013.01); **H01H 71/0207** (2013.01)

Citation (examination)  

- US 5920451 A 19990706 - FASANO MICHAEL [US], et al
- US 2006007611 A1 20060112 - ZIEGLER WILLIAM R [US], et al
- DE 102008004869 A1 20090730 - SIEMENS AG [DE]
- EP 2085998 A1 20090805 - HAGER ELECTRO SAS SOC PAR ACTI [FR]

Cited by  
CN106229231A

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)  
**EP 2685484 A1 20140115; EP 2685484 A4 20141022; EP 2685484 B1 20180117**; AU 2012225034 A1 20131024; AU 2012225034 B2 20160609; WO 2012119555 A1 20120913

DOCDB simple family (application)  
**EP 12754514 A 20120308**; AU 2012225034 A 20120308; CN 2012072078 W 20120308