

Title (en)

CIRCUIT BREAKER WITH LIVE-STATE INFORMATION MEASURING INSTRUMENT

Title (de)

LASTSCHALTER MIT MESSVORRICHTUNG FÜR DIE INFORMIERUNG ÜBER DIE STROMVERSORGUNG

Title (fr)

DISJONCTEUR A DISPOSITIF DE MESURE INFORMANT SUR L'ETAT SOUS TENSION

Publication

EP 1107274 A4 20040303 (EN)

Application

EP 99925416 A 19990622

Priority

JP 9903322 W 19990622

Abstract (en)

[origin: WO0079554A1] A conductor (34) is fastened to a terminal part (33) of the body (1) of a circuit breaker by means of a fastening member (35). A live-state information measuring instrument (30) includes a Hall device (38) for sensing the magnetic flux generated by the current flowing through the conductor (34) and converting it to an electric signal, a contact piece (41) provided in contact with the conductor (34) and adapted to measure the phase voltage, an electronic circuit unit (43) for arithmetically operating the phase voltage signal and the electric signal outputted from the Hall device (38), and output means (40) for outputting the results of the arithmetic operation. The live-state information measuring instrument (30) is detachably provided to the terminal part (33). Even a circuit breaker not incorporating any current transformer (18) can allow live-state information fed to a load protected by the body (1) of the circuit breaker to be indicated.

IPC 1-7

H01H 73/00; **H01H 73/12**; **H01H 83/02**; **H01H 71/12**; **H01H 71/02**

IPC 8 full level

H01H 71/02 (2006.01); **H01H 71/12** (2006.01); **H01H 33/02** (2006.01); **H01H 71/08** (2006.01)

CPC (source: EP KR)

H01H 71/0228 (2013.01 - EP); **H01H 71/125** (2013.01 - EP); **H01H 71/74** (2013.01 - KR); **H01H 71/08** (2013.01 - EP); **H01H 2011/0068** (2013.01 - EP)

Citation (search report)

- [Y] WO 9427157 A1 19941124 - ABB STROEMBERG KOJEET OY [FI], et al
- [Y] US 5218331 A 19930608 - MORRIS ROBERT A [US], et al
- See references of WO 0079554A1

Cited by

EP2028678A1; US11382170B1; EP3361489A1; EP2282321A1; ITMI20121139A1; EP1770740A3; US2016187449A1; CN107209245A; US9995815B2; US9658264B2; US10177542B2; US8447545B2; US7612972B2; US7423858B2; US10467354B2; WO2007100316A1; WO2014005615A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 0079554 A1 20001228; CN 1312950 A 20010912; EP 1107274 A1 20010613; EP 1107274 A4 20040303; KR 20010106451 A 20011129; TW 421811 B 20010211

DOCDB simple family (application)

JP 9903322 W 19990622; CN 99809781 A 19990622; EP 99925416 A 19990622; KR 20017002172 A 20010220; TW 88111810 A 19990713