

Title (en)
CONTACTOR, PARTICULARLY AUXILIARY OR MOTOR CONTACTOR

Publication
EP 0198099 B1 19890322 (DE)

Application
EP 85104537 A 19850415

Priority
EP 85104537 A 19850415

Abstract (en)
[origin: ES8707019A1] A circuit breaker including a housing, coil connector screws and associated connection rails within the housing, a module in a casing received in a recess of the housing, the module being adapted to limit or attenuate voltage peaks, the module having electrical connectors for electrically connecting the module to the connection rails otherwise than through the coil connector screws, the electrical connectors being a pair of metallic leaf springs each in contact with one of the connection rails, the case being of a generally rectangular configuration with a corner recess at two corners thereof, and each corner recess mating with a projection of the housing and being snap-connected thereto.

IPC 1-7
H01H 50/02

IPC 8 full level
H01H 50/02 (2006.01); **H01H 50/44** (2006.01)

CPC (source: EP US)
H01H 50/021 (2013.01 - EP US); **H01H 50/443** (2013.01 - EP US)

Citation (opposition)
Opponent : Siemens AG
• DE 8405966 U1 19840524
• DE 3503292 A1 19860807 - SIEMENS AG [DE]
• EP 0189924 A1 19860806 - SIEMENS AG [DE]
• FREDERICH LÜTZE GMBH & CO.: "Störmeldebausteine im Kompaktgehäuse, Messeneuheiten", LÜTZE REPORT, 1989, XP055262395
Opponent : Telemecanique
• DE 7342273 U 19750612
• DE 8236682 U1 19830609
• US 3733516 A 19730515 - GRUNERT K, et al
• CH 227422 A 19430615 - HERMES PATENTVERWERTUNGS GMBH [DE]
• FR 1561299 A 19690328
• HERBERT FRANKEN: "Schütze und Schützensteuerungen", 1967, SPRINGER VERLAG, Berlin, pages: 347 - 348, XP055262348
• "Relais industriels, CA2-F", CATALOGUE TELEMECANIQUE, 1979, pages 3/12 - 3/14, XP055262364
• "Appareillage pour automatismes industriels, Relais industriels, CA2-F", CATALOGUE TELEMECANIQUE, March 1975 (1975-03-01), XP055262369

Cited by
FR2629632A1; GR890100469A; EP0774767A1; EP2290671A1; GR890100468A; EP0595697A1; FR2697371A1; CN110098087A; DE4306456A1; US5535083A; DE4306456C2; EP0370452A3; US6184762B1; WO2011012389A1; WO2011012391A1; WO9801881A1; WO0005737A1; EP0800192A1; FR2747231A1; CN1118080C; EP0394804A1; CH677554A5; DE3914665A1; FR2631738A1; DE3914665C2; AU616954B2

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0198099 A1 19861022; EP 0198099 B1 19890322; EP 0198099 B2 19930107; AT E41717 T1 19890415; CA 1275140 A 19901009; DE 3569060 D1 19890427; DK 165311 B 19921102; DK 165311 C 19930322; DK 97886 A 19861016; DK 97886 D0 19860304; ES 552238 A0 19870701; ES 8707019 A1 19870701; US 4691978 A 19870908

DOCDB simple family (application)
EP 85104537 A 19850415; AT 85104537 T 19850415; CA 506549 A 19860414; DE 3569060 T 19850415; DK 97886 A 19860304; ES 552238 A 19860220; US 83825186 A 19860310