

Title (en)

Mains socket with differential protection.

Title (de)

Steckdose mit Fehlerstromschutz.

Title (fr)

Prise de courant à protection différentielle.

Publication

EP 0089903 A1 19830928 (FR)

Application

EP 83420036 A 19830307

Priority

FR 8204460 A 19820311

Abstract (en)

1. Socket with an internal insulating housing (32) comprising an external front wall (12) with openings that can receive the pins of an electric plug engaged in the socket and an opening for the passage of a manual control device (28) of a differential protection device arranged in the housing (32), the current incoming terminals carried by said housing (32) being connected in the inside of the housing with holes (30) of the socket, located in face of the openings receiving the pins, by means of said differential protection device comprising a differential transformer (38) the primary windings (66, 68) of which are constituted by the conductors connecting the terminals (48, 50) with the holes (30), and the secondary winding (72) of which feeds a polarized relay (44) to actuate the control mechanism (42) of the contacts (54-64) inserted in said conductors in order to interrupt the connection between the current incoming terminals and the holes (30) of the socket being located in the lower part of the housing (32), whereas said control mechanism (42) and said contacts are located in the upper part of the housing (32), characterized in that the differential transformer (38) is located in the middle part of the housing (32) inserted between the holes (30) and the mechanism (42) on the passage of the conductors connecting the contacts with the holes, and in that said incoming terminals (48, 50) are located outside the housing.

Abstract (fr)

Une prise de courant à protection différentielle comporte à l'intérieur d'un boîtier isolant moulé (32) des alvéoles de prise de courant (30) disposés à la partie inférieure du boîtier (32). Dans la partie supérieure du boîtier (32) sont logés les contacts et le mécanisme de commande (42) de ces contacts, tandis que le transformateur différentiel (38) est interposé entre les alvéoles (30) et cet ensemble bloc de contact (40), mécanisme (42). Le boîtier isolant (32), fermé par la paroi avant (12) portant la manette de commande (42) et les orifices de passage des fiches coopérant avec les alvéoles (30) peut être emboîté dans une enveloppe externe retangulaire (10).

IPC 1-7

H01R 13/713

IPC 8 full level

H01R 13/713 (2006.01)

CPC (source: EP)

H01R 13/7135 (2013.01); **H01R 24/76** (2013.01); **H01R 2103/00** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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EP 0089903 A1 19830928; EP 0089903 B1 19850828; DE 3360641 D1 19851003; ES 520429 A0 19831216; ES 8401283 A1 19831216;
FR 2523377 A1 19830916; FR 2523377 B1 19850308; PT 76359 A 19830401; PT 76359 B 19851118

DOCDB simple family (application)

EP 83420036 A 19830307; DE 3360641 T 19830307; ES 520429 A 19830309; FR 8204460 A 19820311; PT 7635983 A 19830308