

Title (en)

MECHANISM FOR AN AUTOMATIC SWITCH.

Title (de)

MECHANISMUS FÜR EINEN SELBSTSCHALTER.

Title (fr)

MECANISME POUR UN INTERRUPTEUR AUTOMATIQUE.

Publication

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Application

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Abstract (en)

[origin: WO9221134A1] The mechanism has a hand-operating toggle (1) fitted inside a casing (2) and spring-loaded in the off direction on which is articulated a lever (3, 4). During switch-on, a contact lever (5) pivoting about a spindle (2d) against the force of a spring (7) is supported on the lever. The contact lever (5) acts on a fixed contact (6) and can be clamped in the made position against the force of the spring (7). It is the purpose of the invention to simplify the supporting link between the lever (3, 4) and the contact lever (5) in order to obtain uniform release forces with only slight spreads within a production run of switches. To this end, between the hand-operating toggle (1) and the contact lever (5) is fitted a toggle lever consisting of a tension lever (3) and a bracket (4) which, in its stable position, is virtually tensioned and in which the form of the tension lever (3) causes its two articulated arms to assume a precisely defined top dead centre position. Thus during switch-on and in the on position, the toggle lever (3, 4) acts as a rigid lever. Only a substantially perpendicular load on its joint (3b/4a) applied via a release lever (9) towards dead centre causes the toggle lever (3, 4) to assume an unstable position under the effect of the contact lever's (5) return through the force of the spring (7). This releases the rigid connection between the hand-operating toggle (1) and the contact lever (5) so that the lever arm (5c) on the contact side can pivot into its breaking position. The mechanism of the invention is particularly suitable for fault-current protective switches and automatic cut-outs.

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