

Title (en)
MULTI-FOLDED FULL-AUTOMATIC OPENING-CLOSING UMBRELLA

Title (de)
MEHRFACH GEFALTETER SCHIRM MIT VOLLAUTOMATISCHER ÖFFNUNG UND SCHLIESSUNG

Title (fr)
PARAPLUIE À OUVERTURE/FERMETURE ENTIÈREMENT AUTOMATIQUE À PLIS MULTIPLES

Publication
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Application
EP 11869125 A 20110701

Priority
CN 2011076747 W 20110701

Abstract (en)
[origin: GB2501218A] A multi-folded full-automatic opening-closing umbrella comprises a frame (A), cloth, a middle rod set (B), an upper nest (C), a lower nest (D), a handle (G), an umbrella opening/closing transformation ratio mechanism (E) disposed in the middle rod set (B), and an umbrella opening/closing driving mechanism (F) disposed in the handle (G) and the middle rod set (B). The middle rod set (B) is provided with at least three sleeves, which are respectively an outer sleeve (B1), a middle sleeve (B2) and an inner sleeve (B3) from the top down. The umbrella opening/closing transformation ratio mechanism (E) comprises a lower nest pull rope (E1), a middle sleeve pull rope (E2) and an inner sleeve pull rope (E3). One end of the lower nest pull rope (E1) is fixed on a middle sleeve plug (3) of the middle sleeve (B2), and the other end thereof is fixed with the lower nest (C). One end of the middle sleeve pull rope (E2) is fixed on an upper end of the inner sleeve (B3), and the other end thereof is fixed on the top of the outer sleeve (B1). One end of the inner sleeve pull rope (E3) is fixed on the upper end of the inner sleeve (B3), and the other end thereof is fixed on a lower end of the outer sleeve (B1). The umbrella opening/closing driving mechanism (F) comprises driving members (6, 7, 8) connected to the middle sleeve plug (3) and a power source (9) for propelling the driving members (6, 7, 8) to move up and down relative to the inner sleeve (B3). The power source (9) is controlled by a button (G2) on the handle (G). The umbrella opening/closing driving mechanism (F) drives the middle sleeve (B2) of the middle rod set (B) to move up and down relative to the inner sleeve (B3), and linkage opening/closing functions of the sleeves (B1, B2, B3) of the middle rod set (B) and the cloth are realized at the same time.

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CPC (source: EP GB US)
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