

Title (en)  
AUTOMATIC OPENING/CLOSING DEVICE FOR THE COVER FRAME OF AN UMBRELLA

Title (de)  
VORRICHTUNG ZUM SELBSTÄTIGEN ÖFFNEN/SCHLIESSEN VON SCHIRMEN

Title (fr)  
DISPOSITIF POUR L'OUVERTURE/FERMETURE AUTOMATIQUE DE PARASOLS

Publication  
**EP 3804555 B1 20230524 (EN)**

Application  
**EP 20200438 A 20201007**

Priority  
IT 201900018257 A 20191008

Abstract (en)  
[origin: EP3804555A1] The present invention relates to an automatic opening/closing device for umbrella, of the type that provides an electric motor (9), through which it acts on a spool system (25), which provides a wire (4) connected to the cover frame, which determines its opening and closing. Said automatic opening/closing device provides that in the spool (25) a device (40) is housed, advantageously consisting of a magnet, the position of which is detectable through a first sensor (26), capable of accurately determining the number of revolutions performed by such spool (25).

IPC 8 full level  
**A45B 25/14** (2006.01)

CPC (source: EP)  
**A45B 25/143** (2013.01)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3804555 A1 20210414; EP 3804555 B1 20230524; ES 2951390 T3 20231020; HR P20230855 T1 20231124; IT 201900018257 A1 20210408; PT 3804555 T 20230817**

DOCDB simple family (application)  
**EP 20200438 A 20201007; ES 20200438 T 20201007; HR P20230855 T 20201007; IT 201900018257 A 20191008; PT 20200438 T 20201007**