

Title (en)  
Fully-automatic umbrella.

Title (de)  
Völlig automatischer Schirm.

Title (fr)  
Parapluie entièrement automatique.

Publication  
**EP 0151847 A1 19850821 (EN)**

Application  
**EP 84301017 A 19840216**

Priority  
• EP 84301017 A 19840216  
• ZA 84933 A 19840208

Abstract (en)  
A fully-automatic umbrella operable one-handedly by means of a single control means 6, comprising: a stick 1 having a handle 11 at the lower end thereof, an outer tubular shaft 2 mounted on the upper end of said stick and provided with an intermediate ring 21 at the top thereof, an upper inner shaft 3 inserted in the upper end of said outer tubular shaft and provided with an upper ring 31 at the top thereof, a sliding member 4 mounted over said outer tubular shaft and provided with a lower ring 41 at the upper end thereof, a rib assembly 5 collapsibly and pivotably connected to said upper, intermediate and lower rings, a control device disposed in said stick and being operable to control the opening and collapsing of the umbrella through said control means 6, a coil spring 7 adapted for closing the umbrella mounted between said intermediate and lower rings, and two coil springs 8A, 8B adapted for opening of the umbrella mounted separately in the upper and lower portions of said stick.

IPC 1-7  
**A45B 25/16**

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

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

Citation (search report)  
• [A] FR 320506 A 19021212 - HOULARD EMILIEN [FR]  
• [A] FR 2047681 A5 19710312 - IDEAL KK, et al  
• [A] DE 34988 C  
• [A] FR 2094251 A5 19720204 - TISSMETAL LIONEL DUPONT  
• [A] DE 2204998 A1 19730315 - TAKEHARA SEISAKUSHO OMIYA KK [JP], et al  
• [A] DE 1940846 A1 19700917 - KITANI SATUKI, et al

Cited by  
EP0638258A1; EP0601230A1; EP0425071A3; KR102012244B1; GB2239794A; EP0518814A3; EP0531572A1; FR2659001A1; US6481450B2; EP0498986A3; DE4004349A1; FR2658045A1; WO2020040538A1

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

DOCDB simple family (publication)  
**EP 0151847 A1 19850821; EP 0151847 B1 19870715; ZA 84933 B 19840807**

DOCDB simple family (application)  
**EP 84301017 A 19840216; ZA 84933 A 19840208**