

Title (en)

Automatic umbrella with a closing signaling device

Title (de)

Automatischer Schirm mit Schließsignalisierungsvorrichtung

Title (fr)

Parapluie automatique doté d'un dispositif de signalement de fermeture

Publication

**EP 2289362 A1 20110302 (EN)**

Application

**EP 10157383 A 20100323**

Priority

CN 200920174029 U 20090826

Abstract (en)

An automatic umbrella has a signaling device (100) including sensor and alert units (10,20). The sensor unit (10) has a first sensor (11) mounted on one of a handle (400) and a lower end (2301) of a central shaft (200), and a second sensor (12) which is movable with a runner (300) and which is configured to activate the sensor unit (10) to emit a signal once a predetermined spatial relationship is established between the first and second sensors (11,12) as a result of movement of the second sensor toward said first sensor (11) once the runner (300) is moved to reach the handle (400). The alert unit (20) is mounted on the handle (400) to receive the signal and generate an alert indication to indicate that the umbrella is in a closed state.

IPC 8 full level

**A45B 3/04** (2006.01); **A45B 9/02** (2006.01); **A45B 23/00** (2006.01); **A45B 25/00** (2006.01)

CPC (source: EP)

**A45B 3/04** (2013.01); **A45B 9/02** (2013.01); **A45B 23/00** (2013.01)

Citation (applicant)

- TW 560268 B
- TW 375888 B
- TW 371862 B

Citation (search report)

- [I] US 2008087310 A1 20080417 - DAHINDEN RENE [CH]
- [I] US 2004055627 A1 20040325 - P MOGA MICHAEL [US]
- [I] US 6058951 A 20000509 - WILSON ROBERT JOE [US]
- [A] TW 354874 U 19990321 - JOU LUNG-JIAU [TW], et al
- [A] GB 2052037 A 19810121 - GARD E

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

**EP 2289362 A1 20110302**; CN 201480248 U 20100526

DOCDB simple family (application)

**EP 10157383 A 20100323**; CN 200920174029 U 20090826