

Title (en)
Parasol

Title (de)
Schirmsystem

Title (fr)
Parasol

Publication
EP 2443956 A3 20121121 (DE)

Application
EP 11185881 A 20111020

Priority
DE 102010049812 A 20101020

Abstract (en)
[origin: EP2443956A2] The system (10) has a tubular inner sleeve (14), slide element (22) and membrane (20) that is clamped between retracted and clamped arrangements. The slide element moves along the tubular inner sleeve, and clamping elements i.e. traction ropes (24), clamp the membrane, where the clamping elements are articulated at the slide element and formed by an elastic bending rod (21). An intermediate chamber (18) is formed between the tubular inner sleeve and a tubular outer sleeve (16), and the membrane is arranged in the intermediate chamber in a retracted condition.

IPC 8 full level
A45B 19/00 (2006.01); **A45B 11/00** (2006.01); **A45B 23/00** (2006.01)

CPC (source: EP)
A45B 19/00 (2013.01); **A45B 23/00** (2013.01); **A45B 2019/002** (2013.01); **A45B 2023/0018** (2013.01)

Citation (search report)

- [X] US 3706160 A 19721219 - DEIBERT HAROLD LEROY
- [X] WO 2006048026 A1 20060511 - ANDRADE LOPEZ JUAN MANUEL [EC], et al
- [X] WO 9905931 A1 19990211 - SANGE GERHARD MASCHF GMBH [AT], et al
- [A] US 141151 A 18730722
- [A] JP H05161506 A 19930629 - MIZUNO YOUKO, et al
- [A] DE 4008212 A1 19910919 - SZEKELY ISTVAN [DE]
- [A] AT 9522 U1 20071115 - WEHDORN ARCHITEKTEN ZIVILTECHN [AT]
- [E] GB 2481001 A 20111214 - WARNE SIMON [GB]

Cited by
US9822545B1; CN111911871A; ITUA20163444A1

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

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