

Title (en)
VACUUM LIFTER

Title (de)
VAKUUMHEBER

Title (fr)
VENTOUSE DE LEVAGE

Publication
EP 2268931 A1 20110105 (DE)

Application
EP 09725810 A 20090325

Priority

- EP 2009053548 W 20090325
- DE 102008015648 A 20080325

Abstract (en)

[origin: WO2009118362A1] The invention relates to a vacuum suction device for temporary fixing to a substantially smooth fastening surface that is permeable to air, comprising a support shell (3) and a flexible suction table (4) and an actuation mechanism for producing a partial vacuum between the suction table (4) and the fastening surface with an at least partial positional shifting of the suction table, wherein a vacuum indicating device (15) is provided for indication of the partial vacuum. In order to create a simple constructive design of the indicating device, by way of which a reduction in the partial vacuum can be easily and reliably detected even by an untrained operator under different environmental conditions, the vacuum indicating device is provided with an indicating element (16) that is coupled to the suction table mechanically. A change in the partial vacuum can be optically and/or haptically detected and indicated by way of the indicating element (16). The indicating device can be integrated into the actuation mechanism.

IPC 8 full level
F16B 47/00 (2006.01); **A47K 17/02** (2006.01)

CPC (source: EP)
A47K 17/022 (2013.01); **F16B 47/006** (2013.01)

Citation (search report)
See references of WO 2009118362A1

Citation (examination)

- DE 202007008376 U1 20070913 - ROTH ECKART [DE]
- DE 1806451 A1 19691016 - CALLIGARO GIUSEPPE
- US 2004124325 A1 20040701 - KWOK CHIN-PANG [HK]

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 TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
DE 102008015648 A1 20091001; DE 202009014353 U1 20100415; EP 2268931 A1 20110105; WO 2009118362 A1 20091001

DOCDB simple family (application)
DE 102008015648 A 20080325; DE 202009014353 U 20090325; EP 09725810 A 20090325; EP 2009053548 W 20090325