Title (en)

EJECTOR DEVICE FOR SUCTION CUPS

Title (de

EJEKTORVORRICHTUNG FÜR SAUGNÄPFE

Title (fr)

DISPOSITIF ÉJECTEUR POUR DES VENTOUSES

Publication

EP 3255283 B1 20190123 (EN)

Application

EP 16173864 A 20160610

Priority

EP 16173864 A 20160610

Abstract (en)

[origin: EP3255283A1] An ejector device (10) that is driven by compressed air in order to generate an under-pressure applicable for suction cups or similar devices used for transportation or lifting purposes, the ejector device (10) comprising a suction channel (12), a compressed air channel (14), a pressure sensor (16) arranged to measure a pressure related to the suction channel (12), a valve unit (11) arranged to either close or open the compressed air channel (14) in response to the pressure, and a controller (16) for controlling the valve unit (11) and arranged to communicate with the pressure sensor (16), wherein the valve unit (11) and/or the controller (16) are coupled to an energy reservoir (18) for supplying power to the valve unit (11) and/or the controller (16). The valve unit (11) comprises a directly controlled, typically a bi-stable magnetic, valve (13), and a pilot-valve (15), wherein the pilot valve (15) is controlled by the directly controlled valve (13) and arranged in the compressed air channel (14) to either close or open the air channel (14), thereby switching off or on, compressed air to a unit (19) producing under-pressure by means of the supplied compressed air, wherein the valve unit (11) is arranged such that when the directly controlled valve (13) is in open position, the pilot-valve (15) is in open position (CLOSED), closing the compressed air channel (14), under-pressure is provided by the ejector device (10).

IPC 8 full level

F04F 5/20 (2006.01); F04F 5/52 (2006.01)

CPC (source: EP)

F04F 5/20 (2013.01); F04F 5/52 (2013.01)

Cited by

CN109798268A: EP3501738A1

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 3255283 A1 20171213; EP 3255283 B1 20190123

DOCDB simple family (application)

EP 16173864 A 20160610