

Title (en)
FLUID APPLICATION DEVICE AND USES THEREOF

Title (de)
FLÜSSIGKEITSAPPLIKATIONSVORRICHTUNG UND VERWENDUNGEN DAVON

Title (fr)
DISPOSITIF D'APPLICATION DE FLUIDE ET SES UTILISATIONS

Publication
EP 2828097 B1 20210630 (FR)

Application
EP 13715354 A 20130320

Priority
• FR 1252657 A 20120323
• FR 2013050596 W 20130320

Abstract (en)
[origin: WO2013140092A1] The invention relates to a fluid application device comprising a container for housing a free fluid and a fluid delivery device. According to the invention, the container is sealed by a valve comprising a self-healing material, and the fluid application device comprises: tubular means for piercing the valve and simultaneously connecting the fluid in the container with the fluid delivery device; and means for moving the valve towards the tubular piercing means, as a result of which the tubular piercing means release the fluid from the container towards the fluid delivery device.

IPC 8 full level
B43K 5/14 (2006.01); **B43K 5/18** (2006.01); **B43K 8/04** (2006.01); **B43K 8/12** (2006.01); **B43L 19/00** (2006.01)

CPC (source: CN EP US)
B43K 5/145 (2013.01 - CN EP US); **B43K 5/1836** (2013.01 - CN EP US); **B43K 5/1845** (2013.01 - CN EP US); **B43K 8/04** (2013.01 - CN EP US); **B43K 8/12** (2013.01 - CN EP US); **B43L 19/0018** (2013.01 - CN EP US)

Citation (examination)
ARKEMA - SYBILLE CHAIX: "Self-healing elastomer enters industrial production", 27 March 2009 (2009-03-27), XP055631815, Retrieved from the Internet <URL:https://www.arkema.com/export/shared/.content/media/downloads/news-attachments/global/en/press-release/2009/cp-commercialisation-chimie-supra-english.pdf> [retrieved on 20191014]

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)
WO 2013140092 A1 20130926; CN 104395100 A 20150304; CN 104395100 B 20161116; EP 2828097 A1 20150128; EP 2828097 B1 20210630; ES 2883577 T3 20211209; FR 2988328 A1 20130927; FR 2988328 B1 20141219; JP 2015516893 A 20150618; JP 6161684 B2 20170712; KR 102126963 B1 20200625; KR 20150016493 A 20150212; MX 2014011278 A 20150224; MX 353858 B 20180131; US 2015044370 A1 20150212; US 9802439 B2 20171031

DOCDB simple family (application)
FR 2013050596 W 20130320; CN 201380017278 A 20130320; EP 13715354 A 20130320; ES 13715354 T 20130320; FR 1252657 A 20120323; JP 2015500969 A 20130320; KR 20147029829 A 20130320; MX 2014011278 A 20130320; US 201314387040 A 20130320