

Title (en)  
METHOD OF PRODUCING SUBSTANCES WITH SUPERSATURATED GAS, TRANSDERMAL DELIVERY DEVICE THEREOF, AND USES THEREOF

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON SUBSTANZEN MIT EINEM ÜBERSÄTTIGTEN GAS, TRANSDERMALE VERABREICHUNG DAVON UND VERWENDUNGEN DAVON

Title (fr)  
PROCÉDÉ DE PRODUCTION DE SUBSTANCES COMPRENANT UN GAZ SURSATURÉ, DISPOSITIF D'ADMINISTRATION TRANSDERMIQUE DE CES SUBSTANCES, ET UTILISATIONS DE CELLES-CI

Publication  
**EP 2699306 A4 20160727 (EN)**

Application  
**EP 12774807 A 20120419**

Priority  

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- US 2012034316 W 20120419

Abstract (en)  
[origin: WO2012145555A2] The present specification disclosed a noninvasive transdermal delivery device that relates generally to a handheld mechanical apparatus for noninvasive transdermal administration of gas, small to large water-soluble (hydrophilic) pharmaceutical agents, vitamins, and other therapeutic agents. Components of such delivery devices, methods of producing a substance comprising a supersaturated amount of a dissolved gas, as well as, methods of administering a therapeutic agent using such delivery devices and methods of treating a disease or condition using such delivery devices are also disclosed.

IPC 8 full level  
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CPC (source: EP KR)  
**A61M 11/04** (2013.01 - EP KR); **A61M 11/06** (2013.01 - KR); **A61M 37/00** (2013.01 - EP KR); **A61M 35/30** (2019.04 - EP); **A61M 2205/8225** (2013.01 - EP)

Citation (search report)  

- [X] WO 2009126121 A1 20091015 - BIO BATH CORP [US], et al
- [A] WO 2011007425 A1 20110120 - AMUSE COMPANY LTD [JP], et al
- See references of WO 2012145555A2

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EP3411094A4

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 2012145555 A2 20121026; WO 2012145555 A3 20130117**; AU 2012245373 A1 20131114; BR 112013027006 A2 20161227; CA 2833851 A1 20121026; CN 103648576 A 20140319; EP 2699306 A2 20140226; EP 2699306 A4 20160727; IL 228970 A0 20131231; JP 2014515666 A 20140703; KR 20140035378 A 20140321; MX 2013012205 A 20140528; RU 2013151160 A 20150527; SG 194215 A1 20131129; ZA 201307980 B 20140625

DOCDB simple family (application)  
**US 2012034316 W 20120419**; AU 2012245373 A 20120419; BR 112013027006 A 20120419; CA 2833851 A 20120419; CN 201280030260 A 20120419; EP 12774807 A 20120419; IL 22897013 A 20131020; JP 2014506557 A 20120419; KR 20137030605 A 20120419; MX 2013012205 A 20120419; RU 2013151160 A 20120419; SG 2013077706 A 20120419; ZA 201307980 A 20131024