

Title (en)  
POWDER INHALER

Title (de)  
PULVERINHALATOR

Title (fr)  
INHALATEUR DE POUDRE

Publication  
**EP 2739334 A1 20140611 (EN)**

Application  
**EP 11807852 A 20111221**

Priority  
• BR 2011000279 W 20110804  
• BR 2011000493 W 20111221

Abstract (en)  
[origin: WO2013016784A1] Dry powder inhaler improvement, consisting of a base housing (1), snap-in capsule receptacle (2) and a moveable mouthpiece (4), this latter internally including a device (7) to open the capsule (C) containing medication in form of dry powder, housed above a deagglomeration chamber (10), with air intake points (11 and 12) and an outlet (14) for air mixed with powder, integrated with the conduit (9) of the mouthpiece (4); the above mentioned passage (14) for the air / powder mixture located between the conduit (9) and the chamber (10) is restricted and is sufficiently long to cause two effects in the capsule (C) while it spins in the chamber (10) during inhalation: a) valve - obstruction effect on the passage (14) by the capsule (C), more precisely by its cylindrical part, briefly and intermittently, with such obstruction of the passage (14) being repeated at every half turn (180°) of the capsule or whenever it is aligned with the passage (14); and b) impact of the capsule (C) through suction against the roof of the deagglomeration chamber (10) whenever it is aligned with the passage (14) and its obstruction is complete, with this impact being sufficient to neutralize the compaction of the powder at the ends of the capsule (C) during its rotation.

IPC 8 full level  
**A61M 15/00** (2006.01); **A61M 11/00** (2006.01)

CPC (source: EP)  
**A61M 11/003** (2014.02); **A61M 15/0025** (2014.02); **A61M 15/0028** (2013.01); **A61M 15/003** (2014.02); **A61M 15/0035** (2014.02); **A61M 15/0041** (2014.02); **A61M 15/008** (2014.02); **A61M 2202/064** (2013.01); **A61M 2205/583** (2013.01); **A61M 2206/14** (2013.01); **A61M 2206/16** (2013.01)

Citation (search report)  
See references of WO 2013016787A1

Cited by  
EP3159030A1; WO2017068171A1; US10773034B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2013016784 A1 20130207**; BR 112014002724 A2 20170613; BR 112014002724 A8 20170620; EP 2739334 A1 20140611; WO 2013016787 A1 20130207

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