

Title (en)
SPRING ASSEMBLY IN AN INJECTION DEVICE

Title (de)
FEDERANORDNUNG IN EINER INJEKTIONSVORRICHTUNG

Title (fr)
ENSEMBLE RESSORT DANS UN DISPOSITIF D'INJECTION

Publication
EP 2129416 A1 20091209 (DE)

Application
EP 08714769 A 20080319

Priority
• CH 2008000119 W 20080319
• DE 102007013837 A 20070322

Abstract (en)
[origin: US2010137798A1] An injection device, in some embodiments an autoinjector, which includes a thrust spring that advances an injection needle from an initial position to an insertion position from the distal end of the injection device and that causes a product to be emptied from the product reservoir by an emptying movement, and a return spring that retracts the injection needle from the insertion position into the distal end of the injection device counter to the force of the thrust spring, wherein the return spring is decoupled from the thrust spring during the emptying movement.

IPC 8 full level
A61M 5/20 (2006.01); **A61M 5/32** (2006.01)

CPC (source: EP US)
A61M 5/2033 (2013.01 - EP US); **A61M 5/31511** (2013.01 - EP US); **A61M 5/3257** (2013.01 - EP US); **A61M 5/3157** (2013.01 - EP US); **A61M 5/3202** (2013.01 - EP US); **A61M 5/3204** (2013.01 - EP US); **A61M 5/326** (2013.01 - EP US); **A61M 2005/2013** (2013.01 - EP US); **A61M 2005/206** (2013.01 - EP US); **A61M 2005/2073** (2013.01 - EP US); **A61M 2005/3118** (2013.01 - EP US); **A61M 2205/581** (2013.01 - EP US); **A61M 2205/582** (2013.01 - EP US)

Citation (search report)
See references of WO 2008113199A1

Cited by
CN118079144A; WO2019192662A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
US 2010137798 A1 20100603; **US 8398594 B2 20130319**; CN 101678167 A 20100324; CN 101678167 B 20130918; EP 2129416 A1 20091209

DOCDB simple family (application)
US 56380509 A 20090921; CN 200880009057 A 20080319; EP 08714769 A 20080319