

Title (en)

AUTOINJECTOR WITH MULTICHAMBER PRODUCT CONTAINER

Title (de)

AUTOINJEKTOR MIT EINEM MEHRKAMMERPRODUKTBEHÄLTER

Title (fr)

AUTO-INJECTEUR POURVU D'UN RÉCIPIENT DE PRODUIT À CHAMBRES MULTIPLES

Publication

EP 4126118 A1 20230208 (DE)

Application

EP 21712135 A 20210312

Priority

- CH 3792020 A 20200330
- EP 2021056310 W 20210312

Abstract (en)

[origin: WO2021197804A1] The invention relates to an autoinjector for discharging one or more liquid products, in particular at least one medication, comprising: a) a housing (2) and b) a multichamber product container (13), in particular a multichamber syringe (13), which is arranged in the housing (2) and has a syringe body (13c), an injection needle (13a) being rigidly arranged at the distal end of said syringe body. The syringe body (13c) has a first chamber (13e) for a first liquid product, a second chamber (13f) for a second liquid product, and a bypass (13d) for fluidically connecting the first (13e) and second chamber (13f), wherein the bypass (13d) is formed in or on the syringe body (13c) in the form of a curved section protruding radially outwards, and two plungers (13b, 13b') are arranged in the syringe body (13c) in an axially movable manner. In a starting position of the autoinjector, the two liquid products are separated from each other by the second plunger (13b'), and the first plunger (13b) and/or the first (13b) and second plunger (13b') can be moved in a discharge direction in order to discharge the product contained in the multichamber product container (13) or the plurality of products contained in the multichamber product container (13). The autoinjector also comprises c) a drive element (7), which acts on the first plunger (13b) during the discharge of the product, and a first spring (9), which acts on the drive element (7), wherein d) the first spring (9) is biased so strongly that the spring can discharge the liquid product or the plurality of liquid products out of the second chamber (13f) of the multichamber product container (13) by moving the drive element (9) by a discharge stroke (HA), and the multichamber product container (13) is arranged in the housing (2) in an axially fixed manner, in particular in an axially and rotationally fixed manner.

IPC 8 full level

A61M 5/20 (2006.01); **A61M 5/24** (2006.01); **A61M 5/31** (2006.01); **A61M 5/315** (2006.01); **A61M 5/32** (2006.01)

CPC (source: CH EP US)

A61M 5/2033 (2013.01 - CH EP US); **A61M 5/2066** (2013.01 - CH EP); **A61M 5/2448** (2013.01 - CH); **A61M 5/31596** (2013.01 - CH US);

A61M 5/3204 (2013.01 - US); **A61M 5/326** (2013.01 - US); **A61M 5/3157** (2013.01 - EP); **A61M 5/3204** (2013.01 - EP);

A61M 2005/2013 (2013.01 - EP US); **A61M 2005/2433** (2013.01 - EP); **A61M 2005/3132** (2013.01 - EP); **A61M 2005/3267** (2013.01 - EP);

A61M 2205/581 (2013.01 - EP); **A61M 2205/582** (2013.01 - EP)

Citation (search report)

See references of WO 2021197804A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

CH 717267 A2 20210930; EP 4126118 A1 20230208; US 2023022361 A1 20230126; WO 2021197804 A1 20211007

DOCDB simple family (application)

CH 3792020 A 20200330; EP 2021056310 W 20210312; EP 21712135 A 20210312; US 202217957434 A 20220930