

Title (en)

SYSTEM FOR INJECTING A FLUID THROUGH OR INTO HUMAN SKIN

Title (de)

SYSTEM ZUR INJEKTION EINES FLUIDS DURCH ODER IN DIE MENSCHLICHE HAUT

Title (fr)

SYSTÈME D'INJECTION D'UN FLUIDE À TRAVERS, OU DANS LA PEAU HUMAINE

Publication

EP 2237820 A2 20101013 (DE)

Application

EP 09709161 A 20090129

Priority

- EP 2009051014 W 20090129
- DE 102008008023 A 20080204

Abstract (en)

[origin: CA2714424A1] The invention relates to a disposable syringe encompassing an ampoule member that forms a chamber and is used for holding the fluid to be injected, a sealingly guided ampoule plunger which can be axially moved within the chamber, and a male taper of a Luer taper at the distal end of the ampoule member, and an adapter encompassing a female taper of a Luer taper at the proximal end of the adapter and an outlet for the fluid to be injected without a needle at the distal end of the adapter, and an autoinjector encompassing a receiving device for the coupled and fluid-filled combination of the disposable syringe and the adapter, said receiving device being designed to maintain the positive connection between the disposable syringe and the adapter and support the ampoule member of the disposable syringe. The autoinjector further encompasses a distal skin coupling element which forms a skin contact surface for the needle-free injection through or into the skin, is curved, and has a central nozzle cover that is shaped to be complementary with the outlet of the adapter and receives the outlet of the adapter in a flush manner in the area of the skin contact surface during the needle-free injection by means of the nozzle cover. The autoinjector finally encompasses an injection device which is designed to axially move the ampoule plunger according to a predefined pressure profile.

IPC 8 full level

A61M 5/30 (2006.01); **A61M 5/20** (2006.01); **A61M 5/31** (2006.01)

CPC (source: EP US)

A61M 5/30 (2013.01 - EP US); **A61M 5/42** (2013.01 - EP US); **A61M 5/20** (2013.01 - EP US); **A61M 5/3134** (2013.01 - EP US);
A61M 5/31511 (2013.01 - EP US); **A61M 2005/2006** (2013.01 - EP US); **A61M 2005/31516** (2013.01 - EP US)

Citation (search report)

See references of WO 2009098164A2

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 102008008023 A1 20090813; DE 102008008023 A8 20091203; CA 2714424 A1 20090813; EP 2237820 A2 20101013;
JP 2011510719 A 20110407; US 2011034868 A1 20110210; WO 2009098164 A2 20090813; WO 2009098164 A3 20091029;
WO 2009098164 A9 20091217; WO 2009098164 A9 20100304; WO 2009098164 A9 20100429

DOCDB simple family (application)

DE 102008008023 A 20080204; CA 2714424 A 20090129; EP 09709161 A 20090129; EP 2009051014 W 20090129;
JP 2010544700 A 20090129; US 86619809 A 20090129