

Title (en)  
INJECTION SYRINGE.

Title (de)  
INJEKTIONSSPRITZE.

Title (fr)  
SERINGUE POUR INJECTION.

Publication  
**EP 0683682 A1 19951129 (EN)**

Application  
**EP 93901504 A 19921127**

Priority  
• NL 9200217 W 19921127  
• NL 9101994 A 19911128

Abstract (en)  
[origin: WO9310842A1] A syringe, comprising a casing (1) with a piston/piston rod assembly (9, 10) slidable therein and a needle foot (6) latched to a first end of the casing, means being provided to couple the piston with the needle foot and to unlatch the needle foot in an inner extreme position of this assembly in order to be able to withdraw the needle foot with the piston into the casing and thereby to shield off the needle (7) fixed to the needle foot and, as the case may be, to destroy this needle, stroke limiting means (15, 18) being provided which are adapted to limit the stroke length in such a way that the piston remains at a predetermined distance from the needle foot when the piston is pushed inward for the first time to eject the air, and after the withdrawal of the piston for drawing in the injection fluid, to increase the stroke length in such a way that the piston can be coupled with the needle foot when the piston is thereafter pushed inwards again for the ejection of the injection fluid. The means to limit the stroke comprise a ring (18) which, is either slidable by interaction with this assembly, over a predetermined distance with respect to this assembly or to the casing after the assembly has been drawn outwards at least once, or is rotatable and is provided with abutments staggered to each other over the predetermined distance, so that, when the assembly slides, this ring is turned in such a way that, finally, the assembly can be pushed inwards up to the deepest abutment.

IPC 1-7  
**A61M 5/50; A61M 5/315**

IPC 8 full level  
**A61M 5/315** (2006.01); **A61M 5/32** (2006.01)

CPC (source: EP)  
**A61M 5/322** (2013.01); **A61M 5/31505** (2013.01); **A61M 5/3213** (2013.01); **A61M 2005/31506** (2013.01); **A61M 2005/31508** (2013.01)

Citation (search report)  
See references of WO 9310842A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB IE IT LI LU NL PT SE

DOCDB simple family (publication)  
**WO 9310842 A1 19930610**; AU 3267993 A 19930628; BR 9206841 A 19951031; CA 2124574 A1 19930610; EP 0683682 A1 19951129; JP H07501960 A 19950302; NL 9101994 A 19930616

DOCDB simple family (application)  
**NL 9200217 W 19921127**; AU 3267993 A 19921127; BR 9206841 A 19921127; CA 2124574 A 19921127; EP 93901504 A 19921127; JP 51001492 A 19921127; NL 9101994 A 19911128