

Title (en)
RETRACTABLE SYRINGE

Title (de)
EINZIEHBARE SPRITZE

Title (fr)
SERINGUE ESCAMOTABLE

Publication
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Application
EP 04802045 A 20041209

Priority
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Abstract (en)
[origin: WO2005058398A1] A retractable syringe (10) having a barrel (40), a needle (72), a hollow plunger (30) and resilient means (80). The barrel (40) has a front end (52), a rear end (54) and defines a receptacle (46) for containing a liquid for injection. The needle (72) is mounted at the front end (52) of the barrel (40). The hollow plunger (30) is movable within the barrel (40) from the rear end (54) to the front end of the receptacle (46) to expel fluid out of the barrel (40) through the needle. The plunger (30) has an inner chamber (34), an axial hole (36) at the front end of the chamber (30) and means (38) blocking the axial hole (36). The resilient means (80) is adapted to urge the needle (72) in a rearward direction into the barrel (40). The resilient means (80) is restrained by an expandable annular member (90) providing a seal at the front end of the receptacle of the barrel (40). The expandable annular member (90) is engaged by a forward part (38) of the plunger (30) when the plunger (30) reaches the front end of the receptacle (46) of the barrel (40). This causes the expandable annular member (90) to move along a surface (116) at the front end of the barrel (40) and expand to release the resilient means (80). The axial hole (36) is then unblocked and the needle (72) is automatically retracted through the axial hole (36) into the inner chamber (34) of the plunger (30). The resilient means (80), in its restrained condition, limits movement of the needle (72) under the above movement of the expandable annular member (90) to release the resilient means (80).

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