

CLAIMS:

1. A pump device operable with a syringe having a barrel and a plunger, the pump device being operable to cause relative movement between the syringe plunger and the syringe barrel for discharging fluid from the syringe, the pump device comprising a portion adapted to engage the syringe barrel, and a drive mechanism for moving the syringe plunger relative to the barrel to discharge fluid from the syringe, the drive mechanism comprising (1) a piston adapted for guided movement along a path, configured to stay outside the barrel during the relative movement between the plunger and the barrel and having a cylindrical side wall, and (2) a power mechanism for moving the piston to effect movement of the syringe plunger relative to the barrel, wherein the power mechanism comprises two spring mechanisms operable to exert a spring force on the piston,

wherein each spring mechanism comprises a reel and a flexible link, the flexible link having a proximal end attached to the reel and a distal end directly attached to the piston,

wherein the flexible link is windable onto and from the reel,

wherein each reel is mounted on an axle supported between two housing sections of the pump device; and

wherein the piston comprises a base portion and an upper end face, the base portion is configured to define two opposing mounting lugs each directly attached to one distal end of one flexible link and a web functioning as a bridge extending between the lugs and the upper end face of the piston is adapted to directly engage the plunger.

2. The pump device according to claim 1, wherein the power mechanism has a first condition which it assumes when not in operation and a second condition from which it is operable to move the syringe plunger relative to the barrel.

3. The pump device according to claim 2, wherein the power mechanism is adapted to be energising upon movement from the first condition to the second condition.

4. The pump device according to claim 2, wherein the power mechanism is movable from the first condition to the second condition upon installation of the syringe on the syringe pump.

5. The pump device according to claim 1, wherein the two spring mechanisms are disposed on opposed sides of the path along which the piston is movable.

6. The pump device according to claim 1, wherein said portion adapted to engage the

syringe barrel comprises an engaging means for releasably engaging an end section of the barrel from which the plunger extends.

7. The pump device according to claim 6, wherein the engaging means comprises a receptor in which the end section of the barrel is releasably receivable.

8. The pump device according to claim 7, wherein the receptor is configured as a socket formation for operation in conjunction with the end section of the barrel to provide a connection therebetween.

9. The pump device according to claim 8, wherein the socket formation is configured to provide a bayonet connection.

10. The pump device according to claim 9, wherein the receptor is configured to define two bayonet slots adapted for engagement with two bayonet pins on the syringe barrel, the bayonet pins comprising opposed lugs against which a user can locate fingers of a hand in which the syringe is being held to restrain the syringe barrel while pushing the syringe plunger with the thumb of the hand.

11. The pump device according to claim 1, further comprising a cavity formed by the two housing sections in which the piston is accommodated, the cavity defining the path along which the piston is movable, a receptor being provided adjacent one end of the cavity whereby the syringe plunger is receivable in the cavity for engagement with the piston.

12. The pump device according to claim 11, wherein the cavity comprises a passage configured to define a barrel portion along which the piston is guidingly movable.

13. The pump device according to claim 1, wherein each distal end of each flexible link is directly attached to the piston with a screw.