

CLAIMS

1. A plunger (20) for a syringe assembly (100), (200) for administering a liquid composition, wherein the plunger (20) comprises a plunger rod (21) and a plunger head (22), wherein the plunger rod (21) comprises a proximal end and a distal end (25), and
 wherein the plunger head (22) is attached to the proximal end of the plunger rod (21) and comprises a proximal facing surface (24) configured to serve as a thumb plate during administering,
 characterized in that the plunger (20) comprises a grip pad (23) attached to the proximal facing surface (24) of the plunger head (22) and extending at least partly over said proximal facing surface (24), wherein the grip pad (23) is made by injection molding.
2. The plunger (20) according to claim 1, characterized in that the grip pad (23) on the plunger head (22) is made of a thermoplastic elastomere (TPE), in particular of a coloured thermoplastic elastomere (cTPE).
3. The plunger (20) according to claim 1 or 2, characterized in that the proximal facing surface (24) of the plunger head (22) comprises at least one deepening (27), in particular at least one groove (27), which is filled by grip pad injection molding material (23).
4. The plunger (20) according to any one of the previous claims, characterized in that the grip pad (23) on the plunger head (22) is designed in such a way that it represents a symbol (“+”), in particular a letter or another character selected from the ASCII-Code.
5. The plunger (20) according to any one of the previous claims, characterized in that the grip pad (23) on the plunger head (22) is made in one piece comprising one injection point (26) only.
6. The plunger (20) according to any one of the previous claims, characterized in that

the plunger rod ~~(21)~~ comprises at least one section in its longitudinal direction with a at least substantially double-T-profile shape, a double-T-profile-like shape, a I-profile shape or a I-profile-like shape.

7. A method for manufacturing a plunger ~~(20)~~ according to any one of the claims 1 to 6, comprising at least the steps:
 - manufacturing the plunger head ~~(22)~~,
 - forming the grip pad ~~(23)~~ by injection molding.

8. A finger grip ~~(30)~~ for a syringe assembly for administering a liquid composition, comprising a finger grip body ~~(30)~~ with two flanges ~~(31, 32)~~ extending radially in opposite directions from a center bore ~~(37)~~ in the finger grip body through which a plunger ~~(20)~~ of a syringe assembly can be inserted, each flange ~~(31, 32)~~ serving as a grip portion and having a finger contact area onto which at least one finger of a user can be put partly during administering to support the finger whilst administering, wherein each flange ~~(31, 32)~~ comprises a distal facing surface ~~(33)~~ and a proximal facing surface ~~(34)~~,

characterized in that the finger grip ~~(30)~~ comprises a grip pad ~~(35)~~ attached to the distal facing surface ~~(33)~~ of at least one of the flanges ~~(31, 32)~~ extending at least partly over said distal facing surface ~~(33)~~, wherein the grip pad ~~(35)~~ is made by injection molding.

9. Finger grip ~~(30)~~ according to claim 8, characterized in that at least on grip pad ~~(35)~~ on the finger grip ~~(30)~~ is made of a thermoplastic elastomere (TPE), in particular of a coloured thermoplastic elastomere (cTPE).

10. Finger grip ~~(30)~~ according to claim 8 or 9, characterized in that at least one grip pad ~~(35)~~ on one of the finger grip flanges ~~(31, 32)~~ is made in one piece comprising one injection point ~~(26)~~ only.

11. A method for manufacturing a finger grip ~~(30)~~ according to any one of the claims 8 to 10, comprising at least the steps:
 - manufacturing a finger grip body ~~(30)~~ including two flanges ~~(31, 32)~~ extending radially in opposite directions from a center bore ~~(37)~~ in the finger grip body ~~(30)~~

- through which a plunger ~~(20)~~ of a syringe assembly ~~(100, 200)~~ can be inserted, each flange ~~(31, 32)~~ serving as a grip portion and having a finger contact area onto which at least one finger of a user can be put partly during administering to support the finger whilst administering, wherein each flange ~~(31, 32)~~ comprises a distal facing surface ~~(33)~~ and a proximal facing surface ~~(34)~~, and
- forming the grip pad ~~(35)~~ by injection molding.
12. A syringe assembly ~~(100, 200)~~ for administering a liquid composition to a human or animal body, comprising at least:
- a longitudinal syringe barrel ~~(10)~~ having an inner lumen ~~(13)~~ for receiving and storing a liquid composition to be administered,
 - a finger grip ~~(30)~~ coupled to a proximal end of said barrel ~~(10)~~, and
 - a plunger ~~(20)~~ having a plunger rod ~~(21)~~ and a plunger head ~~(22)~~, the plunger rod ~~(21)~~ being disposed at least partly within the inner lumen ~~(13)~~ of the barrel ~~(10)~~ with its distal end ~~(25)~~,
- characterized in that the plunger ~~(20)~~ is a plunger ~~(20)~~ according to any one of the claims 1 to 6 or a plunger ~~(20)~~ made by a method according to claim 7 and/or in that the finger grip ~~(30)~~ is a finger grip ~~(30)~~ according to any one of the claims 8 to 10 or a finger grip ~~(30)~~ made by a method according to claim 11.
13. The syringe assembly ~~(100, 200)~~ according to claim 12, characterized in that the syringe barrel ~~(10)~~ comprises a Luer lock connector ~~(11)~~ at its distal end integrally formed with the syringe barrel ~~(10)~~, wherein the syringe assembly ~~(100, 200)~~ further comprises a tip cap ~~(40)~~, the tip cap ~~(40)~~ covering and sealing the distal end of the syringe barrel ~~(10)~~, wherein the tip cap ~~(40)~~ is a two-part tip cap ~~(40)~~ comprising a rigid part ~~(41)~~ and an elastomeric part ~~(42)~~, wherein the maximum outer diameter ~~(D_{max})~~ of the rigid part ~~(41)~~ is less or equal to the outer diameter of the Luer lock connector ~~(11)~~ of the syringe barrel.
14. A kit comprising parts of a syringe assembly ~~(100, 200)~~ according to claim 12 or 13, configured to be assembled to a syringe assembly ~~(100, 200)~~ according to claim 12 or 13, wherein the kit comprises at least:
- a longitudinal syringe barrel ~~(10)~~ having an inner lumen ~~(13)~~ for receiving and storing a liquid composition to be administered,

a finger grip ~~(30)~~ configured to be coupled to a proximal end of said barrel ~~(10)~~,
and

a plunger ~~(20)~~ having a plunger rod ~~(21)~~ and a plunger head ~~(22)~~, wherein the
plunger rod ~~(21)~~ is configured to be disposed at least partly within the inner lumen
~~(13)~~ of said barrel ~~(10)~~ with its distal end,

characterized in that the plunger ~~(20)~~ is a plunger ~~(20)~~ according to any one of
the claims 1 to 6 or a plunger ~~(20)~~ made by a method according to claim 7 and/or in
that the finger grip ~~(30)~~ is a finger grip ~~(30)~~ according to any one of the claims 8 to
10 or a finger grip ~~(30)~~ made by a method according to claim 11.

15. Use of a syringe assembly ~~(100, 200)~~ according to claim 12 or 13 or of a kit according
to claim 14 for cosmetic or therapeutic application, particularly for replacing or filling
a biological tissue or increasing volume of a biological tissue, wherein an effective
amount of a liquid composition, particularly an effective amount of a dermal filler
composition, is administered to a subject.