Claims

1. A drive assembly for a drug delivery device, comprising:
a piston rod (17),
a guide nut (4), the guide nut being rotatable around an axis of the assembly,
a locking means (9), the locking means being radially movable with respect to the axis in order to engage with the guide nut and to inhibit a rotation of the guide nut,
a body (3) in which the guide nut and the locking means are arranged, the locking means being fastened to the body,
a cartridge holder (2), which can be attached to and removed from the body, and
a fastener (14), the fastener being part of or fastened to the cartridge holder and being provided to move the locking means radially with respect to the axis , engaging the locking means with the guide nut, when the cartridge holder is attached to the body, and to hold the locking means in a position in which the locking means is engaged with the guide nut for drug delivery,
characterized in that
a screw thread (8, 15) coupling the guide nut and the piston rod enables a helical movement of the piston rod with respect to the guide nut, the helical movement comprising a rotation around the axis and a simultaneous shift along the axis,
the fastener is a protruding part of the cartridge holder, and
the fastener is made to slide over the locking means and engages the locking means with the guide nut by a rotation of the cartridge holder with respect to the body.

~~2. The drive assembly according to claim 1, wherein~~
~~the locking means (9) is engaged with the guide nut (4) for drug delivery.~~

~~3. The drive assembly according to claim 1 or 2, further comprising:~~
~~a body (3), in which the guide nut (4) and the locking means (9) are arranged,~~
~~a cartridge holder (2), which can be attached to and removed from the body (3),~~
~~the fastener (14) being part of or fastened to the cartridge holder, and~~
~~the fastener (14) engaging the locking means (9) with the guide nut (4) when the cartridge holder is attached to the body.~~

24. The drive assembly according to claim 13, wherein
the fastener (14) is provided by a protruding element of the cartridge holder (2).

35. The drive assembly according to claim 1 or 2 ~~3 or 4~~, wherein
the locking means (9) is not engaged with the guide nut (4) during a reset operation, when the cartridge holder is not attached to the body (3).

~~6. The drive assembly according to one of claims 3 to 5, wherein~~
~~the locking means (9) is fastened to the body (3), and~~
~~the fastener (14) engages the locking means with the guide nut (4) by a rotation of the cartridge holder (2) with respect to the body.~~

47. The drive assembly according to one of claims 1 to 36, wherein

the guide nut (4) is a toothed wheel having notches or interspaces between the teeth, and

the locking means (9) is a resilient or resiliently mounted pawl or cantilever comprising an edge or hook engaging the notches or interspaces.

~~8. The drive assembly according to one of claims 1 to 7, further comprising:~~
~~a piston rod (17), and~~
~~a screw thread (8, 15) coupling the guide nut (4) and the piston rod and enabling a helical movement of the piston rod with respect to the guide nut, the helical movement comprising a rotation around the axis and a simultaneous shift along the axis.~~

5~~9~~. The drive assembly according to one of claims 1- 4~~8~~, further comprising:
~~a body (3), in which the guide nut (4) and the locking means (9) are arranged, and~~
a web (32) of the body (3) inhibiting a movement of the guide nut (4) in the direction of the axis while permitting a rotation of the guide nut around the axis when the locking means (9) is not engaged with the guide nut.

6~~10~~. The drive assembly according to claim 5~~9~~, further comprising:
a drive sleeve (19) arranged within the body (3), the drive sleeve being coupled with the piston rod (17) by means of a further screw thread (16).

7~~11~~. The drive assembly according to claim 6~~10~~, wherein
the screw thread (8, 15) and the further screw thread (16) have opposite senses of rotation.

8~~12~~. The drive assembly according to claim 6 or 7~~10 or 11~~, further comprising:
a clutch (24), by which the drive sleeve (19) can be rotationally locked with respect to the body (3) in a releasable manner.

9~~13~~. The drive assembly according to claim 8~~12~~, wherein
a shift of the drive sleeve (19) with respect to the body (3) along the axis is converted into a helical movement of the piston rod (17) with respect to the body when the drive

sleeve is rotationally locked with respect to the body and the locking means (9) is engaged with the guide nut (4).

1014. A drug delivery device comprising a drive assembly according to one of claims 1 to 913.

1115. A drug delivery device according to claim 1014, having a shape of an injection pen.