Claims

1. A drug delivery device for dispensing one or more doses of a drug, the drug delivery device (4) having a longitudinal axis (100) and being configured to dispense a dose of a drug in a dose dispense operation as well as being configured to be prepared for a subsequent dose dispense operation in a dose set operation, the device (4) comprising:
a drive member (1) for driving a piston rod (5) in a dispense operation of the drug delivery device and
a dose member for actuating the drive member (1),
a piston rod (5) coupled to the drive member (1) such that
a relative translational movement of the drive member (1) and the piston rod (5) is allowed and a relative rotational movement is prevented and
wherein the drive member (1) is configured to be driven by the dose member (46) around the longitudinal axis (100) in a first (110) and a second rotational direction (111) opposite to each other.

2. The drug delivery device according to claim 1,
wherein the drive member (1) has stable and unstable states relative to the longitudinal axis (100), and wherein in an unstable state the drive member (1) is biased by a biasing means towards a stable state.

3. A drug delivery device for dispensing one or more doses of a drug, the drug delivery device (4) having a longitudinal axis (100) and being configured to dispense a dose of a drug in a dose dispense operation as well as being configured to be prepared for a subsequent dose dispense operation in a dose set operation, the device comprising:
a drive member (1) for driving a piston rod (5) in a dispense operation and
a dose member (46) for actuating the drive member (1), wherein the dose member (46) is constrained to an axial movement along the longitudinal axis (100),
wherein the drive member (1) has stable and unstable states relative to the

longitudinal axis (100) and wherein in an unstable state the drive member (1) is biased by biasing means towards a stable state.

4. The drug delivery device according to any of claims 2 or 3, wherein the biasing means comprise a spring (32).

5. The drug delivery device according to any of claims 2 to 4, wherein the biasing means comprise redirecting means for redirecting a load in an axial direction into a load in a rotational direction relative to the longitudinal axis (100).

6. The drug delivery device according to claim 5, wherein the redirection means comprise a surface being inclined to the longitudinal axis (100).

7. The drug delivery device according to any of claims 2 to 6, wherein the biasing means are configured to bias the drive member (1) towards a first rotational direction (110) relative to the longitudinal axis (100) at the end of a dose set operation.

8. The drug delivery device according to any of claims 2 to 7, wherein the biasing means are configured to bias the drive member (1) towards a second rotational direction (111) relative to the longitudinal axis (100) at the end of a dose dispense operation.

9. The drug delivery device according to any of claims 2 to 8, wherein on a small deflection from a stable state the drive member (1) is biased towards the stable state.

10. The drug delivery device according to any of claims 2 to 9, comprising a neutral state of the drive member (1) configured such that on a small deflection from the neutral state, the drive member (1) is one of biased towards a stable state or unbiased towards any rotational state.

11. The drug delivery device according to any of claims 2 to 10, wherein the drive member (1) is configured such that in an unstable state, a torque exerted by the biasing means results in a rotation towards a stable state, in the case that the rotation of the drive member (1) is unhampered by the dose member (46).

12. The drug delivery device according to any of claims 3 to 11, comprising a piston rod (5) configured to be driven by the drive member (1) in a dose dispense operation, wherein a relative rotational movement of the piston rod (5) and the drive member (1) is prevented and a relative axial movement is enabled.

13. The drug delivery device according to any of claims 1 or 2 or claims 4 to 12, wherein the dose member (46) is constrained to an axial movement along the longitudinal axis (100).

14. The drug delivery device according to claim 13, wherein the dose member (46) is configured for being pulled for setting a dose and for being pushed for dispensing the dose.

15. The drug delivery device according to any of the previous claims, comprising a dose counter (48) for displaying at least one of the number of remaining doses or the number of administered doses.

16. The drug delivery device according to claim 15, wherein the dose counter (48) is driven by the drive member (1).