

CLAIMS

1. An injection pen, comprising:
 - a housing;
 - a lead screw axially moveable in the housing;
 - a dose set member for dose setting and dose correcting, the dose set member being connected to the housing and including teeth;
 - a setback member operatively connected to the dose set member, the setback member including teeth;
 - a clicker operatively coupled to the dose set member and the setback member; and
 - a rotatable driver operatively connected to the setback member and the lead screw, the rotatable driver being rotationally fixed to the setback member,

wherein the teeth of the dose set member slide over the teeth of the setback member so that the driver is prevented from rotating during dose setting and dose correcting, and the teeth of the dose set member are locked to the teeth of the setback member so that the driver rotates during an injection to axially move the lead screw.
2. The injection pen of claim 1, wherein the clicker includes an upper ring having an upper arm and a lower ring having a lower arm.
3. The injection pen of claim 2, wherein the upper arm engages the dose set member and the lower arm engages the setback member.
4. The injection pen of claim 2 or 3, wherein the lower arm prevents relative rotation between the clicker and the setback member during dose setting and the upper arm prevents relative rotation between the clicker and the dose set member during dose correcting.
5. The injection pen of any of claims 2-4, wherein the upper ring has an outer diameter greater than an outer diameter of the lower ring.
6. The injection pen of any of claims 2-5, wherein the upper arm creates an audible signal during dose setting and the lower arm creates an audible signal during dose correcting.

7. The injection pen of any of claims 2-6, wherein the upper arm engages the teeth of the dose set member and the lower arm engages the teeth of the setback member.
8. The injection pen of any of the preceding claims, further comprising a push button connected to the clicker.
9. The injection pen of any of the preceding claims, further comprising a cartridge holder releasably connected to the housing and a retract nut operatively connected to the housing and the lead screw.
10. The injection pen of claim 9, wherein the lead screw rotates with respect to the retract nut when the cartridge holder is disconnected from the housing.
11. The injection pen of claim 9 or 10, wherein the lead screw is rotationally fixed to the retract nut when the cartridge holder is connected to the housing.
12. The injection pen of claim 11, wherein the housing comprises a ratchet arm biased into engagement with the retract nut by the cartridge holder.
13. The injection pen of any of the claims 9-12, further comprising a spring biasing the retract nut in a distal direction.
14. The injection pen of any of the preceding claims, wherein the dose set member is rotated out of the housing in a first direction to set a dose, and the dose set member is freely rotatable in a second direction to correct a set dose.
15. An injection pen, comprising:
 - a housing;
 - a lead screw axially moveable in the housing;
 - a dose set member for dose setting and dose correcting the dose set member being connected to the housing and including teeth;

a setback member operatively connected to the dose set member, the setback member including teeth; and

a rotatable driver operatively connected to the setback member and the lead screw, the rotatable driver being rotationally fixed to the setback member,

wherein the teeth of the dose set member slide over the teeth of the setback member so that the driver is prevented from rotating during dose setting and dose correcting, and the teeth of the dose set member are locked to the teeth of the setback member so that the driver rotates during an injection to axially move the lead screw, and

further comprising a cartridge holder releasably connected to the housing and a retract nut operatively connected to the housing and the lead screw, wherein the lead screw rotates with respect to the retract nut when the cartridge holder is disconnected from the housing and the lead screw is rotationally fixed to the retract nut when the cartridge holder is connected to the housing.

16. The injection pen of claim 15, wherein the dose set member is rotated out of the housing in a first direction to set a dose, rotated into the housing in a second direction to correct a dose, and rotated into the housing in the second direction during injection.
17. The injection pen of claim 16, wherein the setback member moves axially with the dose set member without rotation with respect to the housing during dose setting and dose correcting, and rotates with the dose set member during injection.
18. The injection pen of any of claims 15-17, wherein the driver is rotationally locked to the setback member.
19. The injection pen of any of claims 15-18, wherein the setback member is axially moveable with respect to the driver.
20. The injection pen of any of claims 15-19, wherein the setback member mates with the dose set member to rotationally lock the setback member and the dose set member during injection.

21. The injection pen of any of claims 15-20, further comprising a push button and a clicker connected to the dose set member.
22. The injection pen of claim 21, wherein a force applied to the push button during injection causes the setback member to engage the dose set member.