CLAIMS

What is claimed is:

1. A capsule for use in an inhalation device wherein said capsule is filled with a dry powder comprising levodopa wherein the dry powder has a working density of between about 0.01 g/cm^3 to about 0.1 g/cm^3, and wherein the capsule's shell comprises hydroxypropyl methylcellulose (HPMC) and titanium dioxide;

wherein said capsule emits more powder comprising levodopa upon actuation of the inhalation device as compared to a capsule having a capsule shell that comprises HPMC and that is free of titanium dioxide; and

wherein said dry powder comprises about 75% by weight or more of levodopa.

2. The capsule of claim 1, wherein said working density is between about 0.02 g/cm^3 to about 0.05 g/cm^3.

3. The capsule of claim 1, wherein said dry powder comprises from about 2 to about 8% of water by weight.

4. The capsule of claim 3, wherein said dry powder comprises from about 5 to about 6 % of water by weight.

5. The capsule of claim 1, wherein said capsule is a 00 size capsule.

6. The capsule of claim 5, wherein said dry powder comprises between about 15 and 50 milligrams of levodopa.

7. The capsule of claim 6, wherein said dry powder comprises between about 25 and 35 milligrams of levodopa.

8. The capsule of claim 1, wherein said dry powder further comprises a salt.

9. The capsule of claim 8, wherein said salt is sodium chloride.

10. The capsule of claim 8, wherein said dry powder further comprises a phospholipid.

11. The capsule of claim 10, wherein said phospholipid is dipalmitoylphosphatidylcholine (DPPC).

12. The capsule of claim 1, wherein the dry powder further comprises DPPC and sodium chloride.

13. The capsule of claim 1, wherein the FPF of the dry powder is about 50% to about 70% of the nominal dose.

14. The capsule of claim 1, wherein the capsule is filled with about 30 to about 50 milligrams of dry powder.

15. A capsule for use in an inhalation device wherein said capsule is filled with a dry powder comprising levodopa wherein the capsule's shell comprises hydroxypropyl methylcellulose (HPMC) and titanium dioxide.

16. The capsule of claim 15, wherein said dry powder comprises about 75% by weight or more of levodopa.

17. The capsule of claim 15, wherein upon actuation of said powder from an inhalation device, the emitted dose of powder has an FPF (5.6) of 50 to 65%.

18. The capsule of claim 17, wherein upon actuation of said powder from an inhalation device, the emitted dose of powder has an FPF (5.6) of 50 to 55%.

CLAIMS

What is claimed is:

1. A capsule for use in an inhalation device filled with a dry powder comprising levodopa and having a working density between about 0.02 to about 0.1 g/cm^3, and containing a capsule shell comprising hydroxypropyl methylcellulose (HPMC) and titanium dioxide, and

wherein said capsule emits more powder comprising levodopa upon actuation of the inhalation device as compare to a capsule that comprises HPMC and is free of titanium dioxide.

2. The capsule of claim 1, wherein said working density is between about 0.02 g/cm^3 to about 0.05 g/cm^3.

3. The capsule of claim 1, wherein said dry powder comprises from about 2 to about 8% of water by weight.

4. The capsule of claim 3, wherein said dry powder comprises from about 5 to about 6% of water by weight.

5. The capsule of claim 1, wherein said capsule is a 00 size capsule.

6. The capsule of claim 5, wherein said dry powder comprises between about 15 and 50 milligrams of levodopa.

7. The capsule of claim 6, wherein said dry powder comprises between about 25 and 35 milligrams of levodopa.

8. The capsule of claim 1, wherein said dry powder further comprises a salt.

9. The capsule of claim 8, wherein said salt is sodium chloride.

10. The capsule of claim 8, wherein said dry powder further comprises a phospholipid.

11. The capsule of claim 10, wherein said phospholipid is dipalmitoylphosphatidylcholine (DPPC).

12. The capsule of claim 1 comprising from about 25 to 50 milligrams of dry powder comprising at least 80% of levodopa by weight, a fine particle fraction (FPF) between 55 to 69% of the nominal dose, and a working density between about 0.02 to about 0.05 g/cm^3.

13. The capsule of claim 1, wherein the dry powder comprises about 85% by weight or more of levodopa.

14. The capsule of claim 1, wherein the dry powder comprises about 90% by weight or more of levodopa.

15. The capsule of claim 1, wherein the dry powder comprises a salt and the salt is sodium chloride (NaCl).

16. The capsule of claim 1, wherein the FPF of the dry powder is about 50% to about 70% of the nominal dose.

17. The capsule of claim 1, wherein the capsule is filled with about 25 milligrams or more of the dry powder.

18. The capsule of claim 1, wherein the capsule is filled with about 30 to about 50 milligrams of dry powder.

19. The capsule of claim 1, wherein the dry powder composition comprises a weight ratio of levodopa/DPPC/NaCl of 90:8:2.

20. The capsule of claim 1, wherein the dry powder comprises about 75% by weight or more levodopa, DPPC and a salt.