CLAIMS

1. A pharmaceutical composition for pulmonary delivery comprising particles of levodopa having a geometric size of 5 μm to 30 μm, a tap density of 0.02 g/cm^3 to 0.075 g/cm^3, a fine particle fraction (FPF) of 50% to 90% of the nominal powder dose, and wherein said particles have a water content between 1.90 and 2.90 weight percent.

2. The pharmaceutical composition of claim 1, wherein said particles comprise a phospholipid.

3. The pharmaceutical composition of claim 1, wherein said particles comprise a salt.

4. The pharmaceutical composition of claim 1, wherein said particles comprise a surfactant.

5. The pharmaceutical composition of claim 1, wherein said particles comprise a polymer.

6. The pharmaceutical composition of claim 1, wherein said particles comprise a sugar.

7. The pharmaceutical composition of claim 1, wherein said particles have an external surface area of greater than 10 m^2/g.

8. The pharmaceutical composition of claim 1, wherein said particles have an external surface area of greater than 15 m^2/g.

9. The pharmaceutical composition of claim 1, wherein said particles have an external surface area of greater than 20 m^2/g.

10. The pharmaceutical composition of claim 1, wherein said particles have an external surface area of 10 m^2/g to 50 m^2/g.

11. The pharmaceutical composition of claim 1, wherein said particles have an aerodynamic diameter of between 2.5 μm and 5 μm.

12. The pharmaceutical composition of claim 1, wherein said particles further comprise a salt and a phospholipid.