Claims

1. A composition comprising substantially homogeneous particles including:
about 75% to about 98% microcrystalline cellulose;
about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

2. The composition of claim 1 wherein the composition includes:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

3. The composition of Claim 1 wherein the composition includes:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

4. The composition of claim 1 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

5. The composition of Claims 1 wherein the excipient is formed by spraying an aqueous slurry comprised of the microcrystalline cellulose, binder and disintegrant.

6. A method of making an excipient comprising:
mixing a binder in water to form a viscous solution;
homogenizing microcrystalline cellulose and a disintegrant into the viscous solution to form a slurry; and
spray dry granulating the slurry to form substantially homogeneous particles of excipient.

7. The method of claim 6 wherein:
about 75% to about 98% microcrystalline cellulose;
about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

8. The method of claim 6 comprising:

about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

9. The method of Claim 6 comprising:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

10. The method of claim 6 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

11. A method of making an excipient comprising:
dissolving hydroxypropyl methylcellulose in water to form a viscous solution;
homogenizing microcrystalline cellulose and cross-linked polyvinylpyrrolidone into the viscous solution to form a slurry;
spray dry granulating the slurry to form substantially homogeneous particles.

12. The method of claim 11 comprising:
about 75% to about 98% microcrystalline cellulose;
about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

13. The method of claim 11 comprising:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

14. The method of Claim 11 comprising:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

15. A pharmaceutical tablet comprising:

at least one active pharmaceutical ingredient; and

an excipient of substantially homogeneous particles including:

a) microcrystalline cellulose;

b) at least one binder; and

c) at least one disintegrant.

16. The tablet of claim 15 wherein the excipient includes:

about 75% to about 98% microcrystalline cellulose;

about 1% to about 10% at least one binder; and

about 1% to about 15% at least one disintegrant.

17. The tablet of claim 15 wherein the excipient includes:

about 80% to about 90% microcrystalline cellulose;

about 2% to about 8% at least one binder; and

about 3% to about 12% at least one disintegrant.

18. The tablet of Claim 15 wherein the excipient includes:

about 85% to about 93% microcrystalline cellulose;

about 2% to about 5% at least one binder; and

about 10% at least one disintegrant.

19. The tablet of claim 15 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

20. A method of making a pharmaceutical tablet comprising:

mixing at least one active pharmaceutical ingredient with an excipient of substantially homogeneous particles including:

a) microcrystalline cellulose;

b) at least one binder; and

c) at least one disintegrant to form a mixture; and

compressing the mixture to form a tablet.

21. The method of claim 20 wherein the excipient includes:

about 75% to about 98% microcrystalline cellulose;

about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

22. The method of claim 20 wherein the excipient includes:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

23. The method of Claim 20 wherein the excipient includes:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

24. The method of claim 20 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

I claim:

1. A composition comprising substantially homogeneous particles including:
about 75% to about 98% microcrystalline cellulose;
about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant,
wherein the microcrystalline cellulose, binder and disintegrant are indistinguishable when viewed with a SEM, thereby forming substantially homogeneous, substantially spherical particles.

2. The composition of claim 1 wherein the composition includes:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

3. The composition of Claim 1 wherein the composition includes:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

4. The composition of claim 1 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

5. The composition of Claim 1 wherein the excipient is formed by spraying an aqueous slurry comprised of the microcrystalline cellulose, binder and disintegrant.

6. A method of making an excipient comprising:
mixing microcrystalline cellulose, at least one binder and at least one disintegrant in the presence of water to form a homogenous slurry; and
spray dry granulating the homogenous slurry to form substantially homogeneous particles of excipient.

7. The method of claim 6 wherein:
about 75% to about 98% microcrystalline cellulose;

about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

8. The method of claim 6 comprising:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

9. The method of Claim 6 comprising:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

10. The method of claim 6 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

11. A method of making an excipient comprising:
mixing hydroxypropyl methylcellulose, microcrystalline cellulose and cross-linked polyvinylpyrrolidone in the presence of water to form a homogenized slurry;
spray dry granulating the homogenized slurry to form substantially homogeneous particles.

12. The method of claim 11 comprising:
about 75% to about 98% microcrystalline cellulose;
about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

13. The method of claim 11 comprising:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

14. The method of Claim 11 comprising:
about 85% to about 93% microcrystalline cellulose;

about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

15. A pharmaceutical tablet comprising:
at least one active pharmaceutical ingredient; and
an excipient of substantially homogeneous particles including:
a) microcrystalline cellulose;
b) at least one binder; and
c) at least one disintegrant.

16. The tablet of claim 15 wherein the excipient includes:
about 75% to about 98% microcrystalline cellulose;
about 1% to about 10% at least one binder; and
about 1% to about 15% at least one disintegrant.

17. The tablet of claim 15 wherein the excipient includes:
about 80% to about 90% microcrystalline cellulose;
about 2% to about 8% at least one binder; and
about 3% to about 12% at least one disintegrant.

18. The tablet of Claim 15 wherein the excipient includes:
about 85% to about 93% microcrystalline cellulose;
about 2% to about 5% at least one binder; and
about 10% at least one disintegrant.

19. The tablet of claim 15 wherein the binder includes hydroxypropyl methylcellulose and the disintegrant includes cross-linked polyvinylpyrrolidone.

20. A method of making a pharmaceutical tablet comprising:
mixing at least one active pharmaceutical ingredient with an excipient of substantially homogeneous particles according to Claim 1; and
compressing the mixture to form a tablet.

21. The tablet of Claim 15 wherein the active pharmaceutical ingredient includes ibuprofen.

22. The tablet of Claim 15 wherein the at least one active pharmaceutical ingredient comprises about 5% to about 50% of the tablet.