CLAIMS:

1. A method comprising:

coating a surface of a substrate with a coating composition to form a coating layer thereon, wherein the coating composition comprises:

a first polymer and a second polymer, wherein the first polymer and the second polymer are incompatible and non-reactive with one another, and wherein the absolute value of the difference between the refractive index of the first polymer and the refractive index of the second polymer is about 0 to about 0.01, and

a carrier liquid, wherein the first polymer and the second polymer are soluble in the carrier liquid, and wherein the carrier liquid is a good solvent for the first polymer and a poor solvent for the second polymer; and

removing the carrier liquid from the coating layer to spinodally decompose the mixture of the first polymer and the second polymer, wherein the carrier liquid is removed in an amount sufficient to form a substantially continuous first phase comprising a predominant amount of the first polymer and a substantially discontinuous second phase comprising a predominant amount the second polymer, wherein at least 70% of the second phase comprises droplets with an aspect ratio, when viewed in the plane of the surface of the substrate, of less than about 3.

2. The method of claim 1, wherein at least 70% of the second phase comprises droplets with an aspect ratio of less than about 2.

~~3. The method of claim 2, wherein at least 90% of the second phase comprises droplets.~~

43. The method of claim 1, further comprising drying the coating layer to form a coating, wherein the coating comprises first regions derived from the first phase and second regions derived from the second phase, and wherein the second regions project away from the surface of the substrate to a height of about 0.1 μm to about 15 μm above the height of the first regions.

~~5. The method of claim 4, wherein the height of the second regions is about 0.1 μm to about 10 μm above the height of the first regions.~~

~~6. The method of claim 4, wherein the height of the second regions is about 1.0 μm to about 5.0 μm above the height of the first regions.~~

~~7~~4. The method of claim ~~4~~3, wherein the coating has a RMS roughness of about 0.01 μm to about 2.0 μm.

~~8. The method of claim 4, wherein the coating has a RMS roughness of about 0.2 μm to about 0.8 μm.~~

~~9~~5. The method of claim ~~4~~3, wherein the haze of the planarized coating is within about 1% of the bulk haze of the substrate.

~~10~~6. The method of claim 1, wherein the absolute value of the difference between the refractive index of the first polymer and the refractive index of the second polymer is about 0 to about 0.005.

~~11. The method of claim 1, wherein the wherein the absolute value of the difference between the refractive index of the first polymer and the refractive index of the second polymer is about 0 to about 0.002.~~

~~12~~7. The method of claim 1, wherein the coating composition further comprises a third polymer, and wherein the third polymer is compatible with at least one of the first and the second polymers.

~~13. The method of claim 1, wherein the transparent substrate is selected from glass and polymeric films.~~

~~14. The method of claim 1, wherein the first polymer and the second polymer have a glass transition temperature (Tg) of greater than about 25 °C.~~

~~15. The method of claim 1, wherein the first polymer and the second polymer have a glass transition temperature (Tg) of greater than about 37.5 °C.~~

~~16. The method of claim 1, wherein the first polymer and the second polymer have a glass transition temperature (Tg) of greater than about 50 °C.~~

~~17. The method of claim 1, wherein the first polymer and the second polymer have a glass transition temperature (Tg) of greater than about 80 °C.~~

~~18. The method of claim 1, wherein the first polymer and the second polymer have a glass transition temperature (Tg) of greater than about 100 °C.~~

~~19~~8. The method of claim 1, wherein the first polymer and the second polymer comprise resins selected from the group consisting of cellulose resins, polyester resins, polysulfone resins, (meth)acrylic resins, and cyclic polyolefin resins.

~~20~~9. The method of claim 1, wherein the first polymer and the second polymer each comprise a cellulose resin.

~~21. Them method of claim 20, wherein the cellulose resins comprise cellulose acetate, cellulose acetate butyrate, cellulose acetate propionate, or combinations thereof.~~

~~22. The method of claim 20, wherein cellulose resins comprise cellulose acetate and cellulose acetate butyrate.~~

~~23. The method of claim 22, wherein the coating composition comprises at least 35 wt% cellulose acetate butyrate.~~

~~24. The method of claim 22, wherein the ratio of cellulose acetate to cellulose acetate butyrate in the coating composition is about 2:1 to about 1:10.~~

~~25. The method of claim 22, wherein the ratio of cellulose acetate to cellulose acetate butyrate in the coating composition is about 1:1 to about 1:9.~~

~~26. The method of claim 22, wherein the ratio of cellulose acetate to cellulose acetate butyrate in the coating composition is about 2:1 to about 1:2.~~

~~27. The method of claim 22, wherein the ratio of cellulose acetate to cellulose acetate butyrate in the coating composition is about 1:1.~~

~~28~~10. The method of claim 1, wherein the carrier liquid comprises a solvent selected from the group consisting of water, methanol, ethanol, isopropyl alcohol, cyclohexanone, acetone, ethyl acetate, n-butyl acetate, glycol ethers, toluene, methyl ethyl ketone (MEK), and combinations thereof.

~~29. The method of claim 28, wherein the carrier liquid comprises a glycol ether and a ketone.~~

~~30. The method of claim 29, wherein where the ketone is methyl ethyl ketone (MEK).~~

~~31. The method of claim 29, wherein the ketone is acetone.~~

~~32~~11. The method of claim 1, wherein the carrier liquid is removed by initially drying the coating layer at a temperature of less than about 60 °C.

~~33~~12. The method of claim 1, wherein the droplets have an average size of about 1 μm to about 30 μm.

~~34. The method of claim 1, wherein the droplets have an average size of about 2 μm to about 10 μm.~~

~~35~~13. The method of claim ~~4~~3, wherein the effective transmission of the coating is at least 1.1.

~~36~~14. An optical element comprising:

a light transmissive substrate; and

a continuous coating on the substrate, wherein the coating comprises:

a first region comprising a first polymer selected from cellulose resins and (meth)acrylic resins; and

a second region comprising a second polymer different from the first polymer, wherein the second polymer is selected from cellulose resins and (meth)acrylic resins; wherein the first polymer and the second polymer are incompatible and non-reactive with one another, and wherein the absolute value of the difference between the refractive index of the first polymer and the refractive index of the second polymer is about 0 to about 0.01, and wherein the first regions have a thickness different from the second regions.

~~37~~15. The optical element of claim ~~36~~14, wherein the first polymer and the second polymer comprise cellulose resins.

~~38. The optical element of claim 37, wherein the first polymer and the second polymer comprise cellulose acetate, cellulose acetate butyrate, and cellulose acetate propionate.~~

~~39. The optical element of claim 38, wherein the first polymer and the second polymer comprise cellulose acetate and cellulose acetate butyrate.~~

~~40. The optical element of claim 39, wherein at least 35% of the regions in the coating comprise cellulose acetate butyrate.~~

~~41~~16. The optical element of claim ~~36~~14, wherein the ratio of the first regions to the second regions in the coating is about 1:1.

~~42. The optical element of claim 36, wherein the ratio of the first regions in the coating to the second regions in the coating is about 9:1.~~

~~43~~17. The optical element of claim ~~36~~14, wherein the second regions project away from a surface of the substrate to a height of about 0.1 μm to about 15 μm above the height of the first regions.

~~44. The optical element of claim 36, wherein the height of the second regions is about 0.1 μm to about 10 μm above the height of the first regions.~~

~~45. The optical element of claim 43, wherein the coating has a RMS roughness of about 0.01 μm to about 2.0 μm.~~

~~46. The optical element of claim 43, wherein the coating has a RMS roughness of about 0.2 μm to about 0.8 μm.~~

~~47~~18. The optical element of claim ~~43~~17, wherein the bulk haze of the coating as measured after planarizing the substrate is less than about 1.0.

~~48~~19. The optical element of claim ~~36~~14, wherein the wherein the absolute value of the difference between the refractive index of the first polymer and the refractive index of the second polymer is about 0 to about 0.005.

~~49. The optical element of claim 36, wherein the wherein the absolute value of the difference between the refractive index of the first polymer and the refractive index of the second polymer is about 0 to about 0.002.~~

~~50~~20. The optical element of claim ~~36~~14, wherein the coating further comprises a third polymer, and wherein the third polymer is compatible with at least one of the first and the second polymers.

~~51. The optical element of claim 36, wherein the substrate comprises glass or a polymeric film.~~

~~52. The optical element of claim 51, wherein the substrate is a polymeric film.~~

~~53~~21. The optical element of claim ~~36~~14, wherein the coating has a haze of about 1% to about 99%.

~~54~~22. The optical element of claim ~~36~~14, wherein the coating has a clarity of about 5% to about 98%.

~~55~~23. The optical element of claim ~~36~~14, wherein the coating has a haze and a clarity both less than about 50%.

~~56. The optical element of claim 36, wherein the coating has a haze and a clarity both less than about 40%.~~

~~57. The optical element of claim 36, wherein the coating has a haze and a clarity both less than about 30%.~~

~~58~~24. The optical element of claim ~~36~~14, wherein the effective transmission of the coating is at least 1.1.