the mask applied has openings for two separate adjacent sub-pixels.

46. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 43 wherein:

the mask applied has openings for one large pixel.

47. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 38 wherein the reflective cholesteric liquid color filter layer of claim 39 and the reflective cholesteric liquid color filter layer of claim 43 are glued together to form a reflective color filter for a display.

48. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 38 wherein:

the mixture of cholesteric liquid crystal material is

a left handed cholesteric liquid crystal polymer blue polysiloxane, Wacker SLM 90032, approximately 63% by weight

a low molecular weight nematic liquid crystal, EMI E44 approximately 28.6% by weight,

a low molecular weight nematic liquid crystal, SLICHEM TEB30 approximately 8.4% by weight,

a photo initiator Ciba-Geigy IG184 approximately 0.35% of polymer,

the first temperature is set to approximately 75° C. and the unmasked mixture of cholesteric liquid crystal material exposed to Ultraviolet light of about 360 nm wavelength at an intensity of about 0.1 mW/cm^2 for about 20 seconds, to make a red reflecting cholesteric liquid crystal portion,

the unmasked mixture of cholesteric liquid crystal material is then re-exposed at 75° C. with a collimated UV of about 360 nm at another intensity of about 10 mW/cm^2 for about 30 seconds,

remove a portion of the mask to expose another portion of the cholesteric liquid crystal material,

with the cholesteric liquid crystal material still at about 75° C. expose the unmasked portion to ultraviolet light 360 nm wavelength at an intensity of about 0.1 mW/cm^2 for about 40 seconds, to polymerize the red, green reflection portion,

the unmasked mixture of cholesteric liquid crystal material is then re-exposed at 75° C. with a collimated UV of about 360 nm at another intensity of about 10 mW/cm^2 for about 30 seconds,

the second temperature is set to approximately 150° C. and all of the mixture of cholesteric liquid crystal material exposed to the UV radiation of about 360 nm wavelength at an intensity of about 20 mW/cm^2 for about 150 seconds resulting in a red, green reflecting portion, a red reflecting portion and a clear portion of the layer.

49. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 48 wherein:

the substrates are mechanically sheared while at 75° C. before the mask is applied.

50. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 38 wherein:

the mixture of cholesteric liquid crystal material is

a left handed cholesteric liquid crystal polymer blue polysiloxane, Wacker SLM 90032, approximately 47.5% by weight

a left handed cholesteric liquid crystal polymer blue polysiloxane, Wacker SLM 90031, approximately 19.1% by weight a low molecular weight nematic liquid crystal, EMI E44 approximately 32.1% by weight,

a chiral dopant EMI S1011, 1.3% by weight,

a photo initiator Ciba-Geigy IG184 approximately 0.35% of polymer,

the first temperature is set to approximately 75° C. and the unmasked mixture of cholesteric liquid crystal material exposed to Ultraviolet light of about 360 nm wavelength at an intensity of about 0.1 mW/cm^2 for about 20 seconds, to make a blue reflecting cholesteric liquid crystal portion,

the unmasked mixture of cholesteric liquid crystal material is then re-exposed at 75° C. with a collimated UV of about 360 nm at another intensity of about 10 mW/cm^2 for about 30 seconds, before unmasking the substrate, remove a portion of the mask to expose another portion of the cholesteric liquid crystal material, with the cholesteric liquid crystal material still at about 75° C. expose the unmasked portion to ultraviolet light 360 nm wavelength at an intensity of about 0.1 mW/cm^2 for about 40 seconds, to polymerize the blue, green reflecting portion,

the unmasked mixture of cholesteric liquid crystal material is then re-exposed at 75° C. with a collimated UV of about 360 nm at another intensity of about 10 mW/cm^2 for about 30 seconds, removing the remainder of the mask, the second temperature is set to approximately 150° C. and all of the mixture of cholesteric liquid crystal material exposed to the UV radiation of about 360 nm wavelength at an intensity of about 20 mW/cm^2 for about 150 seconds, resulting in a blue, green reflecting portion, a blue reflecting portion and a clear portion of the layer.

51. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 50 wherein:

the substrates are mechanically sheared while at 75° C. before the mask is applied.

52. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 38 wherein the reflective cholesteric liquid color filter layer of claim 48 and the reflective cholesteric liquid color filter layer of claim 50 are glued together to form a reflective color filter for a display.

53. A reflective cholesteric liquid crystal color filter manufacturing process as in claim 38 wherein,

the first and second frequency ultraviolet radiation being attenuated half way through the reflective cholesteric color filter layer to polymerize only one half the layer,

the steps of claim 38 are repeated substituting third and fourth temperatures and ultraviolet radiations for the