WHAT IS CLAIMED IS:

~~1. A chiral liquid crystal precursor composition, wherein the chiral liquid crystal precursor composition comprises at least one salt that changes a position of a selective reflection band exhibited by the composition in a cured state compared to a position of a selective reflection band exhibited by a composition in a cured state that does not contain the at least one salt.~~

1. Use of at least one salt in a chiral liquid crystal precursor composition, to change a position of a selective reflection band exhibited by the composition in a cured state compared to a position of a selective reflection band exhibited by a composition in a cured state that does not contain the at least one salt, wherein the chiral liquid crystal precursor composition comprises (i) one or more nematic compounds A and (ii) one or more chiral dopant compounds B which are capable of giving rise to a cholesteric state of the chiral liquid crystal precursor composition.

~~2. The precursor composition of claim 1, wherein the chiral liquid crystal precursor composition comprises (i) one or more nematic compounds A and (ii) one or more chiral dopant compounds B which are capable of giving rise to a cholesteric state of the chiral liquid crystal precursor composition.~~

~~3.~~2. The ~~precursor composition~~use of claim ~~2~~1, wherein the chiral liquid crystal precursor composition comprises at least two compounds A.

~~4.~~3. The ~~precursor composition~~use of any one of claims ~~2~~1 and ~~3~~2, wherein the one or more nematic compounds A as well as the one or more chiral dopant compounds B comprise at least one compound that comprises at least one polymerizable group.

~~5.~~4. The ~~precursor composition~~use of claim ~~4~~3, wherein the at least one polymerizable group comprises an unsaturated carbon-carbon bond.

~~6.~~5. The ~~precursor composition~~use of claim ~~5~~4, wherein the at least one polymerizable group comprises a group of formula H_2C=CH-C(O)-.

~~7.~~6. The ~~precursor composition~~use of any one of claims ~~2~~1 to ~~6~~5, wherein all of the one or more nematic compounds A and all of the one or more chiral dopant compounds B comprise at least one polymerizable group.

~~8.~~7. The ~~precursor composition~~use of any one of claims 1 to ~~7~~6, wherein the chiral liquid crystal precursor composition comprises at least one chiral dopant compound B of formula (I):

~~9.~~8. The ~~precursor composition~~use of any one of claims 1 to ~~8~~7, wherein the at least one salt is selected from metal salts and ammonium salts.

~~10.~~9. The ~~precursor composition~~use of claim ~~9~~8, wherein the at least one salt comprises at least one of lithium perchlorate, lithium nitrate, lithium tetrafluoroborate, lithium bromide, lithium chloride, tetrabutylammonium perchlorate, tetrabutylammonium chloride, tetrabutylammonium tetrafluoroborate, tetrabutylammonium bromide, sodium carbonate, sodium chloride, and sodium nitrate.

~~11.~~10. The ~~precursor composition~~use of claim ~~9~~8, wherein the at least one salt comprises a metal salt.

~~12.~~11. The ~~precursor composition~~use of claim 1~~1~~0, wherein the metal is selected from alkali and alkaline earth metals.

~~13.~~12. The ~~precursor composition~~use of claim 11~~2~~, wherein the metal is selected from Li and Na.

~~14.~~13. The ~~precursor composition~~use of claim 1~~3~~2, wherein the metal is Li.

~~15.~~14. The ~~precursor composition~~use of any one of claims 1 to 1~~4~~3, wherein the at least one salt is present at a concentration that results in a shift of a position of the selective reflection band exhibited by the precursor composition in the cured state by at least about 5 nm compared to a position of the selective reflection band exhibited by the precursor composition in the cured state without the at least one salt.

~~16.~~15. The ~~precursor composition~~use of any one of claims 1 to 1~~5~~4, wherein the at least one salt is present in the precursor composition at a concentration of from about 0.01 % to about 10 % by weight, based on a solids content of the precursor composition.

~~17.~~16. The ~~precursor composition~~use of any one of claims 1 to 1~~6~~5, wherein the at least one salt shifts a position of the selective reflection band exhibited by the composition in the cured state to longer wavelengths.

~~18.~~17. The ~~precursor composition~~use of any one of claims 1 to 1~~6~~5, wherein the at least one salt shifts a position of the selective reflection band exhibited by the composition in the cured state to shorter wavelengths.

~~19.~~18. The ~~precursor composition~~use of any one of claims 1 to 1~~8~~7, wherein at least a part of the selective reflection band exhibited by the precursor composition in the cured state that has been shifted by the at least one salt is in the visible range.

~~20.~~19. The ~~precursor composition~~use of any one of claims 1 to 1~~9~~8, wherein the composition further comprises at least one polymerization initiator.

~~21.~~20. The ~~precursor composition~~use of claim ~~20~~19, wherein the at least one polymerization initiator comprises a UV polymerization initiator.

~~22.~~21. The ~~precursor composition~~use of any one of claims 1 to 2~~1~~0, wherein the composition is in a form of at least one of an image, a picture, a logo, indicia, and a pattern representing a code selected from one or more of a 1-dimensional barcode, a stacked 1-dimensional barcode, a 2-dimensional barcode, a 3-dimensional barcode, and a data matrix.

~~23.~~22. The ~~precursor composition~~use of claim 2~~2~~1, wherein the precursor composition is in the cured chiral liquid crystal state.

~~24. A substrate which comprises at least one precursor composition according to any one of claims 1 to 23.~~

~~25. The substrate of claim 24, wherein the substrate is or comprises at least one of a label, packaging, a cartridge, a container that contains nutraceuticals, pharmaceuticals, foodstuffs or beverages, a banknote, a credit card, a stamp, a tax label, a security document, a passport, an identity card, a driver's license, an access card, a transportation ticket, an event ticket, a voucher, an ink transfer film, a reflective film, an aluminum foil, and a commercial good.~~

~~26.~~23. A method of changing a position of a selective reflection band exhibited by a chiral liquid crystal precursor composition in a cured state, said composition comprising (i) one or more nematic compounds A and (ii) one or more chiral dopant compounds B

which are capable of giving rise to a cholesteric state of the chiral liquid crystal precursor composition, wherein the method

comprises incorporating in the precursor composition at least one salt that is capable of changing a position of a selective reflection band exhibited by the precursor composition in a cured state.

~~27.~~24. A method of shifting a selective reflection band exhibited by a chiral liquid crystal precursor composition in a cured state to a predetermined position, said composition comprising (i) one or more nematic compounds A and (ii) one or more chiral dopant compounds B which are capable of giving rise to a cholesteric state of the chiral liquid crystal precursor composition, wherein the method comprises incorporating in the precursor composition at least one salt in an amount that results in a shift of the selective reflection band to the predetermined position.

~~28.~~25. The method of claim ~~27~~24, wherein the method further comprises determining a shift of the position of the selective reflection band as a function of an amount of the least one salt present in the precursor composition and selecting an amount that results in a shift of the selective reflection band to the predetermined position.

~~29.~~26. The method of any one of claims 2~~7~~4 and 2~~8~~5, wherein a position of the selective reflection band is shifted to a predetermined wavelength.

~~30.~~27. A chiral liquid crystal precursor composition with a predetermined shift of a selective reflection band exhibited by the precursor composition in a cured state, obtained by the method of any one of claims 2~~7~~4 to 2~~9~~6.

~~31.~~28. The precursor composition of claim ~~30~~27, wherein the composition is in a cured state.

~~32.~~29. A method of changing a position of a selective reflection band exhibited by a chiral liquid crystal precursor composition in a cured state and of providing a marking on a substrate, wherein the method comprises:

a) applying onto a surface of the substrate a precursor composition as defined in ~~of~~ any one of claims 1 to 2~~2~~1 and ~~30~~27,

b) heating the applied composition to bring same to a chiral liquid crystal state; and

c) curing the composition in the chiral liquid crystal state.

~~33.~~30. The method of claim ~~32~~29, wherein (b) comprises heating the composition to a temperature in a range of from about 55°C to about 150°C.

~~34.~~31. The method of any one of claims ~~32~~29 and 3~~0~~, wherein (c) comprises applying UV radiation.

~~35.~~32. The method of any one of claims ~~32~~29 to ~~34~~31, wherein the composition is applied by at least one of spray coating, knife coating, roller coating, screen coating, curtain coating, gravure printing, flexography, offset printing, dry offset printing, letterpress printing, screen-printing, pad printing, continuous ink-jet printing, drop-on-demand ink-jet printing, and valve-jet printing.

~~36.~~33. The method of any one of claims ~~32~~29 to ~~35~~32, wherein the composition is applied in a form of at least one of an image, a picture, a logo, indicia, and a pattern representing a code selected from one or more of a 1-dimensional barcode, a stacked 1-dimensional barcode, a 2-dimensional barcode, a 3-dimensional barcode, and a data matrix.

~~37.~~34. The method of any one of claims ~~32~~ 29 to 3~~6~~3, wherein the substrate is or comprises at least one of a label, packaging, a cartridge, a container that contains nutraceuticals, pharmaceuticals, foodstuffs or beverages, a banknote, a credit card, a stamp, a tax label, a security document, a passport, an identity card, a driver's license, an access card, a transportation ticket, an event ticket, a voucher, an ink-transfer film, a reflective film, an aluminum foil, and a commercial good.

~~38.~~35. The method of any one of claims ~~32~~ 29 to ~~37~~34, wherein at least two different precursor compositions are applied onto the substrate and are processed according to (b) and (c) either together or separately.

~~39.~~36. The method of claim ~~38~~35, wherein the precursor compositions differ with respect to the at least one salt comprised therein.

~~40.~~37. The method of any one of claims ~~38~~ 35 and ~~39~~36, wherein the precursor compositions differ with respect to concentrations of the at least one salt comprised therein.

~~41. A substrate provided with a marking, wherein the substrate is obtainable by the method of any one of claims 32 to 40.~~

~~42.~~38. A substrate which comprises at least two precursor compositions ~~according~~as defined in~~to~~ any one of claims 1 to 2~~3~~2, wherein the precursor compositions differ with respect to concentrations of the at least one salt and/or with respect to the at least one salt.

~~43. Use of at least one salt in a chiral liquid crystal precursor composition, to change a position of a selective reflection band exhibited by the composition in a cured state compared to a position of a selective reflection band exhibited by a composition in a cured state that does not contain the at least one salt.~~