CLAIMS

1. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP), in the manufacture of a medicament comprising a liquid composition for reducing visibility of a hypomineralised dental surface or subsurface, the liquid composition comprising at least 40% w/w of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of greater than or equal to pH 5 but less than or equal to pH 9.

2. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP), in the manufacture of a medicament comprising a liquid composition for treating or preventing dentinal sensitivity in a subject in need thereof, the liquid composition comprising at least 40% w/w of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of greater than or equal to pH 5 but less than or equal to pH 9.

3. The use according to claim 1 or 2, wherein the pH of the liquid composition is greater than or equal to 6 but less than or equal to 8, preferably, greater than or equal to 7 but less than or equal to 8.

4. The use according to any one of claims 1 to 3, wherein the liquid composition comprises greater than or equal to 45% w/w stabilized ACP and/or ACFP, greater than or equal to 50% w/w stabilized ACP and/or ACFP, greater than or equal to 55% w/w stabilized ACP and/or ACFP, or greater than or equal to 60% w/w stabilized ACP and/or ACFP.

5. The use according to any one of claims 1 to 4, wherein the liquid composition comprises greater than or equal to 45% w/v stabilized ACP and/or ACFP, greater than or equal to 50% w/v stabilized ACP and/or ACFP, greater than or equal to 55% w/v stabilized ACP and/or ACFP, greater than or equal to 60% w/v stabilized ACP and/or ACFP, ~~about~~ or equal to 65% w/v stabilized ACP and/or ACFP, ~~about~~ or equal to 70% w/v stabilized ACP and/or ACFP, or ~~about~~ or equal to 75% w/v stabilized ACP and/or ACFP.

6. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition for reducing visibility of a hypomineralised dental surface or subsurface, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,

wherein the liquid composition is to be applied to the hypomineralised dental surface or subsurface and subsequently the pH of the liquid composition applied to the hypomineralised dental surface or subsurface is to be raised to equal to, or greater than, ~~about~~ 9, thereby forming a gel in and/or on the hypomineralised dental surface or subsurface.

~~7. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition for forming a gel in and/or on a dental surface or subsurface lesion, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,~~

~~wherein the liquid composition is to be applied to the dental surface or subsurface lesion and subsequently the pH of the liquid composition applied to the dental surface or subsurface lesion is to be raised to equal to, or greater than, about 9, thereby forming a gel in and/or on the dental surface or subsurface lesion.~~

7~~8~~. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition for treating or preventing dentinal sensitivity in a subject in need thereof, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,

wherein the liquid composition is to be applied to the dental surface or subsurface lesion and subsequently the pH of the liquid composition applied to the dental surface or subsurface lesion is to be raised to equal to, or greater than, ~~about~~ 9, thereby forming a gel in and/or on the exposed dentinal tubules.

~~9. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition for forming a protective layer on a dental surface, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,~~

~~wherein the liquid composition is to be applied to the dental surface or subsurface lesion and subsequently the pH of the liquid composition applied to the dental surface or subsurface lesion is to be raised to equal to, or greater than, about 9.~~

8~~10~~. The use according to ~~any one of~~ claim~~s~~ 6 or 7~~to 9~~, wherein the pH of the liquid composition applied to the dental surface or sub-surface lesion is to be raised to equal to, or greater than, ~~about~~ 10.

9~~11~~. The use according to any one of claims 6 to 8~~10~~, wherein raising the pH of the liquid composition applied to the dental surface or sub-surface is by contacting the liquid composition applied to the dental surface or sub-surface with a further composition of alkaline pH.

10~~2~~. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition for reducing visibility of a hypomineralised dental surface or subsurface, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,

wherein the liquid composition is to be mixed with a further composition of alkaline pH, thereby forming a mixed composition with a pH of equal to, or greater than, ~~about~~ 9, and subsequently the mixed composition is to be applied to the hypomineralised dental surface or subsurface, thereby forming a gel in and/or on the hypomineralised dental surface or subsurface.

11~~3~~. Use of a phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition for treating or preventing dentinal sensitivity

in a subject in need thereof, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,

wherein the liquid composition is to be mixed with a further composition of alkaline pH, thereby forming a mixed composition with a pH of equal to, or greater than, ~~about~~ 9, and subsequently the mixed composition is to be applied to a dental surface or subsurface with exposed dentinal tubules, thereby forming a gel in and/or on the exposed dentinal tubules.

~~14. Use of a phosphopeptide (PP) stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) in the manufacture of a medicament comprising a liquid composition forming a protective layer on a dental surface, the liquid composition comprising at least 40% w/v of said phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6,~~

~~wherein the liquid composition is to be mixed with a further composition of alkaline pH, thereby forming a mixed composition with a pH of equal to, or greater than, about 9, and subsequently the mixed composition is to be applied to a dental surface, thereby forming a protective layer on the dental surface.~~

12~~5~~. The use according to ~~any one of~~ claim~~s~~ 10~~2~~ or 11~~to 14~~, wherein the alkaline pH of the further composition is a pH of ~~about~~ 9, ~~about~~ 10, ~~about~~ 11, ~~about~~ 12, ~~about~~ 13 or ~~about~~ 14.

13~~6~~. The use according to any one of claims 1 to 12~~5~~, wherein the liquid composition further comprises free fluoride ions.

14~~7~~. The use according to claim 13~~6~~, wherein the free fluoride ions are present in the liquid composition at a concentration in the range of ~~about~~ 200 ppm to ~~about~~ 10,000 ppm, ~~about~~ 2,600 ppm to ~~about~~ 8,500 ppm, or ~~about~~ 8,200 ppm.

15~~8~~. The use according to any one of claims 1 to 14~~7~~, wherein the dental surface or subsurface, or lesion is to be heated to a temperature.

169. The use according to claim 158, wherein the dental surface or subsurface, or lesion is to be heated to a temperature of greater than or equal to 37°C, greater than or equal to 40°C, greater than or equal to 45°C, greater than or equal to 50°, greater than or equal to 55°C, greater than or equal to 60°C, or greater than or equal to 65°C.

1720. The use according to claim 158 or 169, wherein the dental surface or subsurface, or lesion is to be heated to a temperature that does not exceed 65°C.

1821. The use according to any one of claims 158 to 1720, wherein:

(a) when the liquid composition is to be applied to the dental surface or subsurface, or lesion; the dental surface or subsurface, or lesion is to be heated;

(b) following application of the liquid composition to the dental surface or subsurface, or lesion; the dental surface or subsurface, or lesion is to be heated;

(c) when subsequently the pH of the liquid composition applied to the dental surface or subsurface, or lesion is to be raised to equal to, or greater than, 9;

or

when the dental surface is contacted with the mixed composition, the dental surface or subsurface, or lesion is to be heated;

or

(d) following subsequently raising the pH of the liquid composition applied to the dental surface or subsurface, or lesion is to be raised to equal to, or greater than, 9;

or

following contacting the dental surface with the mixed composition, the dental surface or subsurface, or lesion is to be heated.

1922. The use according to any one of claims 6 to 1821, wherein the liquid composition comprises greater than or equal to 45% w/v stabilized ACP and/or ACFP, greater than or equal to 50% w/v stabilized ACP and/or ACFP, greater than equal to 55% w/v stabilized ACP and/or ACFP, greater than equal to 60% w/v stabilized ACP and/or ACFP, ~~about~~ equal to 65% w/v stabilized ACP and/or ACFP, ~~about~~ equal to 70% w/v stabilized ACP and/or ACFP, or ~~about~~ equal to 75% w/v stabilized ACP and/or ACFP.

203. The use according to any one of claims 6 to 1922, wherein the hypomineralised dental surface or subsurface, or lesion, is to be contacted with the liquid composition for up to 20 minutes, ~~about~~ a few seconds to ~~about~~ 5 minutes, or ~~about~~ 5 minutes to ~~about~~ 20 minutes before the raising the pH of the liquid composition applied to the hypomineralised dental surface or subsurface to equal to, or greater than, ~~about~~ 9.

214. The use according to any one of claims 1 to 203, wherein the dental surface is dental enamel.

225. The use according to any one of claims 1 to 214, wherein the dental surface is a lesion in enamel is caused by caries, dental erosion or fluorosis.

236. The use according to claim 225, wherein the lesion is a white spot lesion.

247. The use according to any one of claims 1 to 236, wherein the phosphopeptide is a casein phosphopeptide.

258. The use according to any one of claims 1 to 247, wherein the liquid, further and/or mixed compositions are to be applied to the dental surface, subsurface or lesion by a dental health care professional.

269. The use according to claim 258 wherein the liquid, further and/or mixed compositions are to be applied to the dental surface, subsurface or lesion using a microbrush.

~~30. A cosmetic method of masking or concealing the visual appearance of a hypomineralised dental surface or subsurface, the method comprising:~~

~~(i) contacting the hypomineralised dental surface or subsurface with a liquid composition comprising at least 40% w/v of phosphopeptide (PP)-stabilized amorphous~~

~~calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6; and~~

~~(ii) subsequently to (i), raising the pH of the liquid composition applied to the hypomineralised dental surface or subsurface to equal to, or greater than, about 9, thereby forming a gel in and/or on the hypomineralised dental surface or subsurface,~~

~~thereby masking or concealing the visual appearance of a hypomineralised dental surface or subsurface.~~

~~31. A cosmetic method masking or concealing the visual appearance of a hypomineralised dental surface or subsurface, the method comprising~~

~~contacting the hypomineralised dental surface or subsurface with a liquid composition comprising at least 40% w/w of phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of greater than or equal to pH 6 but less than or equal to pH 8,~~

~~thereby masking or concealing the visual appearance of a hypomineralised dental surface or subsurface.~~

~~32. A kit for reducing visibility of a hypomineralised dental surface or subsurface, the kit comprising or consisting of: (a) a liquid composition comprising at least 40% w/v of phosphopeptide (PP)-stabilized amorphous calcium phosphate (ACP) and/or amorphous calcium fluoride phosphate (ACFP) at a pH of less than or equal to pH 6, and (b) a further composition of alkaline pH.~~