CLAIMS

We claim:

1) A tooth whitening composition for whitening a surface of a tooth, the composition comprising:
   a) a whitening agent comprising an aqueous peroxide,
   b) a hydrophobic polymer carrier for adhering the tooth whitening composition to a tooth surface, wherein the hydrophobic polymer is a silicone pressure sensitive adhesive, and
   c) at least one adhesion enhancing agent, the adhesion enhancing agent comprising a plastigel and crospovidone,

   and wherein the plastigel comprises from 30 to 60 weight % of said composition, and wherein the composition comprises from 10 to 20 weight % of said crospovidone.

2) The composition according to Claim 1, wherein the silicone pressure sensitive adhesive comprises from 5 to 50 weight % of said composition.

3) The composition according to Claim 1, wherein the whitening composition comprises from 0.1 to 50 weight % of said aqueous peroxide.

4) The composition according to Claim 1, wherein the aqueous peroxide comprises hydrogen peroxide.

5) The composition according to Claim 4, wherein the hydrogen peroxide is present in an amount of from 0.01 to 17.5 weight % hydrogen peroxide.

6) The composition according to Claim 5, wherein the hydrogen peroxide is present in an amount of from 3 to 10 weight % hydrogen peroxide.

7) The composition according to Claim 1, wherein the whitening composition has a viscosity of from 10,000 to 900,000 cps., measured on a Brookfield Viscometer at 25°C, spindle E.

8) The composition according to Claim 1, wherein the whitening composition further comprises one or more of the following components: a surfactant, a flavoring agent, a desensitizing agent, an antimicrobial agent, an anti-caries agent, and an anti-calculus agent.

9) The composition according to Claim 1, wherein the whitening composition comprises from 5 to 50 weight % of the silicone pressure sensitive adhesive, from 0.1 to 50 weight % of the aqueous peroxide, from 30 to 60 weight% of the plastigel adhesive enhancing agent; and from 0 to 1 weight % of at least one of a flavoring agent and a sweetening agent.

10) A method for whitening a surface of a tooth in an oral cavity of a mammal comprising:
   a) applying a tooth whitening composition of Claim 1 to the tooth surface to be whitened for a plurality of minutes per day; and
   b) repeating (a) for multiple days to thereby whiten the teeth.

11) A method of whitening a tooth in a mammal, the method comprising applying to the tooth a tooth whitening composition comprising a mixture of a whitening agent comprising an aqueous peroxide, a hydrophobic polymer carrier for adhering the tooth whitening composition to a tooth surface, wherein the hydrophobic polymer is a silicone pressure sensitive adhesive, and at least one adhesion enhancing agent, the adhesion enhancing agent comprising a plastigel, and crospovidone, wherein the plastigel comprises from 30 to 60 weight % of said composition.

12) The method according to claim 11, wherein the composition comprises from 10 to 20 weight % of said crospovidone.

13) The method according to Claim 11 or 12, wherein applying is achieved by contacting a film comprising the tooth whitening composition with the surface of the tooth.

14) The method according to Claim 11 or 12, wherein applying is achieved by contacting a liquid form of the tooth whitening composition with the surface of the tooth.

REPLACEMENT SHEET Attorney Docket No. : 7706-00-WO-OC

CLAIMS

We claim:

1) A tooth whitening composition for whitening a surface of a tooth, the composition comprising:
   a) a whitening agent comprising an aqueous peroxide,
   b) a hydrophobic polymer carrier for adhering the tooth whitening composition to a tooth surface, wherein the hydrophobic polymer is a silicone pressure sensitive adhesive, and
   c) at least one adhesion enhancing agent, the adhesion enhancing agent comprising a plastigel and crospovidone,
   and wherein the plastigel comprises from 30 to 60 weight % of said composition.

2) The composition according to Claim 1, wherein the silicone pressure sensitive adhesive comprises from 5 to 50 weight % of said composition.

3) The composition according to Claim 1, wherein the composition comprises from 10 to 20 weight % of said crospovidone.

4) The composition according to Claim 1, wherein the whitening composition comprises from 0.1 to 50 weight % of said aqueous peroxide.

5) The composition according to Claim 1, wherein the aqueous peroxide comprises hydrogen peroxide.

6) The composition according to Claim 5, wherein the hydrogen peroxide is present in an amount of from 0.01 to 17.5 weight % hydrogen peroxide.

7) The composition according to Claim 6, wherein the hydrogen peroxide is present in an amount of from 3 to 10 weight % hydrogen peroxide.

REPLACEMENT SHEET Attorney Docket No. : 7706-00-WO-OC

8) The composition according to Claim 1, wherein the whitening composition has a viscosity of from 10,000 to 900,000 cps., measured on a Brookfield Viscometer at 25°C, spindle E.

9) The composition according to Claim 1, wherein the whitening composition further comprises one or more of the following components: a surfactant, a flavoring agent, a desensitizing agent, an antimicrobial agent, an anti-caries agent, and an anti-calculus agent.

10) The composition according to Claim 1, wherein the whitening composition comprises from 5 to 50 weight % of the silicone pressure sensitive adhesive, from 0.1 to 50 weight % of the aqueous peroxide, from 30 to 60 weight% of the plastigel adhesive enhancing agent; and from 0 to 1 weight % of at least one of a flavoring agent and a sweetening agent.

11) A method for whitening a surface of a tooth in an oral cavity of a mammal comprising:
a) applying a tooth whitening composition of Claim 1 to the tooth surface to be whitened for a plurality of minutes per day; and
b) repeating (a) for multiple days to thereby whiten the teeth.

12) A method of whitening a tooth in a mammal, the method comprising applying to the tooth a tooth whitening composition comprising a mixture of a whitening agent comprising an aqueous peroxide, a hydrophobic polymer carrier for adhering the tooth whitening composition to a tooth surface, wherein the hydrophobic polymer is a silicone pressure sensitive adhesive, and at least one adhesion enhancing agent, the adhesion enhancing agent comprising a plastigel, and crospovidone, wherein the plastigel comprises from 30 to 60 weight % of said composition.

13) The method according to Claim 12, wherein applying is achieved by contacting a film comprising the tooth whitening composition with the surface of the tooth.

ation: 10 01 2012 10:48:55 - 10.01.2012 10:51:03. This page 13 of AMENDED SHEET 2012 10:50:40
Received at the EPO on Jan 10, 2012 10:51:03. Page 13 of 16

REPLACEMENT SHEET Attorney Docket No. : 7706-00-WO-OC

15. The method according to Claim 12, wherein applying is achieved by contacting a liquid form of the tooth whitening composition with the surface of the tooth.

25

ation: 10.01.2012 10:48:55 - 10.01.2012 10:51:03. This page 14 of 2012 10:50:43
Received at the EPO on Jan 10, 2012 10:51:03. Page 14 of 16