CLAIMS

1. Toothpaste composition for alleviating dentin hyperesthesia, comprising a peptide consisting of an amino acid sequence of the following Formula 1:

K-Y-R1-R2-R3-R4-R5-R6-R7-R8 (Formula 1)

wherein R1 is arginine(R), lysine(K) or glutamine(Q);

R2 is arginine(R) or glutamine(Q);

R3, R4, and R5 are arginine(R) or lysine(K), respectively;

R6 is asparagine(N) or serine(S); and

R7 and R8 are lysine(K) or tyrosine(Y), respectively,

wherein said toothpaste composition includes 0.0015-0.0025 parts by weight of the peptide, 31.00-33.00 parts by weight of tricalcium phosphate, 0.045-0.055 parts by weight of hydroxyapatite, and 20-22 parts by weight of purified water,

wherein said toothpaste composition forms a thin film on the surface of said dentin and induces remineralization on said surface of said dentin and dentinal tubule by binding with the phosphate-calcium ions released from said tricalcium phosphate.

2. The composition of claim 1, wherein said peptide is any one amino acid sequence of SEQ ID NOS: 1 to 96.

3. The composition of claim 1, wherein said toothpaste composition comprises humectant 33-37 parts by weight, viscosity modifier 4.4-5.4 parts by weight, surfactant 1.1-1.3 parts by weight, flavoring agent 0.8-0.9 parts by weight based

on 100 parts by weight.

4. The composition of claim 1, wherein said toothpaste composition comprises 0.15-0.25 parts by weight of aminocaproic acid and 1.9-2.1 parts by weight of allantoin based on 100 parts by weight.

5. The composition of claim 3, wherein said humectant is D-sorbitol solution, sodium PCA solution, concentrated glycerin or a mixture thereof,

said viscosity modifier is hydrous silicic acid, xanthan gum, CMC (Carboxymethyl Cellulose Sodium Salt) or a mixture thereof,

said surfactant is sodium cocoylmethyltaurate,

said flavoring agent is green tea extract, chamomile extract, rosemary extract, myrrh tincture, rhatany tincture, chamomile tincture, mastic oil 40 HF-60662, propolis extract, grapefruit seed extract, spearmint B71228, peppermint oil 81689 or a mixture thereof.

6. The composition of claim 5, wherein said humectant comprises 80-83% by weight of said D-sorbitol solution, 7-8% by weight of said Sodium PCA solution and 10-12% by weight of said concentrated glycerin.

7. The composition of claim 5, wherein said viscosity modifier comprises 79-85% by weight of said hydrous silicic acid, 4-8% by weight of said xanthan gum, and 11-13% by weight of said CMC.

8. The composition as claimed in claim 1 for use in ~~A~~

~~method of~~ alleviating dentin hyperesthesia wherein the composition is to be administered ~~in a subject in need thereof, administering the toothpaste composition according to claim 1,~~ to dentin surface of ~~said~~ a subject in need.