new claims, marked up copy

**We claim:**

1. A fluorophosphate glass with high bone forming ability having metaphosphate units and fluorophosphate ions [$P_2(O,F)_7$] ~~units~~ in it made from a composition of (35-65) phosphorus pentoxide- (22-36) calcium oxide- (11-32) sodium oxide (0.01-~~5~~ 12) zirconium oxide- (0.01-~~15~~ 20) calcium fluoride, said percentages being molar percentages.

2. The composition for a bone graft substitute, orthopaedic implant made of fluorophosphate~~s~~ glass as claimed in claim 1, wherein phosphorus pentoxide is substituted by any of thefollowing: Ammonium di hydrogen phosphate, Phosphorus chloride, ammonium phosphate, calcium phosphate, sodium phosphate, and silver phosphate.

3. The composition for ~~any prosthetic device or fluorophosphate glass or coating~~ a bone graft substitute, scaffold or orthopaedic implant as claimed in claim 1, wherein calcium oxide is substituted by any of the following: Calcium sulphate, calcium carbonate, calcium fluoride, calcium fluorophosphate, calcium chloride, calcium caseinate, and calcium bicarbonate.

4. The composition for ~~any prosthetic device or fluorophosphate glass or coating~~ a bone graft substitute, scaffold or orthopaedic implant as claimed in claim 1, wherein sodium oxide is substituted by any of the following: Sodium carbonate, sodium citrate, and sodium fluoride.

5. The composition ~~for any prosthetic device or fluorophosphate glass or coating~~ a bone graft substitute, scaffold or orthopaedic implant as claimed in claim 1, wherein calcium fluoride is substituted by any of the following: Calcium ~~di fluoride~~ difluoride, calcium ~~tri fluoride~~ trifluoride, calcium fluorophosphate, and sodium fluoride.

6. The composition for ~~any prosthetic device or fluorophosphate glass or coating~~ a bone graft substitute, scaffold or orthopaedic implant as claimed in claim 1, wherein zirconium oxide is substituted by any of the following: Zirconium fluoride, zirconium carbonate, zirconium phosphate, and zirconium chloride.

7. The composition of claim 1, wherein the bioactive glass has a composition by either molar percentage or weight percentage:

| Compound | Mol.% | Wt.% |
|---|---|---|
| **$P_2O_5$** | ~~40-60~~ 35-65 | 60-70 |
| **CaO** | 22-36 | ~~15-19~~ 12-20 |
| **$Na_2O$** | 11-32 | ~~7-16~~ 6-20 |
| **$ZrO_2$** | 0.01-~~2~~ 12 | ~~0.5-4~~ 0.1-12 |
| **$CaF_2$** | 0.01-~~10~~ 20 | ~~2-5~~ 0.1-10 |

8. Any bone graft substitute, scaffold or orthopaedic implant containing the composition of claim 1, wherein it is made essentially of said fluorophosphate glass ~~or coated with said fluorophosphate glass~~ for use in humans, farm animals or pet animals.