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the ionic compound comprising at least one of sodium fluoride, stannous fluoride, iron fluoride, calcium fluoride, aluminum fluoride.

27. The method of claim 1 wherein the accelerator is at least one of dimethyl amino ethyl methacrylate, acryl phosphine oxide, and ethyl 4 dimethylamino benzoate.

28. The method of claim 1, wherein the composite material constitutes a dentin replacement material.

29. The method of claim 1, wherein the composite material constitutes a composite sealant.

30. The method of claim 1, wherein the composite material constitutes a tooth glaze.

31. The method of claim 12, wherein the at least one multifunctional acidic monomer comprises an acidic monomer having an acid group, wherein the acid group is phosphoric, phosphonic, phosphinic, sulfuric, sulfonic, or sulfinic moieties.

32. The method of claim 12, wherein the at least one multifunctional acidic monomer comprises a bis-2(methacryloyloxy)ethyl phosphate.

33. The method of claim 12, wherein the non-reactive filler is silica, radiopaque glass, barium aluminum silicate, silanated silica, alumina, quartz, or a combination thereof.

34. The method of claim 12, wherein the total monomer content further comprises a non-acid co-monomer having a

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concentration ranging from about 5% to about 80% by weight based on the total weight of the composite material, the non-acid co-monomer being diurethane dimethacrylate, hydroxyethylmethacrylate, trimethylol propane trimethacrylate, 1,6 dihydroxy hexamethylene dimethacrylate, triethylene glycol dimethacrylate, bis glycidyl dimethacrylate, or a combination thereof.

35. The method of claim 12, wherein the photoinitiator is camphorquinone, acryl phosphine oxide, benzoin, methyl benzyl ether or a combination thereof.

36. The method of claim 12, wherein the polymerizable composite material further comprises an ionic compound having a concentration ranging from about 0.01% to about 10% by weight based on the total weight of the composite material.

37. The method of claim 36, wherein the ionic compound is sodium fluoride, stannous fluoride, iron fluoride, calcium fluoride, aluminum fluoride or a combination thereof.

38. The method of claim 1, wherein the polymerization system is capable of being activated only by light.

39. The method of claim 24, wherein the accelerator is an amine.

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