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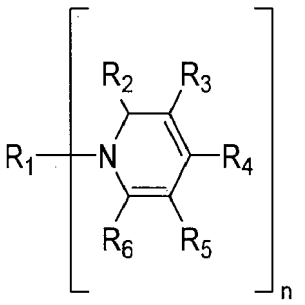
(54) RADICALLY POLYMERIZABLE COMPOSITION COMPRISING A REDOX INITIATOR SYSTEM BASED ON DIHYDROPYRIDINES

(57) Radically polymerizable dental material, which comprises a catalyst paste and a base paste, wherein the catalyst pastes comprises an oxidizing agent, preferably a peroxide or hydroperoxide, a radically polymerizable monomer and/or oligomer with acid group and a polyfunctional radically polymerizable monomer, and the base paste comprises a polyfunctional radically polymerizable monomer without an acid group and a dihydropyridine derivative of Formula (I)



wherein R^1 is a C_6-C_{10} aryl group, preferably a phenyl group, which can be unsubstituted or substituted; R^{2-6} independently of each other are a hydrogen atom, a

C_1-C_{20} alkyl group that can be interrupted by one or more of an S atom, O atom, -C(O)O- group and/or -C(O)NH-group, and/or can be unsubstituted or substituted; a C_3-C_{16} cycloaliphatic group that can be unsubstituted or substituted; or a C_7-C_{20}-alkylaryl group that can be interrupted by one or more of an S atom, O atom, -C(O)O- group and/or -C(O)NH- group and/or can be unsubstituted or substituted; n is 1, 2, 3 or 4. The material comprises at least 50 % by weight of polyfunctional radically polymerizable monomers or monomers and oligomers, based on the total amount of radically polymerizable monomers and oligomers. The material has good mechanical properties and does not exhibit a bitter taste.

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