

Title (en)
DENTAL COMPOSITE MATERIAL AND MILL BLANKS CONSISTING OF SAID COMPOSITE MATERIAL

Title (de)
DENTALES KOMPOSITMATERIAL SOWIE FRÄSROHLINGE DIESES KOMPOSITMATERIALS

Title (fr)
MATÉRIAU COMPOSITE DENTAIRE ET ÉBAUCHES À FRAISER DE CE MATÉRIAU COMPOSITE

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Application
EP 18783400 A 20181001

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Abstract (en)
[origin: WO2019068614A1] The invention relates to a polymerizable, dental composite material which comprises (i) 70 to 85 wt.% of at least one inorganic filler component comprising at least one dental glass and optionally at least one amorphous metal oxide, (ii) 10 to 30 wt.% of at least one monomer comprising 1,3-bis(5'-alkyl-3',8'-dioxo- 2'-aza-4',7'-dioxo-decyl-9'-en)phenyl and/or 1,3-bis(5',9'-dialkyl-3',8'-dioxo-2'-aza-4',7'-dioxo-decyl-9'-en)phenyl, each alkyl group being independently selected from linear or branched C1 to C4 alkyl groups, optionally in a mixture of at least two different urethane (meth)acrylates, (iii) 0.01 to 5 wt.% of at least one di-, tri-, tetra- or multi-functional monomer different from urethane (meth)acrylate, in particular comprising bis(methacryloyloxymethyl)-tetrahydrodicyclopentadiene, bis(acryloyloxymethyl)-tetrahydrodicyclopentadiene or a mixture comprising at least one di-, tri-, tetra- or multi-functional monomer different from urethane (meth)acrylate, and (iv) 0.01 to 10 wt.% of at least one initiator, initiator system and optionally at least one stabilizer and optionally at least one pigment, the total composition of the composite material adding up to 100 wt.%. The invention also relates to a polymerized composite material having a flexural strength of greater than or equal to 190 MPa and an elastic modulus of 12 to 21 GPa for the production of indirect dental prostheses.

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