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(54) **DENTAL COMPOSITES COMPRISING GROUND, DENSIFIED, EMBRITTLED GLASS FIBER FILLER**

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(57) **ABSTRACT**

A composite for a dental restoration is presented comprising ground, densified, embrittled glass fibers together with fillers and a polymeric matrix precursor composition. The ground, densified, embrittled glass fibers are obtained by grinding glass fibers which have been densified and embrittled by heating glass fibers at a temperature substantially below the softening point of the glass fibers, without significant fusion or melting together of the fibers. The composite is particularly useful as a direct filling material, in that it has the feel and workability of an amalgam.

15 Claims, 3 Drawing Sheets