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(54) Title: PRINTABLE SHAPE MEMORY POLYMER COMPOSITION AND PRINTED DENTAL ALIGNER FABRICATED FROM THE SAME

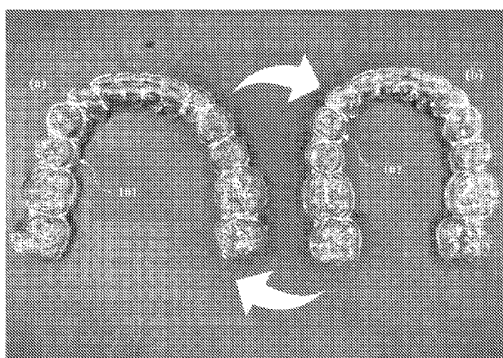


FIG. 1

(57) Abstract: A printable shape memory polymer composition for use in fabricating a 4D printed dental aligner is provided. The composition comprises a first (meth)acrylate monomer, a second (meth)acrylate monomer which provides transient crosslinks to the printable shape memory polymer composition, one or more crosslinkers, and a photoinitiator, wherein the printable shape memory polymer composition is responsive to change in temperature at temperature T_g to become flexible, allowing the printable shape memory polymer composition to be shaped and reshaped at temperature T_g . A 4D printed dental aligner comprising the printable shape memory polymer composition is also disclosed.

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