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(54) **SILICONE ENCAPSULANT COMPOSITION FOR MOLDING SMALL SHAPES**

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See application file for complete search history.

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(57) **ABSTRACT**

A process includes the steps of: 1) heating a mold at a temperature ranging from 100° C. to 200° C.; 2) feeding a silicone encapsulant composition including a mold release agent, where the composition has a viscosity ranging from 100 cps to 3,000 cps at operating temperatures of the process, to an assembly for preventing the silicone encapsulant composition from flowing backward out of the assembly; 3) injecting the silicone encapsulant composition from the assembly into a mold having a horizontal orientation and having a mold cavity through a gate, where the mold cavity has a top and a bottom, a vent is located at the top of the mold cavity, the vent comprises a channel 0.1 mm to 1 mm wide by 0.0001 mm to 0.001 mm deep, the gate is located at the bottom of the mold cavity, and injecting is performed at a pressure ranging from 1,000 psi to 10,000 psi for up to 5 seconds; 4) holding the silicone encapsulant composition at 1,000 psi to 10,000 psi for an amount of time sufficient to prevent the silicone encapsulant composition from flowing out of the mold cavity; 5) curing the product of step 4). Lenses for LED packages may be prepared by the process.

4 Claims, 3 Drawing Sheets