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[54] **SPIN-ON-GLASS PROCESS WITH CONTROLLED ENVIRONMENT**

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[*] Notice: This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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[58] **Field of Search** 427/240, 335, 427/336; 118/52; 438/760, 780, 782, 948

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[57] **ABSTRACT**

A process for spreading and flowing in a flowable dielectric during manufacture of an integrated circuit resulting in greater planarity and better gap filling ability. The process involves spinning the integrated circuit while controlling evaporation of the solvent from the flowable dielectric to increase the amount of flow in time and decrease spin velocity during flow in to improve planarity in gap filling ability. The process includes supporting the integrated circuit in a chamber; dispensing the flowable dielectric in a solvent on the integrated circuit in the chamber; covering the integrated circuit to provide a controllable environment within the chamber after the step of dispensing; spinning the integrated circuit while controlling the controllable environment to spread and flow in the flowable dielectric; uncovering the integrated circuit within the chamber; spinning the integrated circuit to spin off flowable dielectric; and curing the flowable the flowable dielectric.

18 Claims, 4 Drawing Sheets