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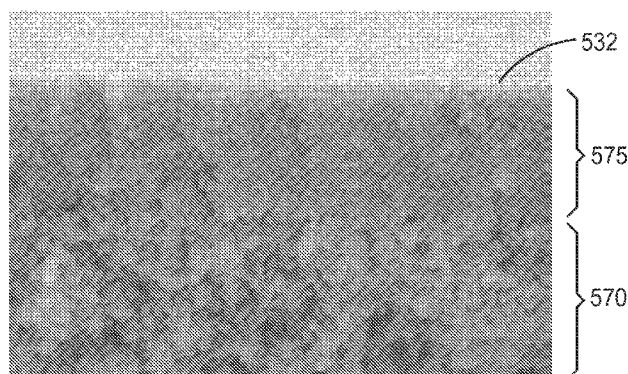
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(54) Title: PROCESS FOR GRADIENT NANOVOIDED ARTICLE

**FIG. 5B**

(57) Abstract: A process and apparatus for producing a gradient nanovoiled article, a gradient nanovoiled coating, and a gradient low refractive index coating is described. The process includes providing a first solution of a polymerizable material in a solvent, and providing a first environment proximate a first region of the coating and a different second environment proximate an adjacent region of the coating. The process further includes at least partially polymerizing the polymerizable material to form a composition that includes an insoluble polymer matrix and a second solution. The insoluble polymer matrix includes a plurality of nanovoids that are filled with the second solution, and a major portion of the solvent from the second solution is removed. A first volume fraction of the plurality of nanovoids proximate the first region of the coating is less than a second volume fraction of the plurality of nanovoids proximate an adjacent of the coating. An apparatus for the process is also described, and includes a web line, a coating section, a partial polymerization section, and a solvent removal section.



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