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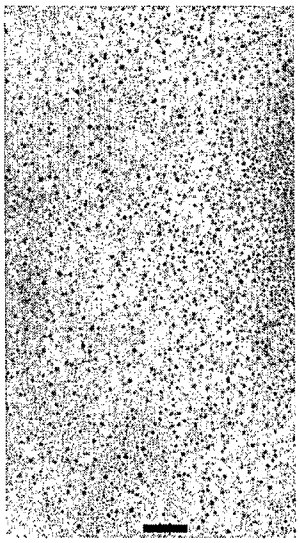
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(54) Title: POLYHEDRAL OLIGOMERIC SILSESQUIOXANES AND POLYHEDRAL OLIGOMERIC SILICATES BARRIER MATERIALS FOR PACKAGING



(57) Abstract: A method for barrier property enhancement using silicon containing agents and in situ formation of nanoscopic glass layers on polymer surfaces. Nanostructured chemicals such as polyhedral oligomeric silsesquioxane (POSS) are added to polymers, followed by in situ surface oxidation to form a glass layer.

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