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(54) Title: METAL-COATED SUBSTRATES, INTERPOSERS, AND METHODS FOR PRODUCTION THEREOF

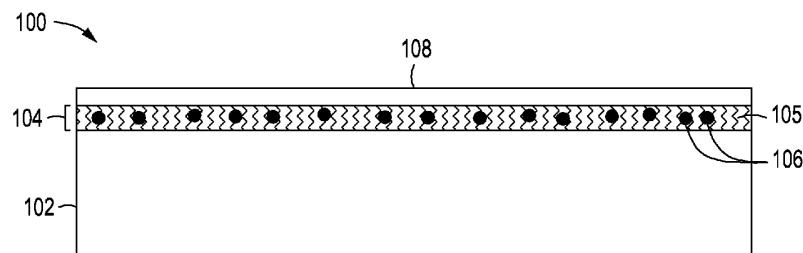


FIG. 3

(57) Abstract: Substrates may be metallized by introducing a seed layer upon a base substrate, mechanically polishing the seed layer, and forming a metal layer upon the seed layer after mechanical polishing. The base substrate may comprise a ceramic, such as silicon nitride or aluminum nitride, a polymer, silicon, metal, or glass. The seed layer optionally may be rendered electrically conductive by mechanical polishing of an initially non-conductive seed layer. The metal layer may be formed by depositing a metal nanoparticle composition upon the seed layer after mechanical polishing and consolidating metal nanoparticles therein, such as through a hot pressing operation. The metal nanoparticle composition may contain one or more additives that facilitate CTE matching of the metal layer to the base substrate.



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