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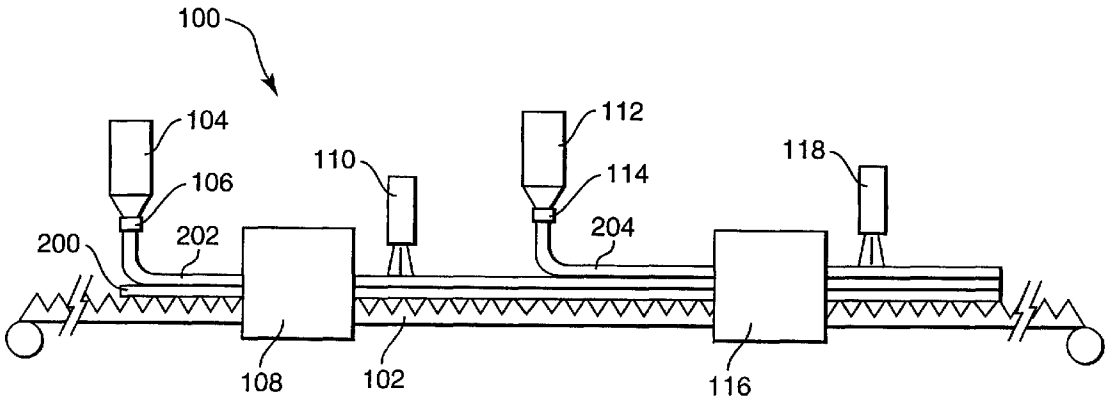
(54) Title: OPTICAL BODIES CONTAINING CHOLESTERIC LIQUID CRYSTAL MATERIAL AND METHODS OF MANUFACTURE



(57) Abstract: An optical body includes a substrate and a cholesteric liquid crystal layer disposed on the substrate. The cholesteric liquid crystal layer has a non-uniform pitch along a thickness direction of the layer and comprises a crosslinked polymer material that substantially fixes the cholesteric liquid crystal layer. The crosslinking hinders diffusion of cholesteric liquid crystal material within the cholesteric liquid crystal layer. In other methods of making an optical body, a reservoir of chiral material is provided during the process over a first cholesteric liquid crystal layer to diffuse into the layer and provide a non-uniform pitch. Alternatively, two coating compositions can be disposed on a substrate where the material of the first coating composition is not substantially soluble in the second coating composition.

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