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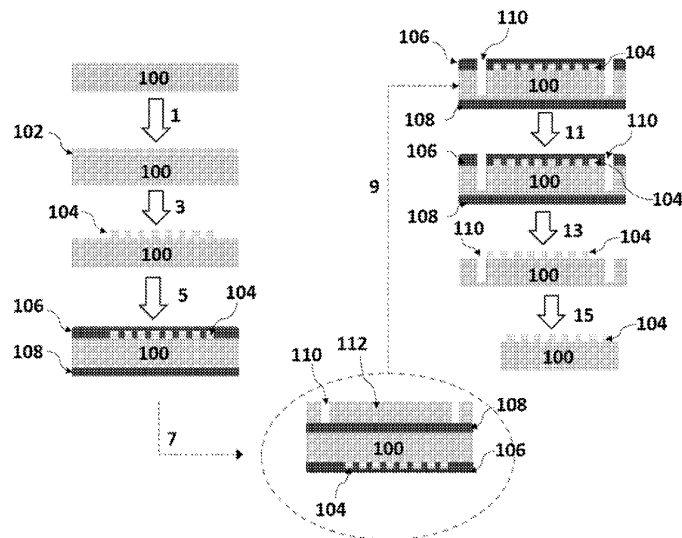
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(54) Title: SUB-MM FLAT LENS FABRICATION

FIG. 8



(57) **Abstract:** A method of fabricating an optical lens disclosed herein includes forming a layer of a flat lens structure on a front surface of a substrate, depositing a protective metal layer on the layer of the flat lens structure and on a back surface of the substrate, wherein the protective layer includes chromium, gold, titanium, or nickel, wherein the back surface is located opposite to and away from the front surface having the layer of the flat lens structure, irradiating the protective metal layer at the front surface with a laser to form a channel (i) through the protective metal layer, (ii) through the layer of the flat lens structure and (iii) in the substrate, removing the protective metal layer at the front surface and the back surface of the substrate, and separating the layer of the flat lens structure from the substrate to obtain the optical lens, wherein the channel has a depth defined by a thickness of the substrate remaining at the channel after irradiating the protective metal layer at the front surface with the laser. The optical lens fabricated from the method is also disclosed herein.

[Continued on next page]

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