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(54) Title: LOW FREQUENCY IMPRINT FOR GRayscale OPTICAL DEVICE FABRICATION

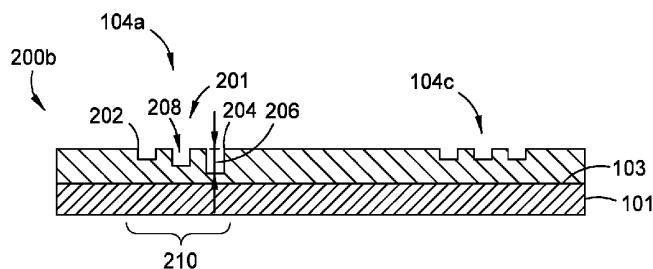


FIG. 2B

(57) Abstract: Embodiments described herein relate to methods for forming waveguides with gratings of structures having depths distributions, method includes disposing a resist material over areas of a device material or a substrate corresponding to gratings of structures to be formed having depth distributions, imprinting a stamp into the resist material over areas, the stamp having a positive pattern of the depth distribution, the imprinting the stamp and curing the resist material forms a patterned resist over the areas, releasing the stamp, etching the patterned resist and one of the device material or the substrate to form the depth distributions in the device material or the substrate, and forming the structures in the areas having the depth distributions to form the gratings.

[Continued on next page]



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