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(54) Title: AN OPTICAL UNIT AND METHOD FOR COLLIMATING, FOCUSING OR EXPANDING LIGHT BEAM

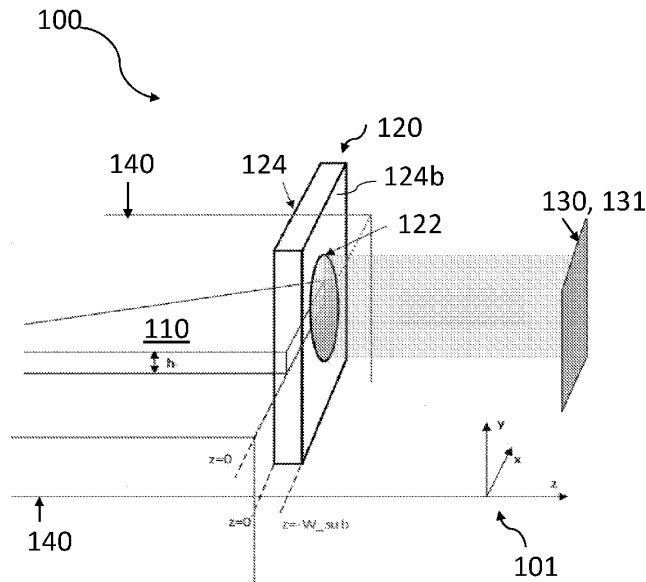


FIG. 1

(57) Abstract: In some aspects, an optical unit is provided. The optical unit includes a waveguide component and a collimating metalens. The collimating metalens is optically coupled to the waveguide component and configured to collimate, focus or expand light beam transmitted by the waveguide component on to a detection plane. The collimating metalens comprises a metasurface having nanostructures extending toward the detection plane.

[Continued on next page]

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