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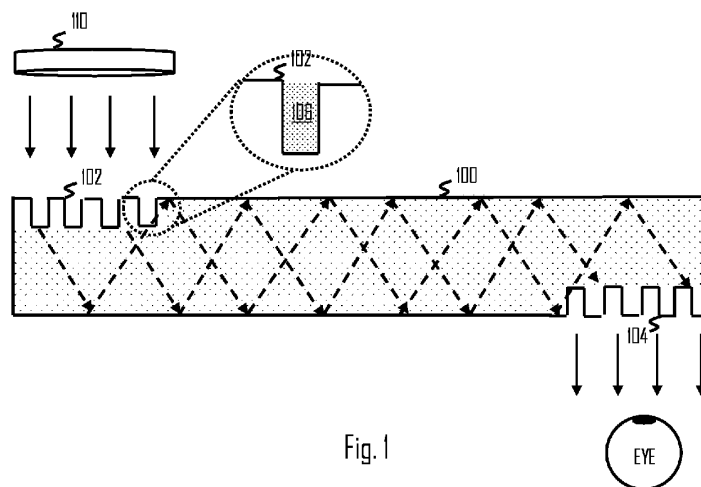


Fig. 1

(57) Abstract: This document discloses a solution for an optical waveguide for an augmented reality display device. According to an aspect, the optical waveguide comprises: a substrate arranged to guide an optical image inside the substrate from an inlet to an outlet of the optical waveguide via a plurality of reflections; a surface relief grating at the inlet or the outlet of the optical waveguide, the surface relief grating guiding the image in the optical waveguide via diffraction and comprising a plurality of grooves; a coating disposed on the surface relief grating and filling at least partially at least one groove disposed at an edge of the surface relief grating where the image is coincident with the at least one groove after a first reflection of the image inside the substrate, the coating having optical characteristics convergent with optical characteristics of the substrate.

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