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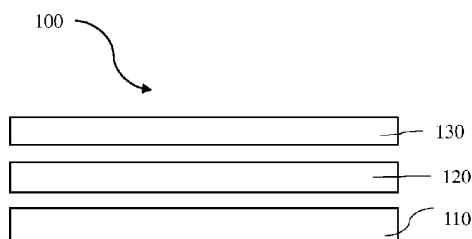


FIG. 1

(57) Abstract: In some embodiments, a tunable lens is provided. The tunable lens includes a substrate; at least one layer of ferroelectric material disposed over the substrate; and a first electrode disposed on the at least one layer of ferroelectric material; wherein a refractive index of the at least one layer of ferroelectric material is tunable by applying an electric field through the first electrode.

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