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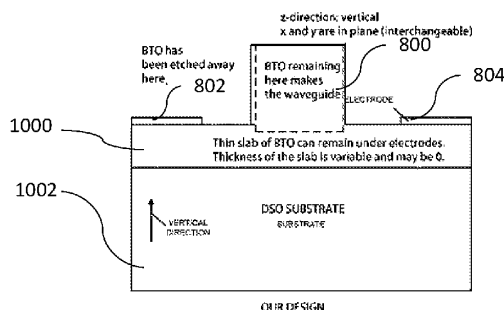


Figure 10

(57) Abstract: A structure for an optoelectronics platform and a method of fabricating a structure for an optoelectronics platform such as a Mach-Zehnder modulator or a waveguide. The method comprises the steps of providing a substrate, and depositing a BaTiO₃, BTO, film on a surface of the substrate and having a thickness suitable for single mode operation with one or more possible polarization configurations with optical confinement in the BTO film at a wavelength or wavelength range of operation; wherein the substrate is chosen to provide vertical refractive index confinement in a direction perpendicular to the surface of the substrate for the single mode operation optical confinement in the BTO film at the wavelength or wavelength range of operation.