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(54) Title: GLASS WAVEGUIDES WITH BARRIER LAYER

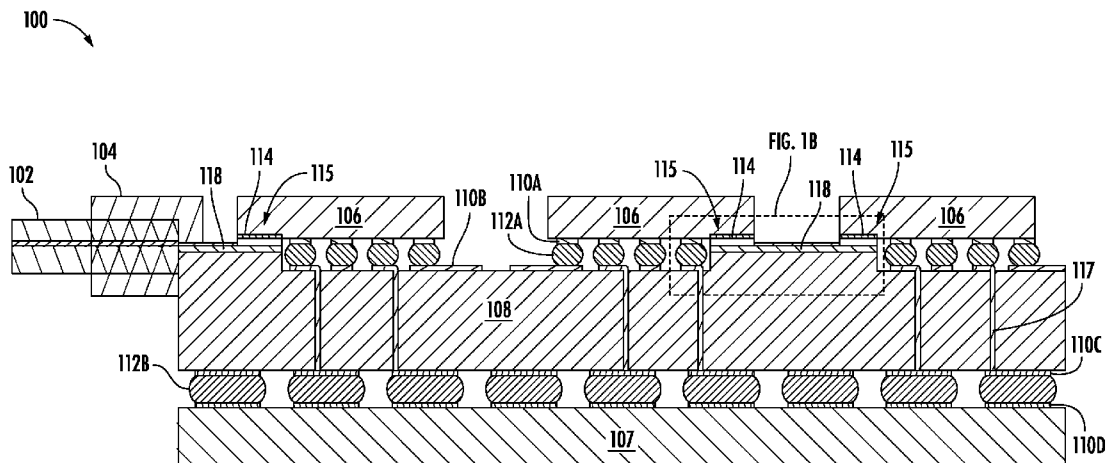


FIG. 1A

(57) Abstract: A waveguide assembly is provided. The waveguide assembly includes a glass substrate comprising a first waveguide, and the first waveguide is buried in the glass substrate. The waveguide assembly also comprises a second substrate comprising a second waveguide. The waveguide assembly also comprises an adhesive and a barrier layer. The first waveguide and the second waveguide are positioned proximate to each other at an optical interface with the adhesive positioned between the second substrate and the barrier layer and with the barrier layer positioned between the glass substrate and the adhesive. The barrier layer is configured to reduce the amount of alkali material migrating into the adhesive and the second substrate.



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