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(54) **Title**: METHODS, DEVICES, AND MATERIALS FOR METALLIZATION

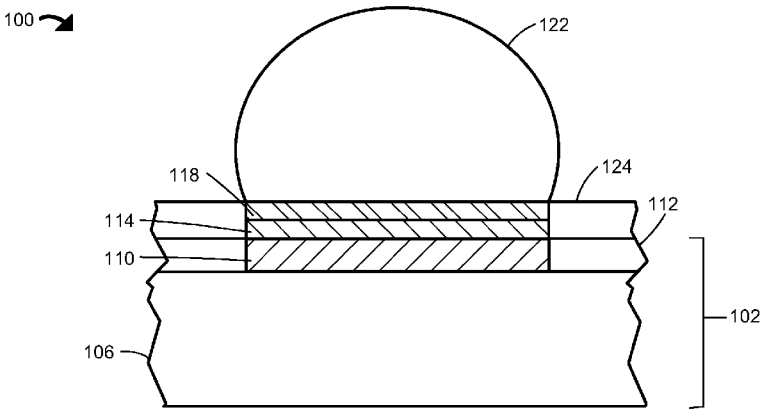


FIG. 2

(57) **Abstract**: A method of making an electronic device which in one embodiment comprises providing a substrate, electrolessly depositing a barrier metal at least on portions of the substrate, and using wet chemistry such as electroless deposition to deposit a substantially gold-free wetting layer having solder wettability onto the barrier metal. An electronic device which in one embodiment comprises a metallization stack. The metallization stack comprises a barrier metal deposited electrolessly and a substantially gold-free wetting layer deposited on the barrier metal, and the wetting layer is wettable by solder.

WO 2012/004710 A2