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(54) **Title:** PATTERNED WAFER SOLDER DIFFUSION BARRIER

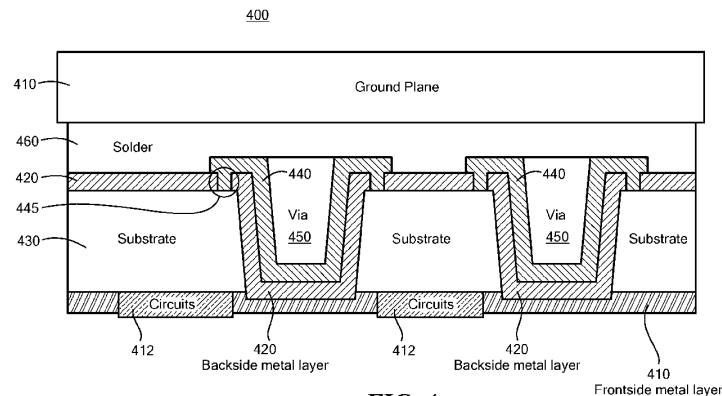


FIG. 4

(57) **Abstract:** Methods and apparatus for an integrated circuit having with a frontside metal layer on the frontside of the substrate and a backside metal layer on the backside of the substrate. The backside metal layer is deposited onto the backside of the substrate and into the via such that a portion of the backside metal layer is connected to a portion of the frontside metal layer. A diffusion barrier layer is deposited on the backside metal layer located in the via.

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