

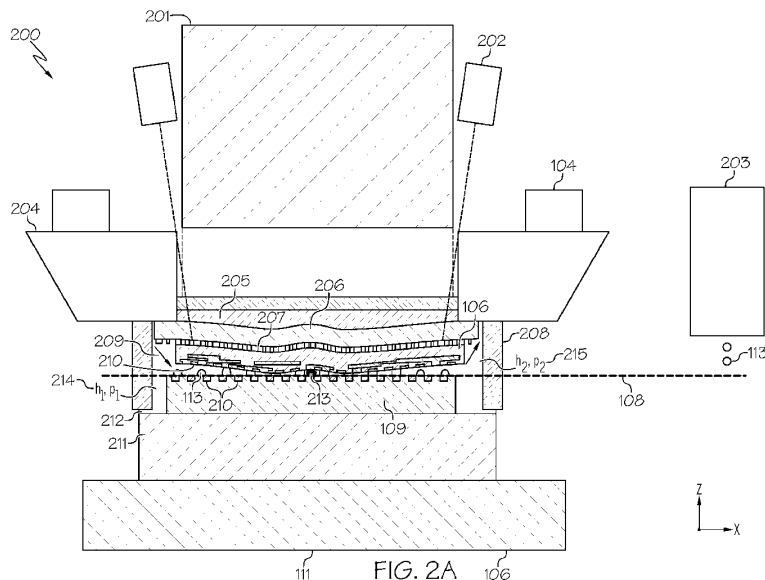


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(54) **Title: PROCESS CONTROL TECHNIQUES FOR WAFER-TO-WAFER BONDING**



(57) **Abstract:** A method for bonding with high bonding yield. Droplets of interfacial liquid are dispensed at pre-specified locations on a first bonding surface or a second bonding surface. The first bonding surface is then bonded with the second bonding surface. The bonding interface between the first bonding surface and the second bonding surface is monitored for interfacial particles as the interfacial liquid evaporates. Furthermore, the evaporation of the interfacial liquid is then arrested in response to detecting one or more interfacial particles.

[Continued on next page]

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