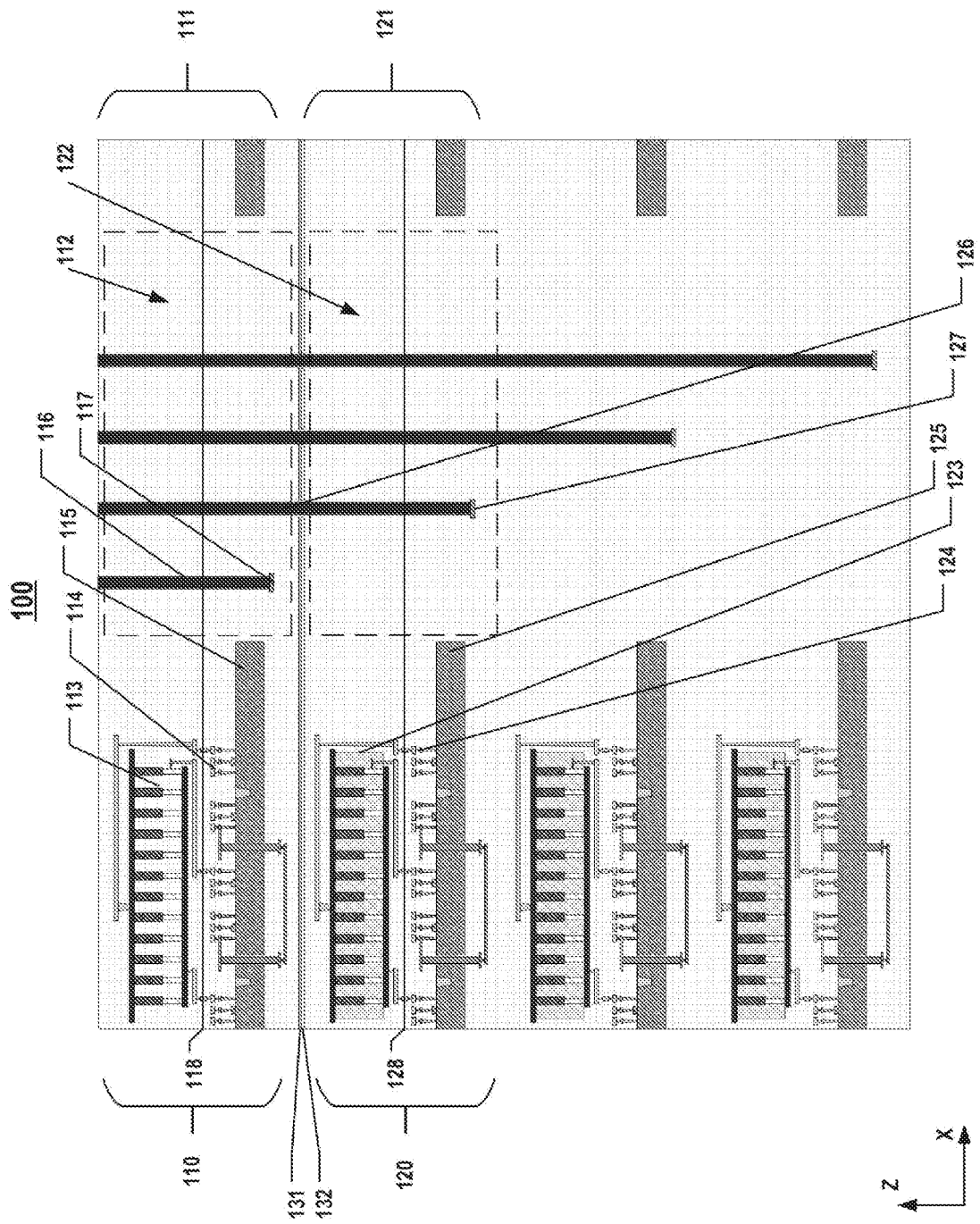

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FIG. 1

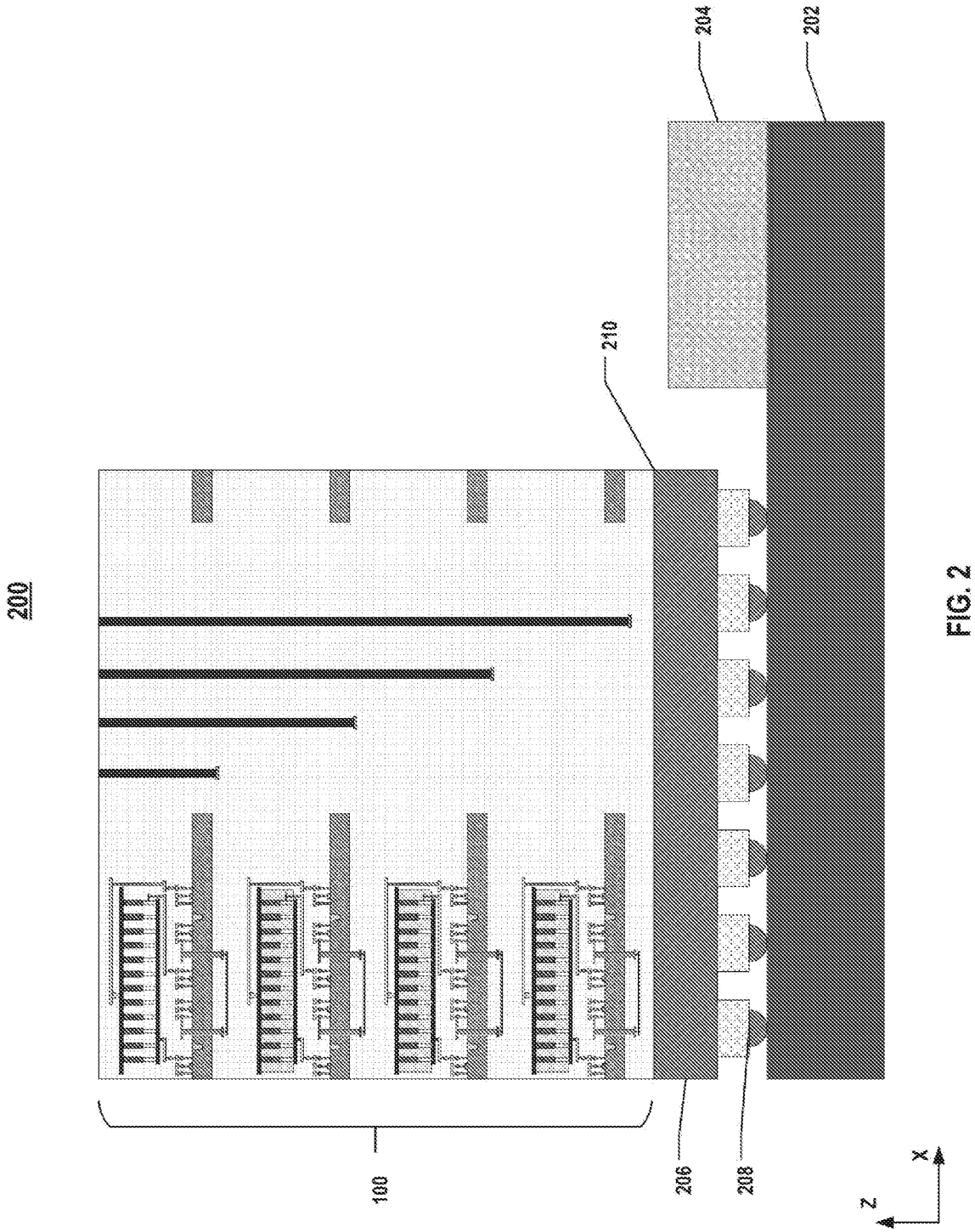


FIG. 2

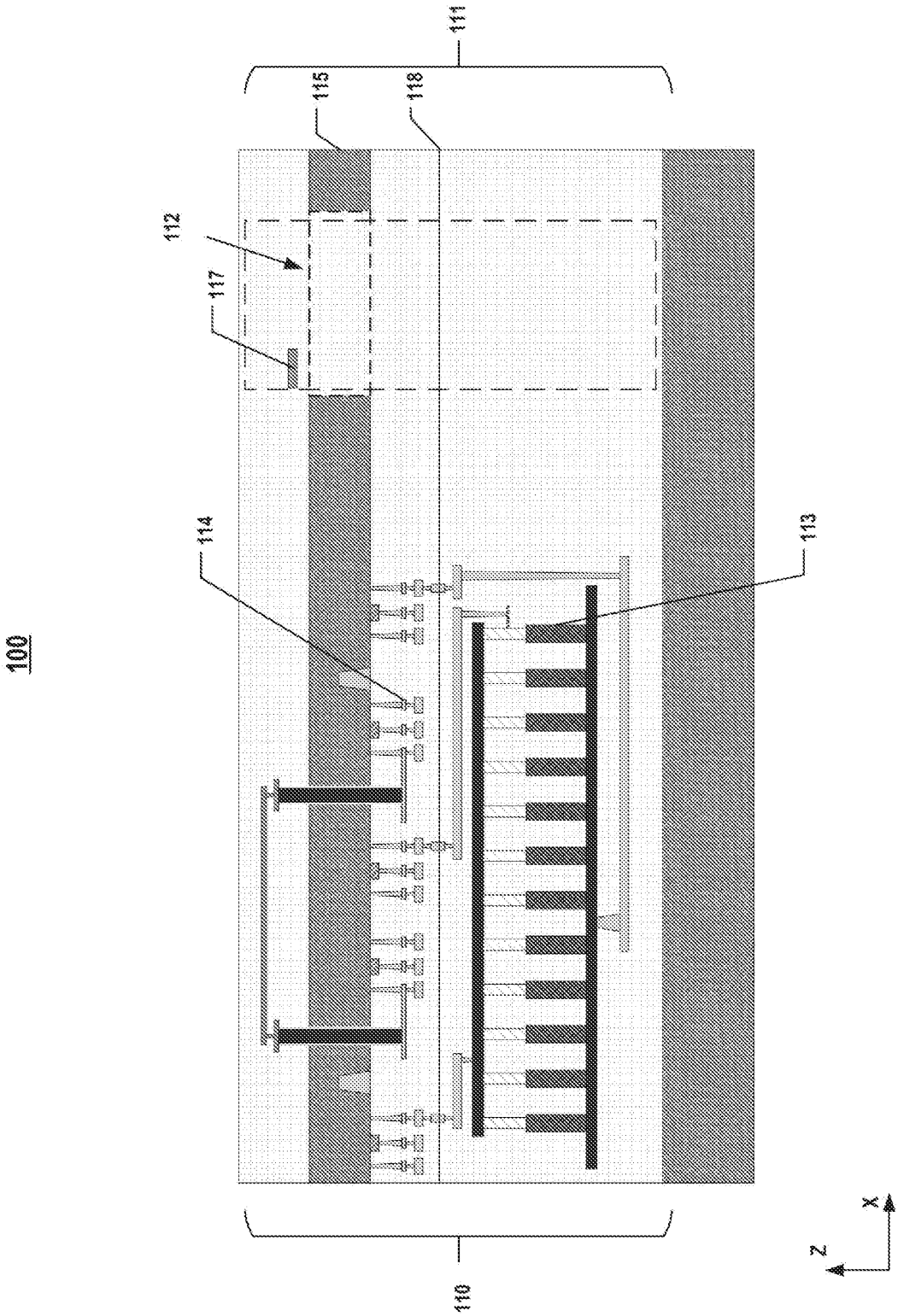


FIG. 3

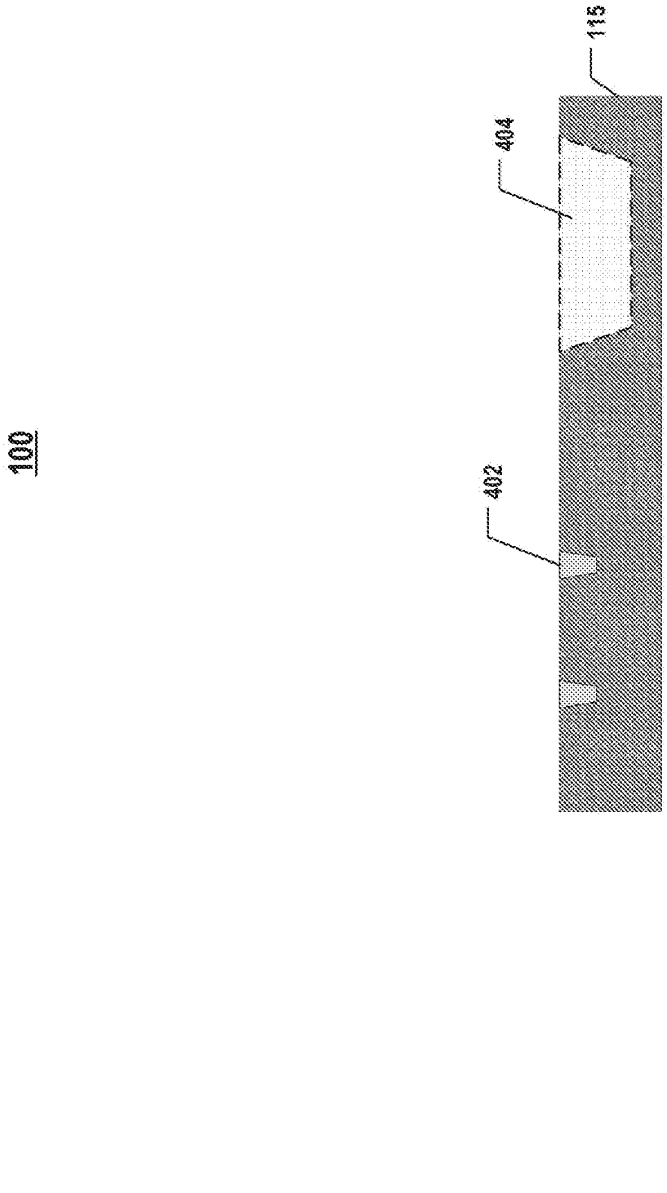


FIG. 4

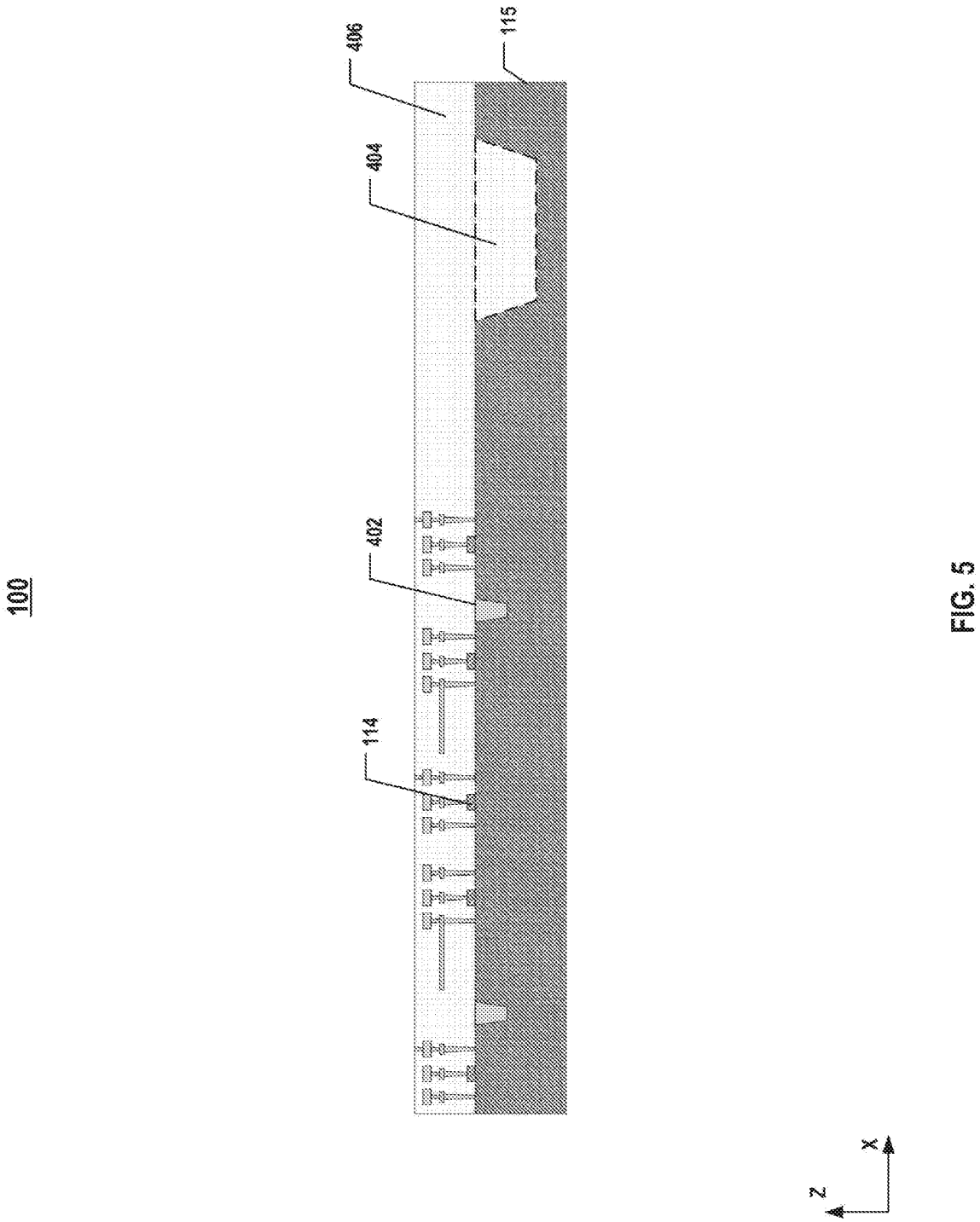


FIG. 5

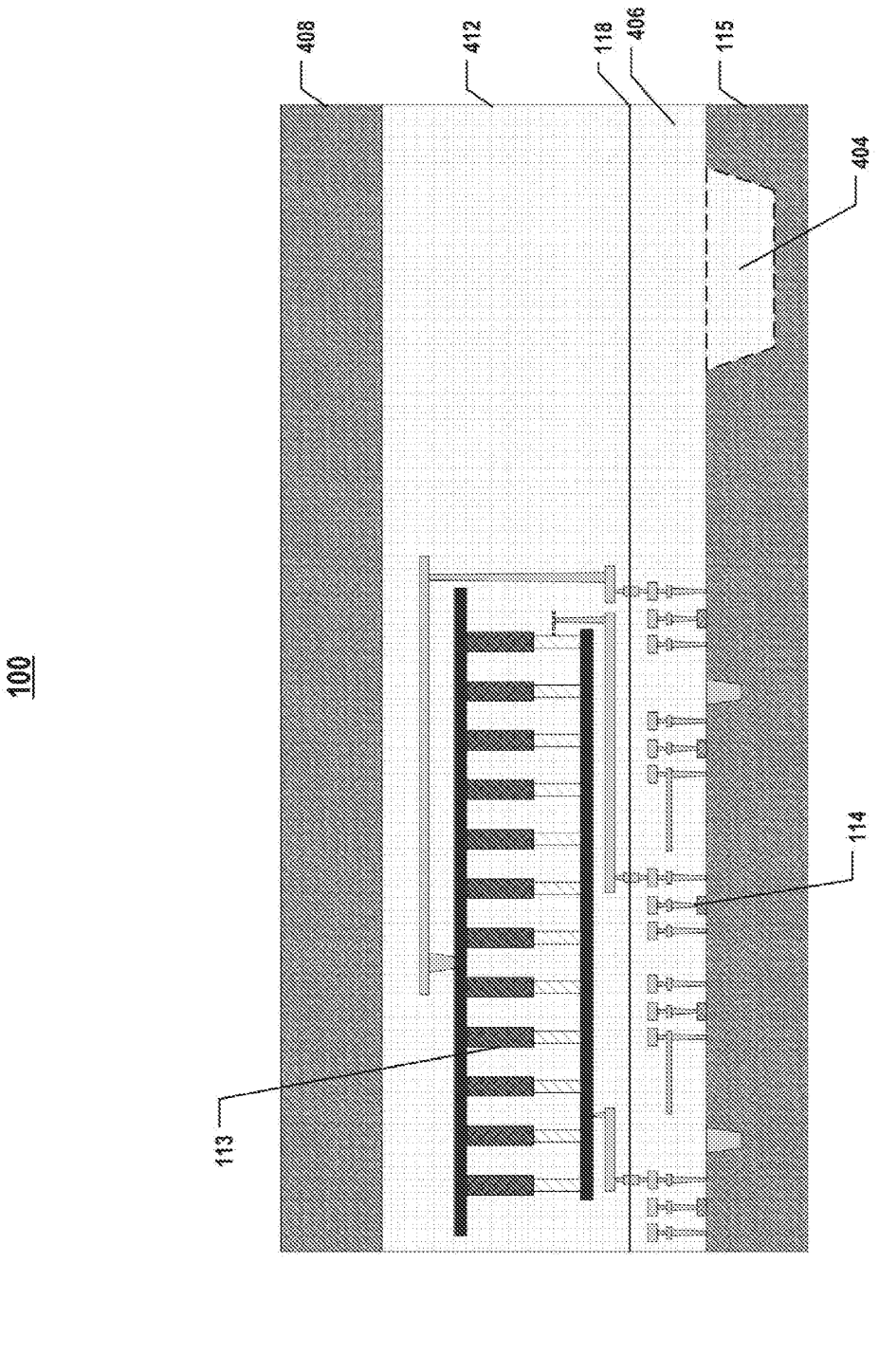


FIG. 6

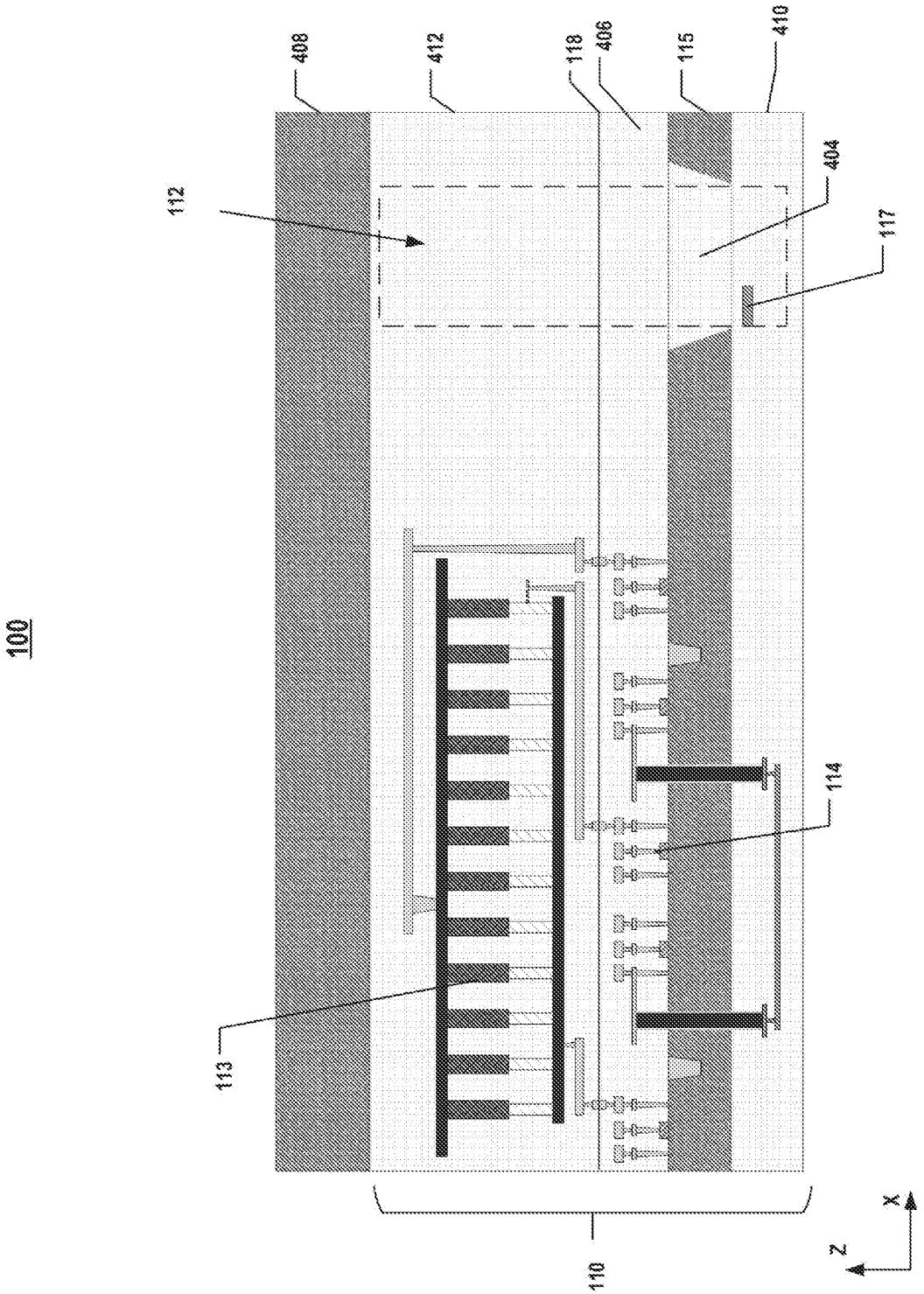


FIG. 7

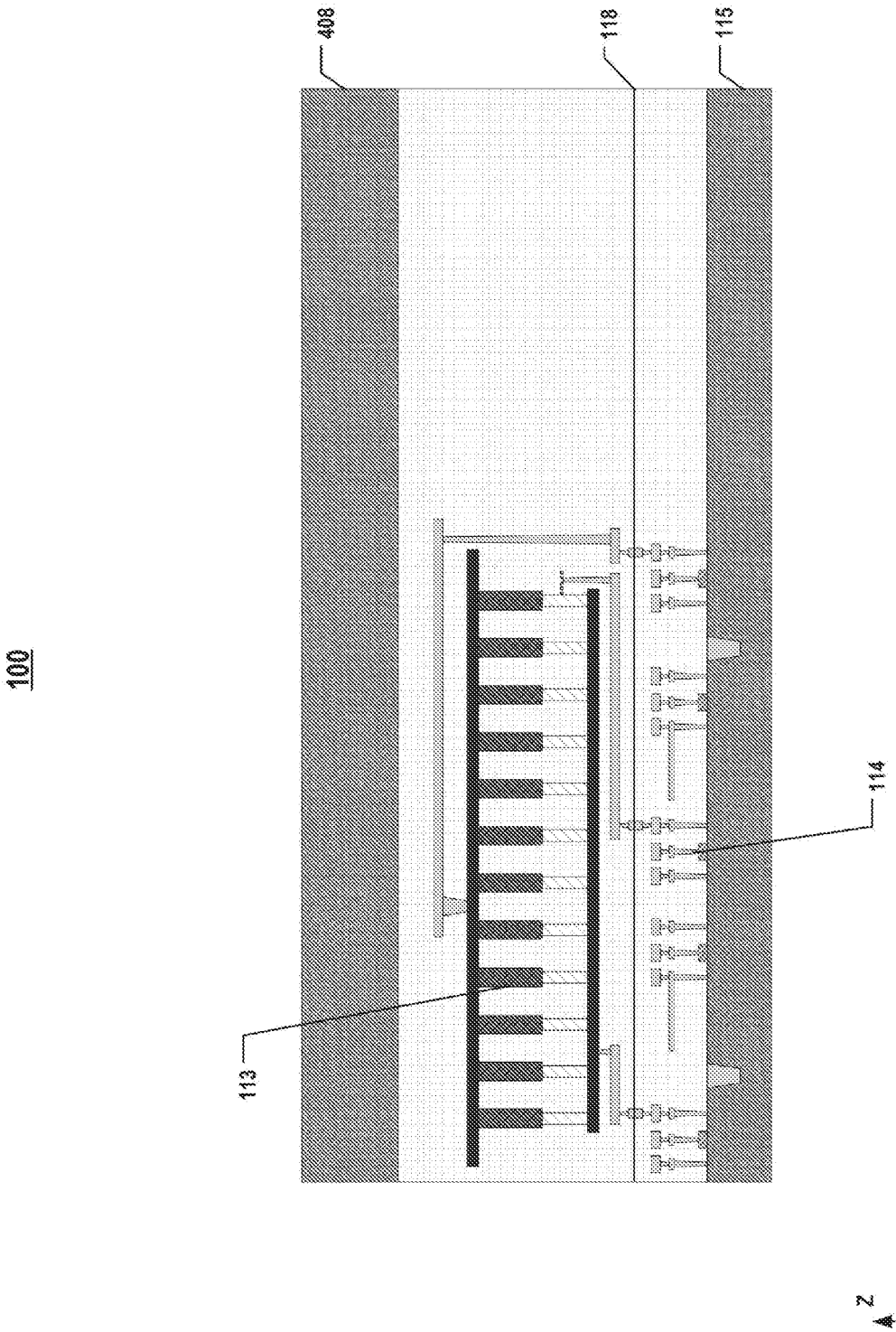


FIG. 8

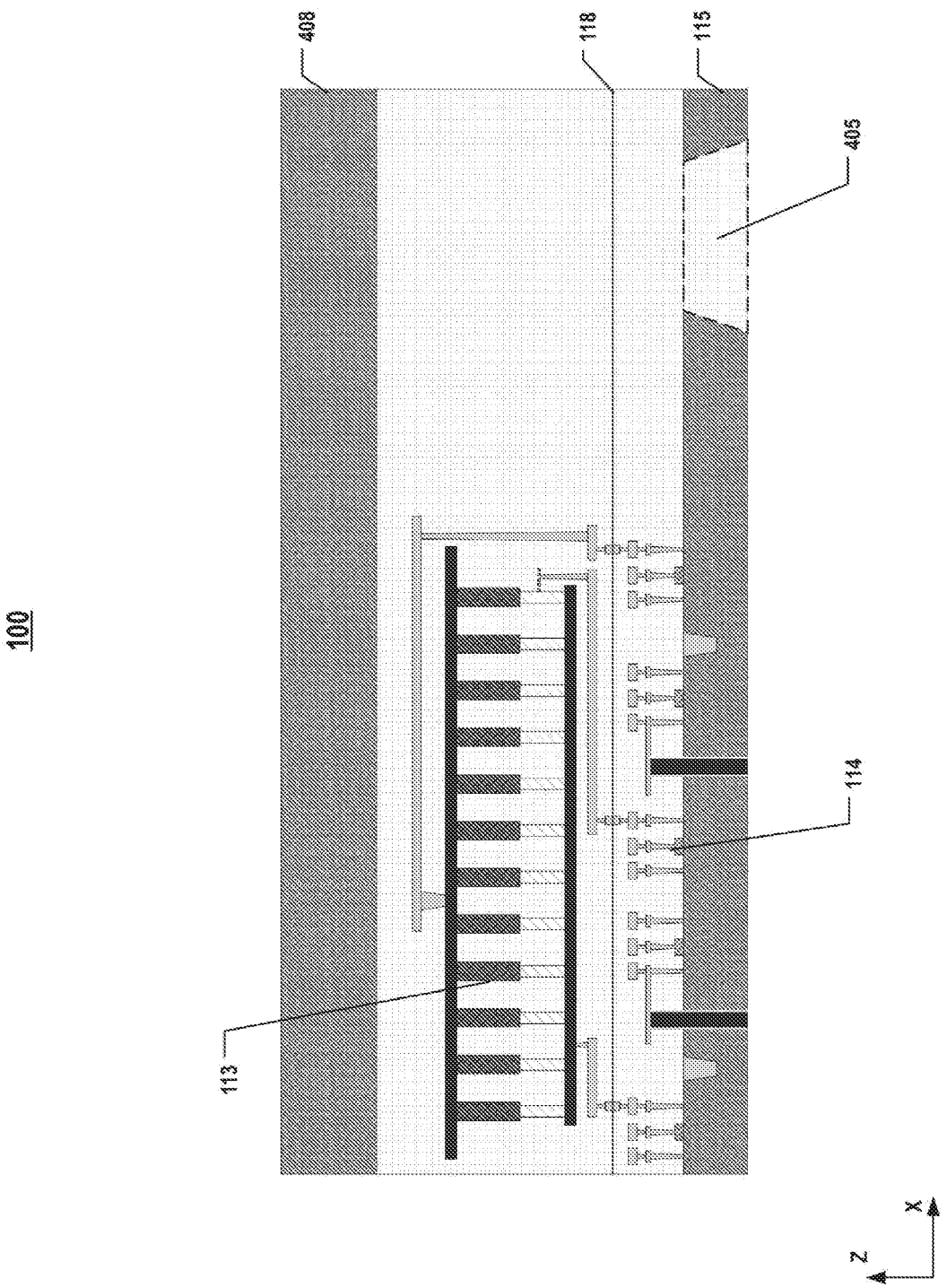


FIG. 9

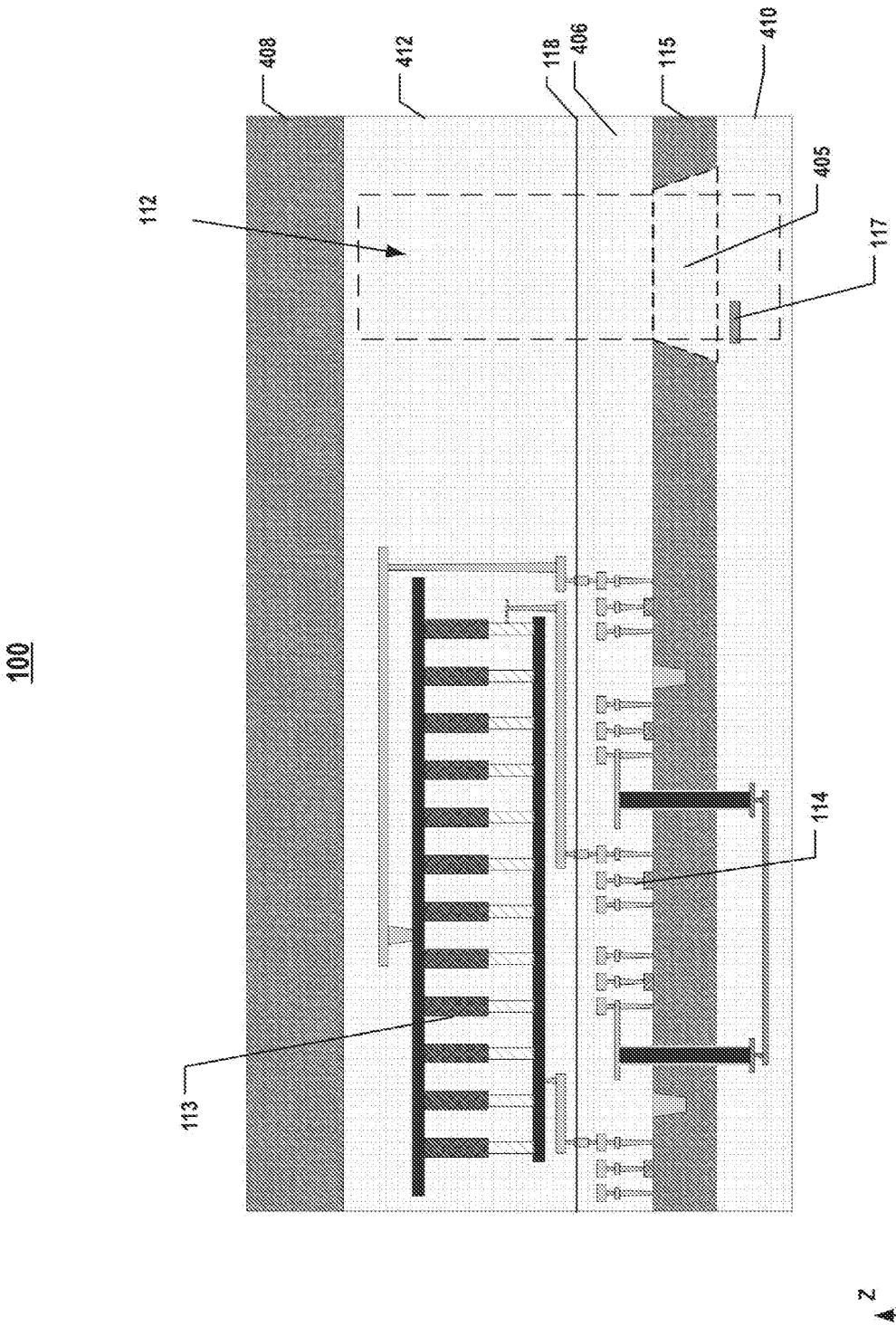


FIG. 10

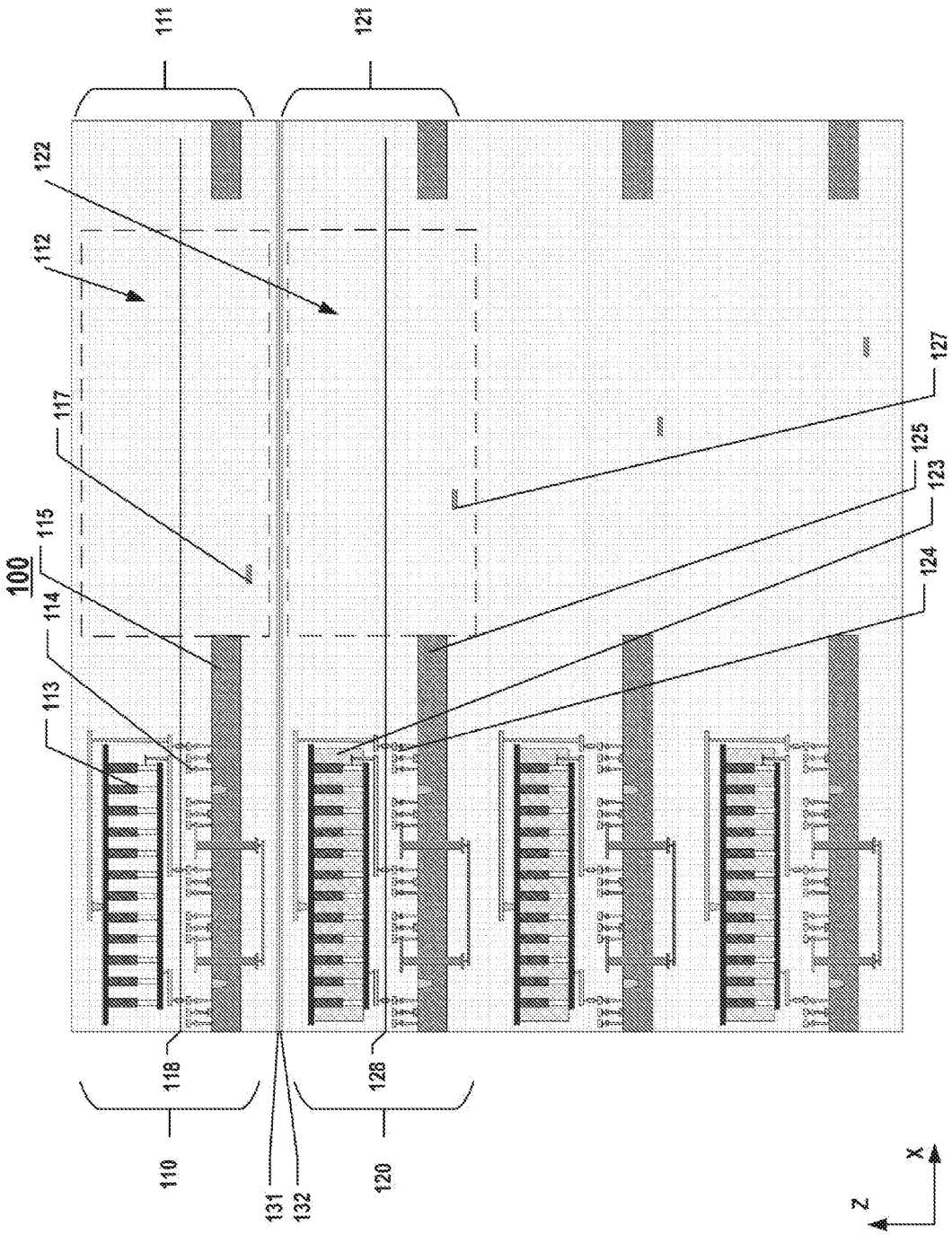

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FIG. 11

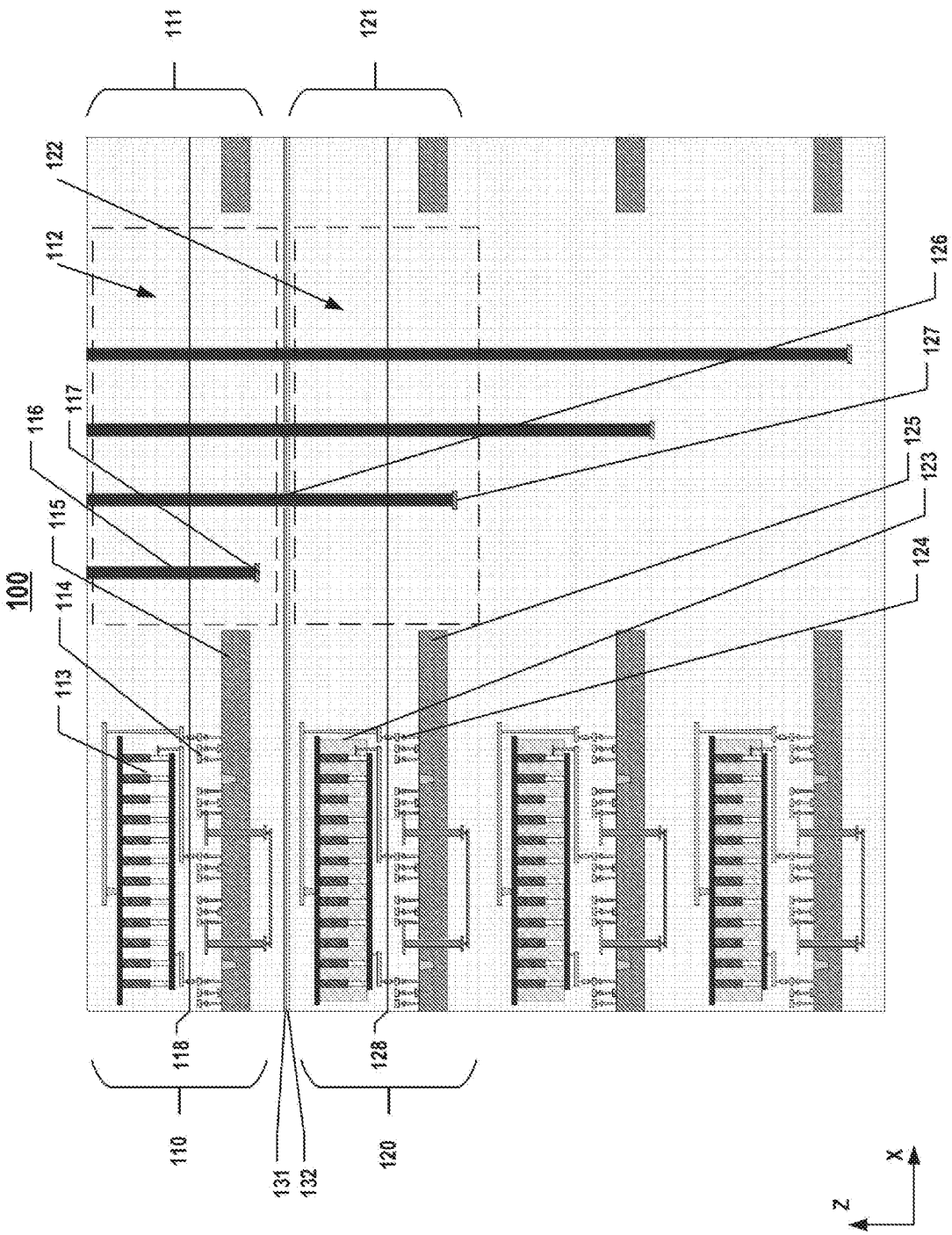

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FIG. 12

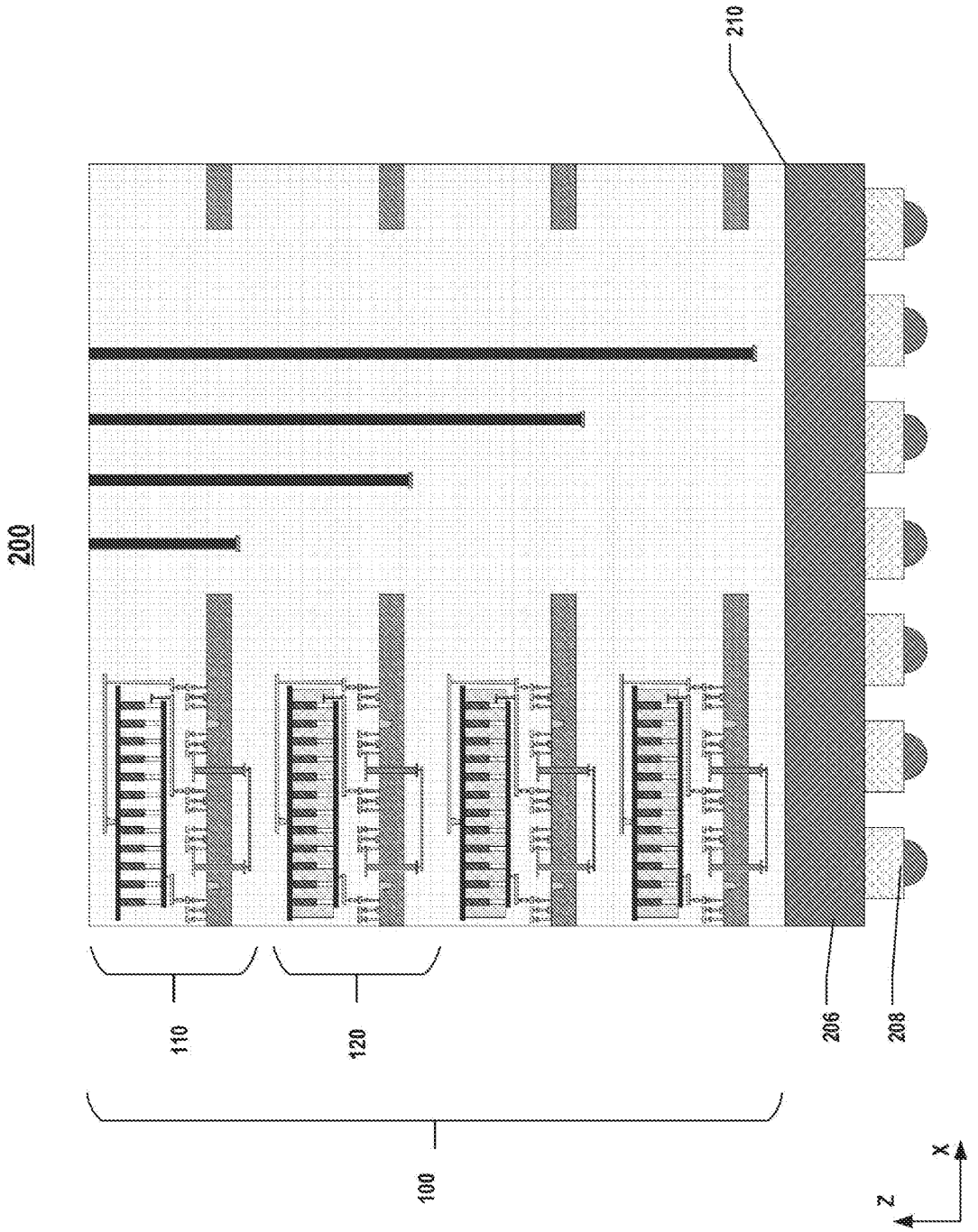


FIG. 13

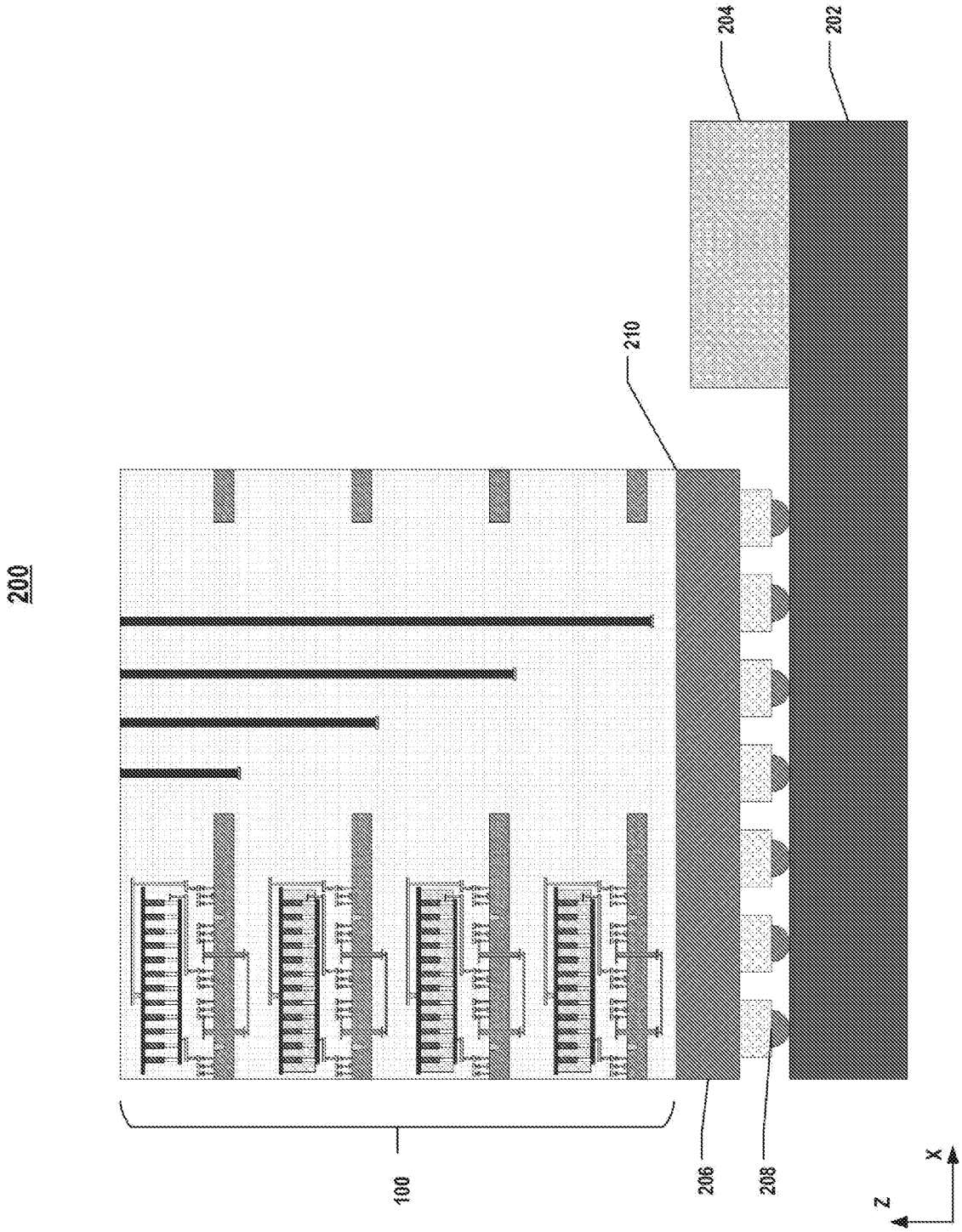


FIG. 14

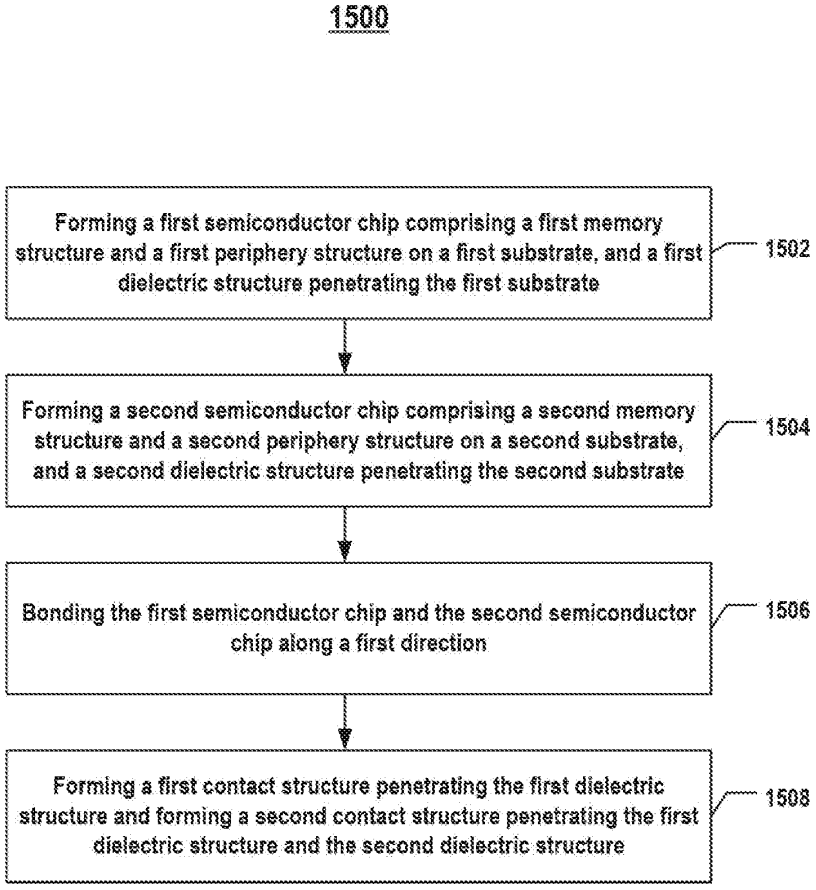

1500
Forming a first semiconductor chip comprising a first memory structure and a first periphery structure on a first substrate, and a first dielectric structure penetrating the first substrate
1502
Forming a second semiconductor chip comprising a second memory structure and a second periphery structure on a second substrate, and a second dielectric structure penetrating the second substrate
1504
Bonding the first semiconductor chip and the second semiconductor chip along a first direction
1506
Forming a first contact structure penetrating the first dielectric structure and forming a second contact structure penetrating the first dielectric structure and the second dielectric structure
1508

FIG. 15

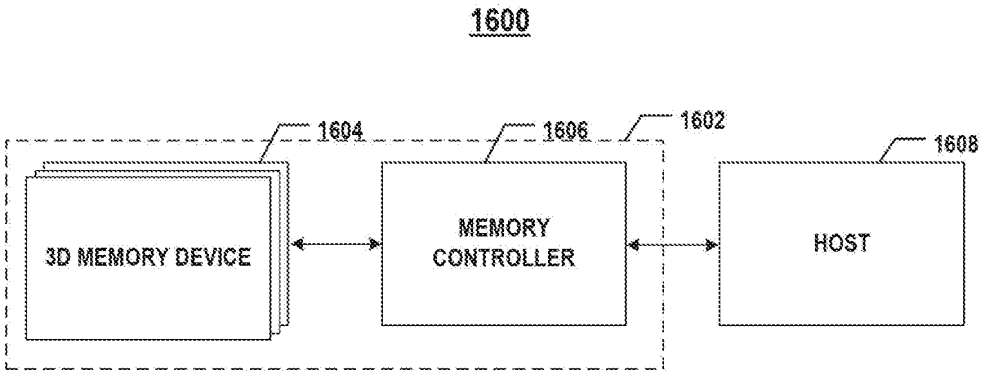


FIG. 16

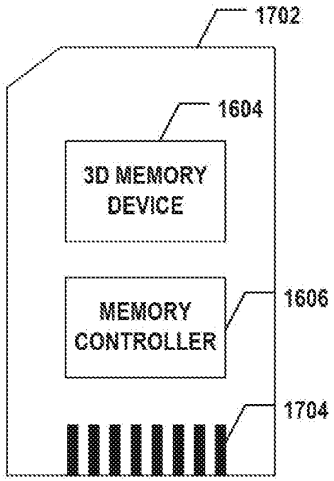


FIG. 17A

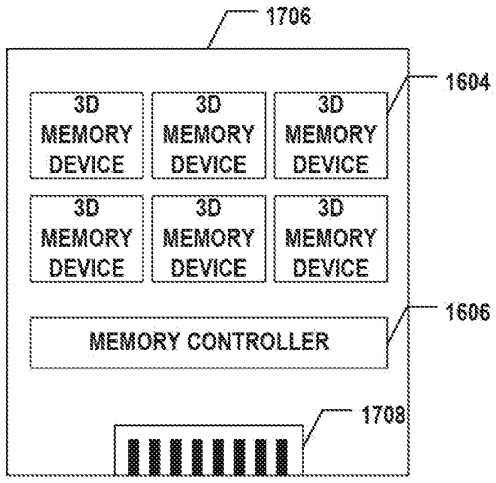


FIG. 17B