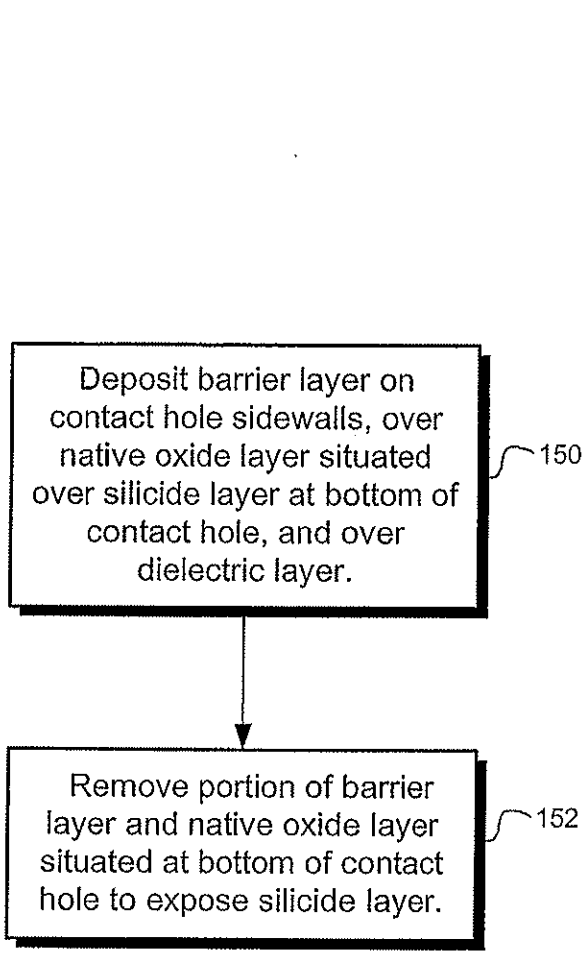

100
Deposit barrier layer on contact hole sidewalls, over native oxide layer situated over silicide layer at bottom of contact hole, and over dielectric layer.
150
Remove portion of barrier layer and native oxide layer situated at bottom of contact hole to expose silicide layer.
152

Fig. 1

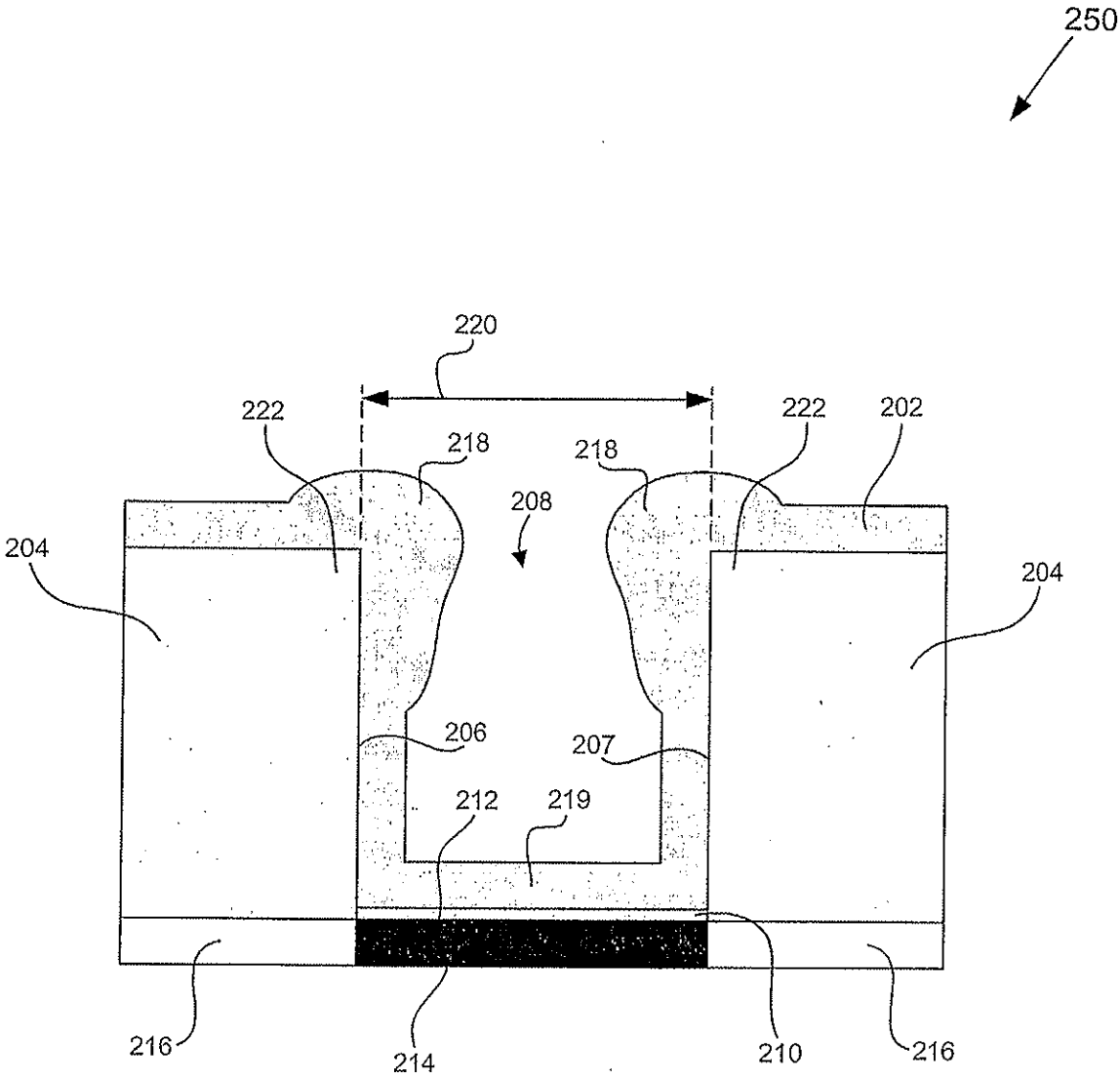

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Fig. 2A

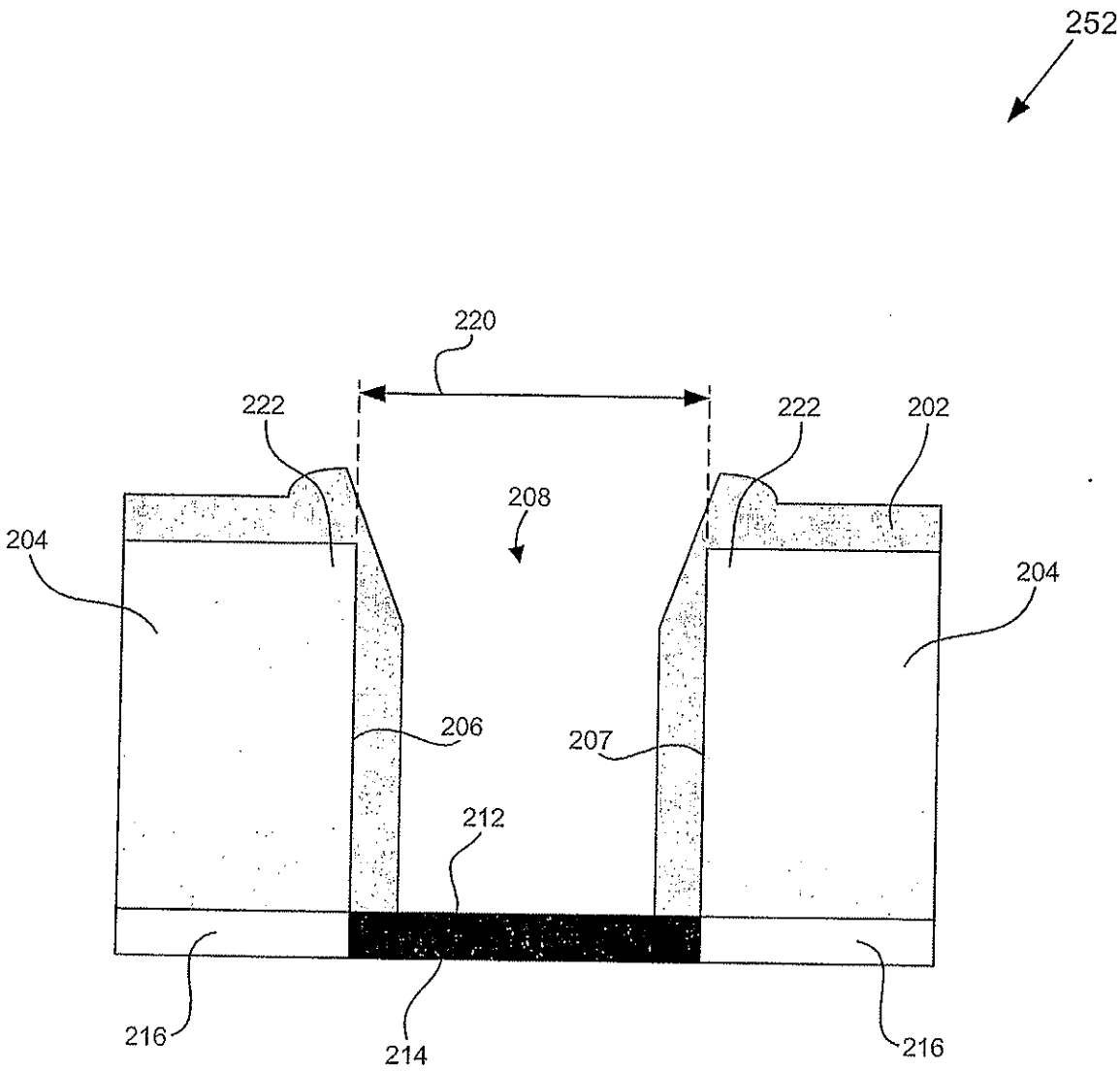


Fig. 2B

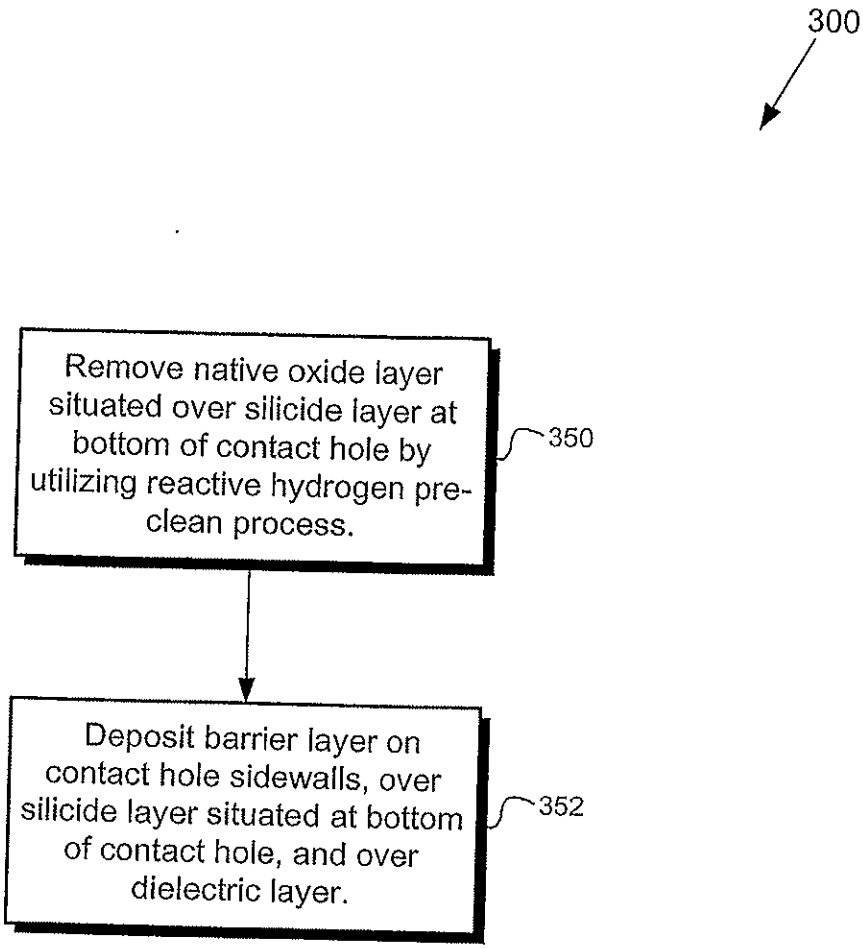

300
Remove native oxide layer situated over silicide layer at bottom of contact hole by utilizing reactive hydrogen pre-clean process.
350
Deposit barrier layer on contact hole sidewalls, over silicide layer situated at bottom of contact hole, and over dielectric layer.
352

Fig. 3

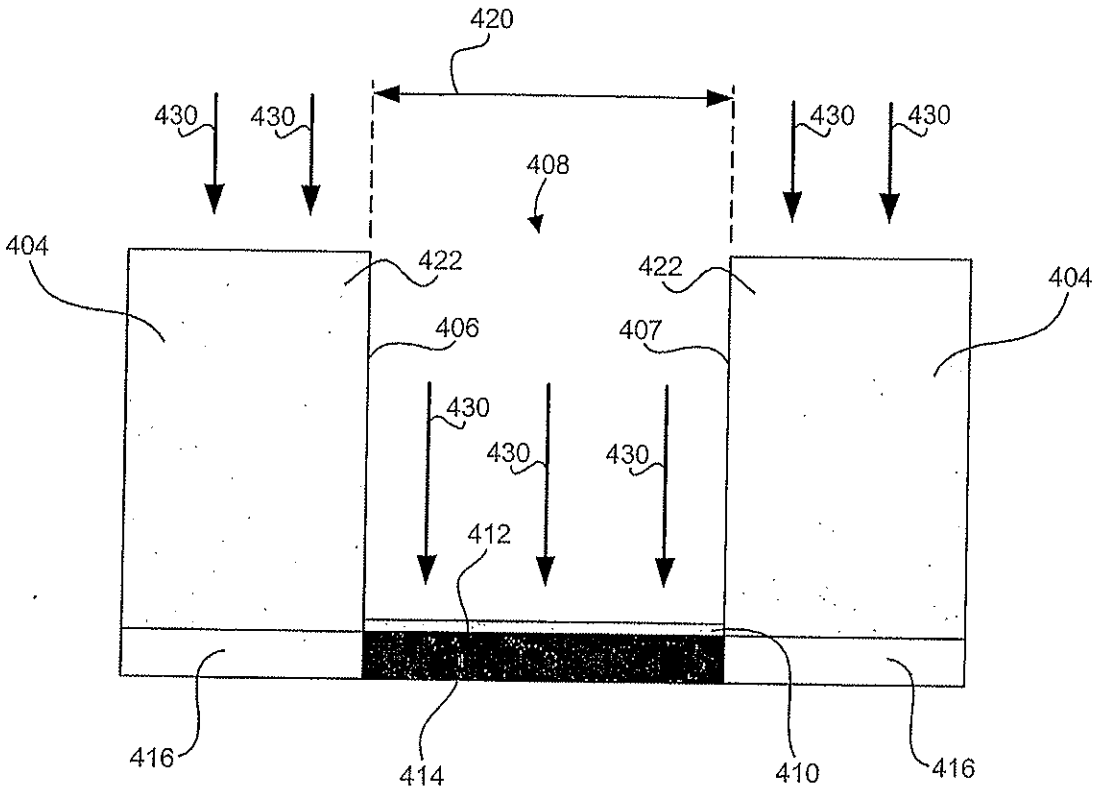

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Fig. 4A

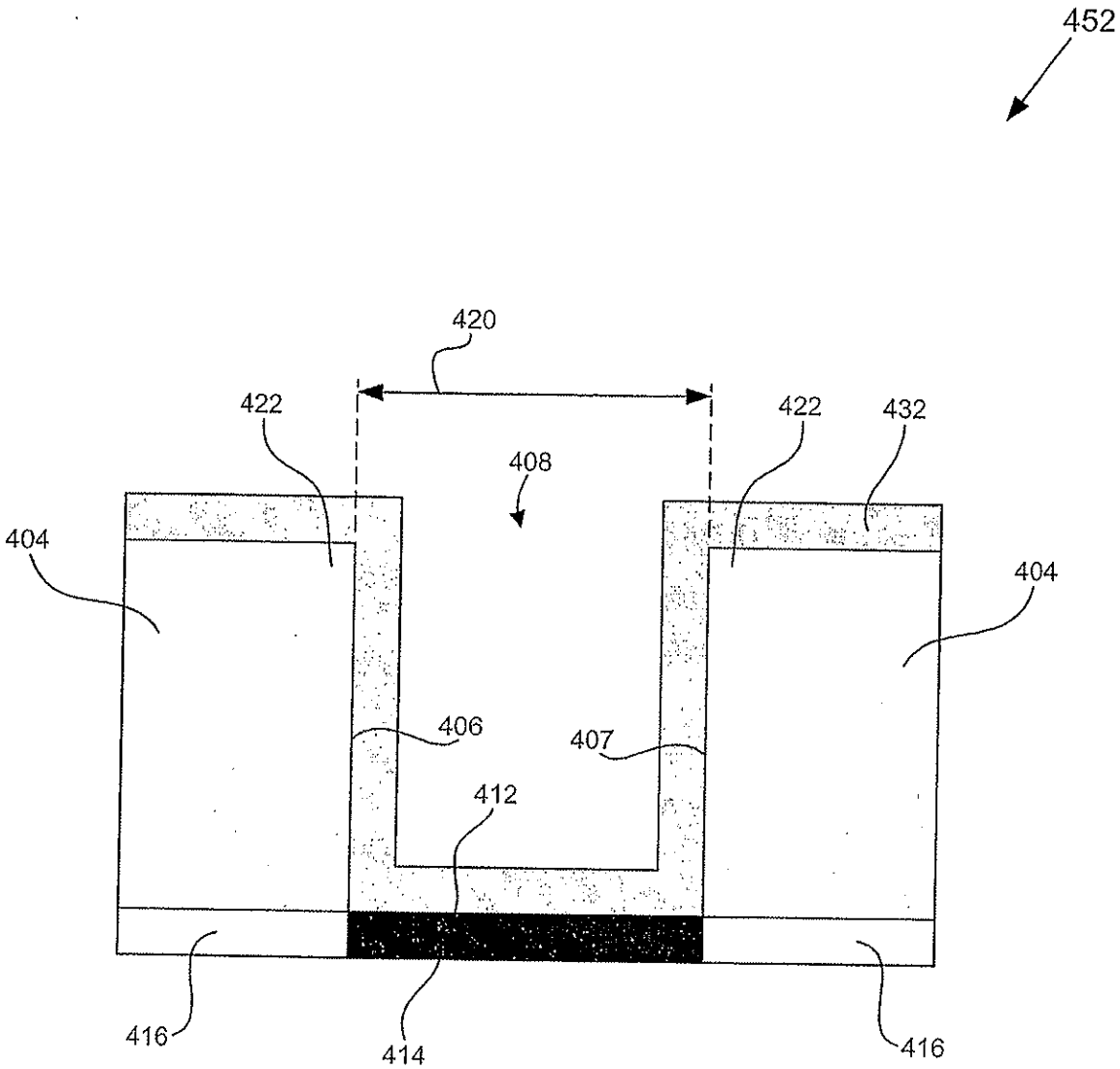


Fig. 4B

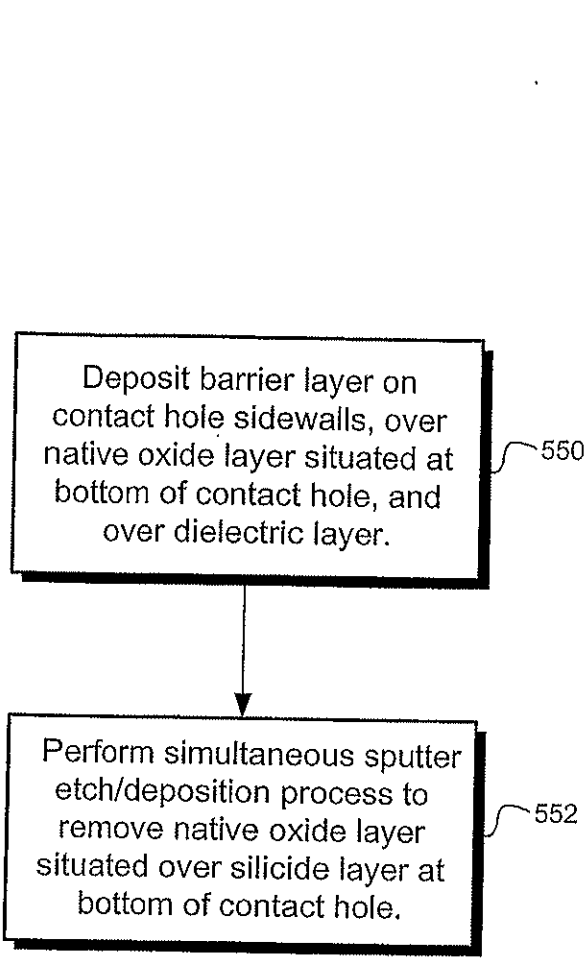

500
Deposit barrier layer on contact hole sidewalls, over native oxide layer situated at bottom of contact hole, and over dielectric layer.
550
Perform simultaneous sputter etch/deposition process to remove native oxide layer situated over silicide layer at bottom of contact hole.
552

Fig. 5

WO 2005/048342 PCT/US2004/033417

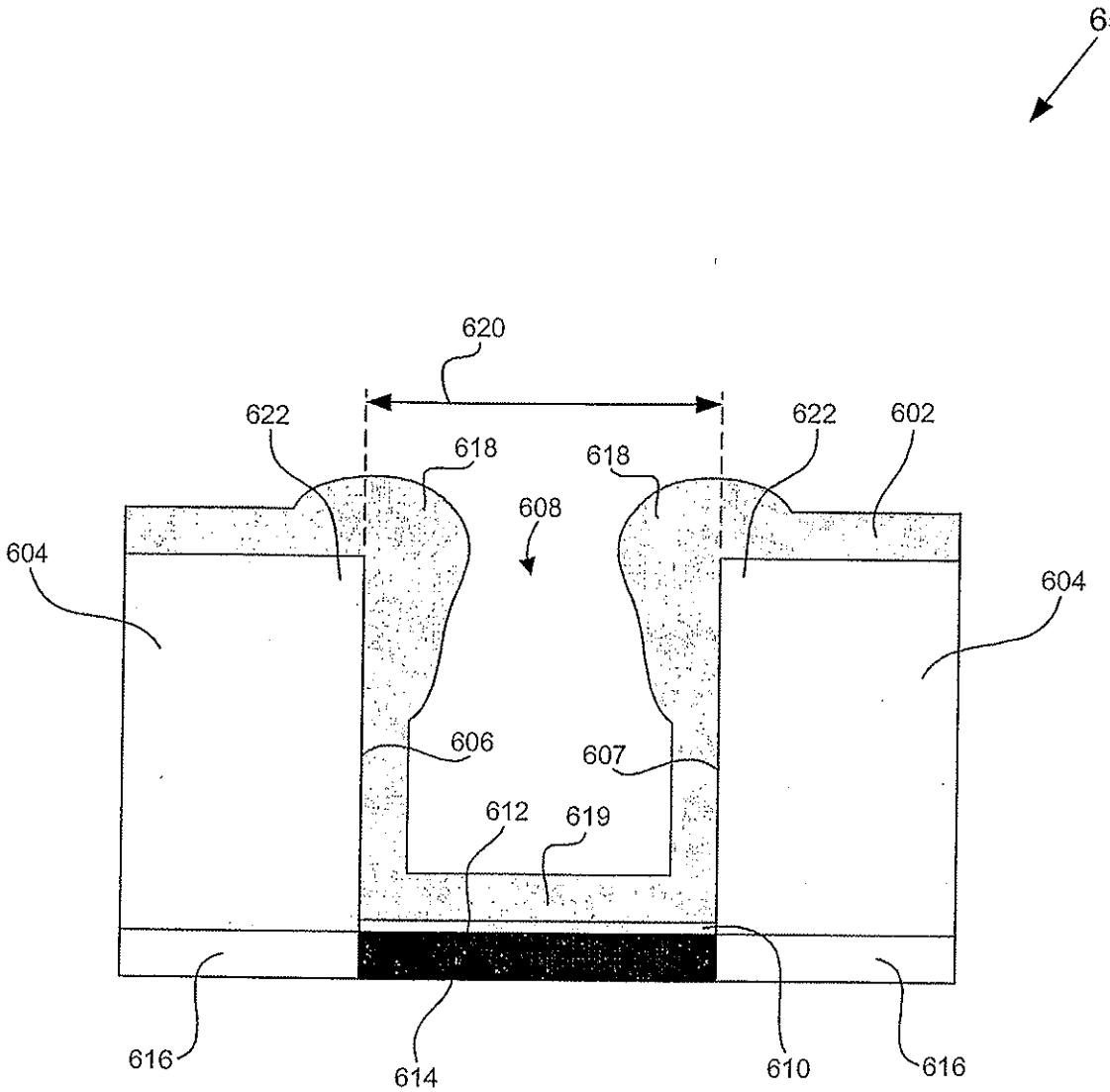


Fig. 6A

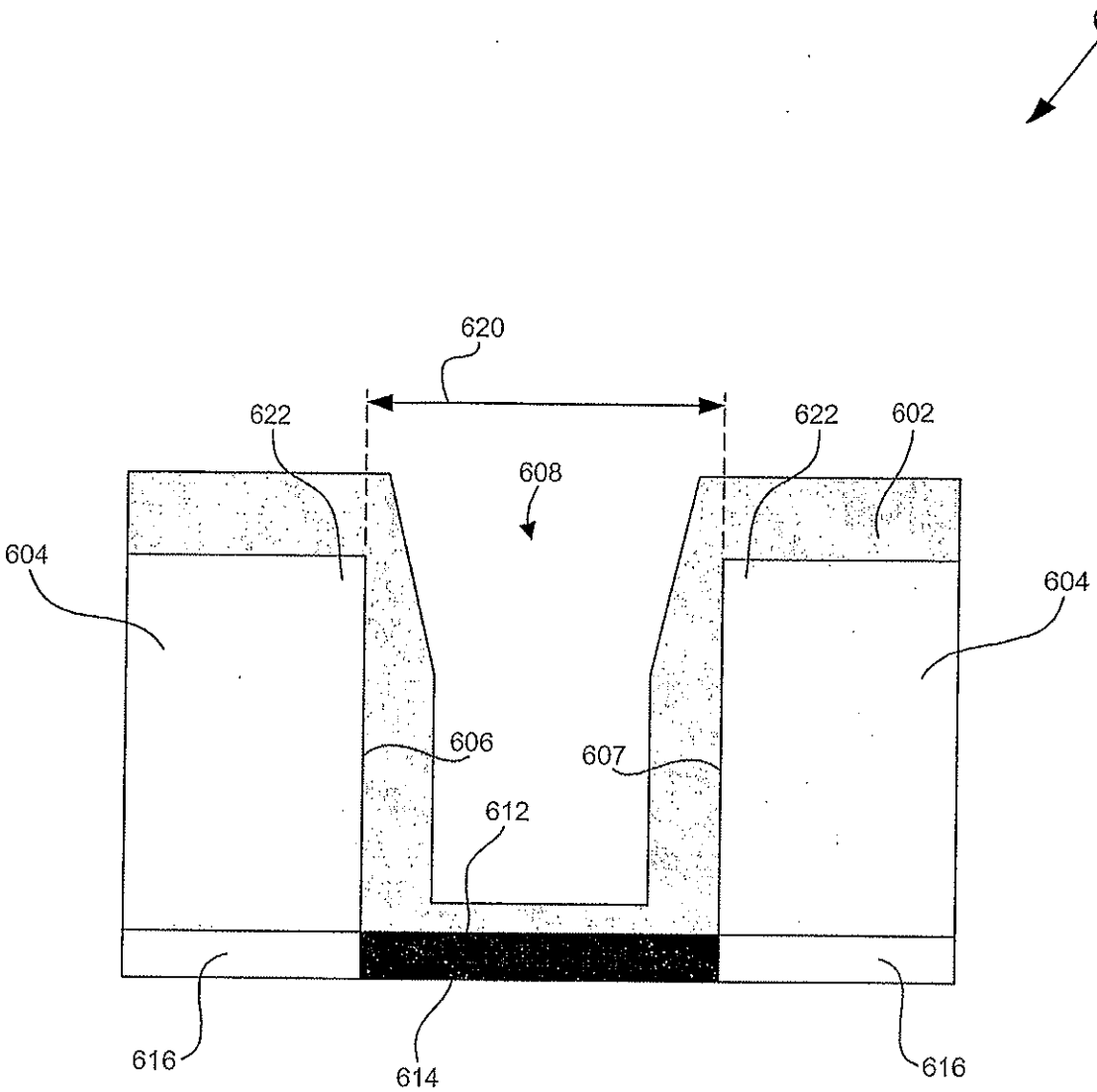


Fig. 6B