

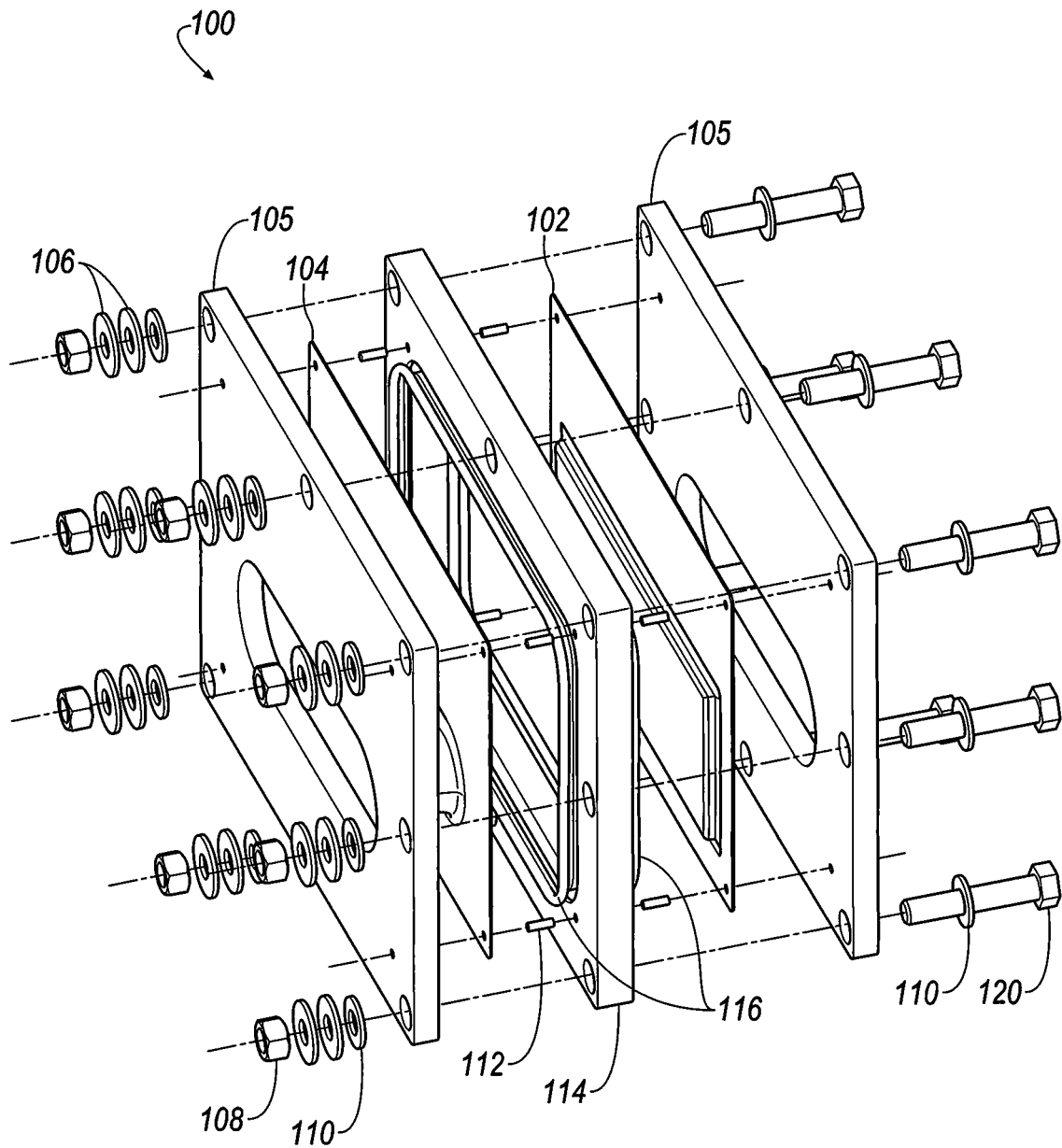


FIG. 1

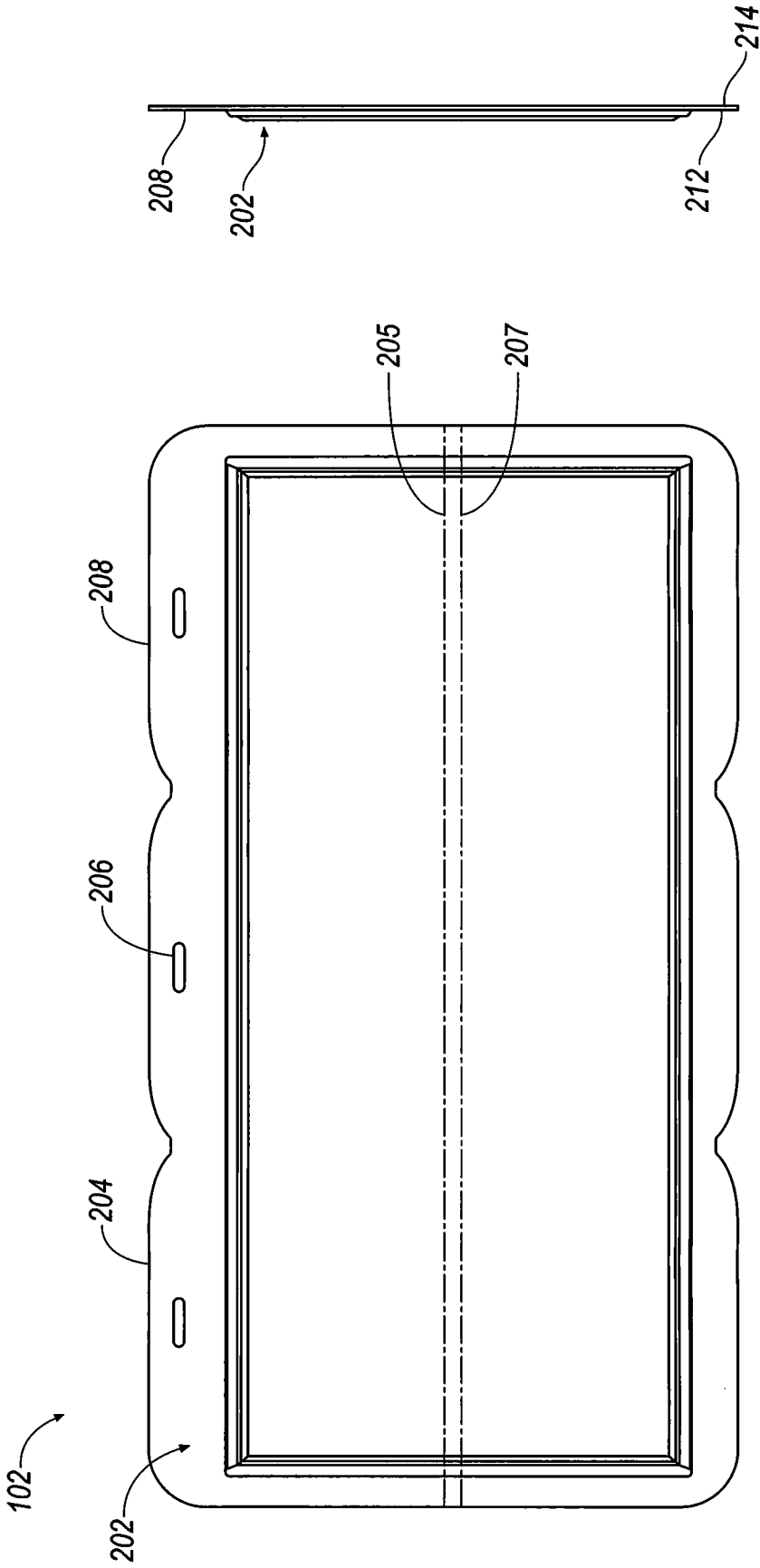
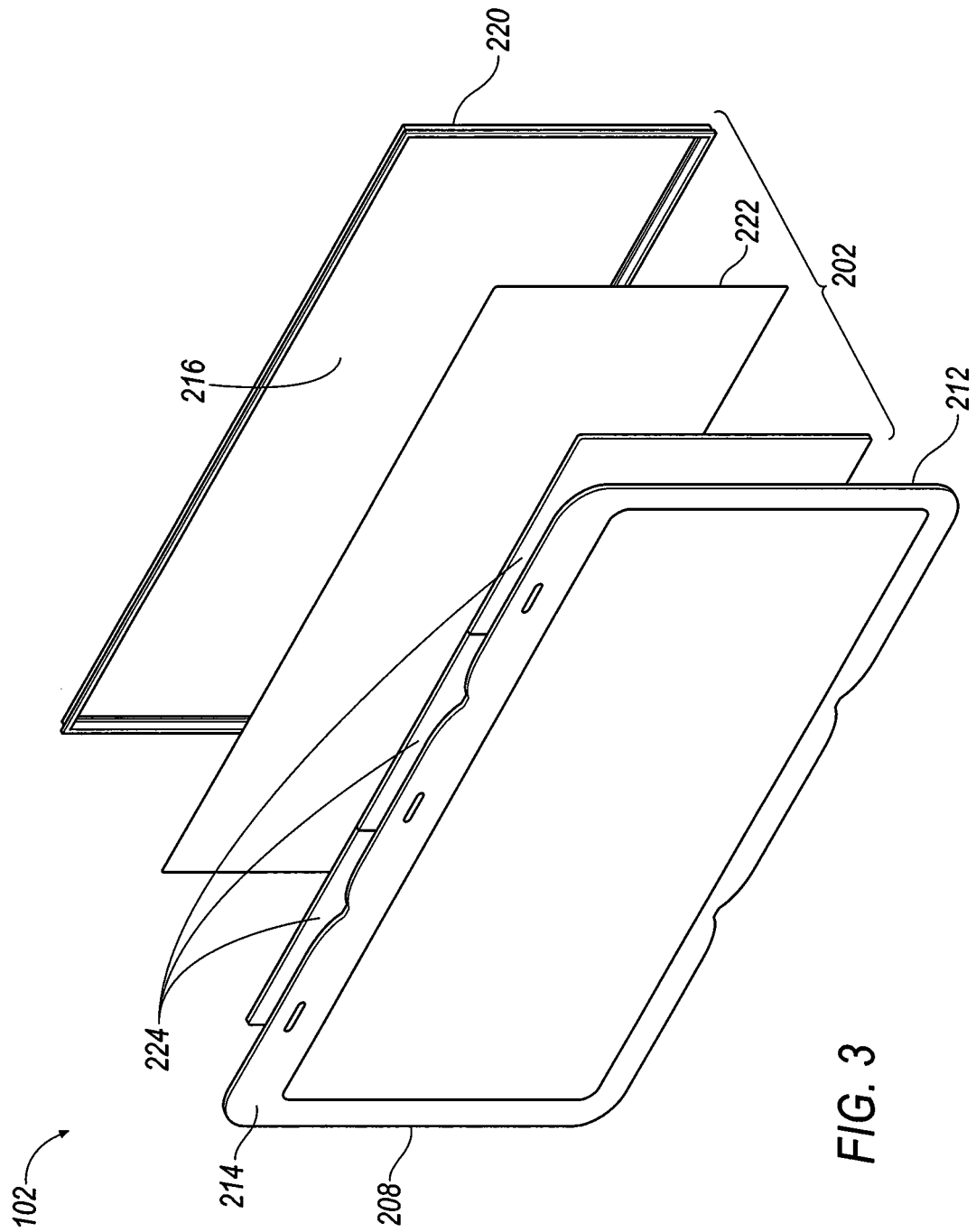


FIG. 2A

FIG. 2B



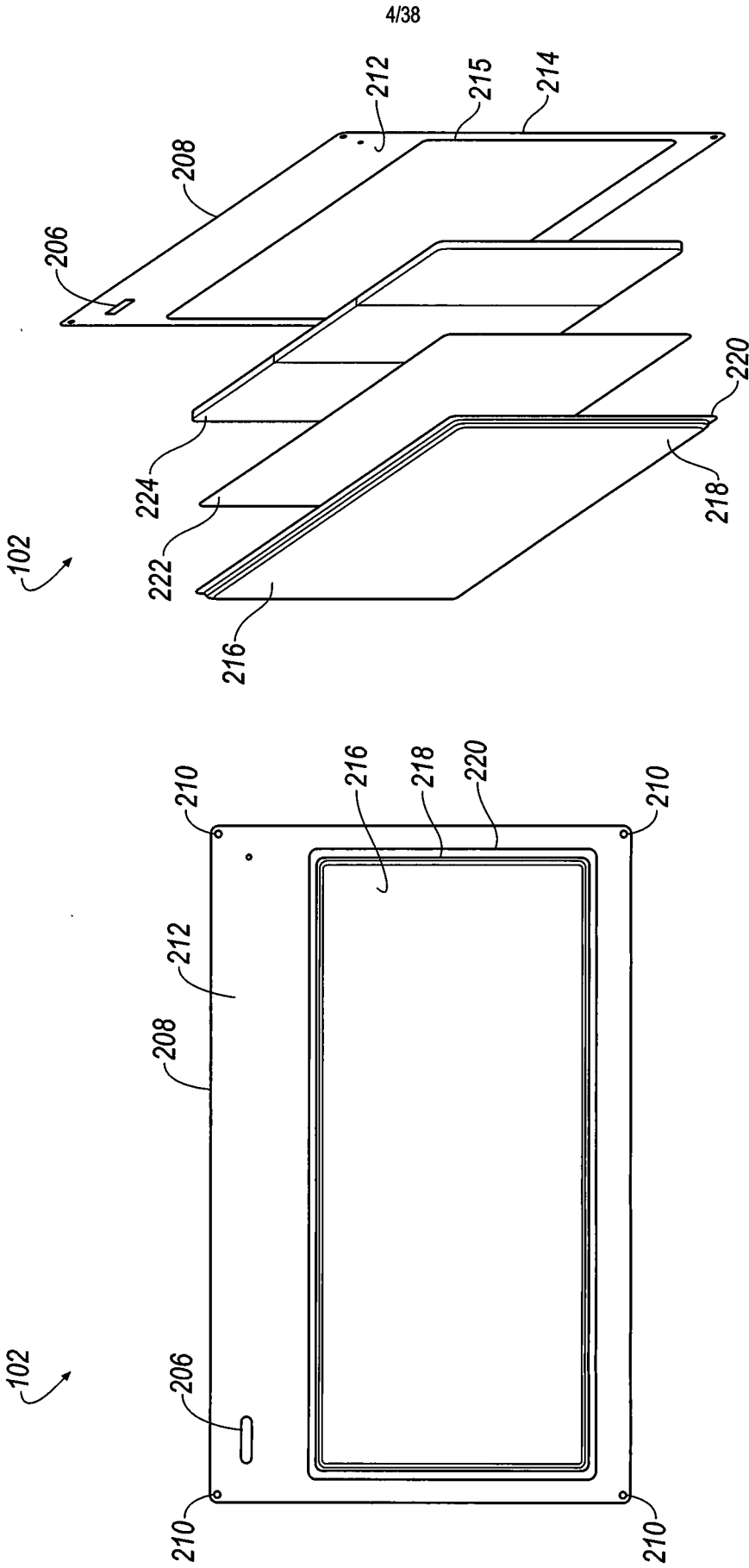


FIG. 4A

FIG. 4B

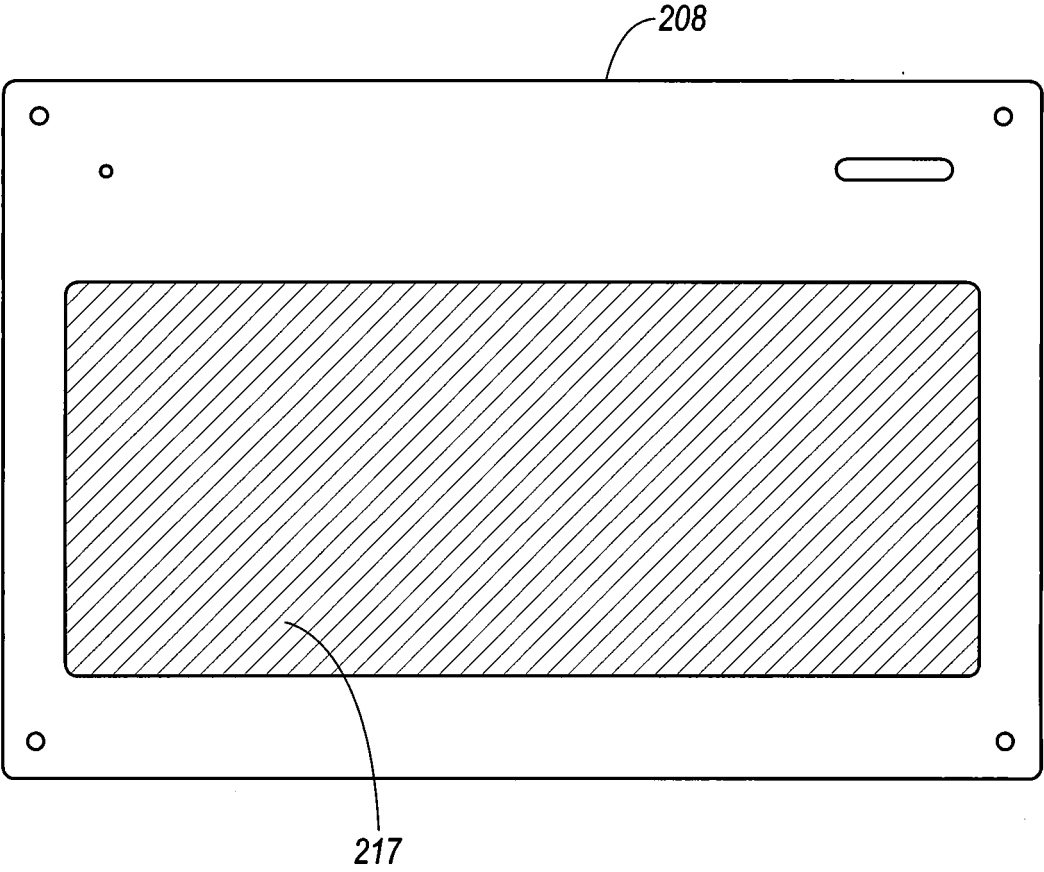


FIG. 5

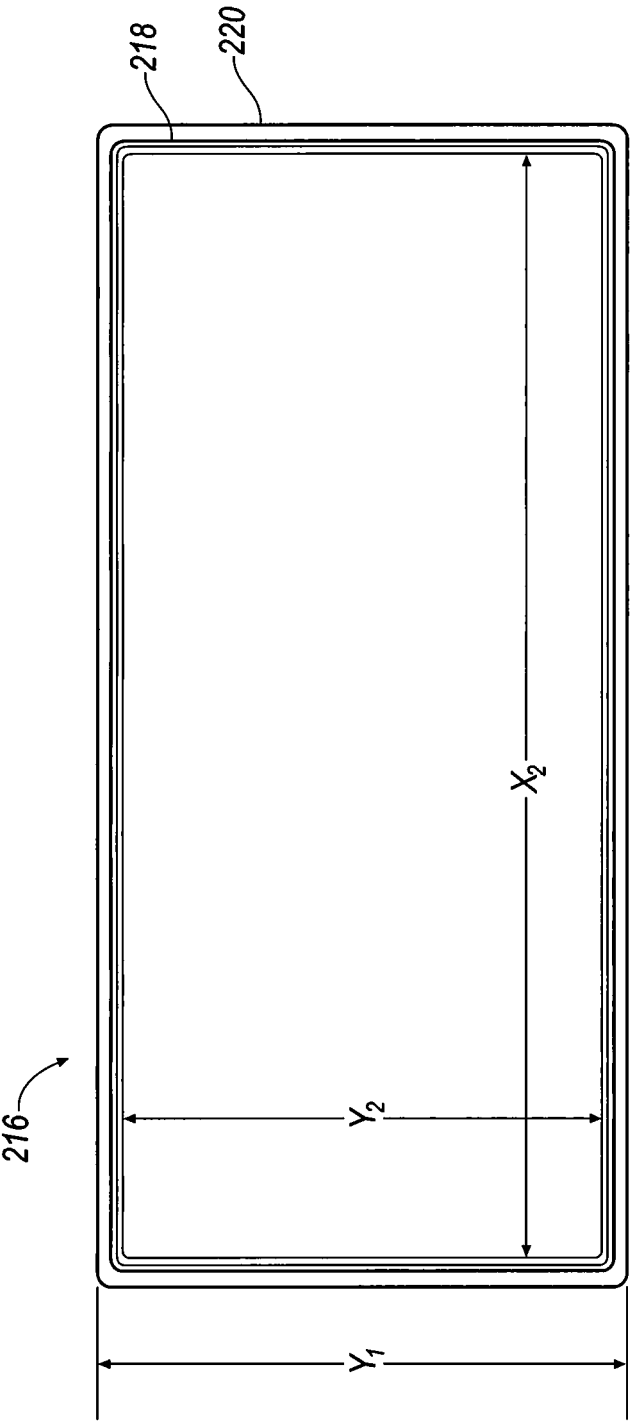


FIG. 6A

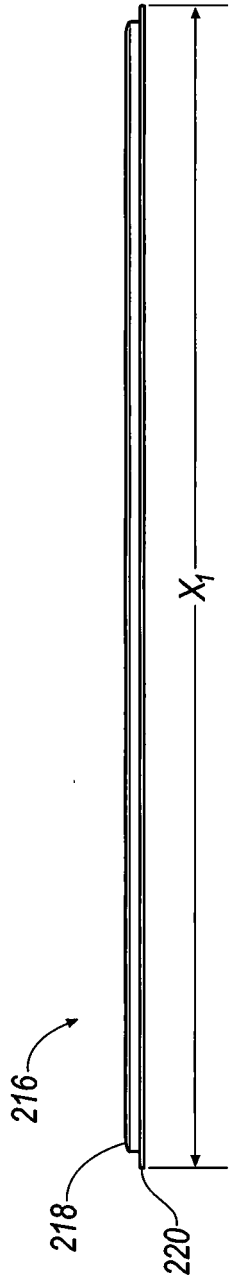
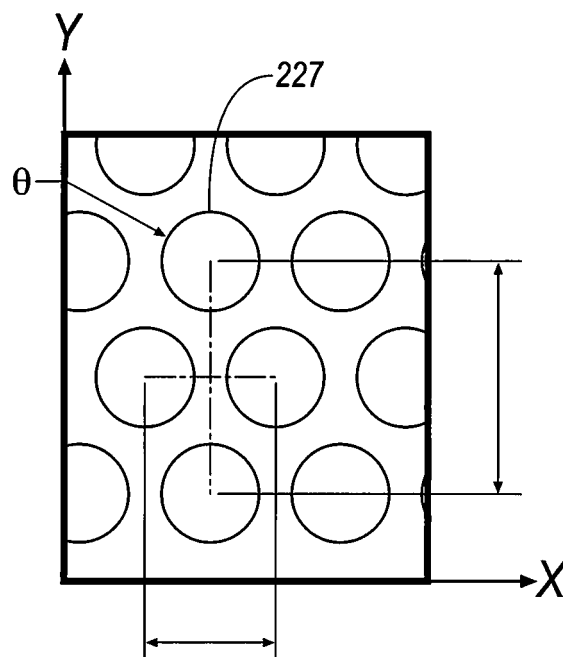
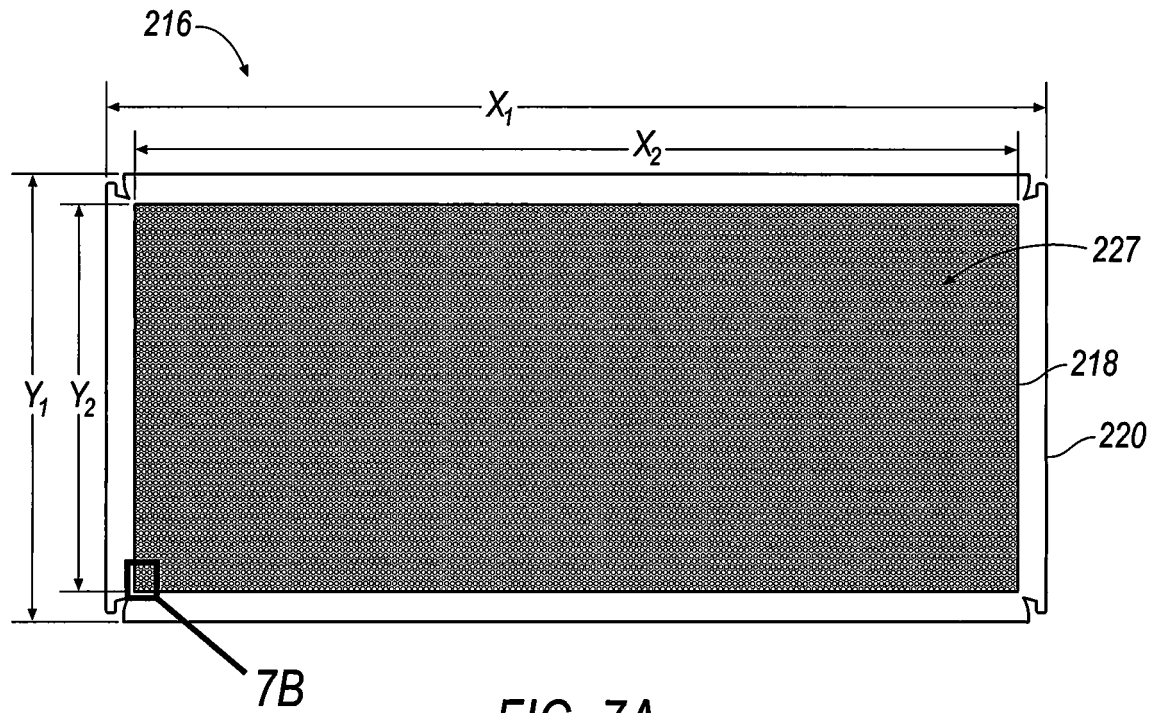


FIG. 6B

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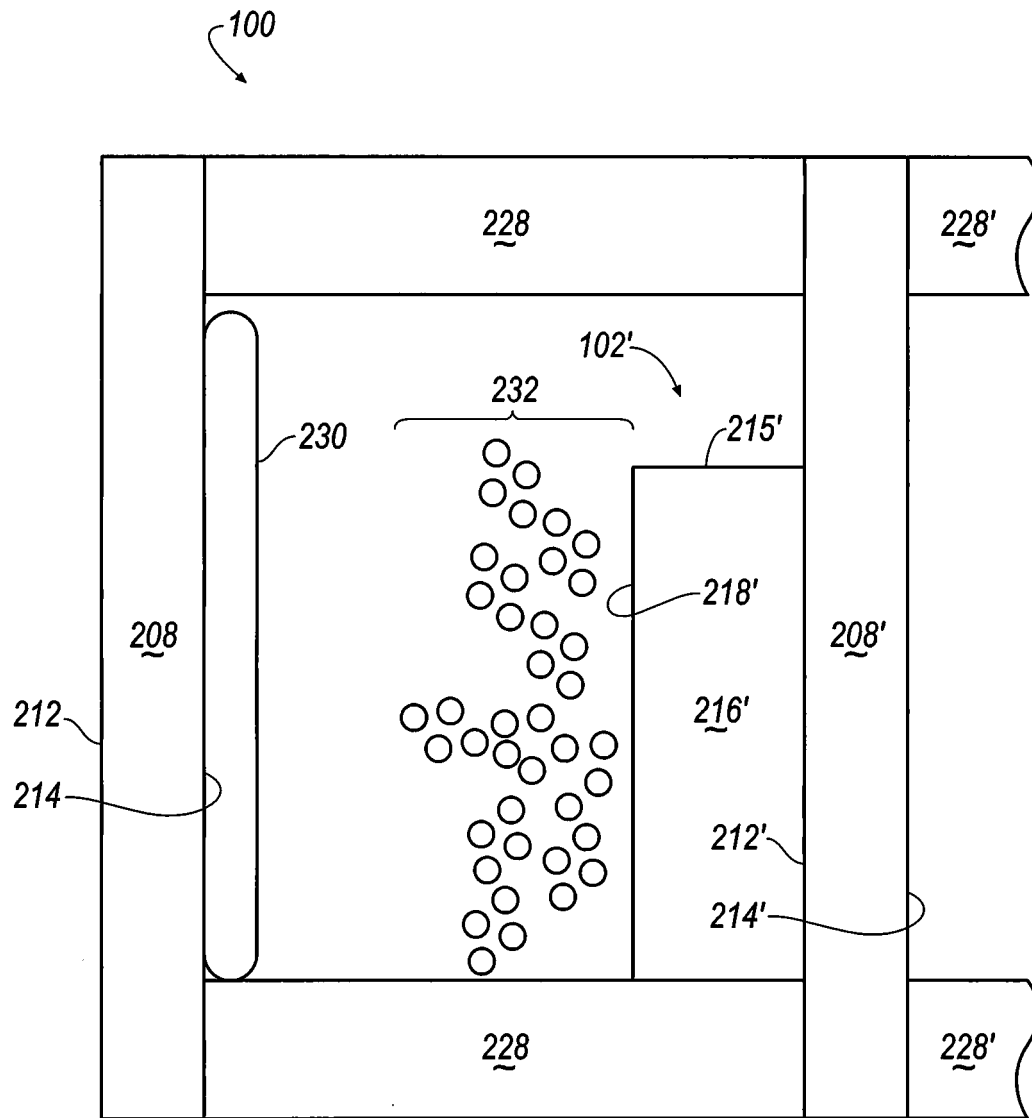
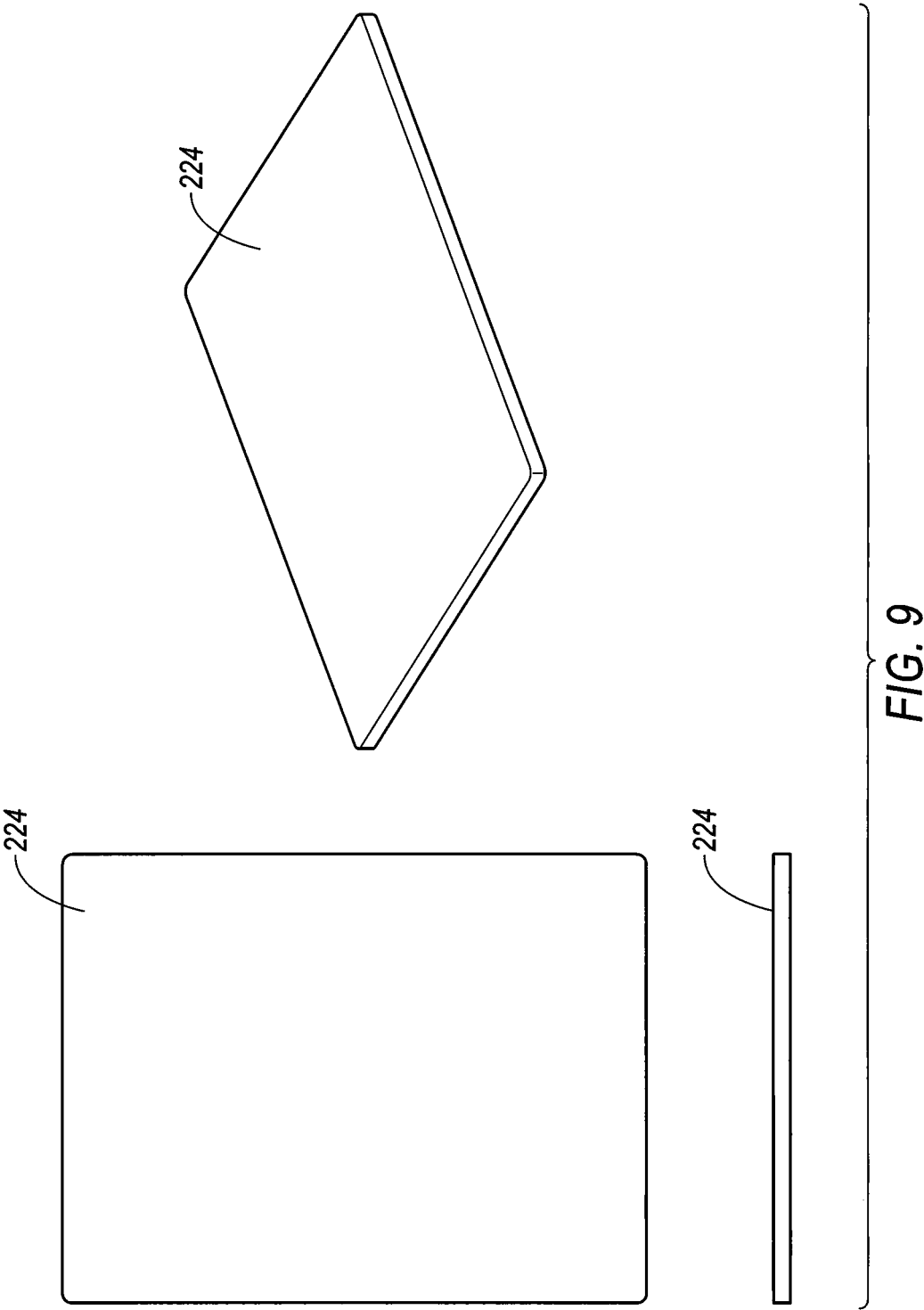


FIG. 8



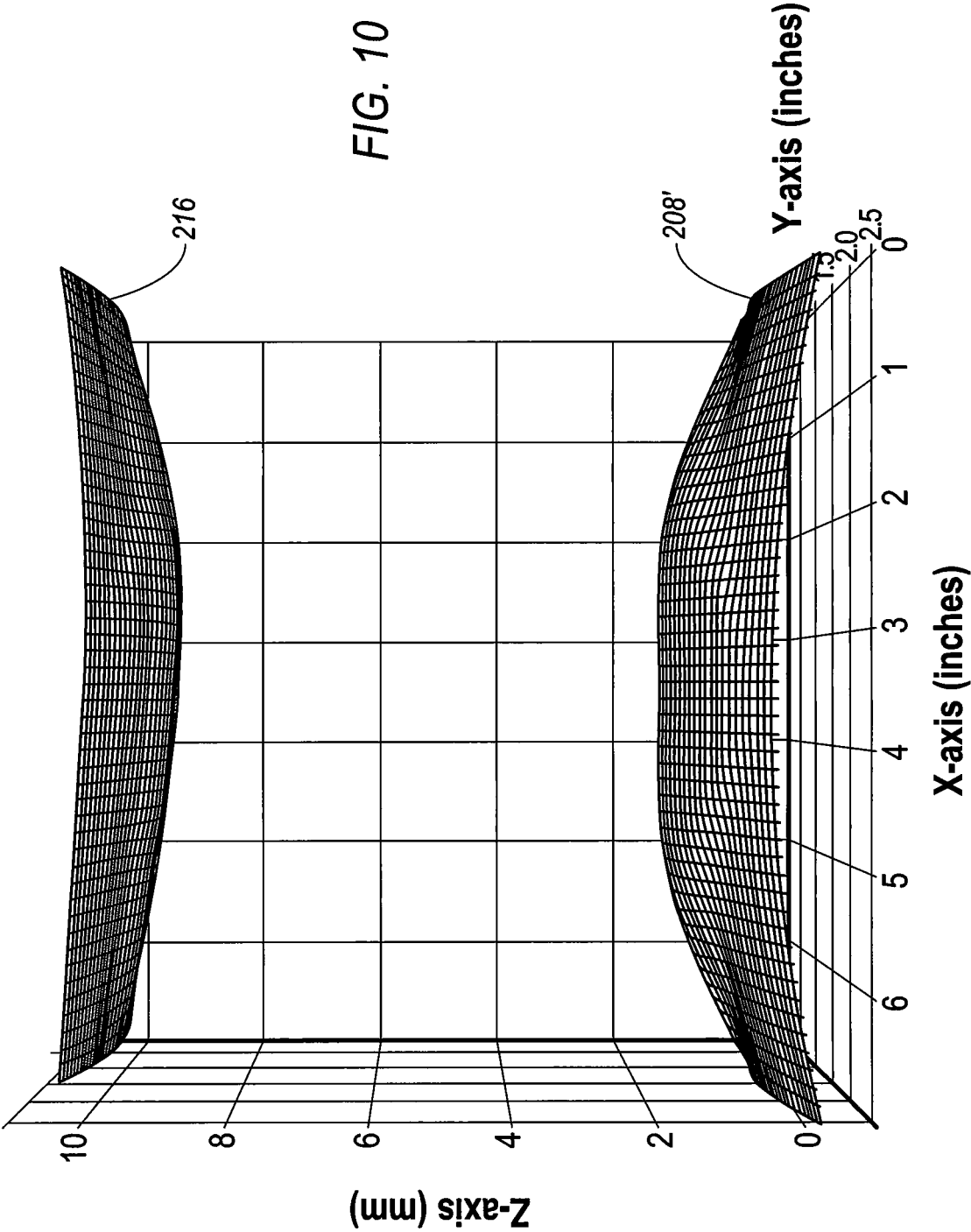
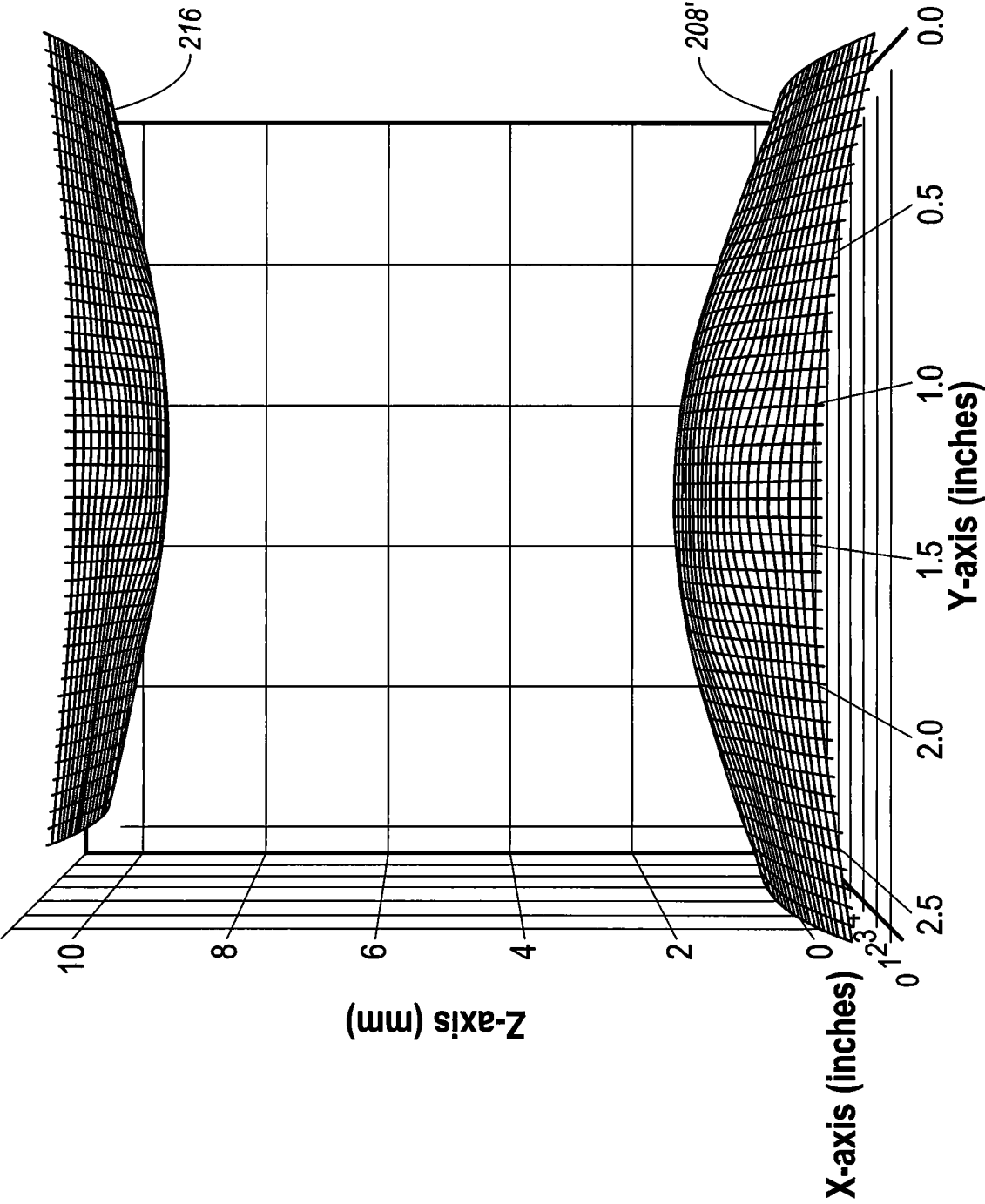


FIG. 11



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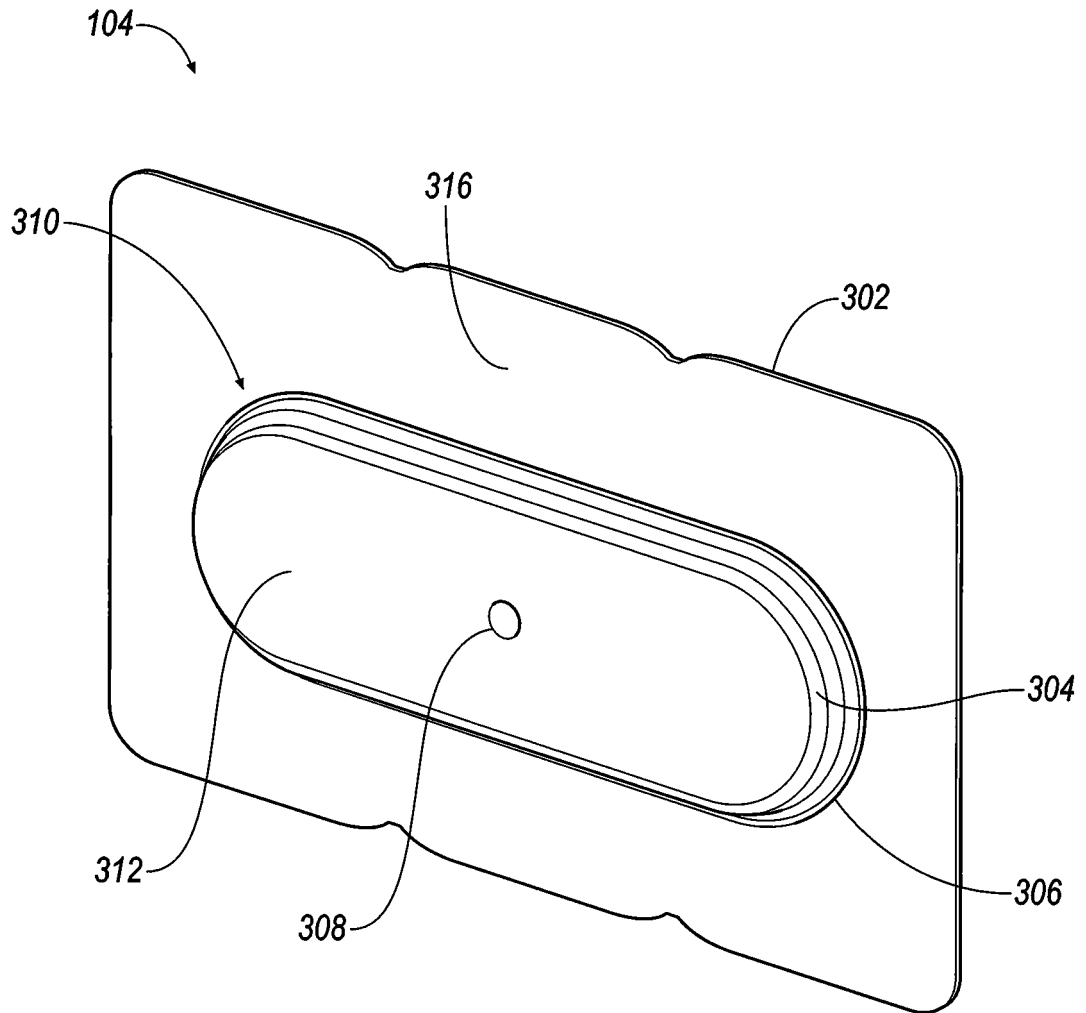
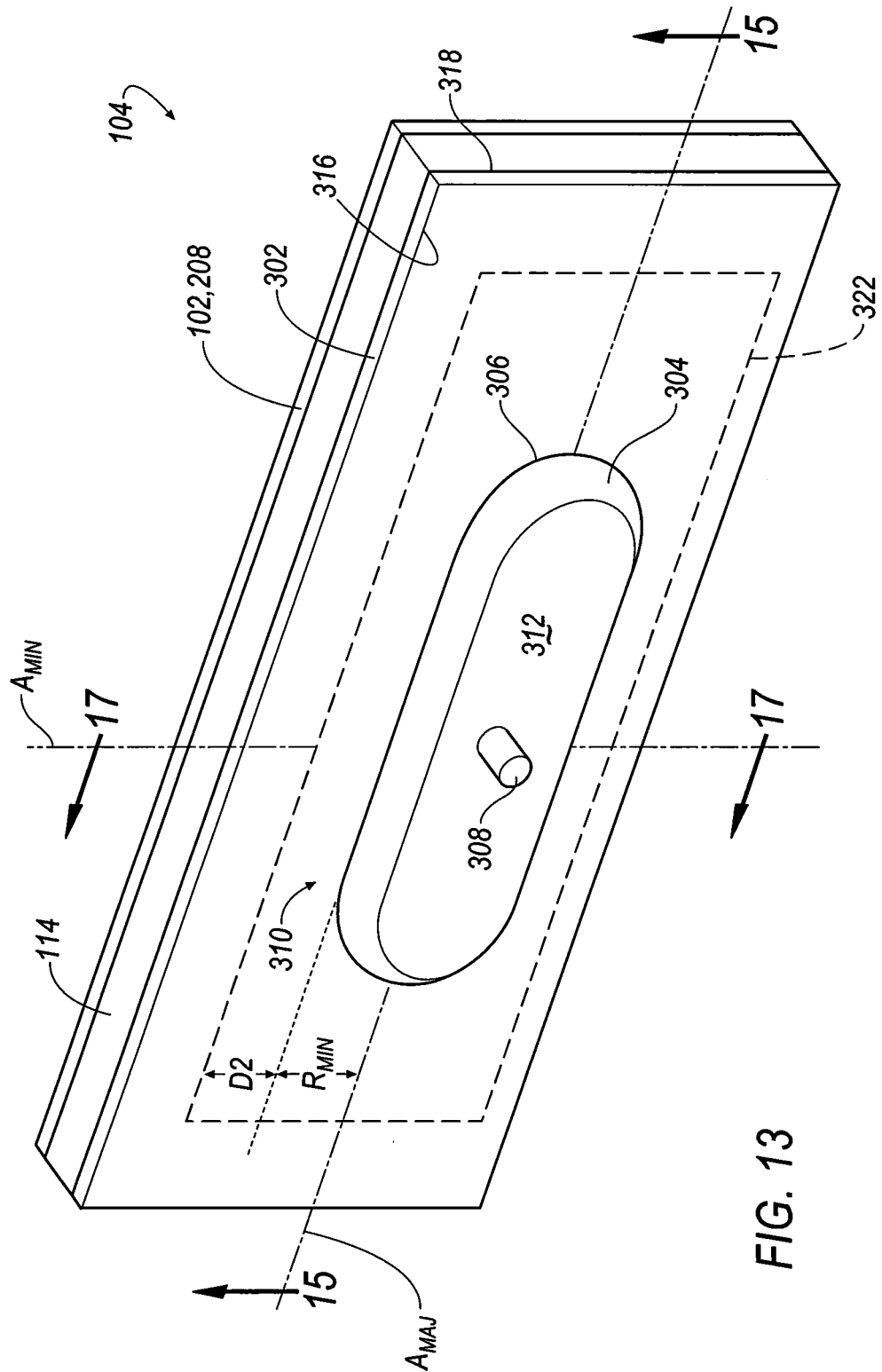


FIG. 12



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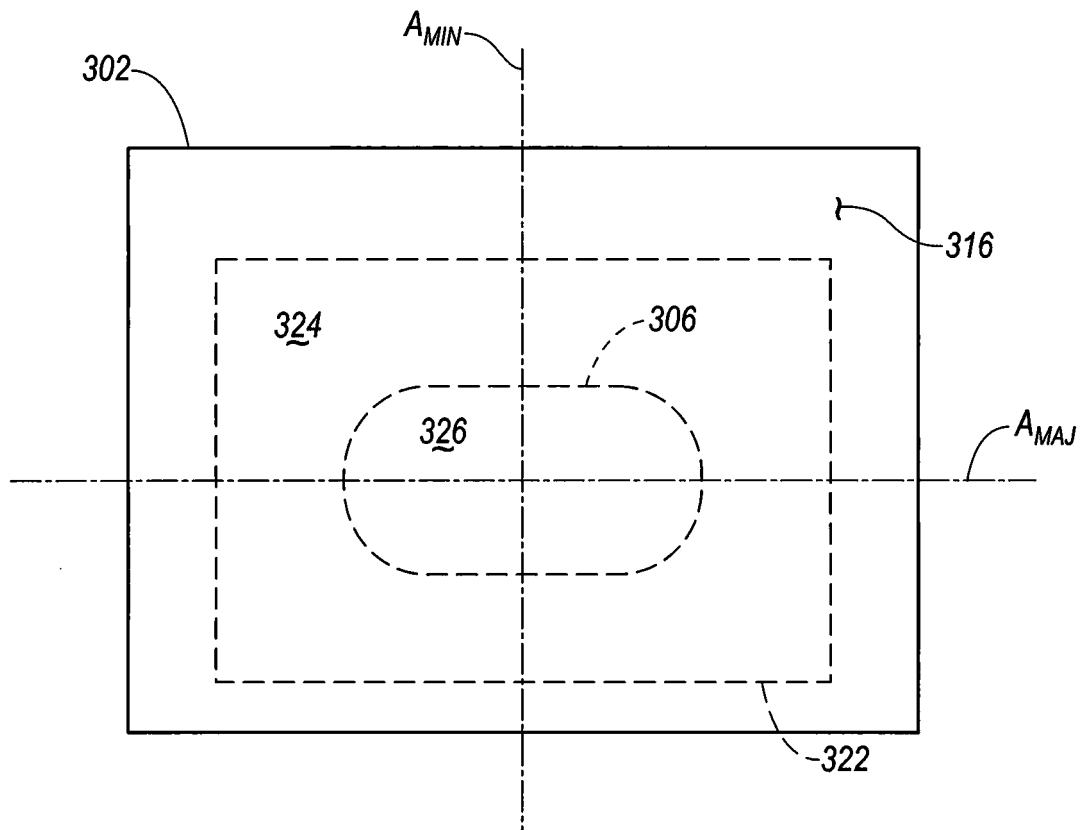


FIG. 14

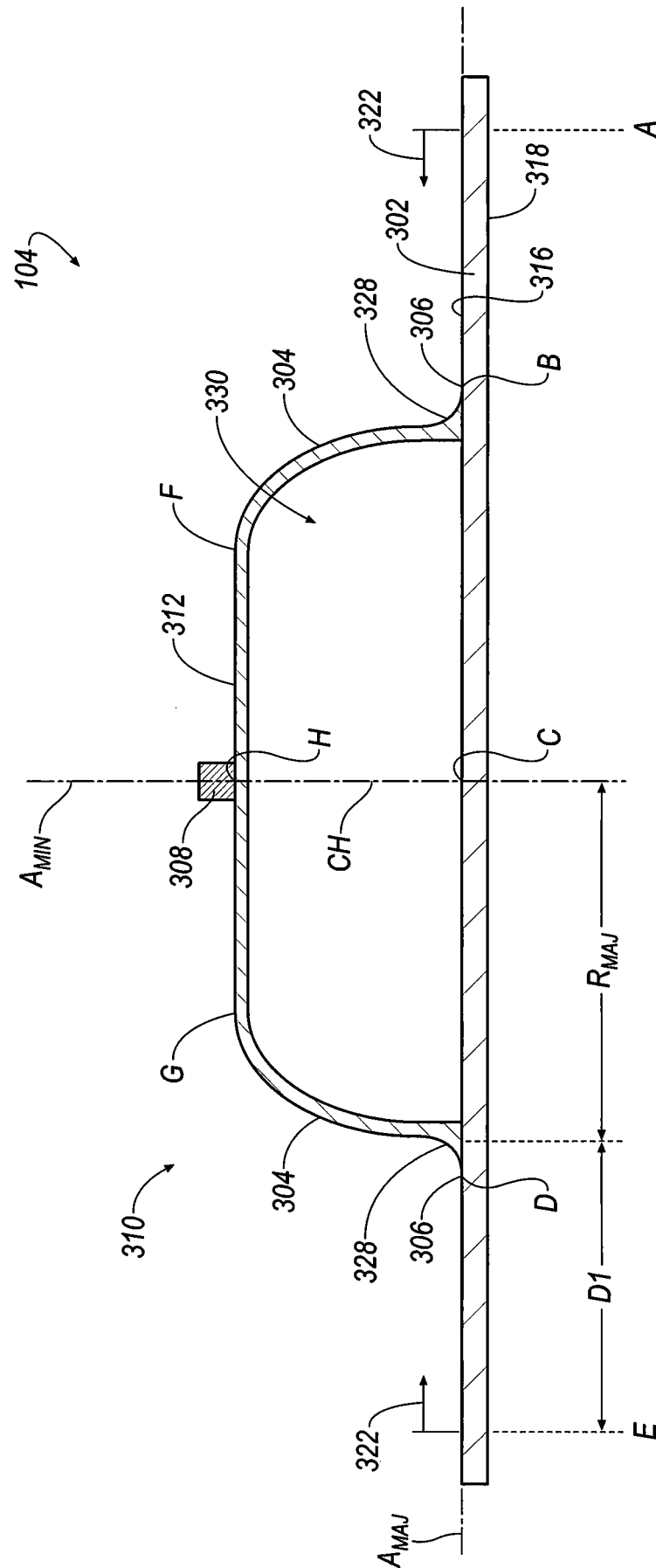


FIG. 15

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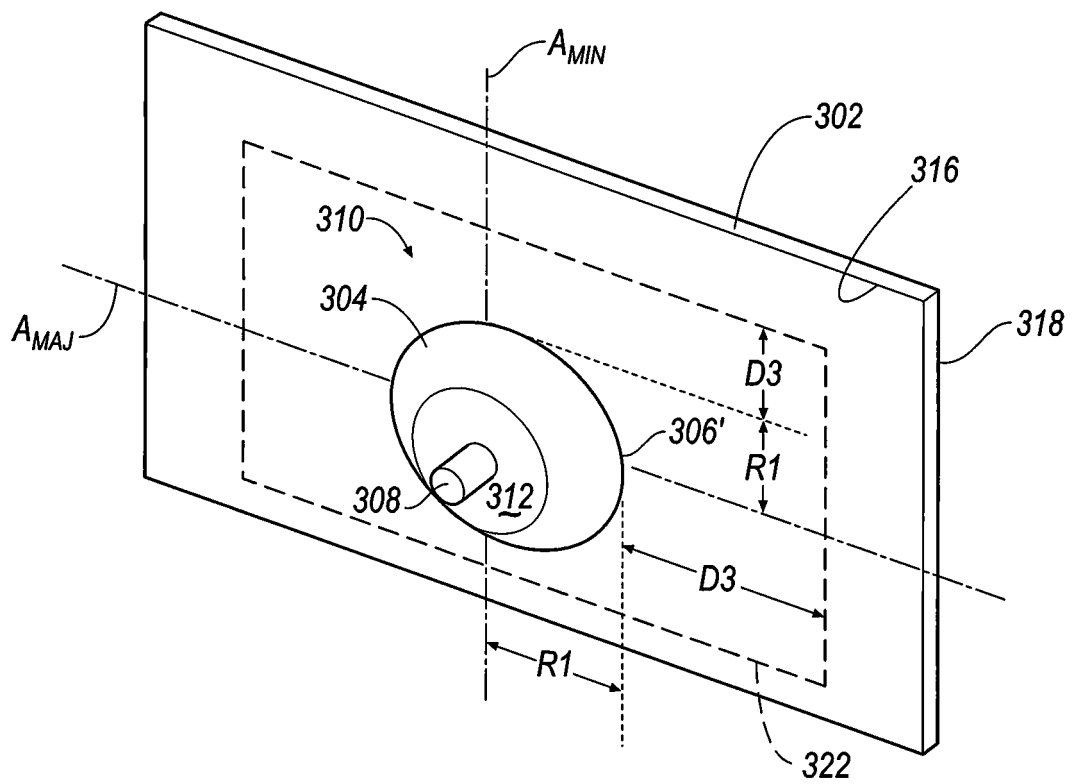


FIG. 16

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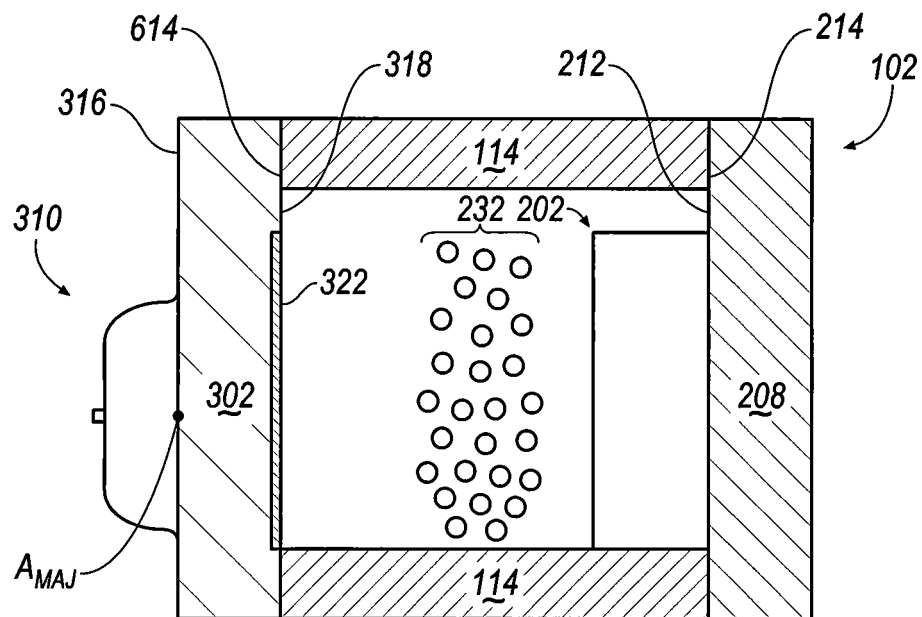


FIG. 17

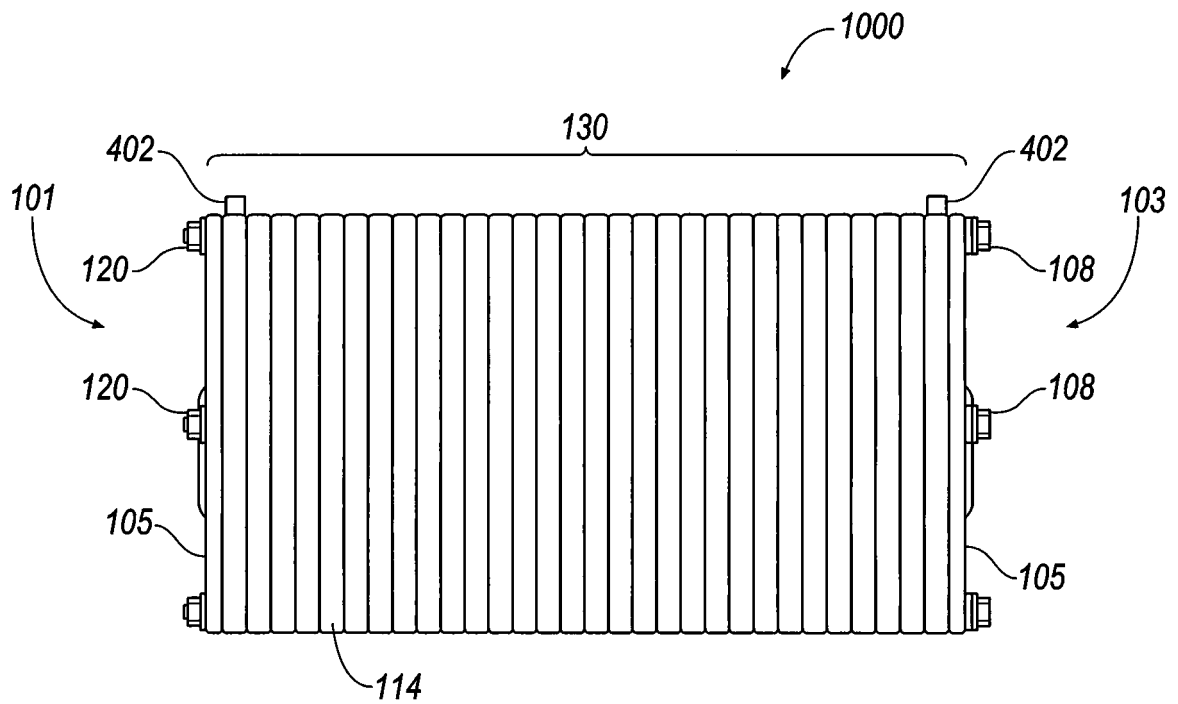


FIG. 18

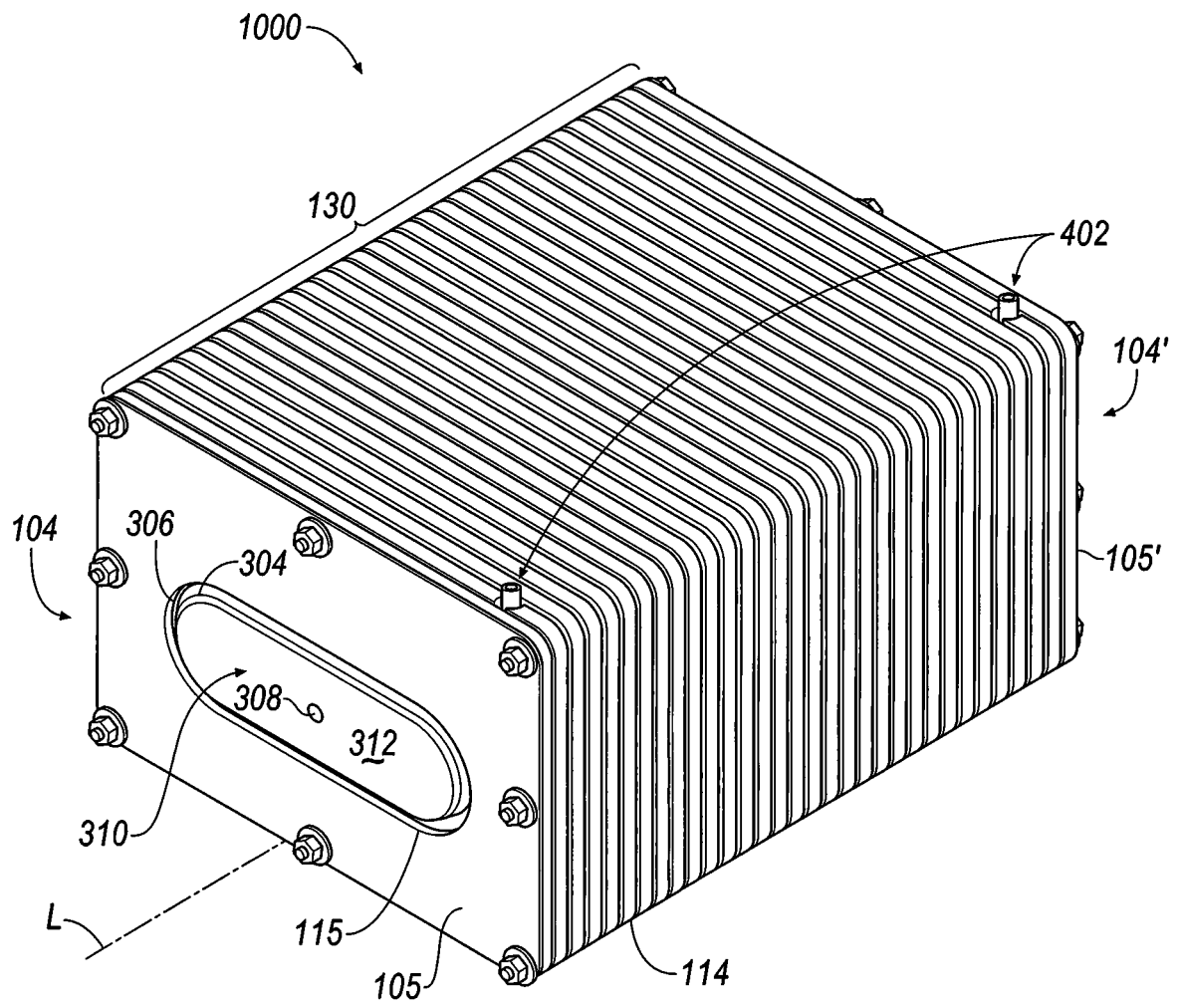
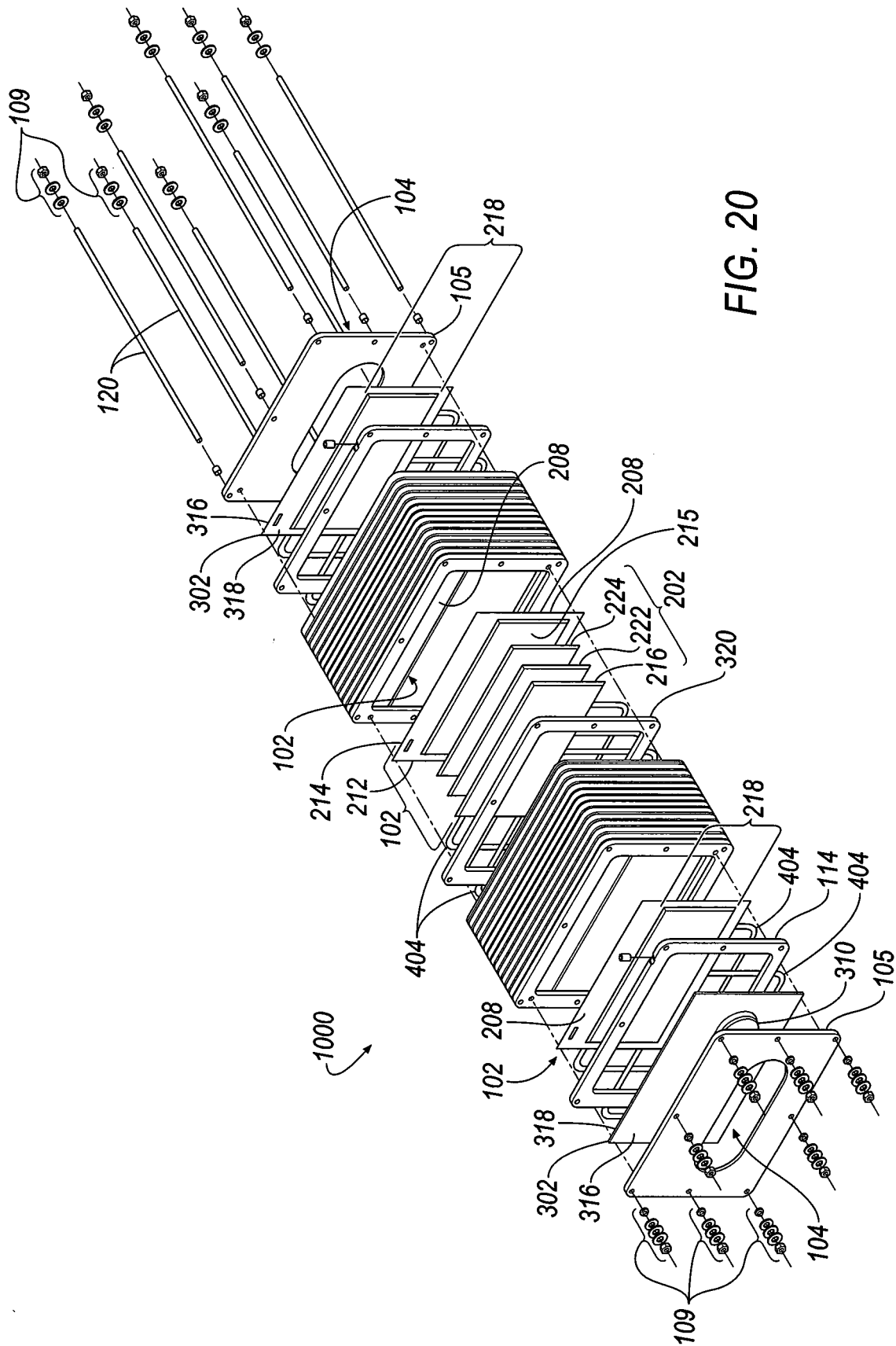
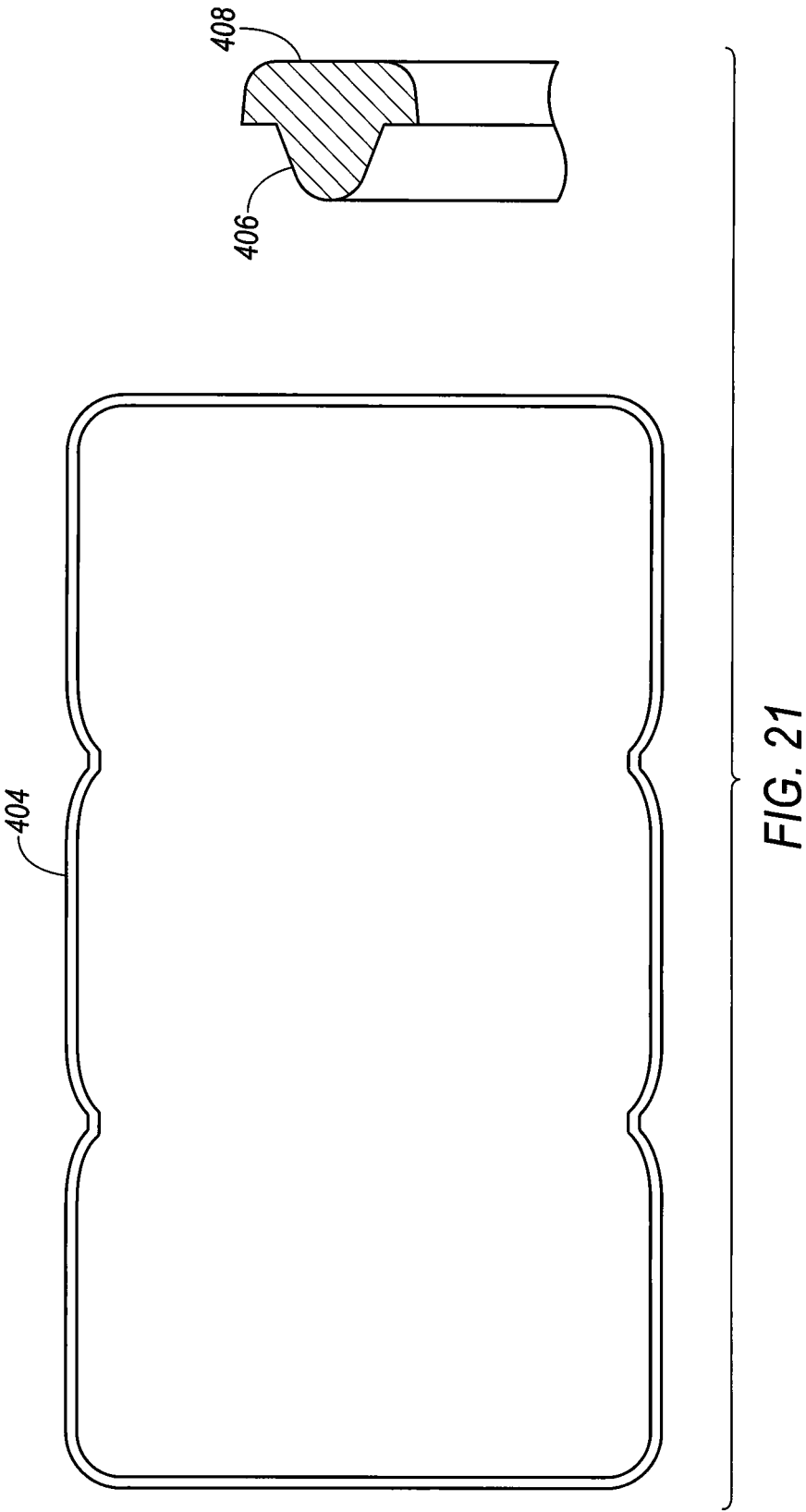


FIG. 19



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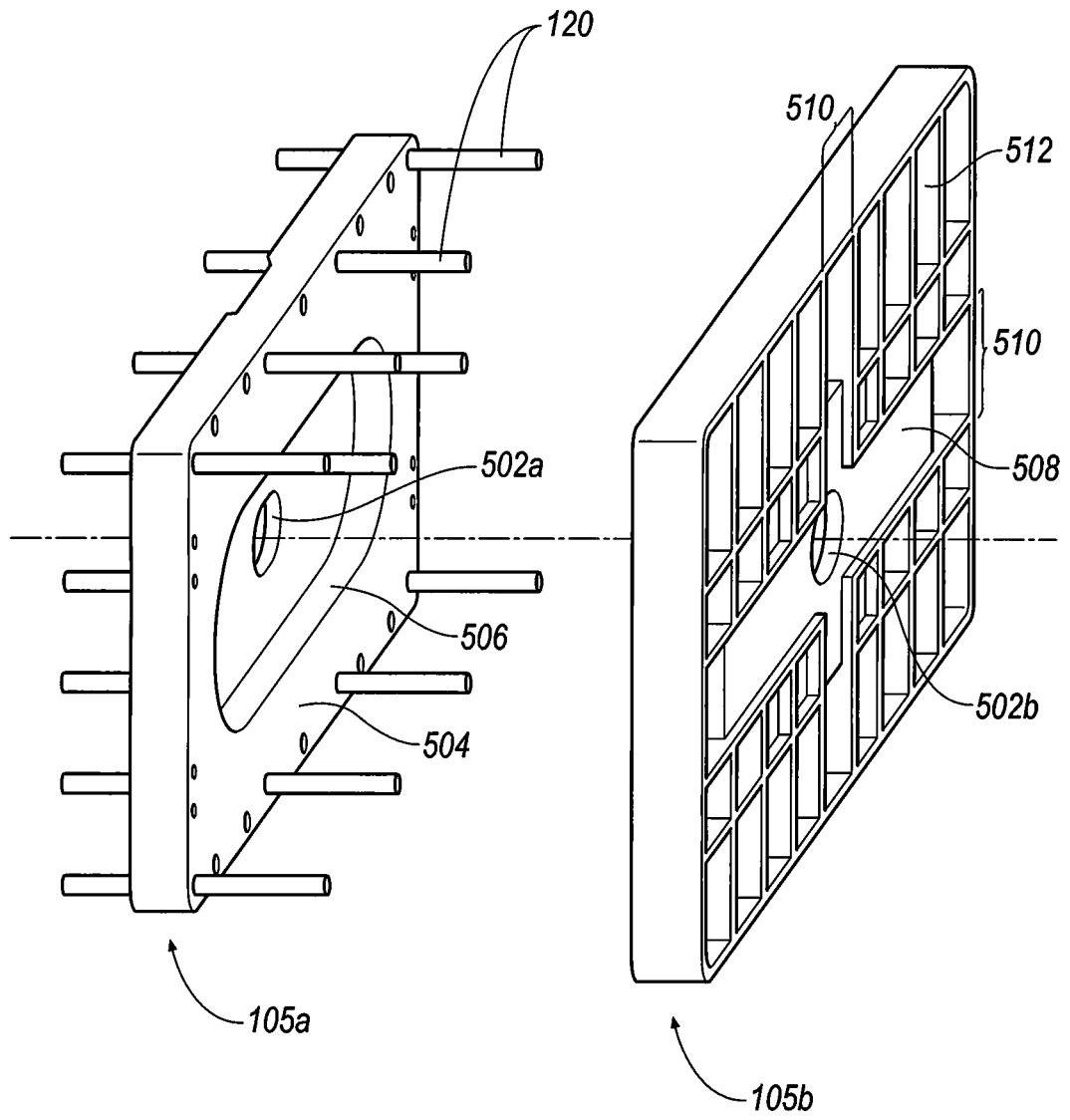


FIG. 22

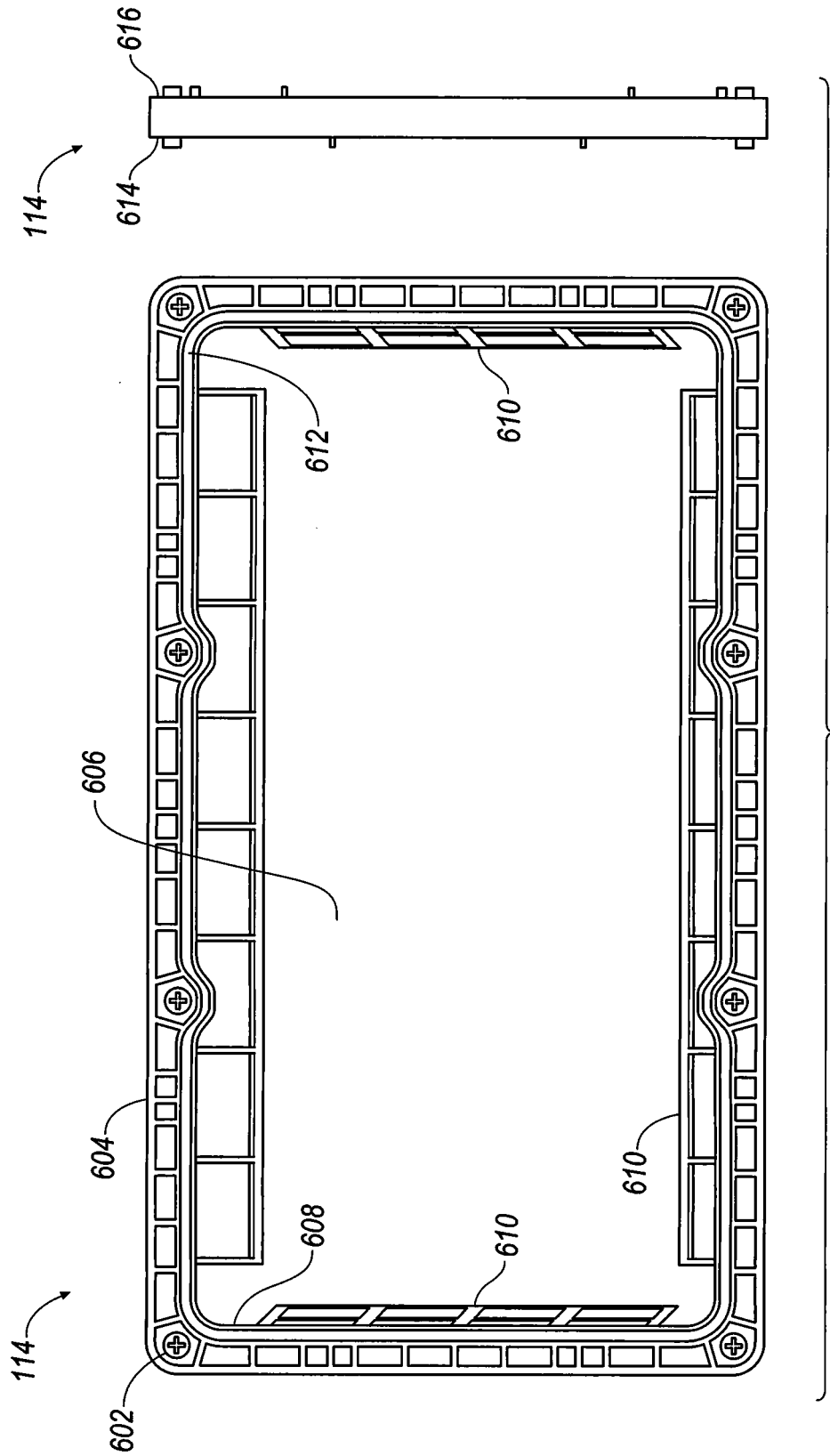


FIG. 23

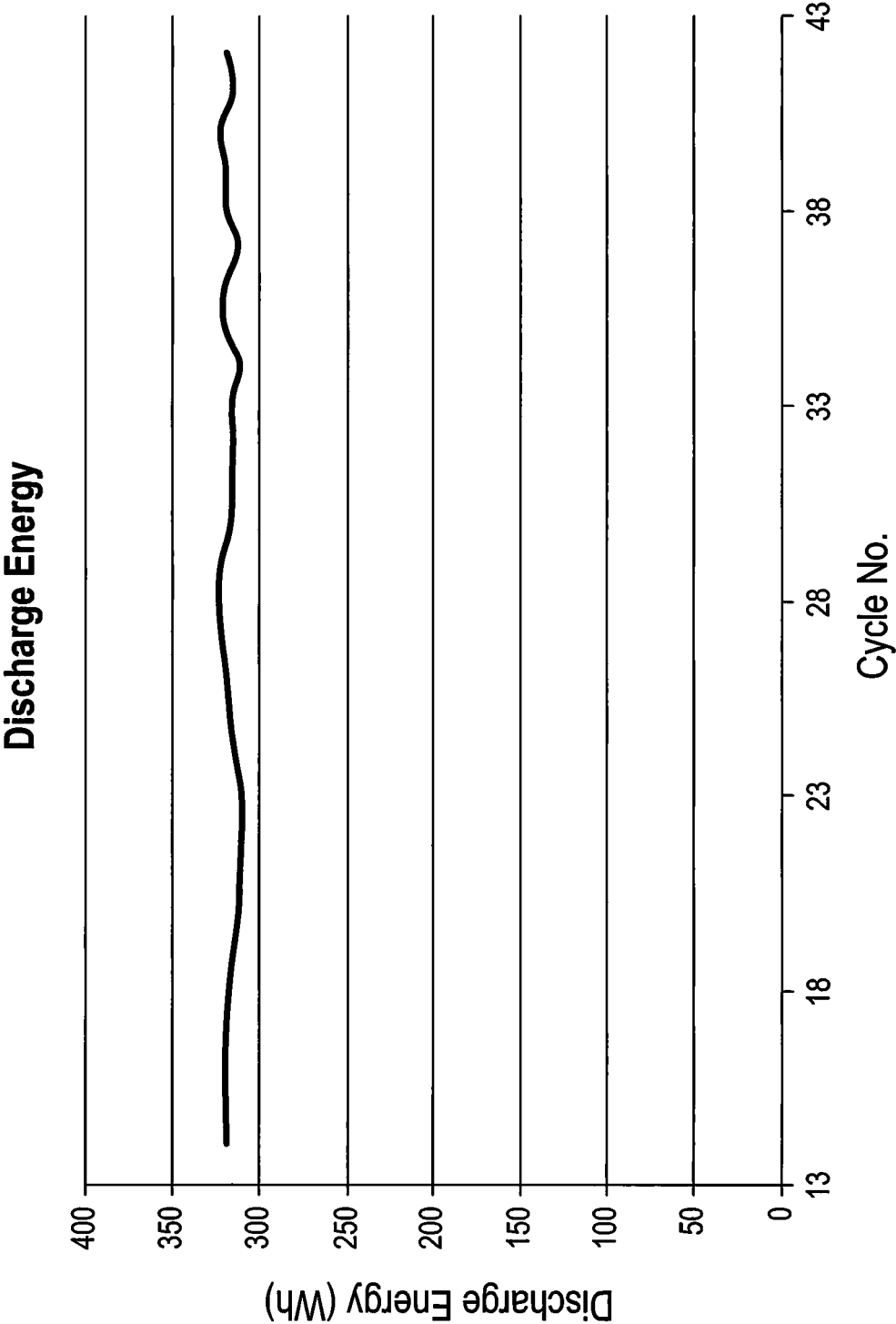
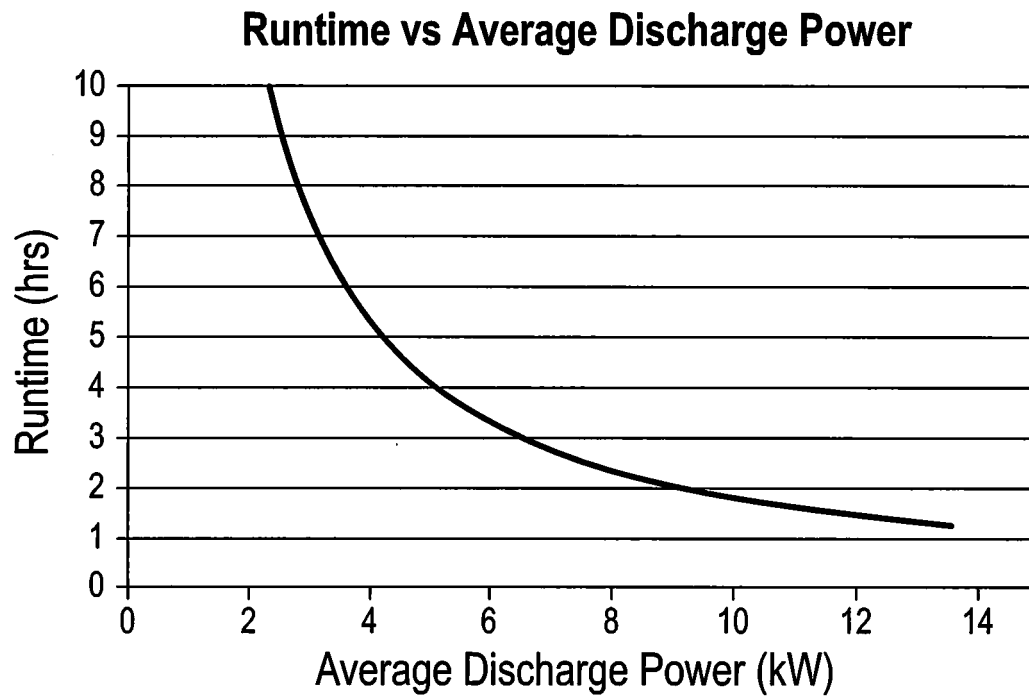
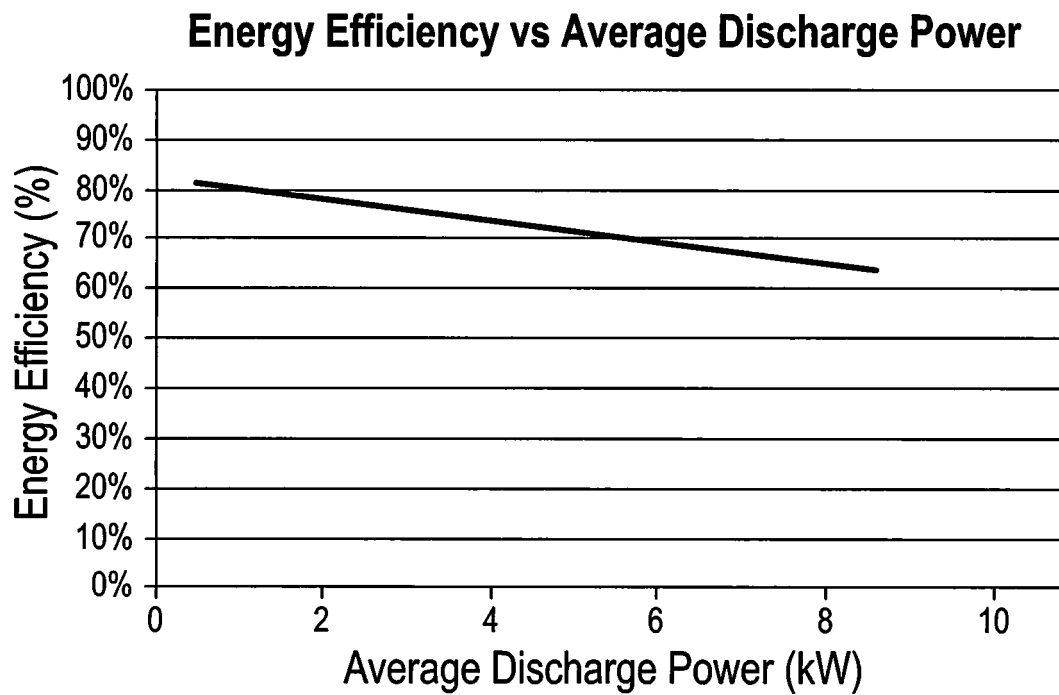
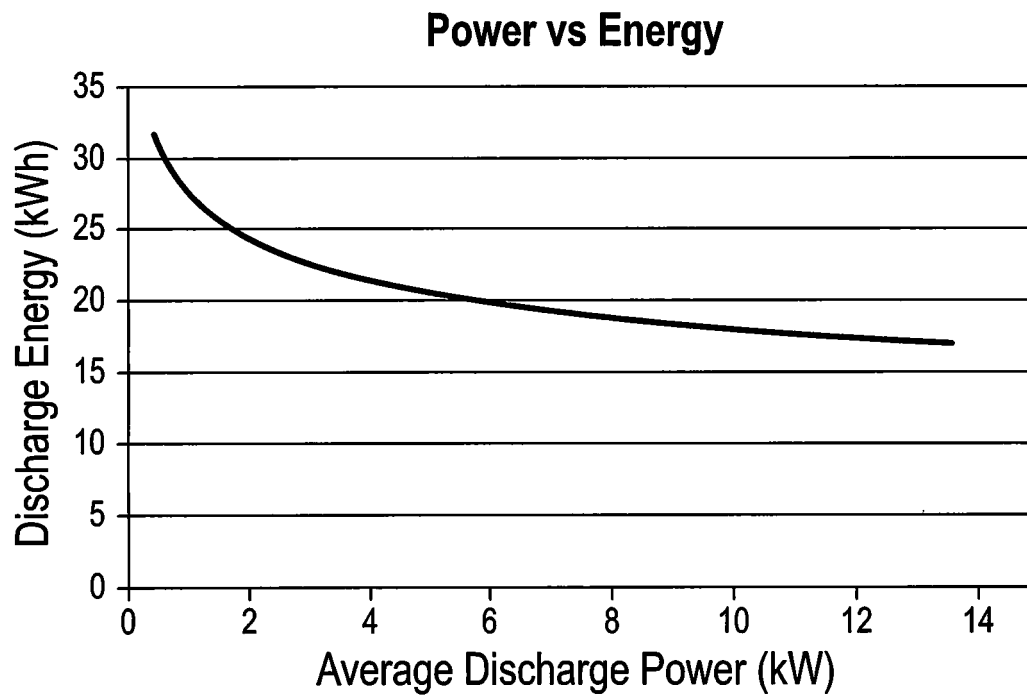


FIG. 24

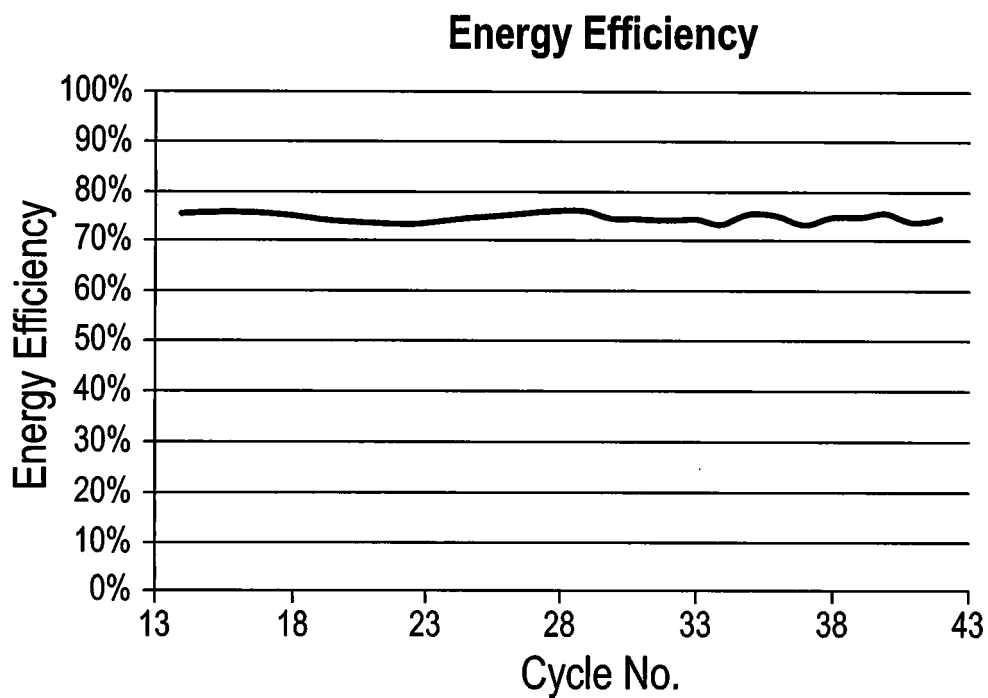
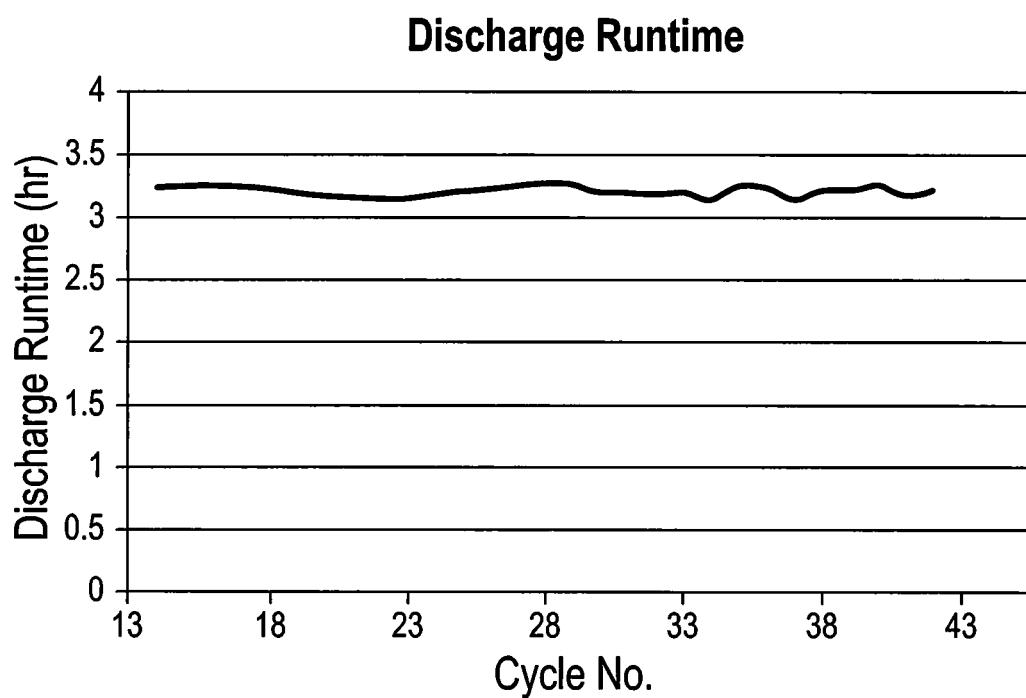
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*FIG. 25A**FIG. 25B*

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*FIG. 26*

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*FIG. 27A**FIG. 27B*

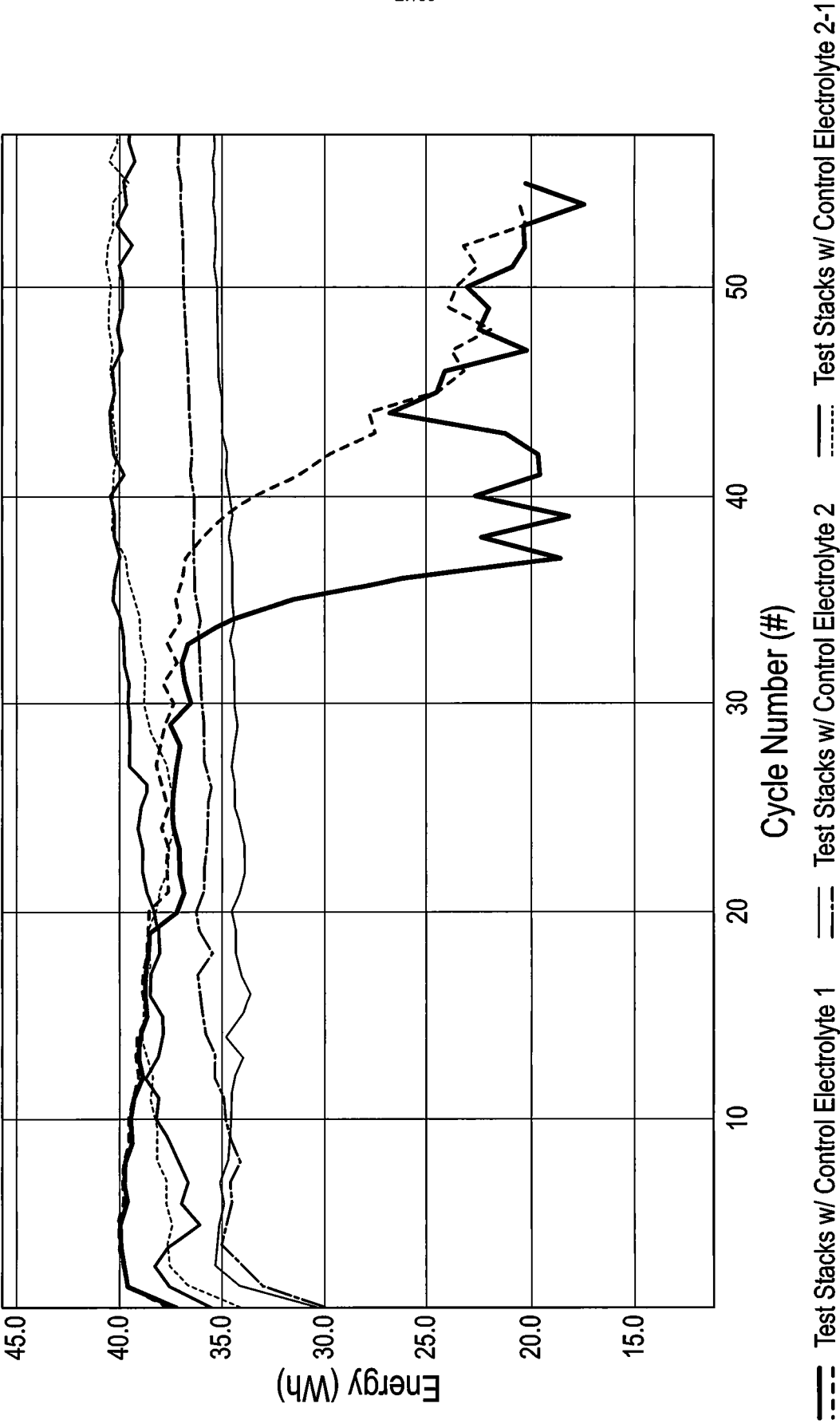
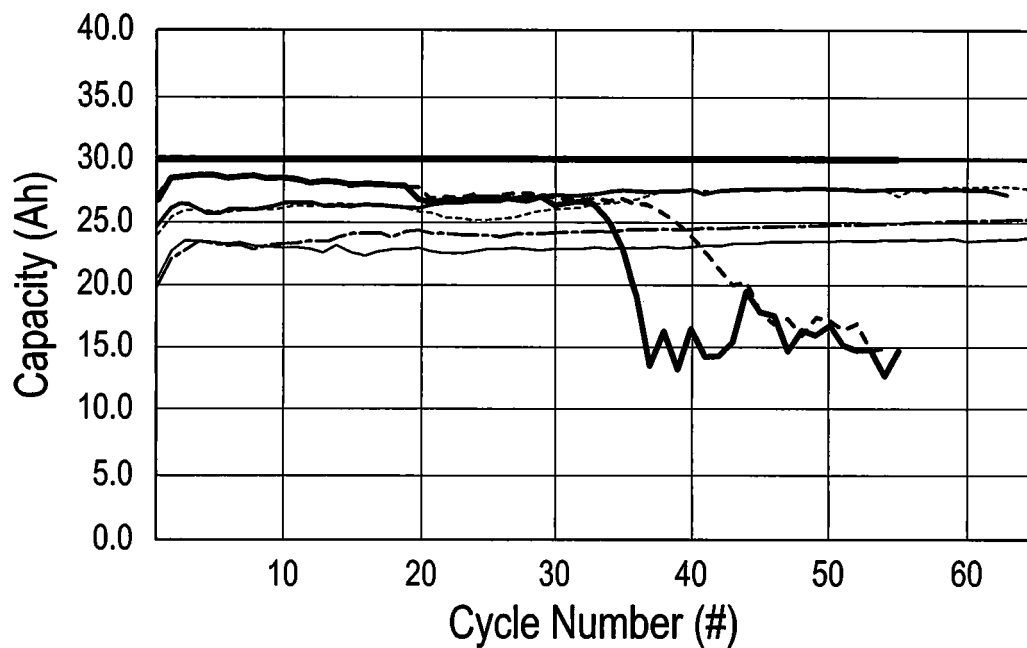


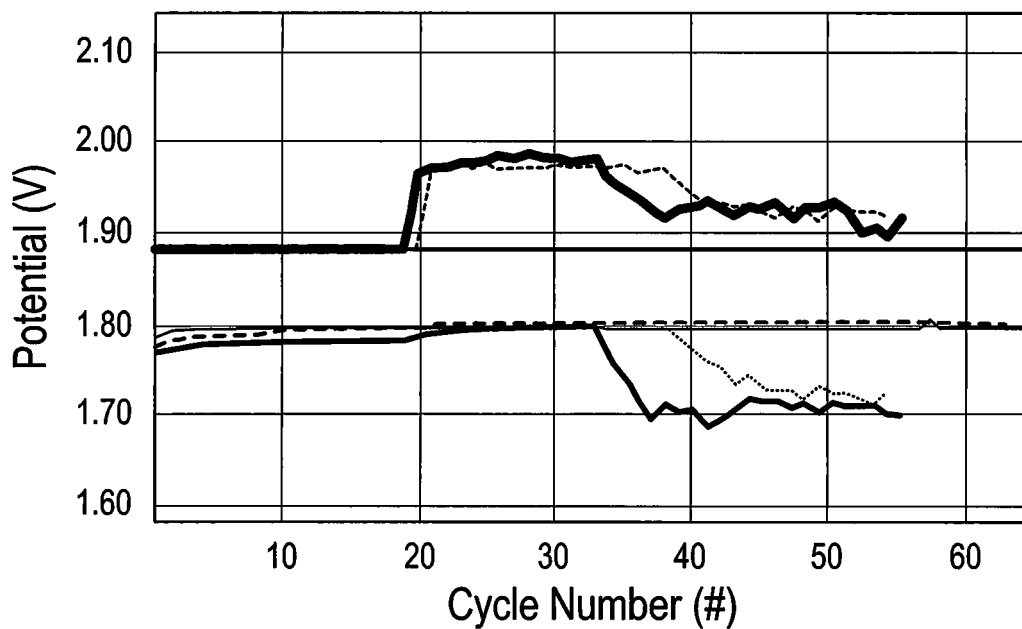
FIG. 28

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--- Test Stacks w/ Control Electrolyte 1 --- Test Stacks w/ Control Electrolyte 2
----- Test Stacks w/ Control Electrolyte 2-1

FIG. 29A



--- Test Stacks w/ Control Electrolyte 1 --- Test Stacks w/ Control Electrolyte 2
----- Test Stacks w/ Control Electrolyte 2-1

FIG. 29B

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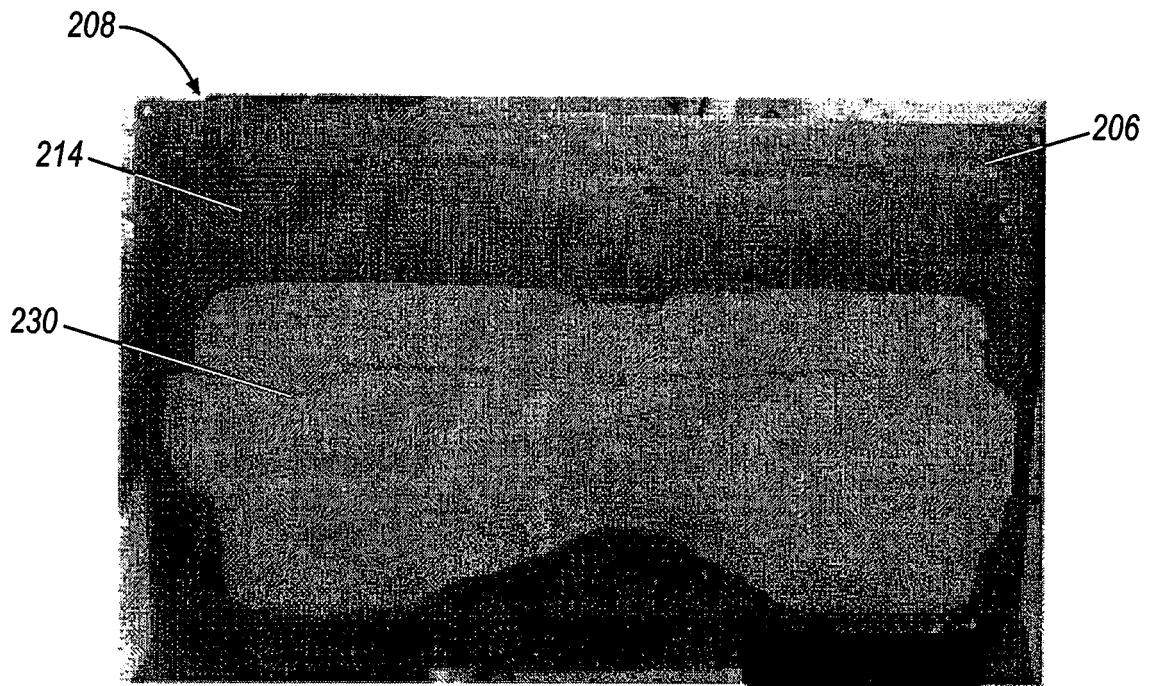


FIG. 30A

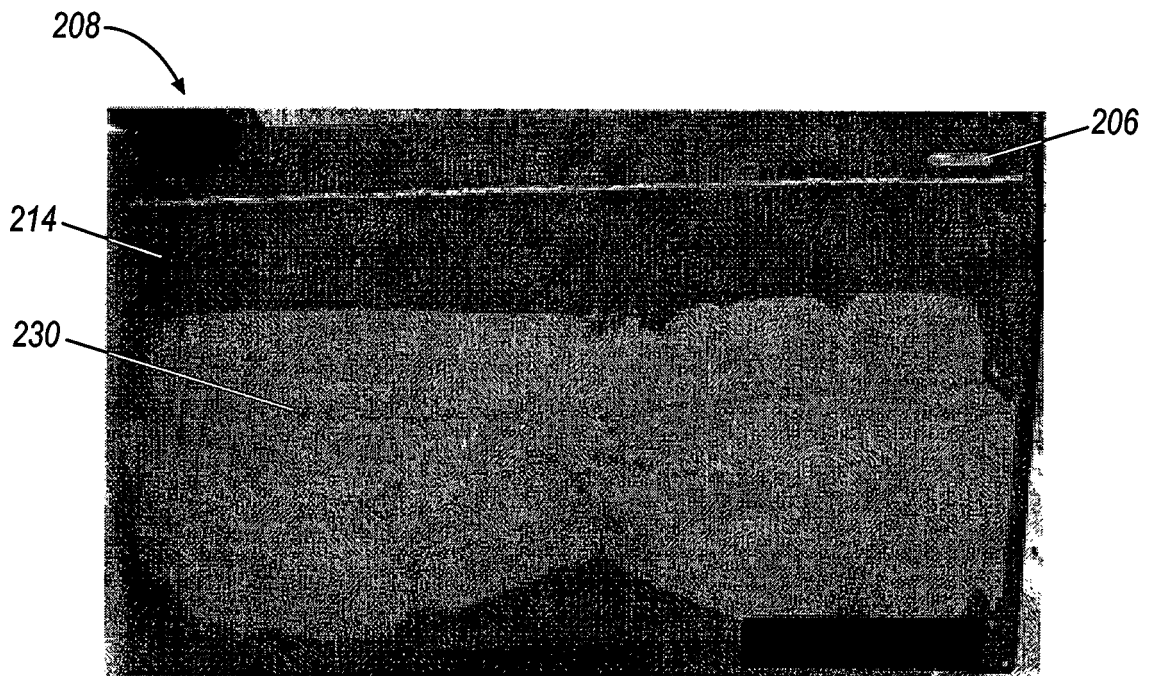


FIG. 30B

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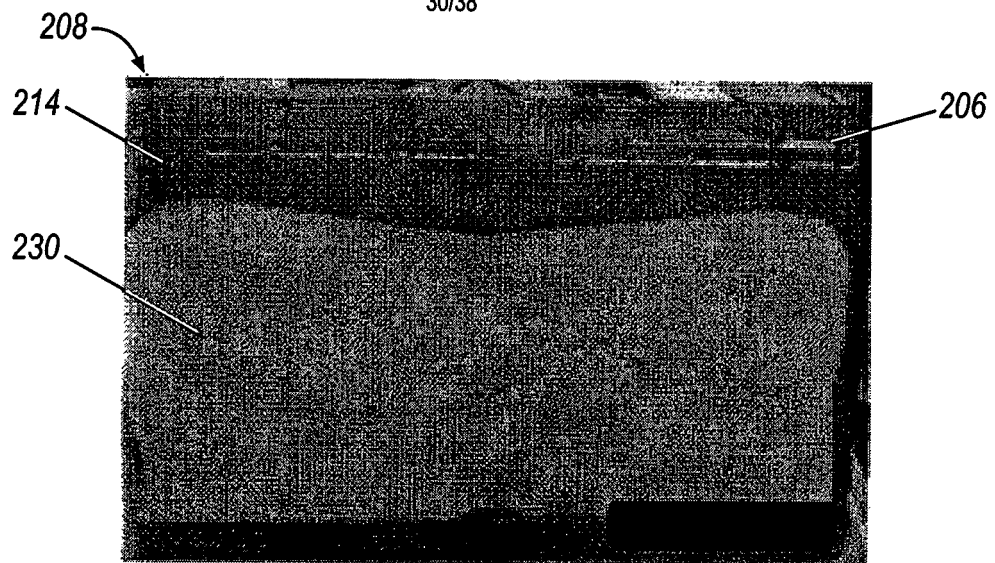


FIG. 31A

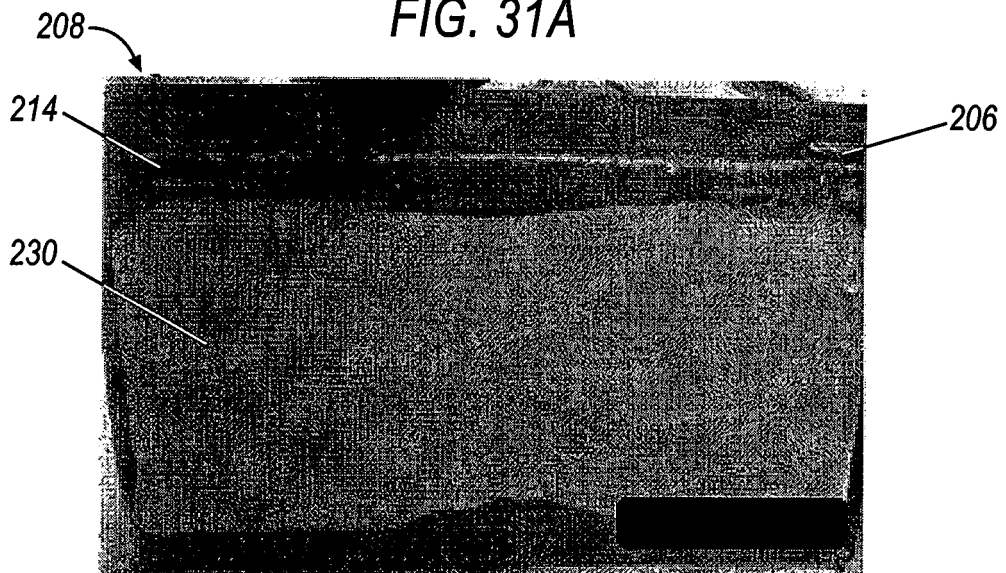


FIG. 31B

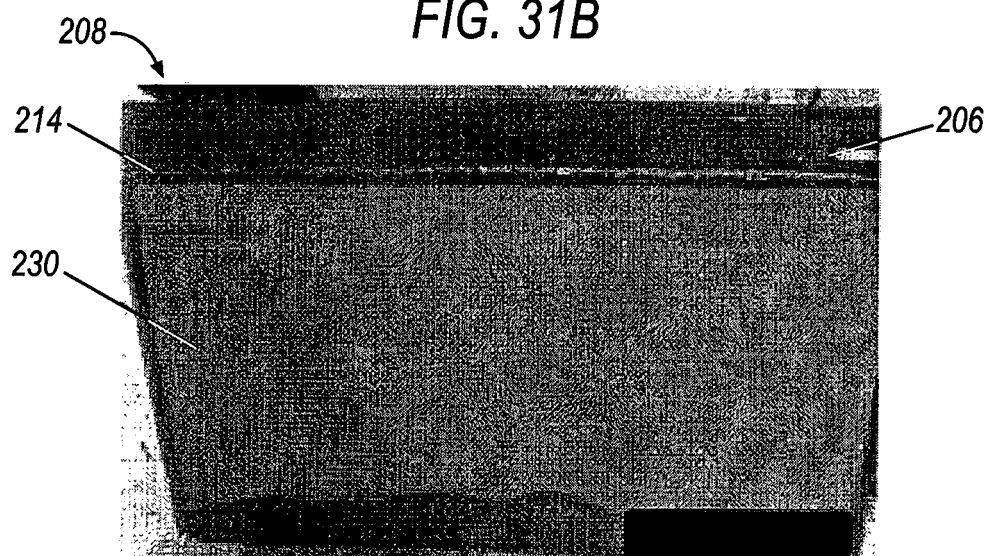
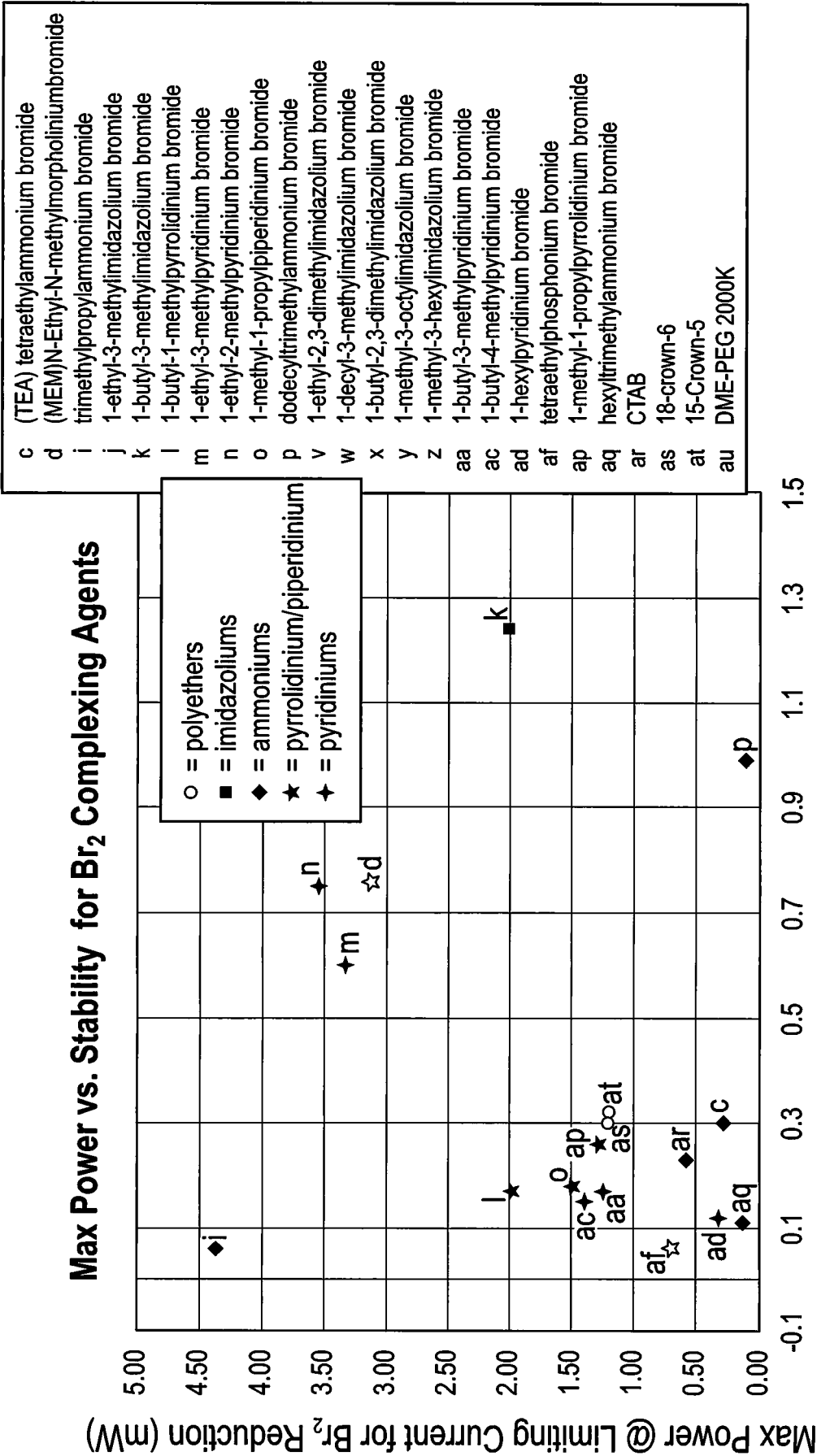


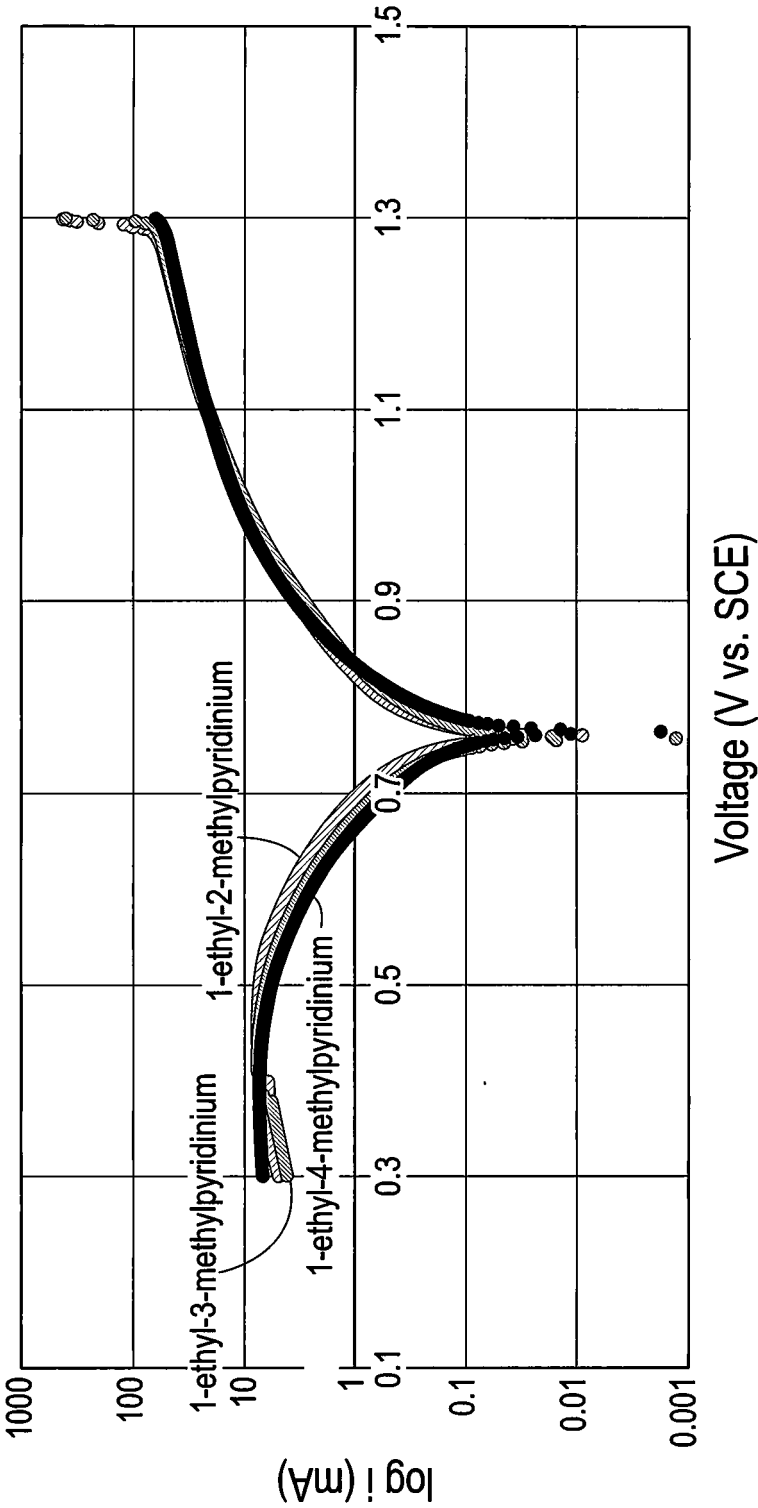
FIG. 31C



Change in pH @60C after 7 Days

FIG. 32

Comparison of Br₂ Activity of Ethyl Methyl Pyridiniums
Tafel Plots of Ethyl Methyl Pyridiniums



Max Power at Limiting Current similar for each:
● 1-ethyl-2-methylpyridinium Br=3.43 mW
● 1-ethyl-3-methylpyridinium Br=3.28 mW
● 1-ethyl-4-methylpyridinium Br=3.03 mW

FIG. 33

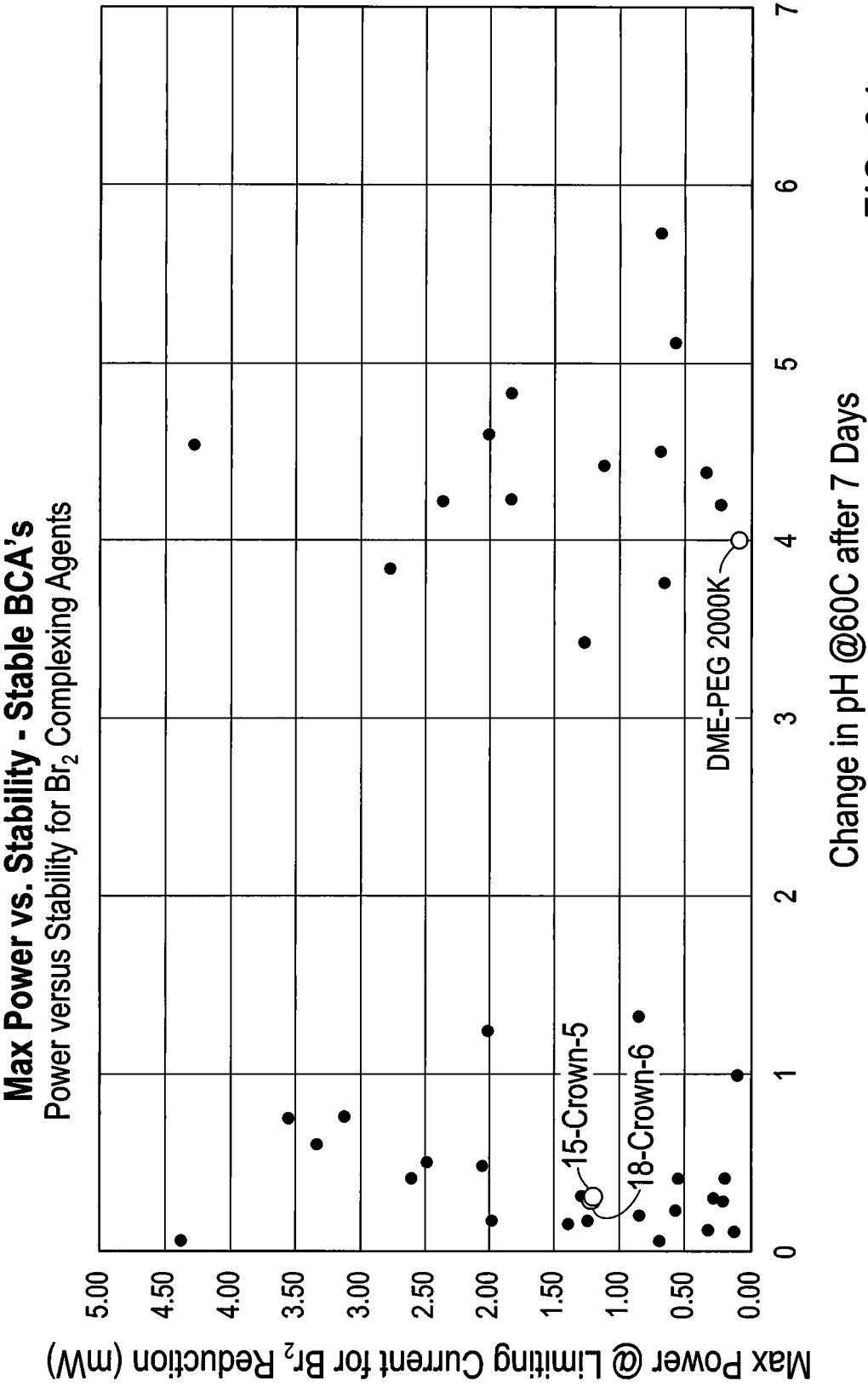


FIG. 34

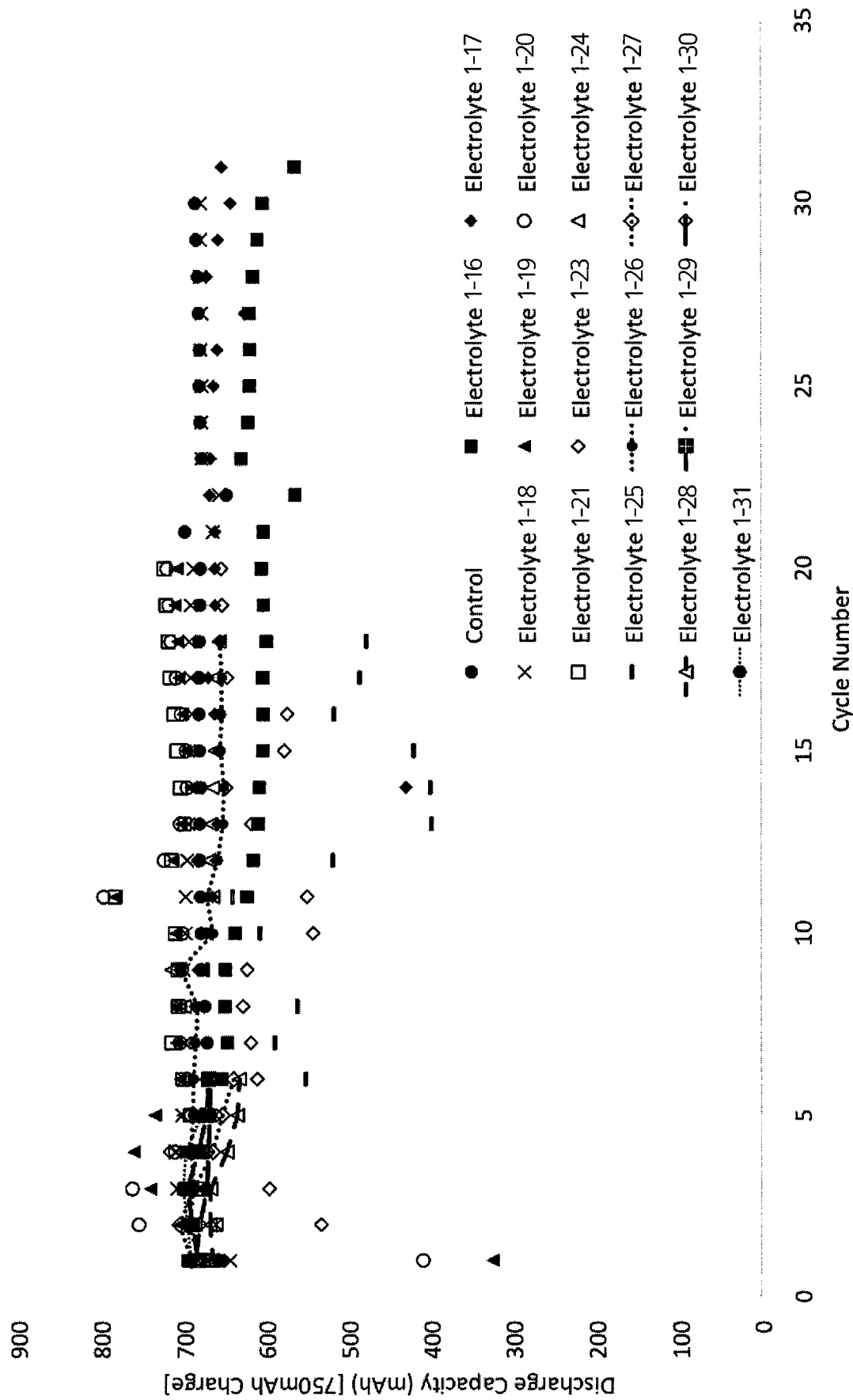


FIG. 35

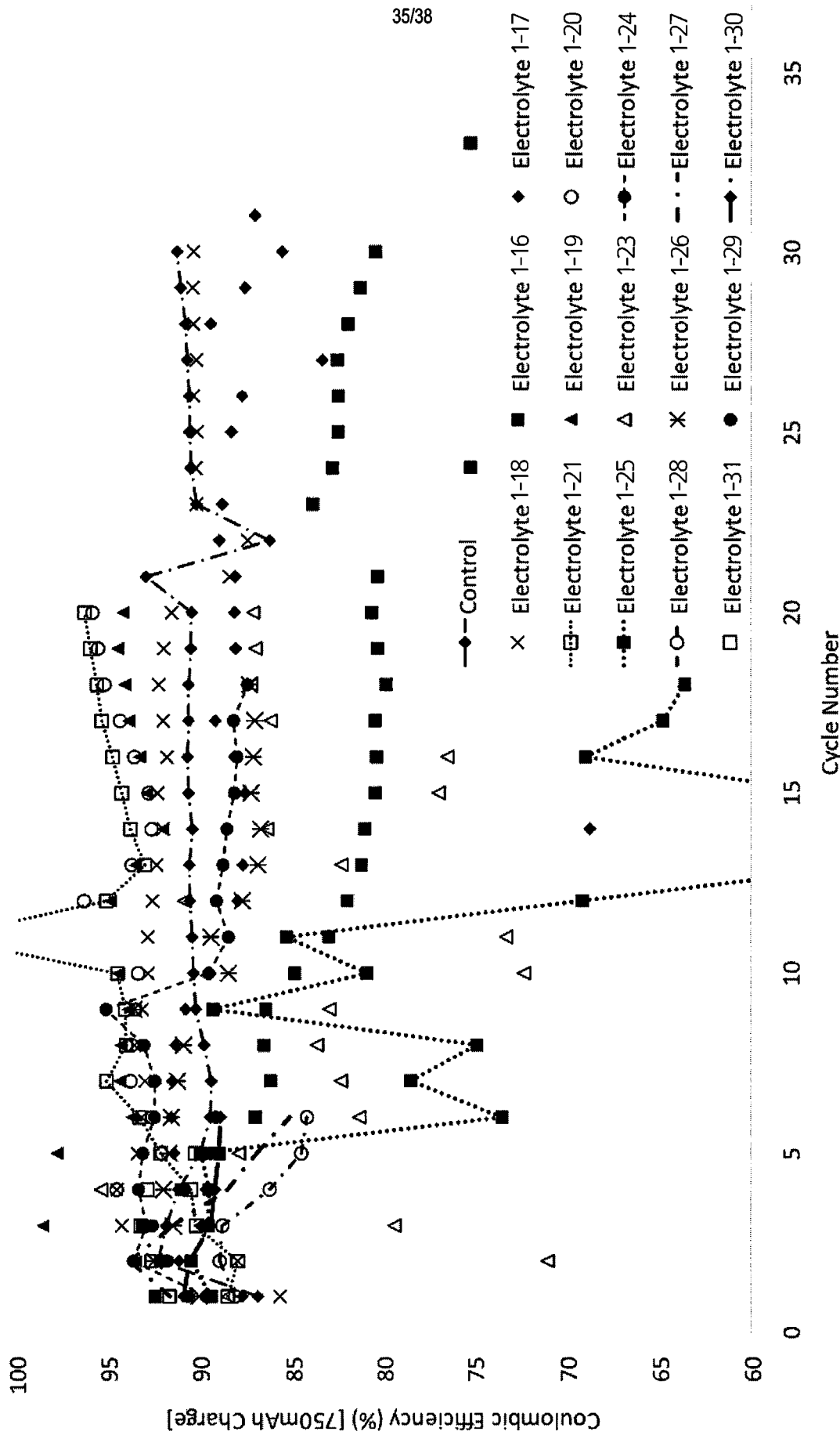


FIG. 36

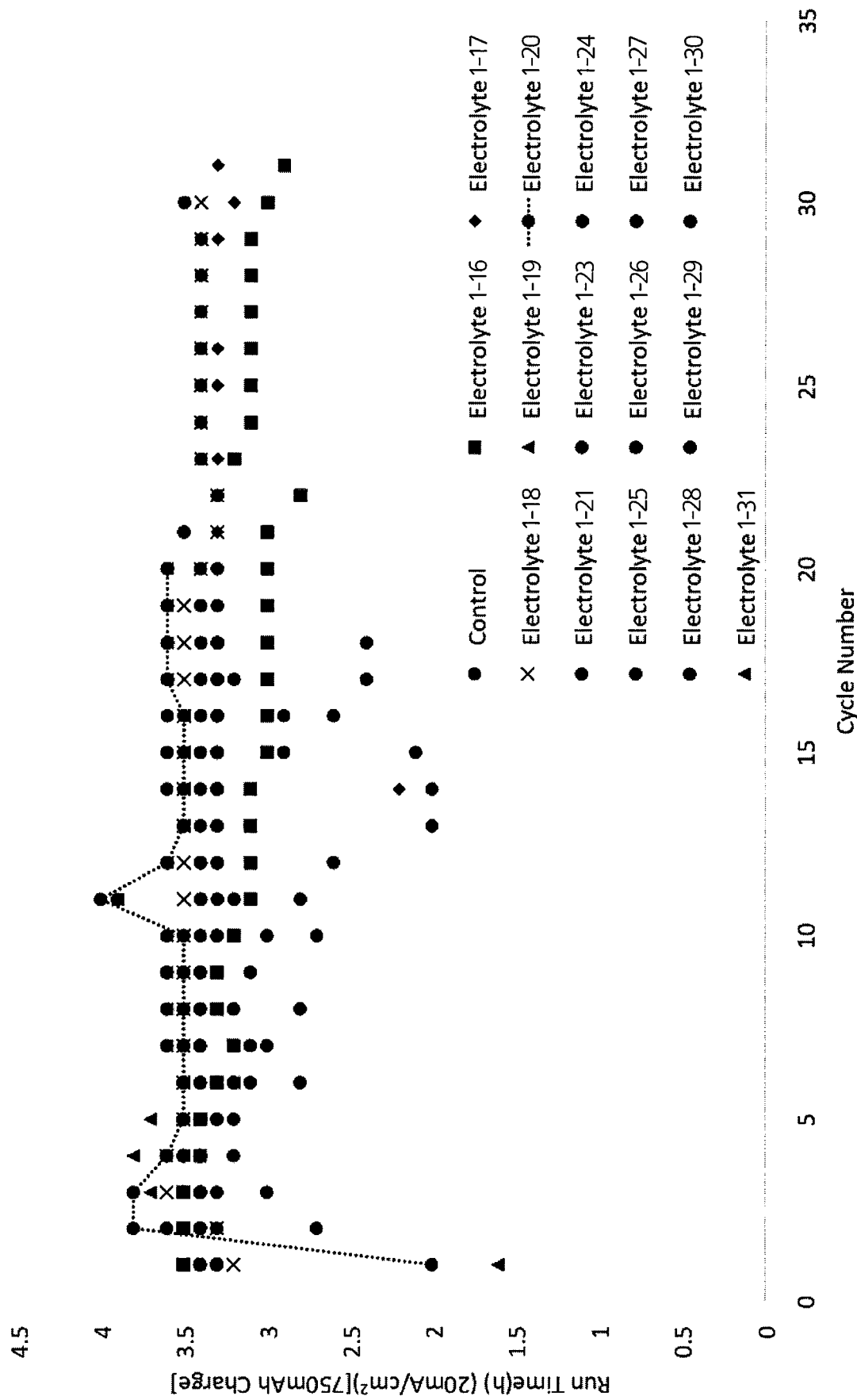


FIG. 37

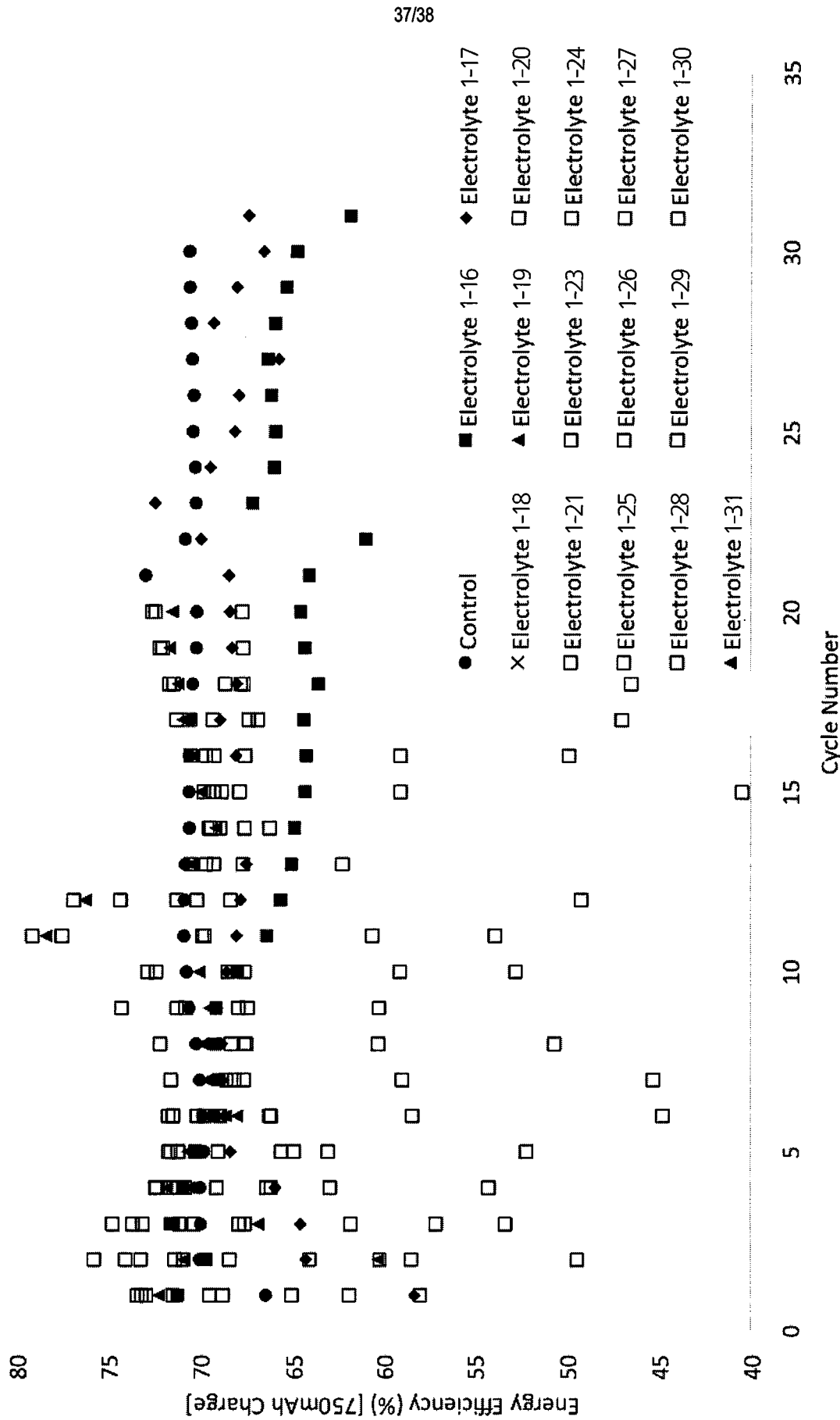


FIG. 38

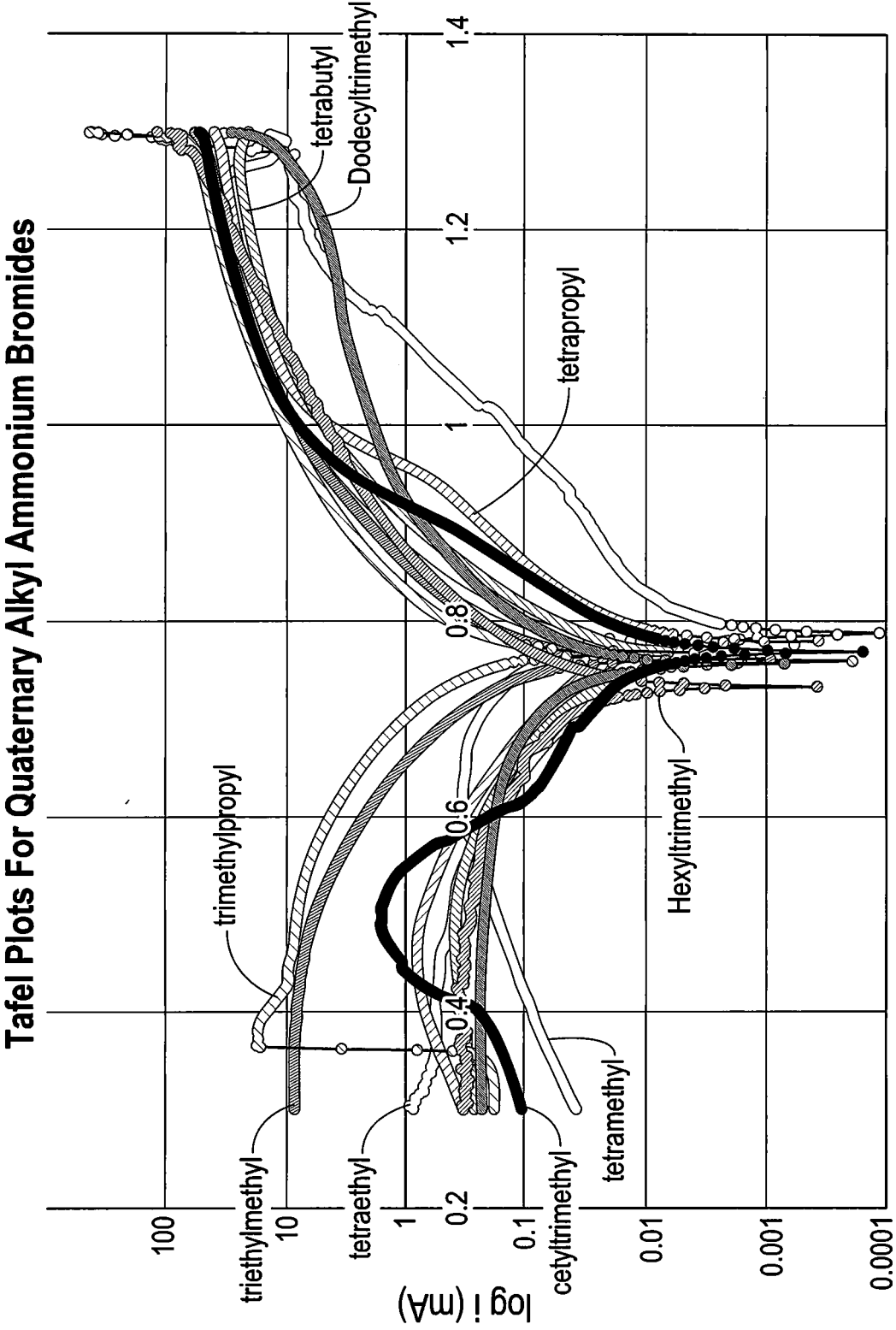


FIG. 39