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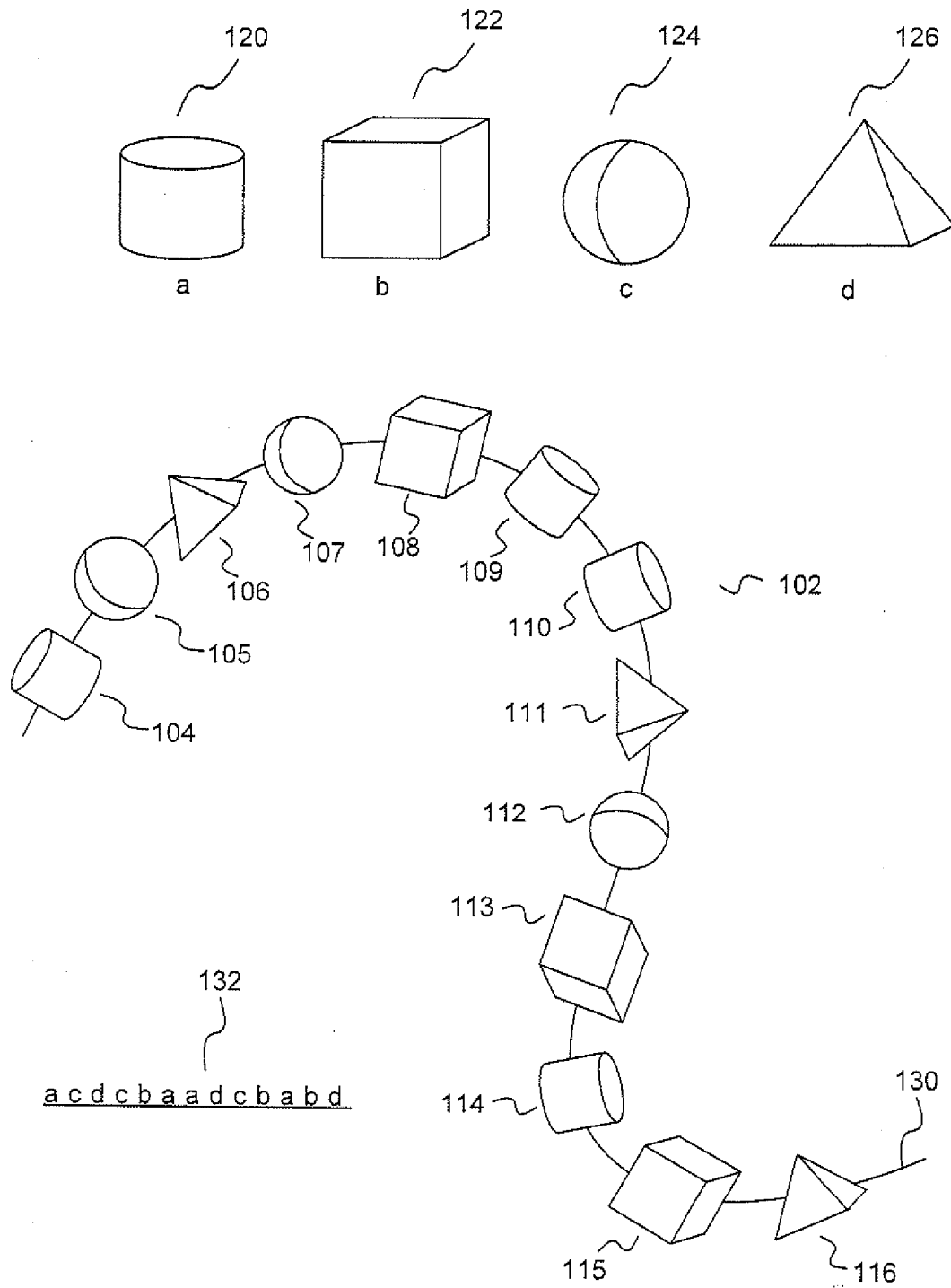


FIG. 1

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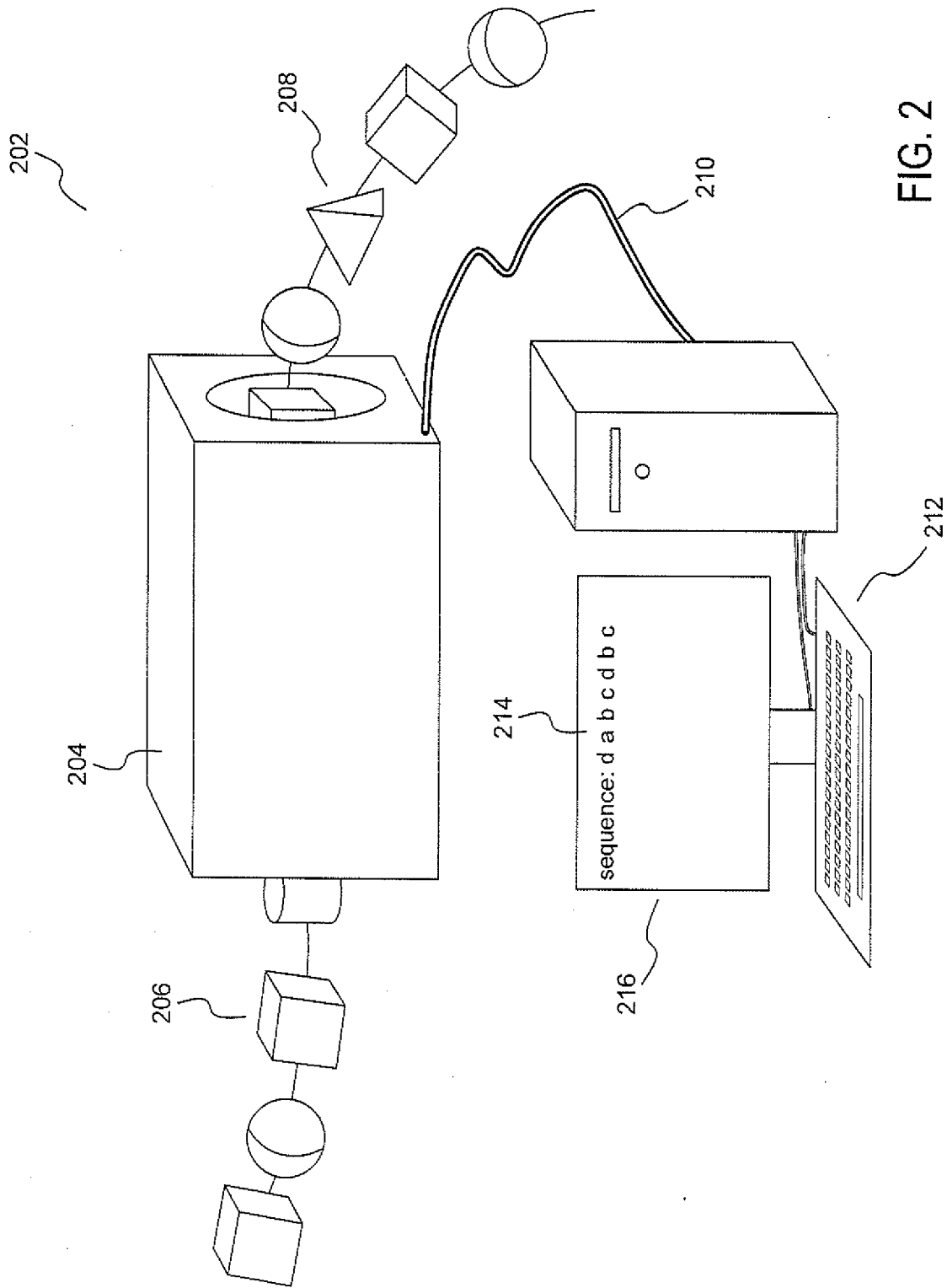


FIG. 2

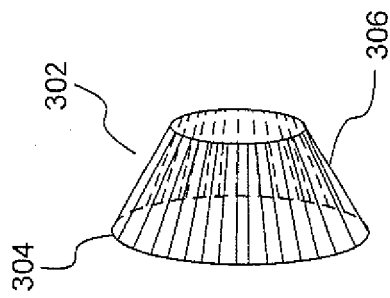


FIG. 3A

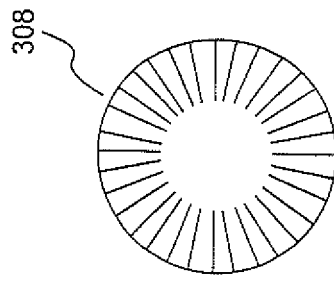


FIG. 3B

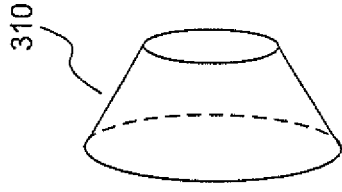


FIG. 3C

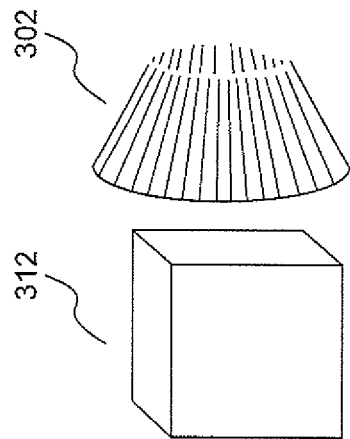


FIG. 3D

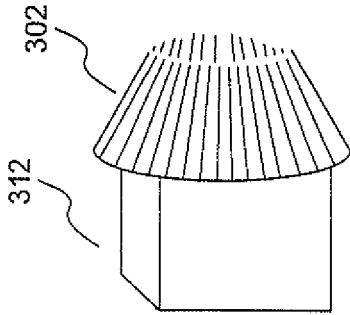


FIG. 3E

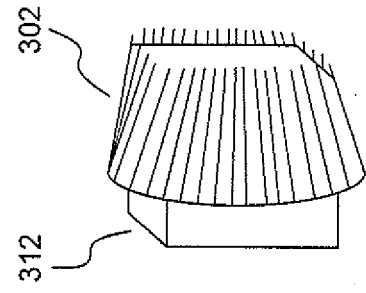


FIG. 3F

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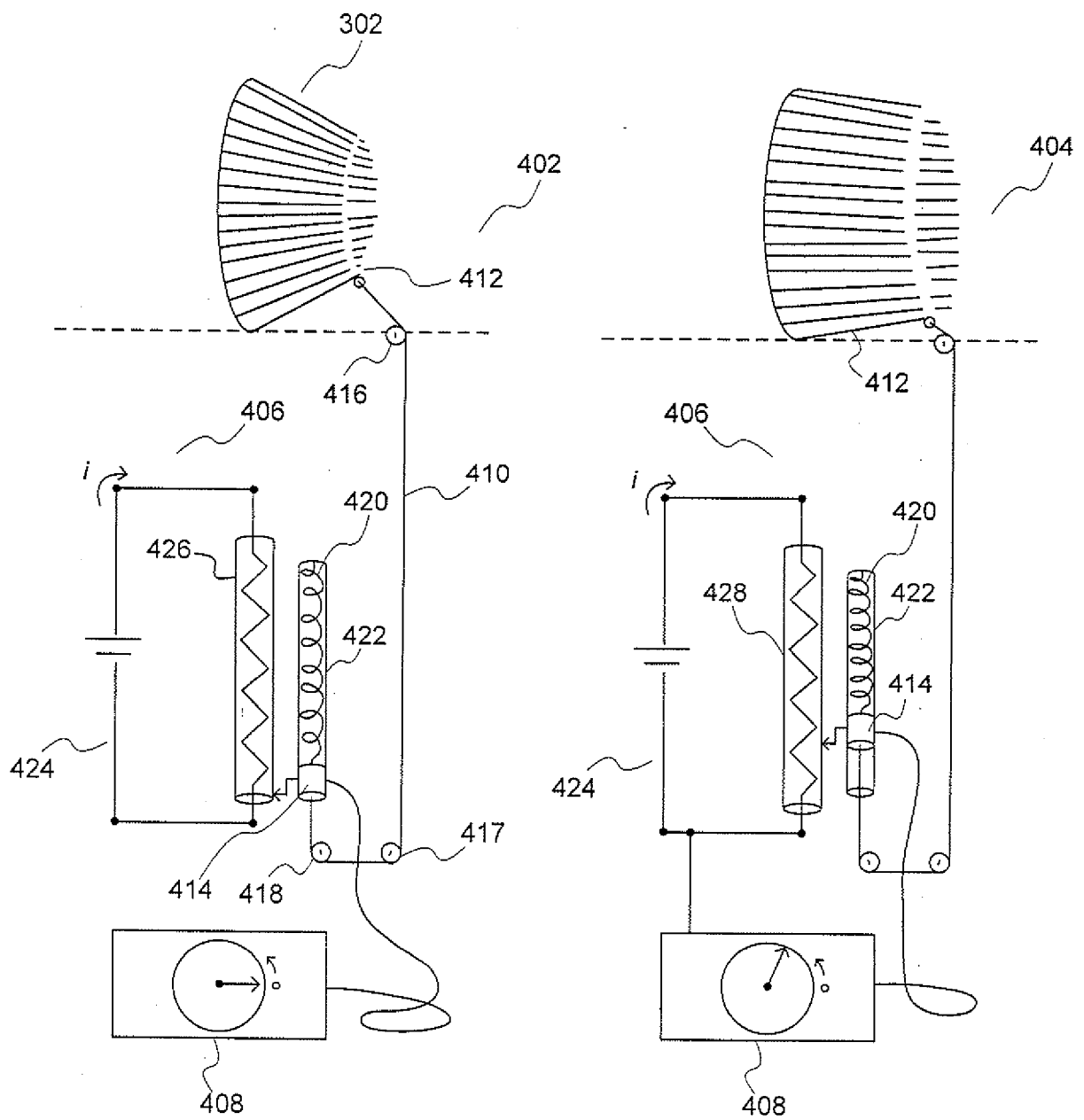


FIG. 4

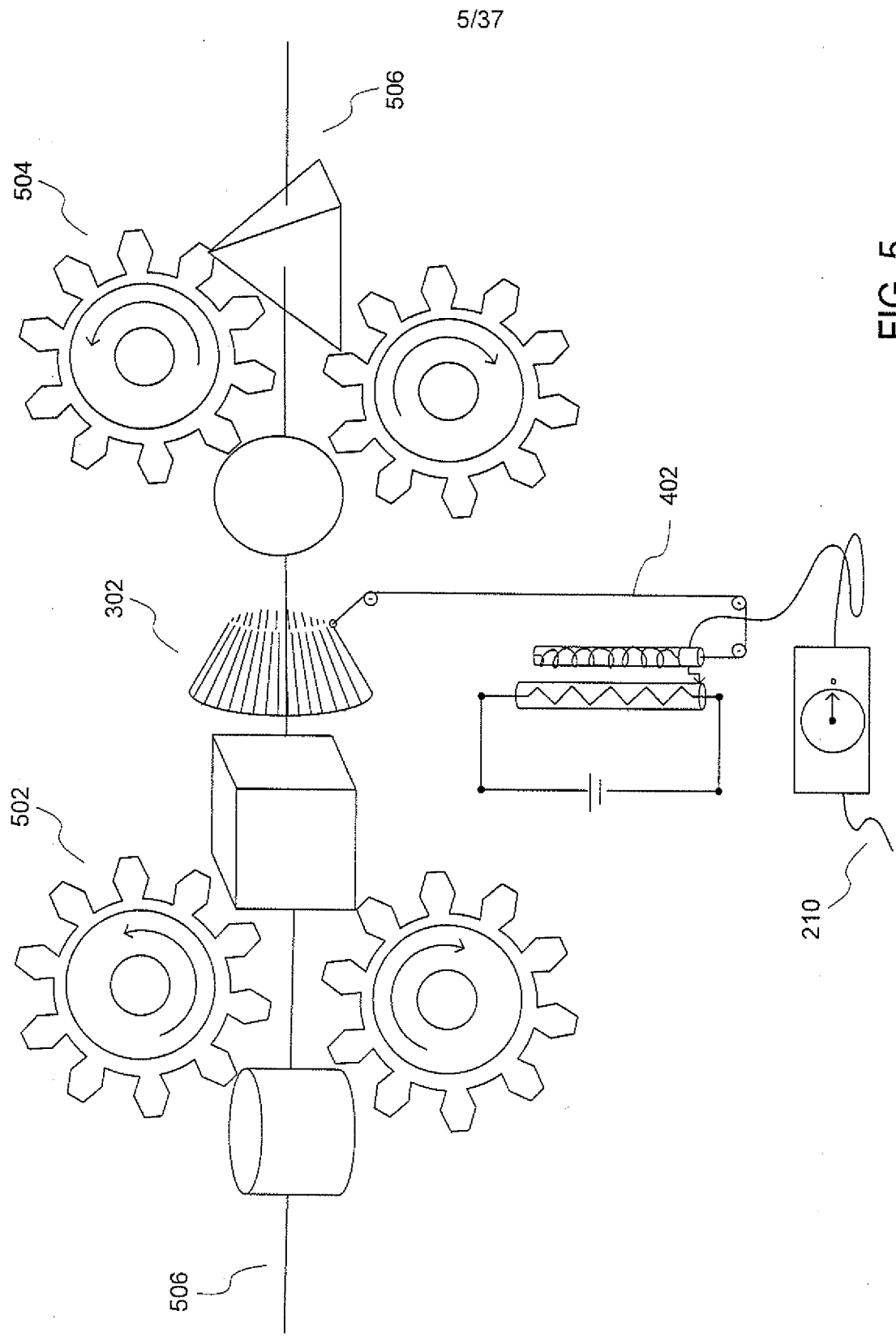
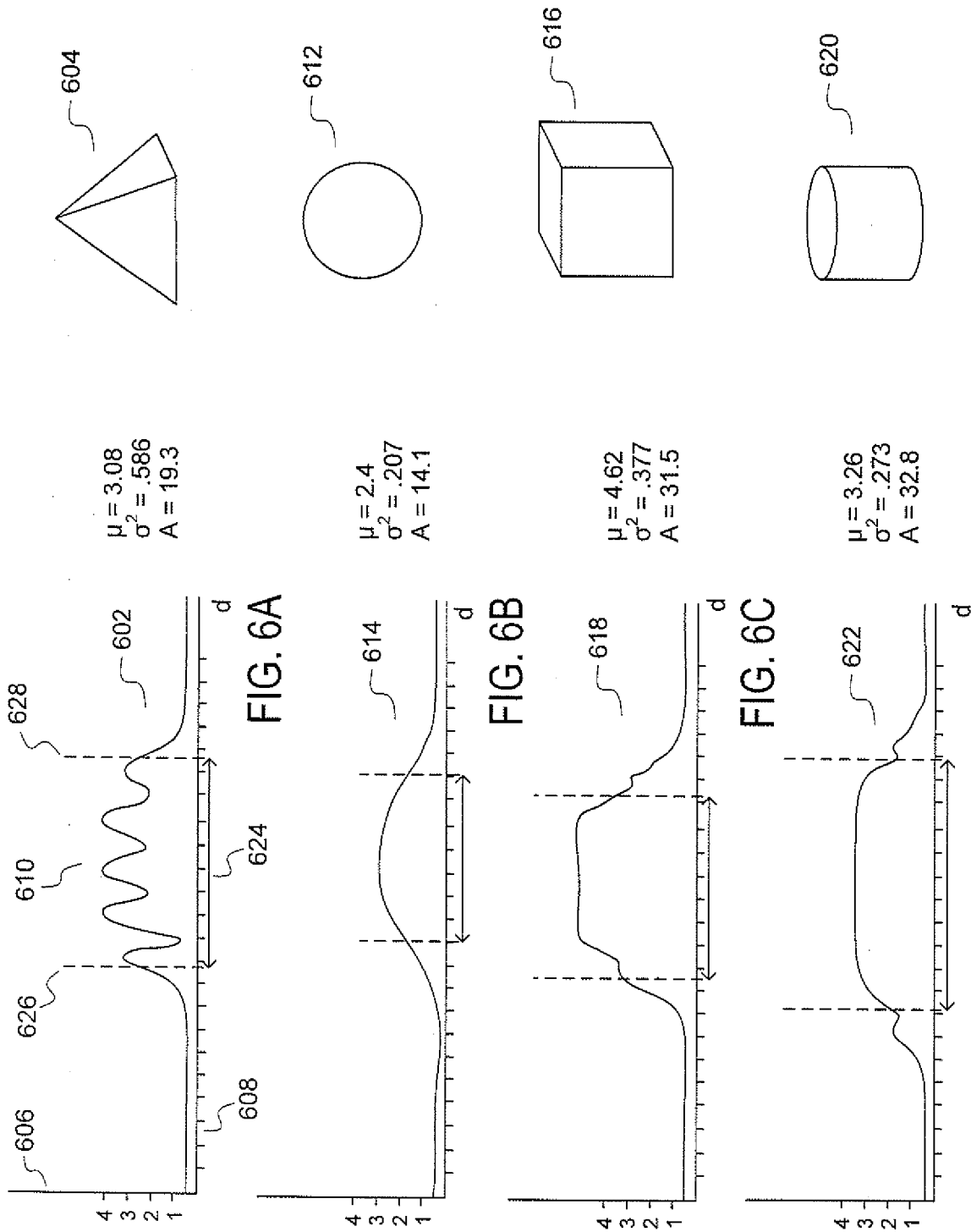


FIG. 5



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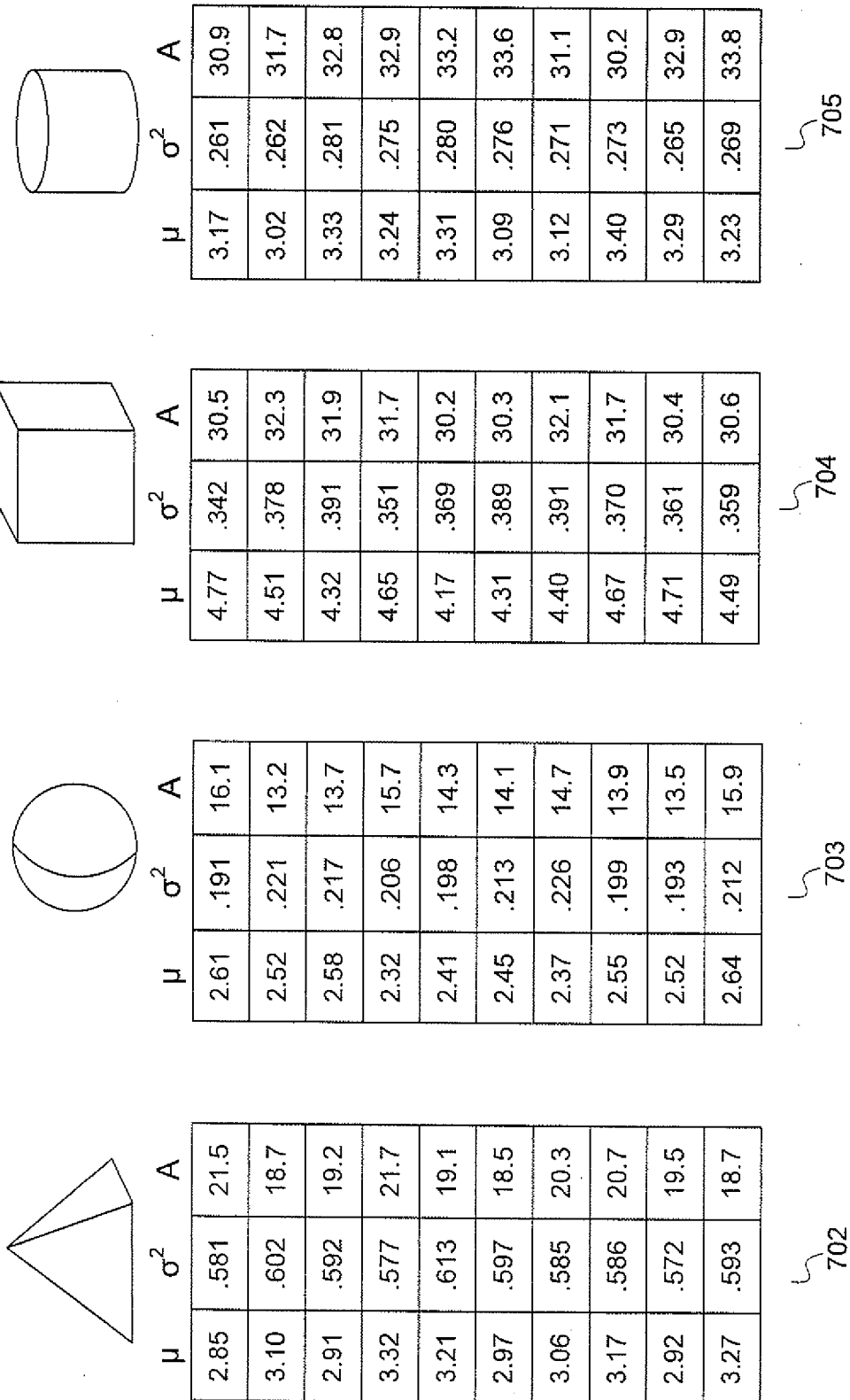


FIG. 7

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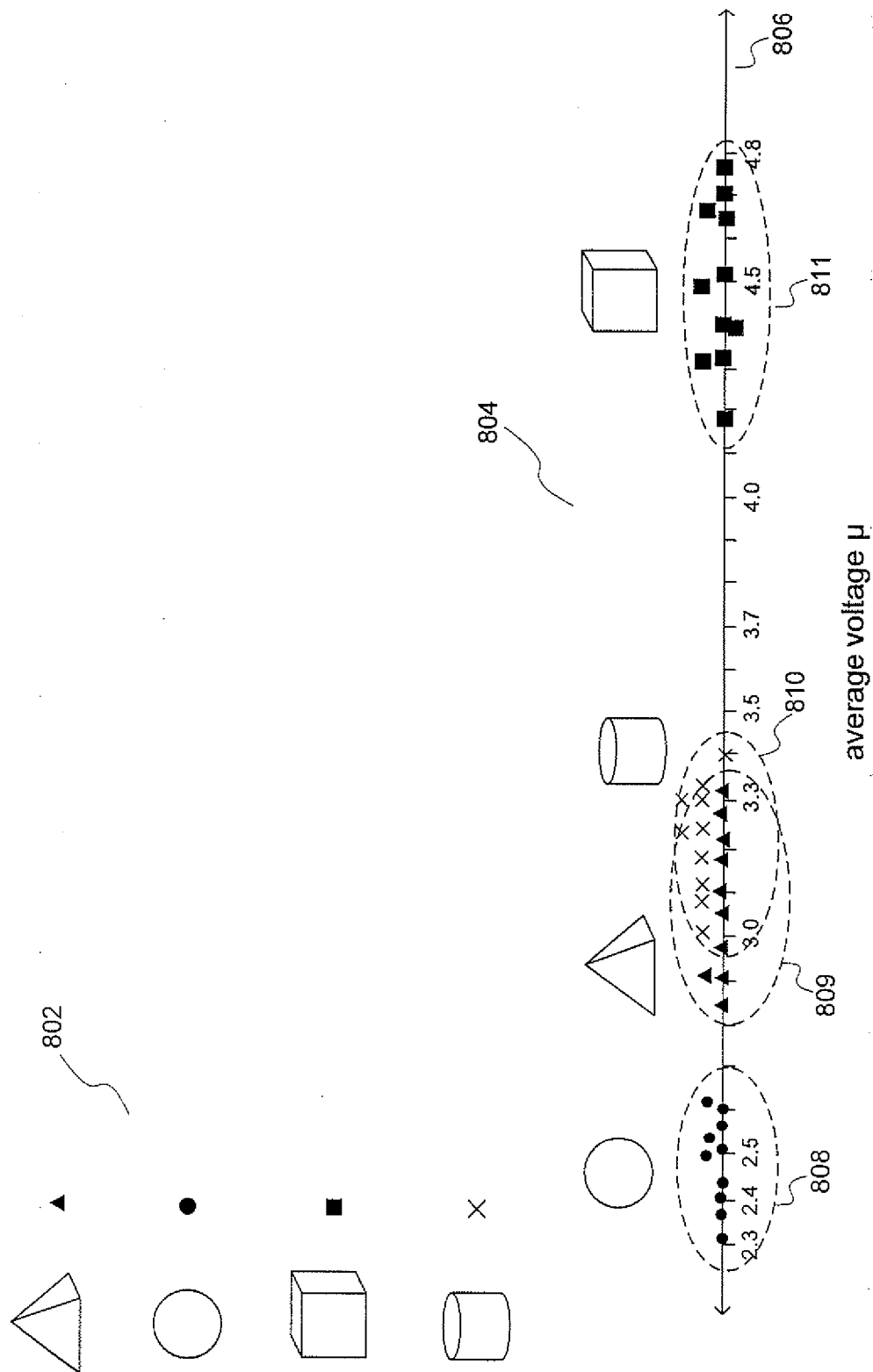


FIG. 8

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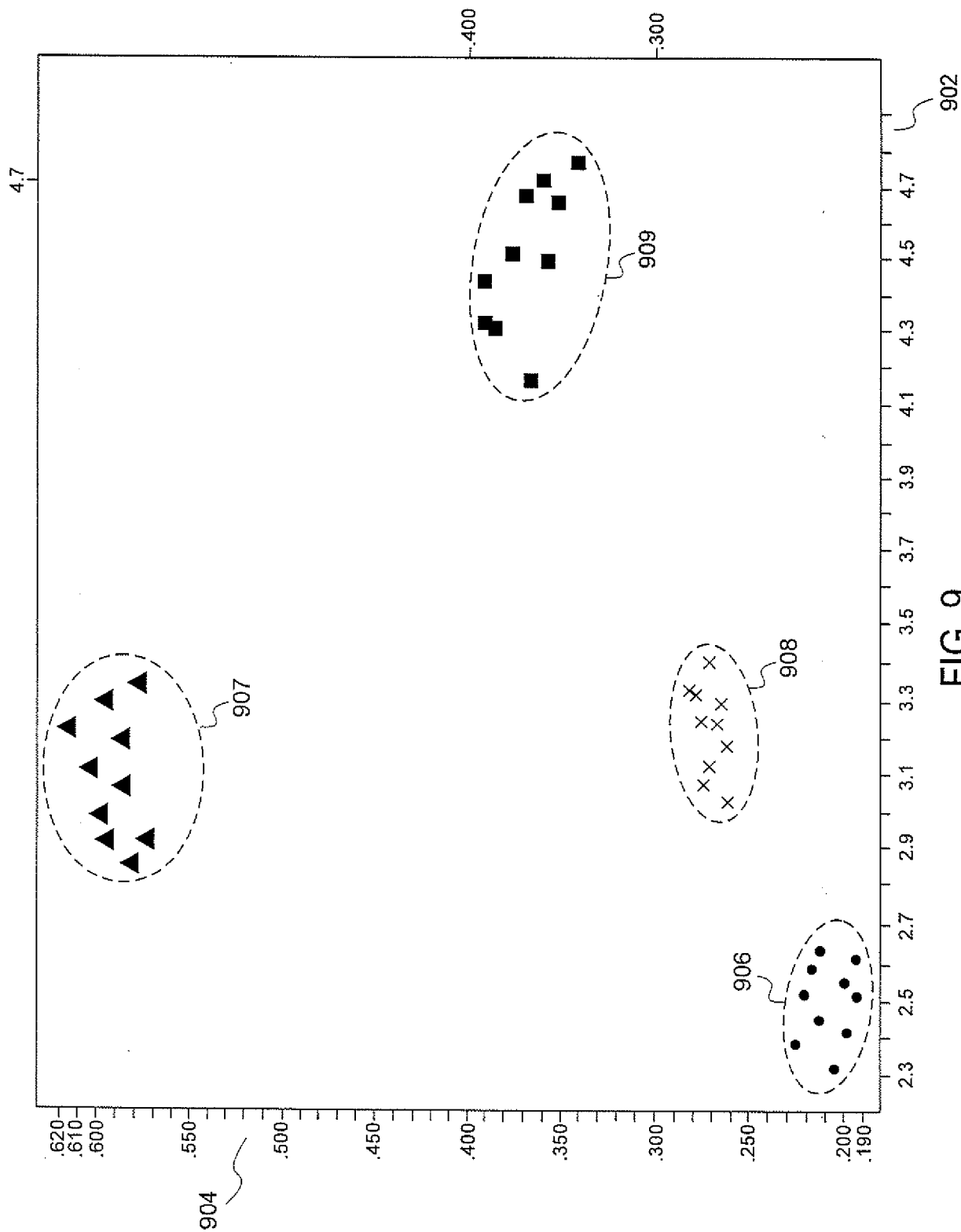


FIG. 9

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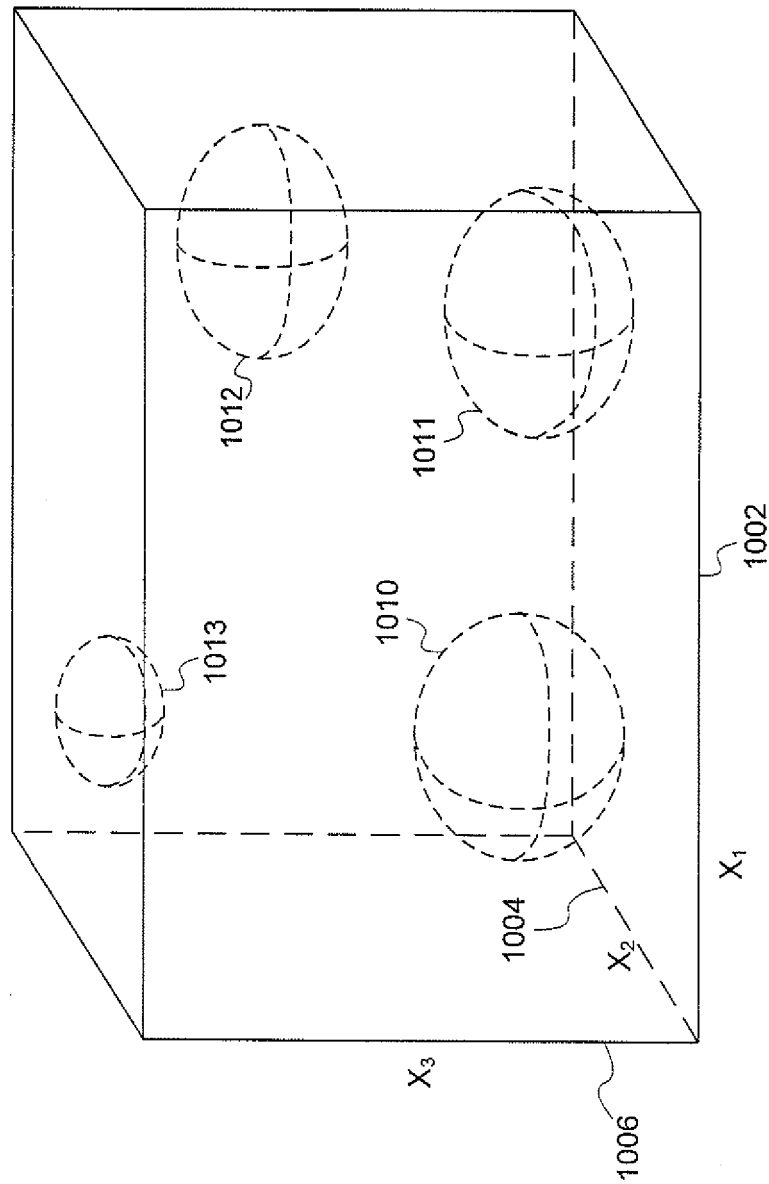


FIG. 10

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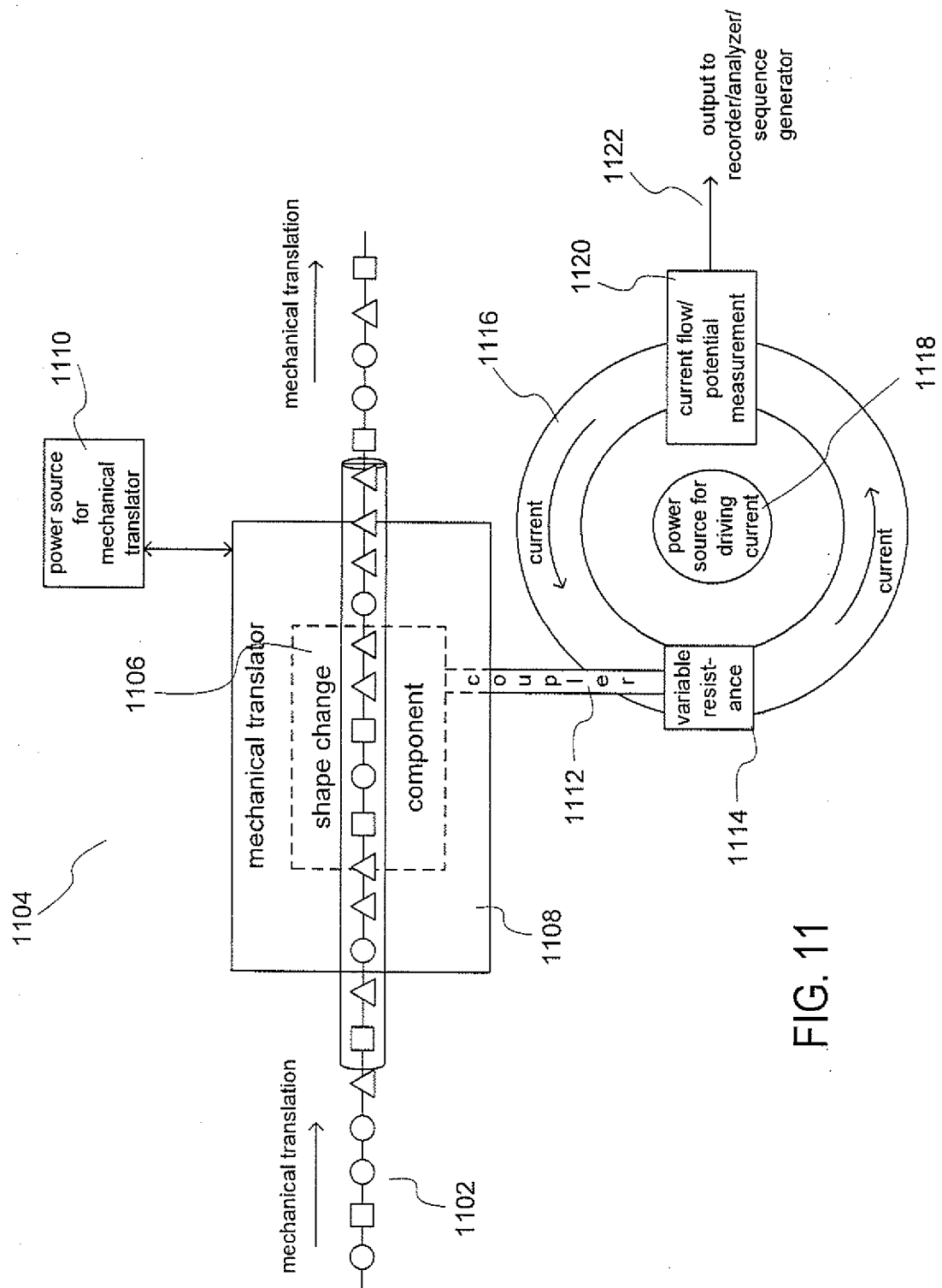


FIG. 11

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1202	1204	1206
	first implementation (Fig. 5)	second implementation (Fig. 13)
power source for mechanical translator	battery/line current	dNTP → dNMP monomer + PPi → dNMP monomer + 2Pi
mechanical translator	electric motor/geared drums	Klenow fragment of DNA polymerase I
shape-change component	funnel-shaped set of spring-like bristles	Klenow fragment of DNA polymerase I
coupler	cord/wire	DNA polymer
variable resistor	potentiometer	DNA-polymer subsequence/ MspA-porin constriction
current	electric current	charged-particle current
power source for driving the current	battery/line current	line current
current flow/potential measurement	voltmeter	current-to-voltage converter

FIG. 12

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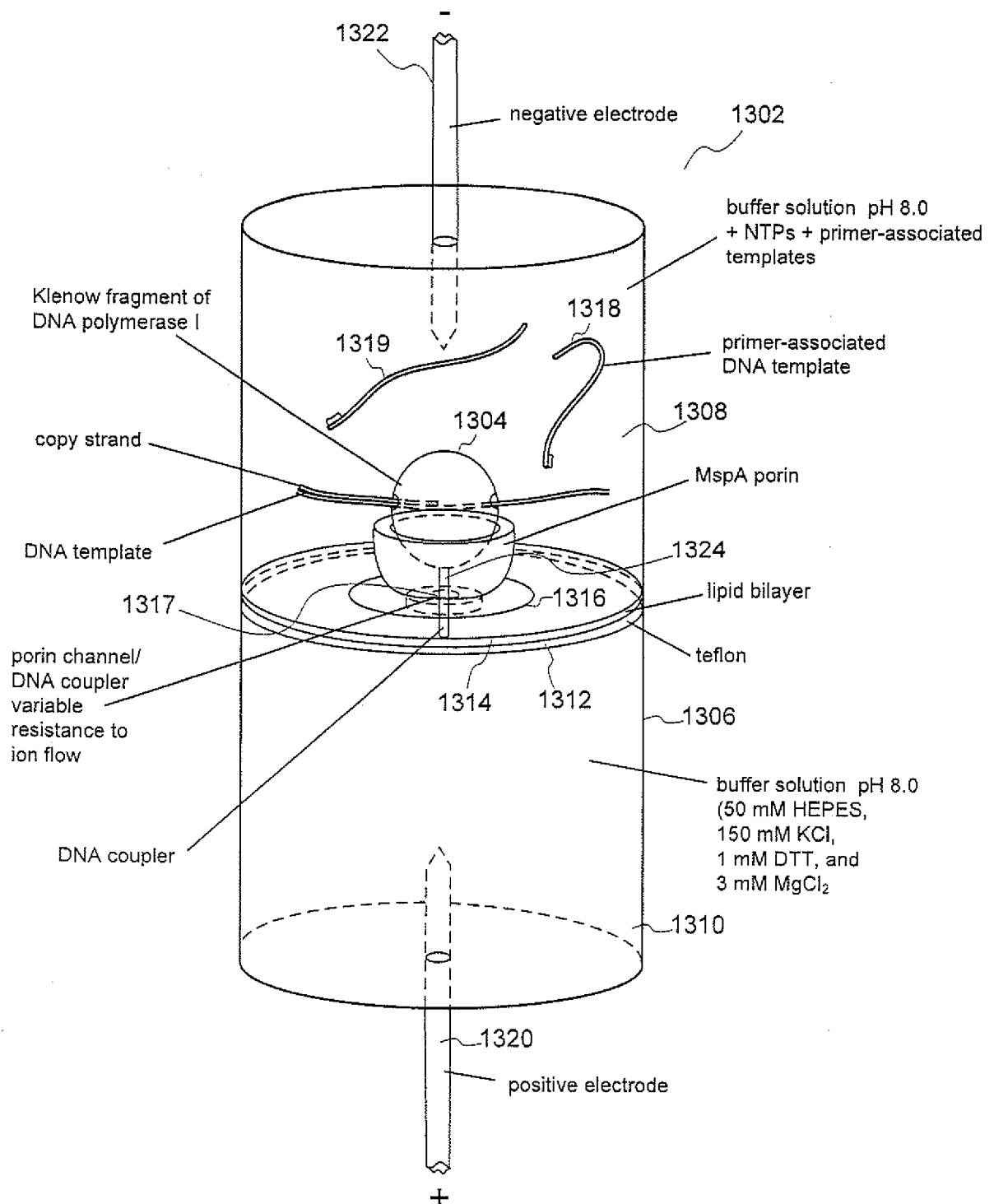


FIG. 13

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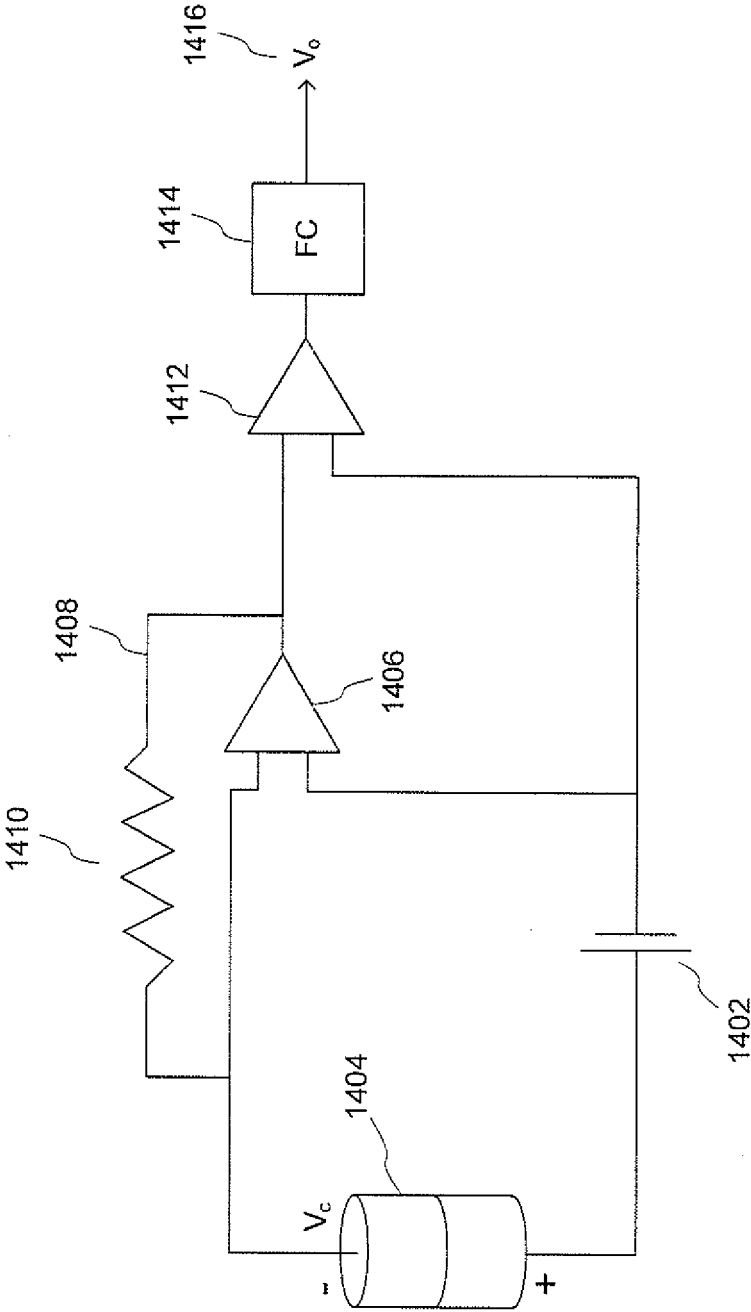


FIG. 14A

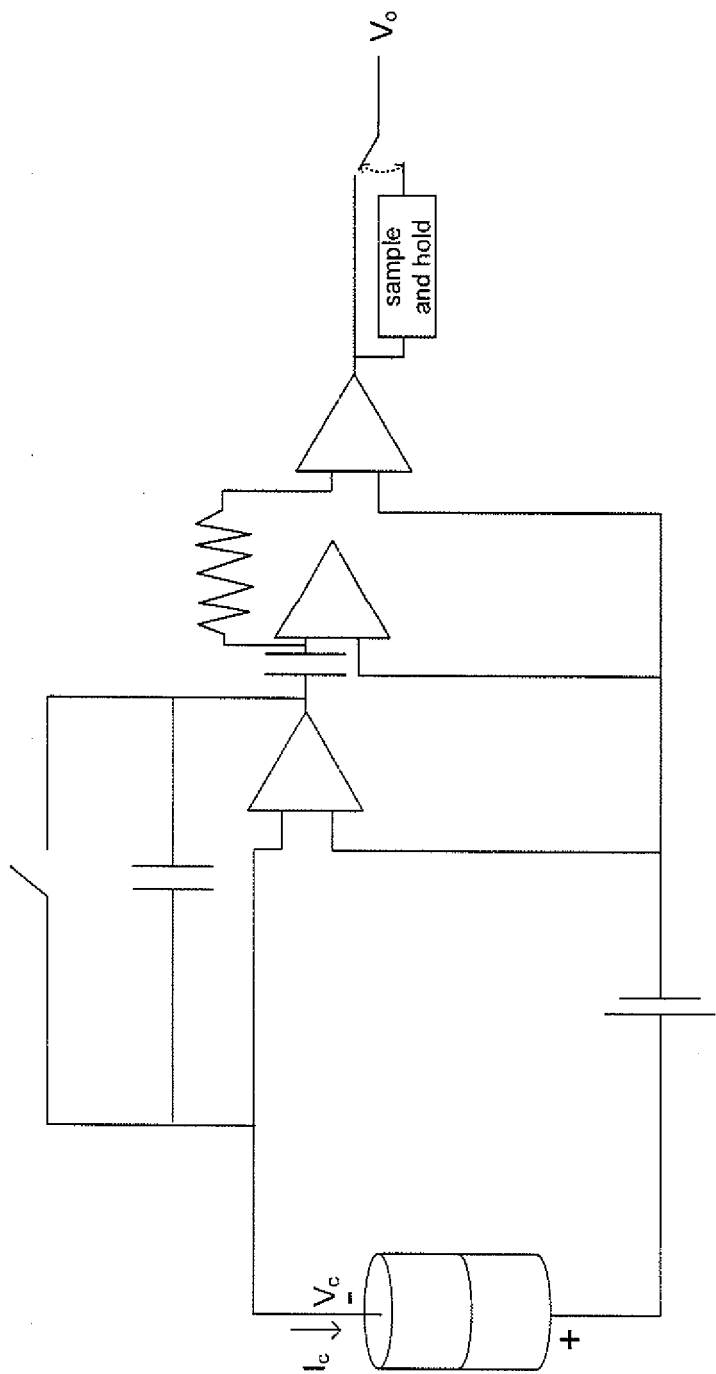


FIG. 14B

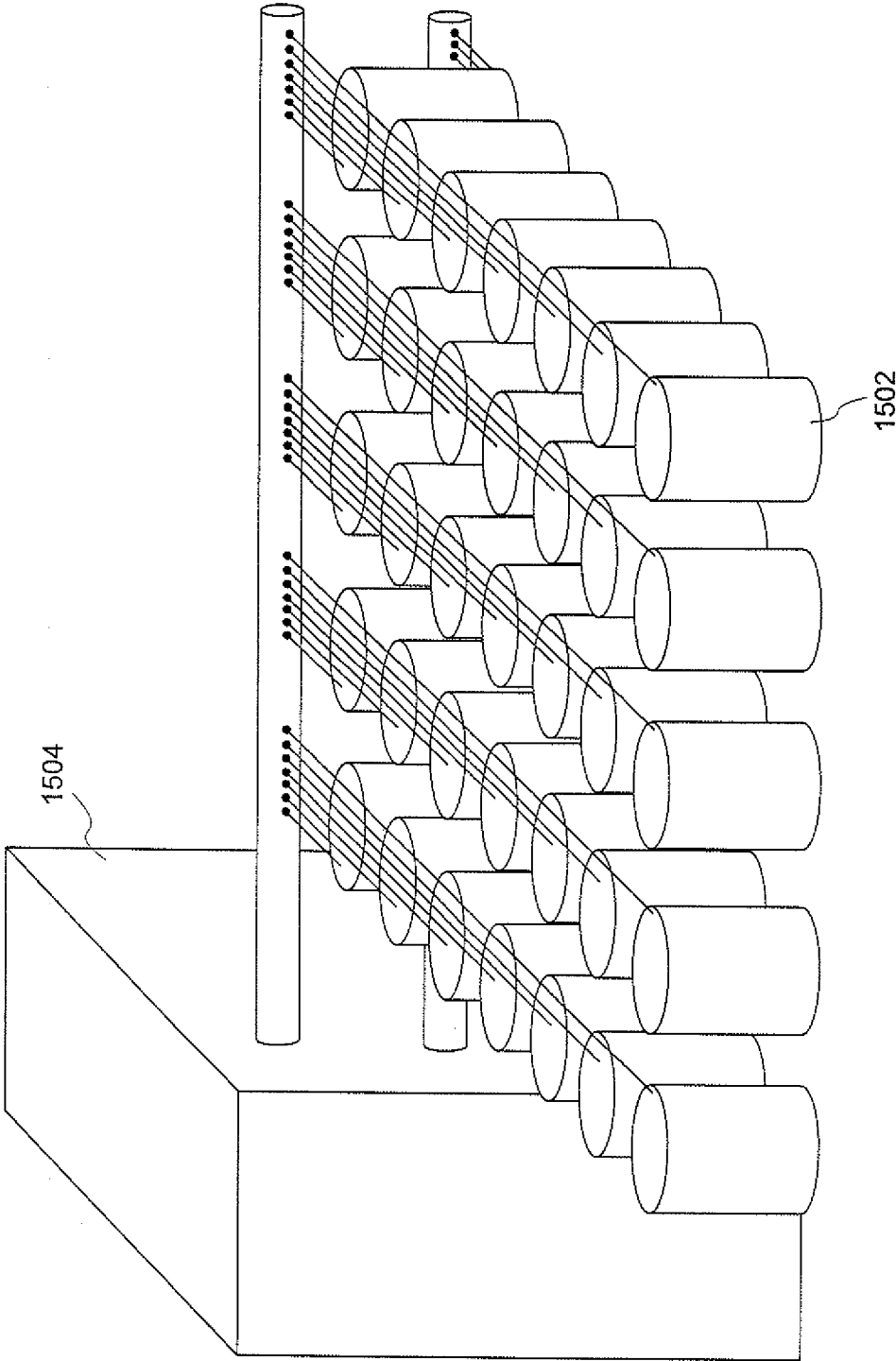


FIG. 15

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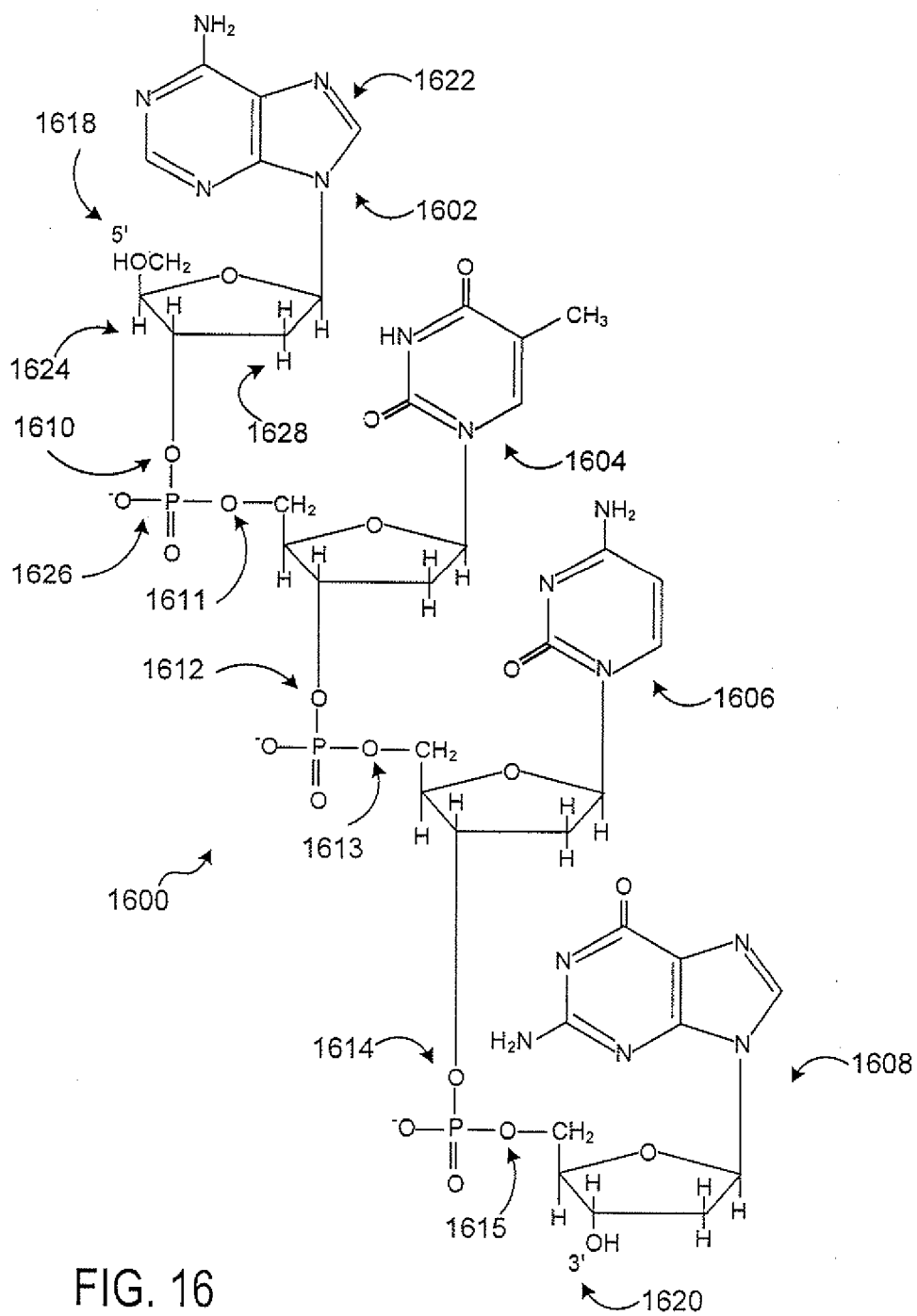


FIG. 16

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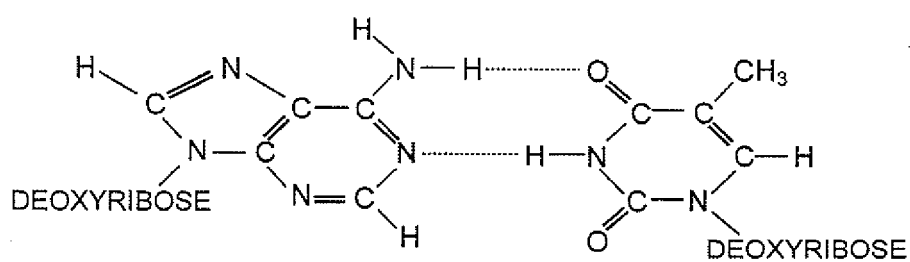


FIG. 17A

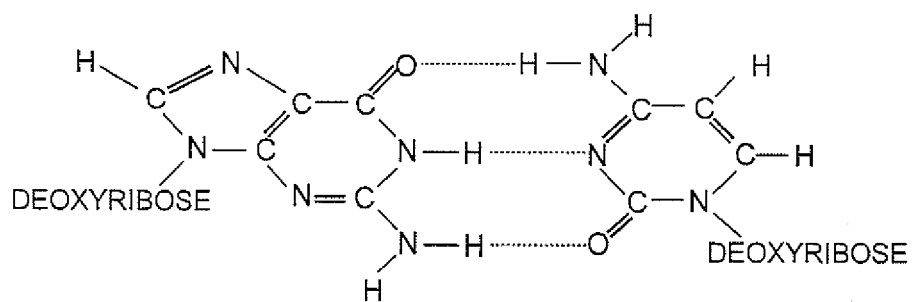


FIG. 17B

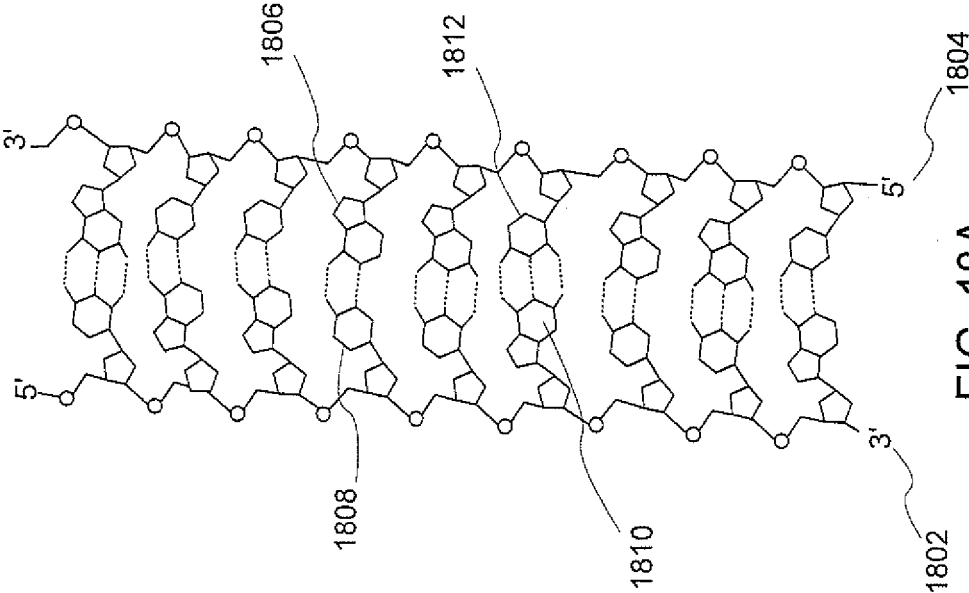


FIG. 18A

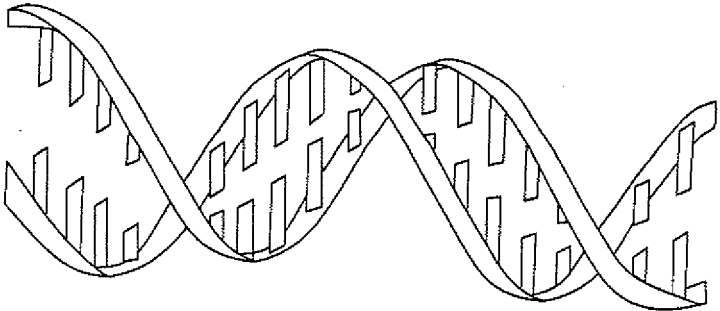


FIG. 18B

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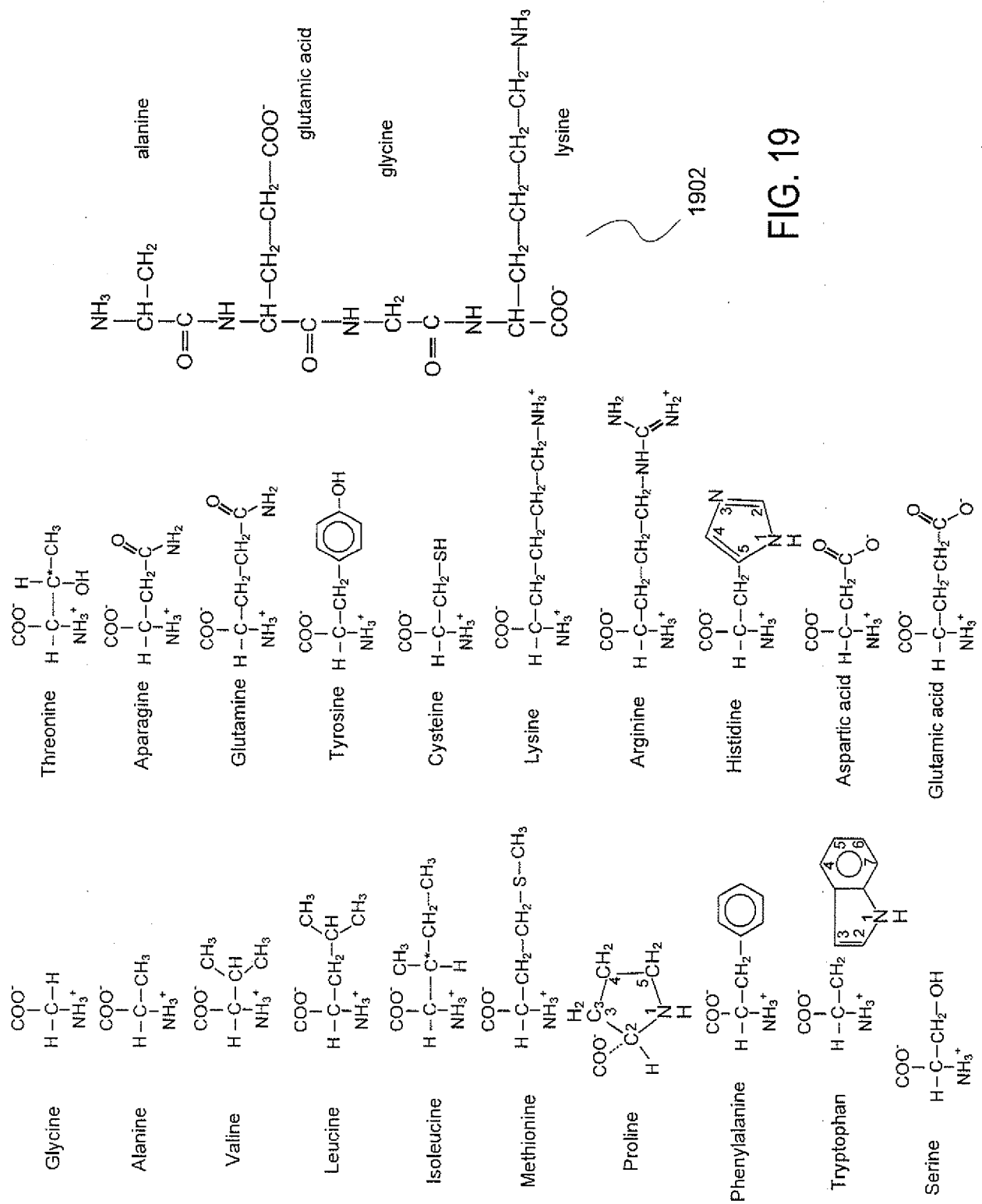


FIG. 19

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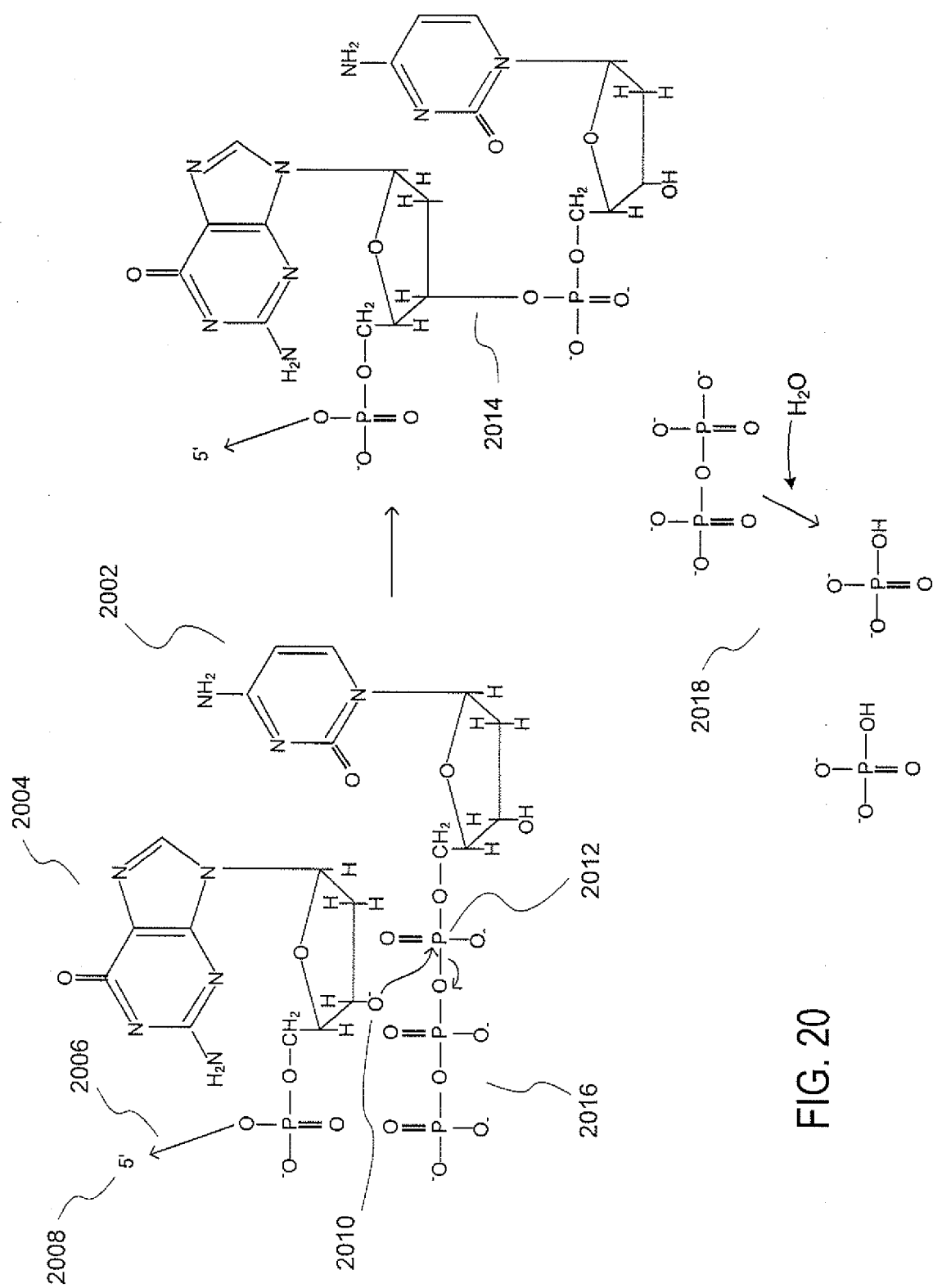


FIG. 20

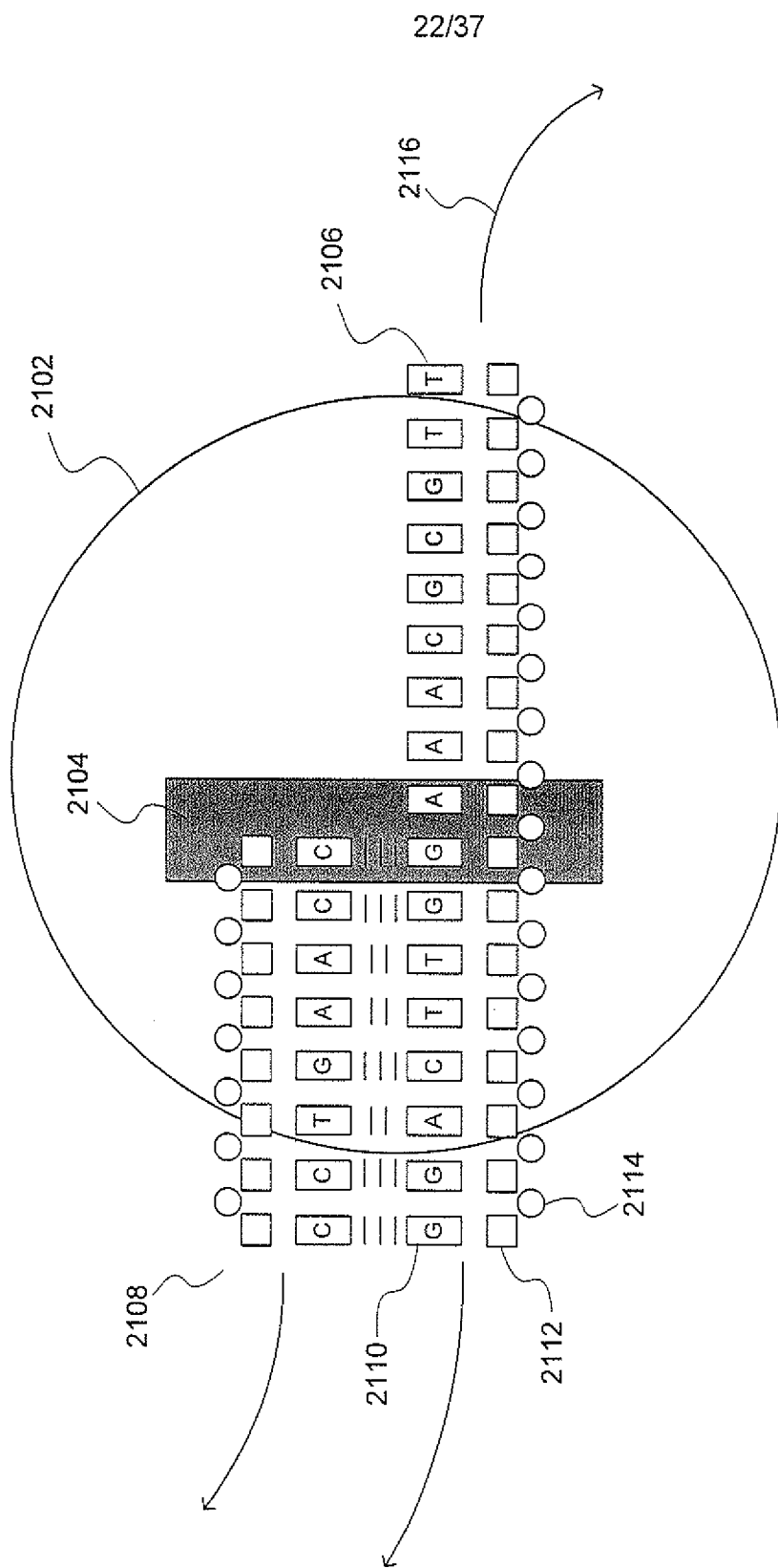


FIG. 21A

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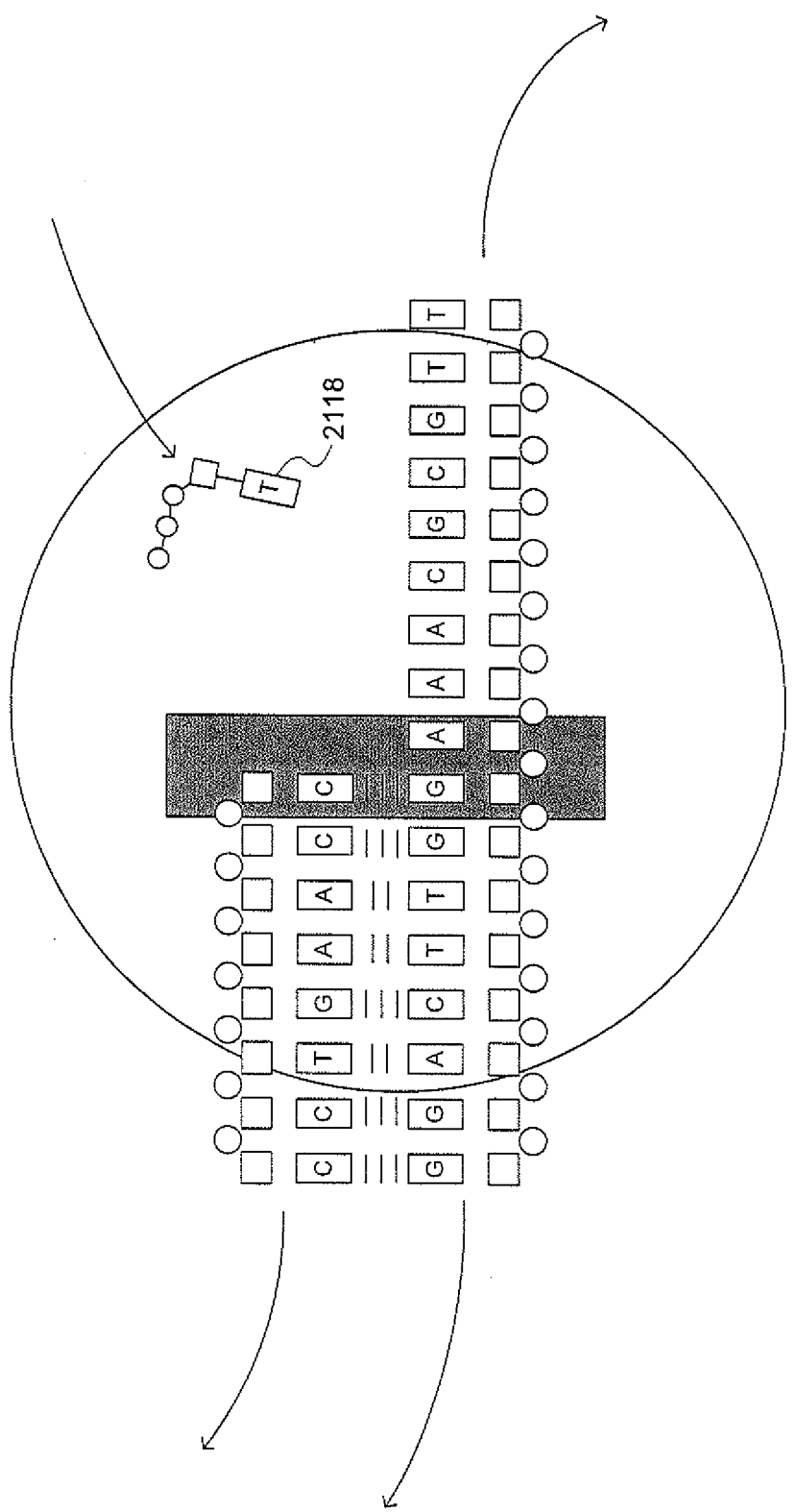


FIG. 21B

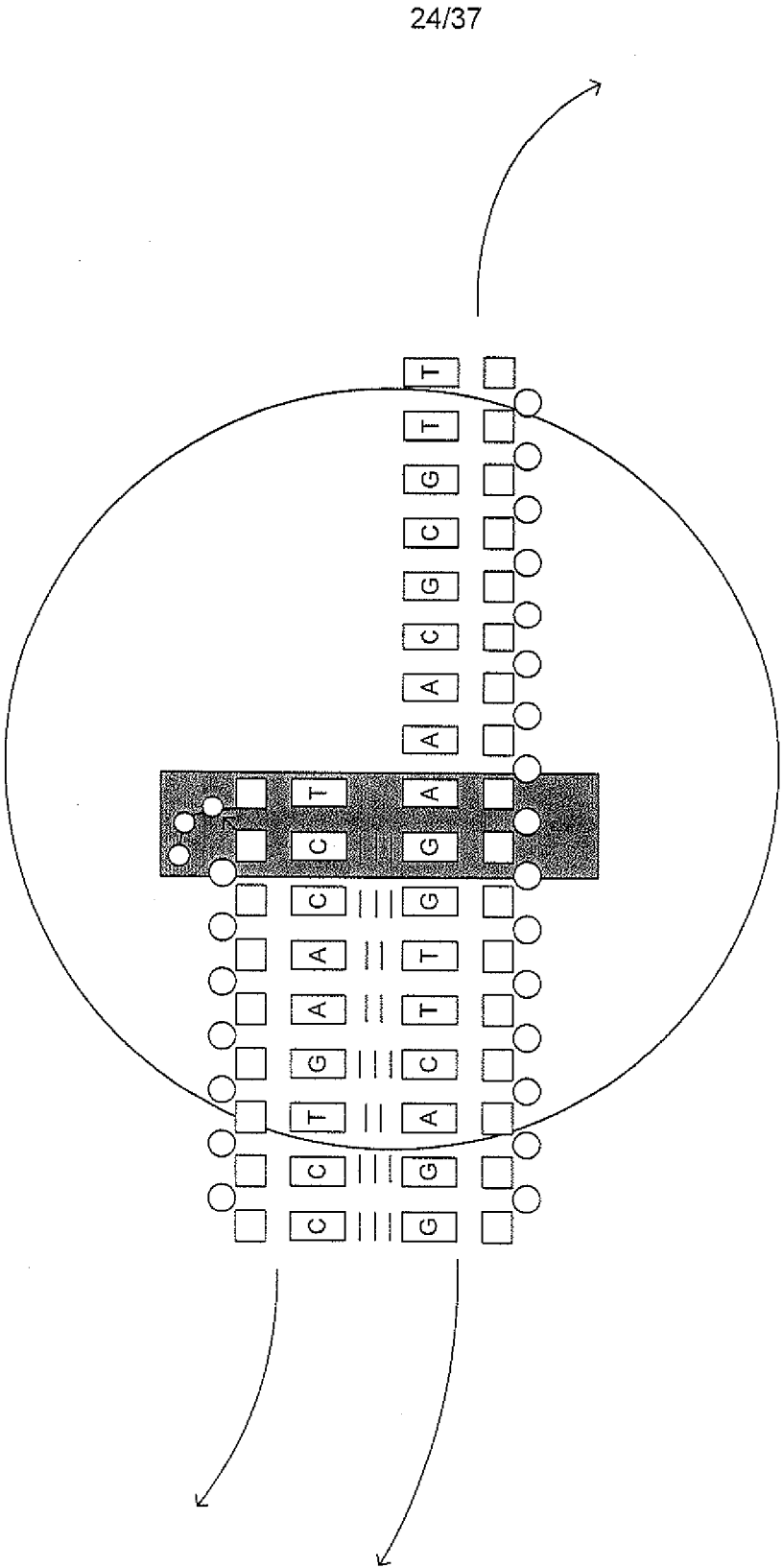


FIG. 21C

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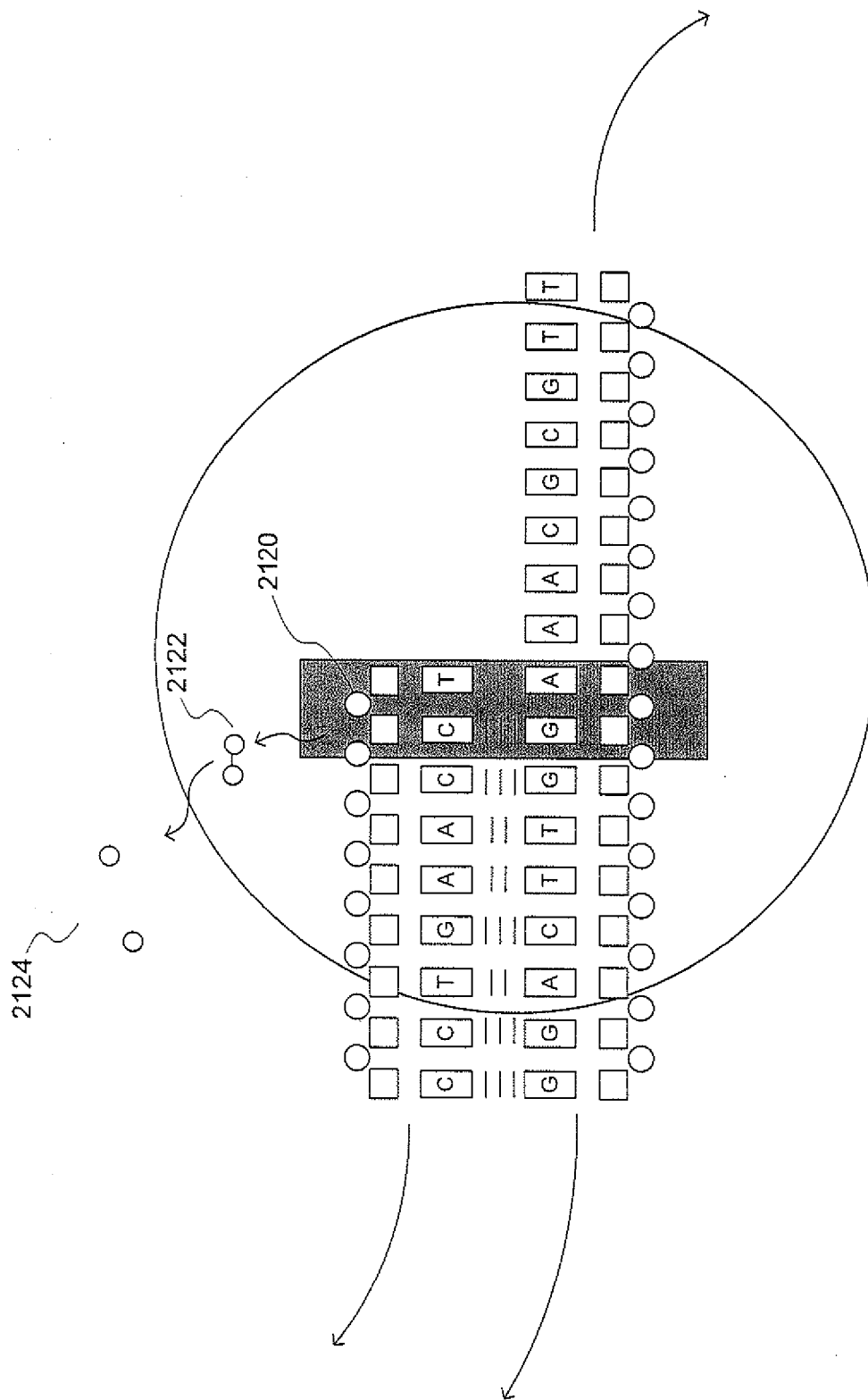


FIG. 21D

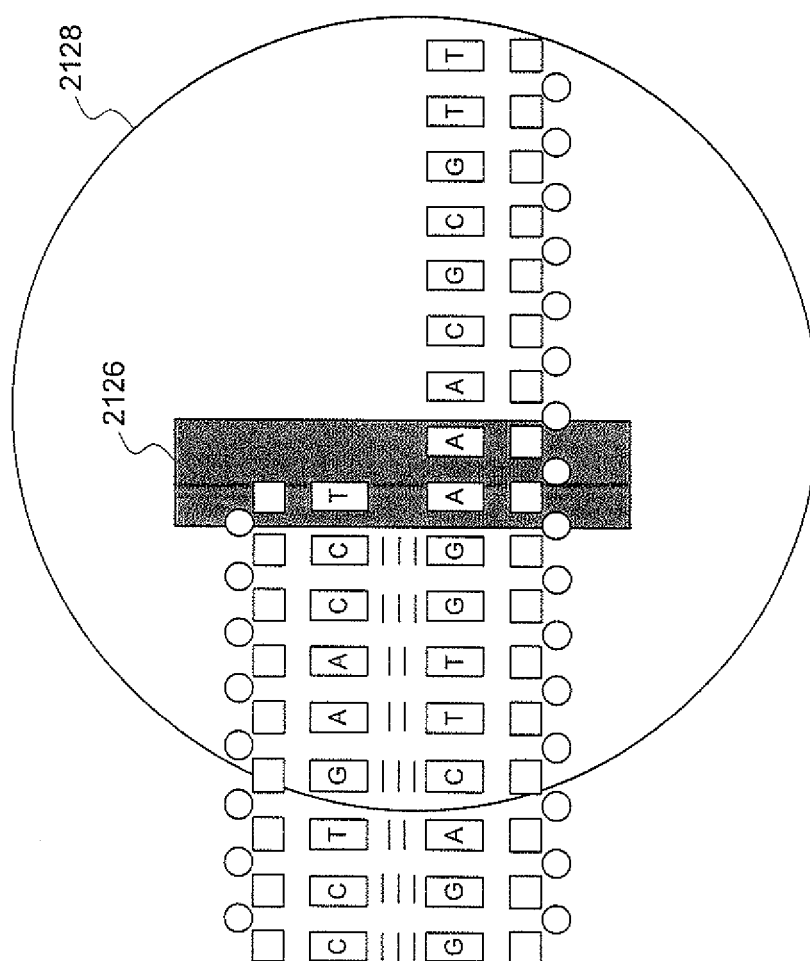


FIG. 21E

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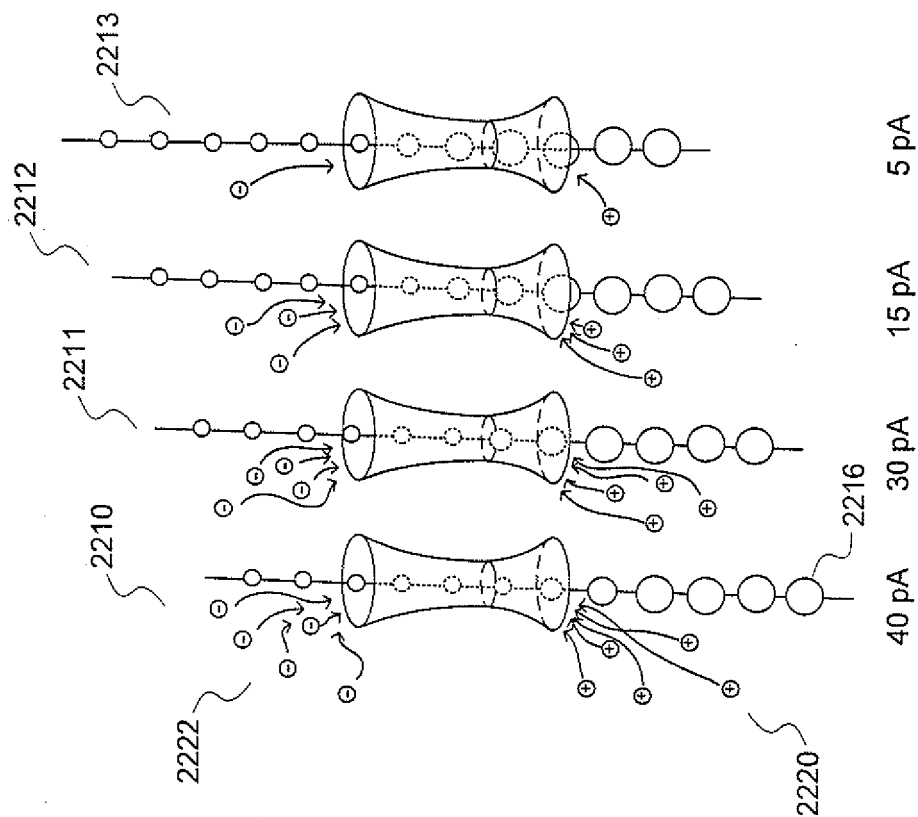


FIG. 22B

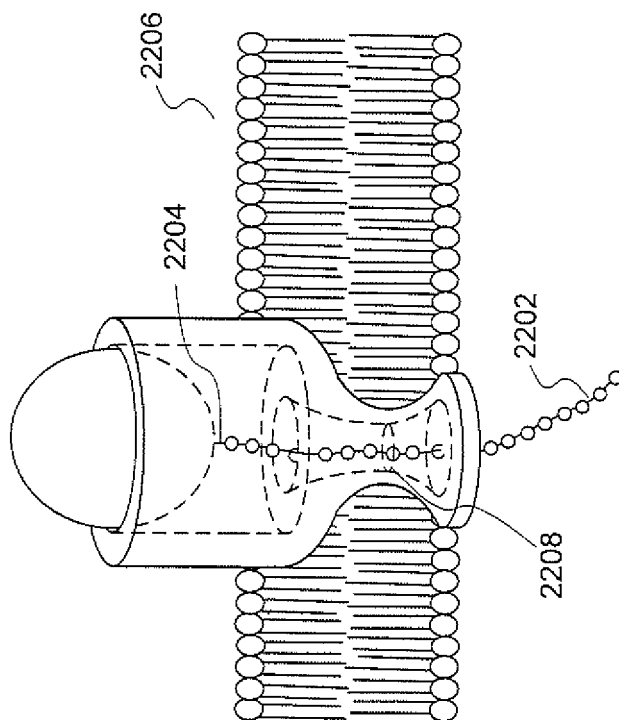


FIG. 22A

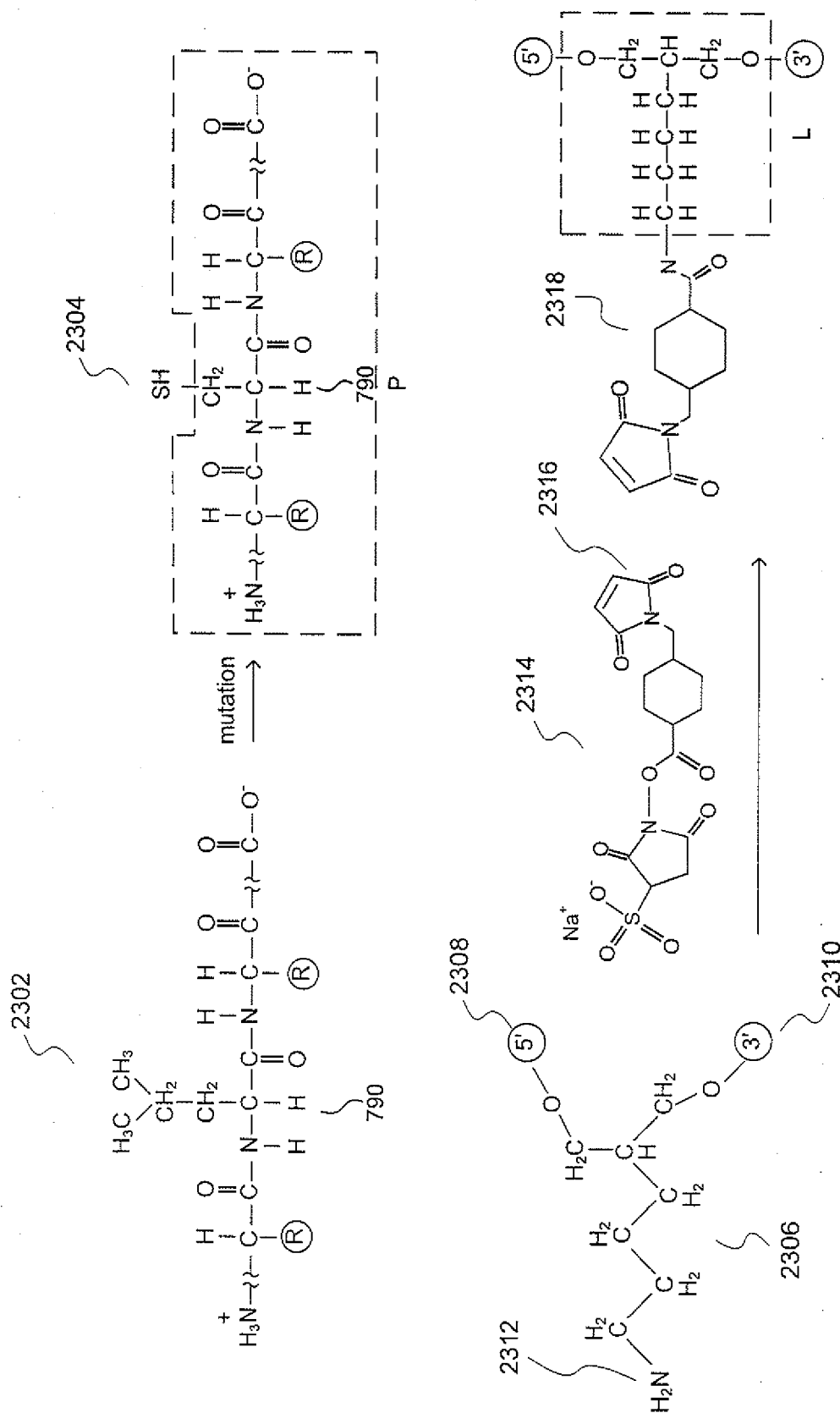


FIG. 23A

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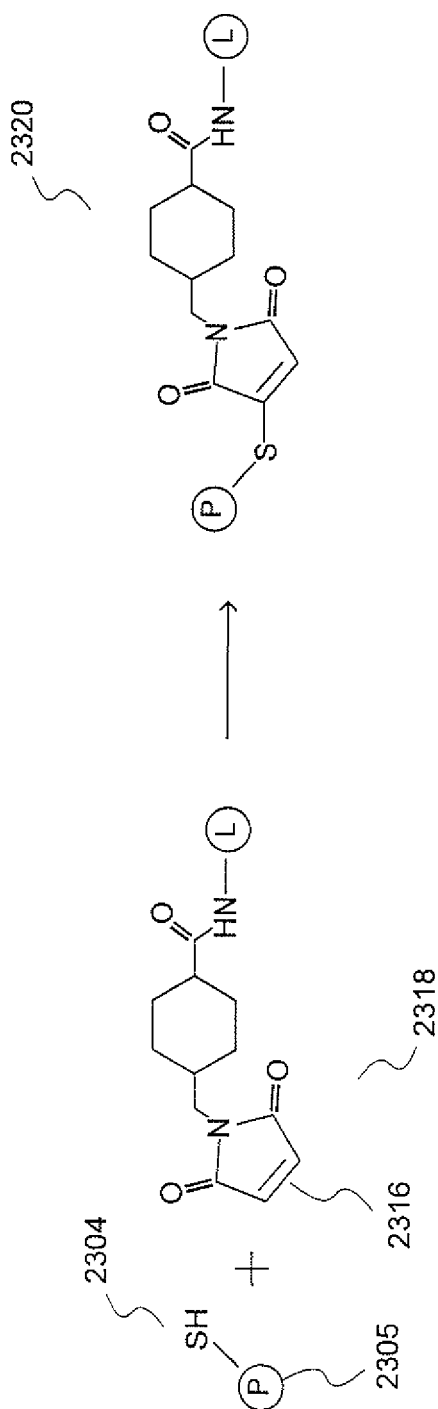


FIG. 23B

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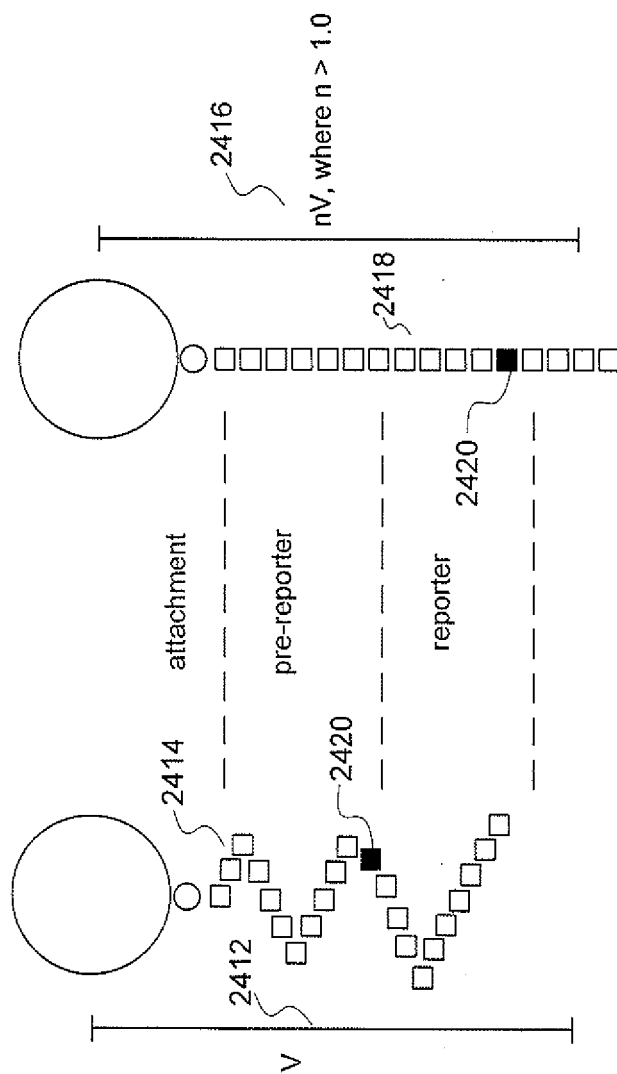
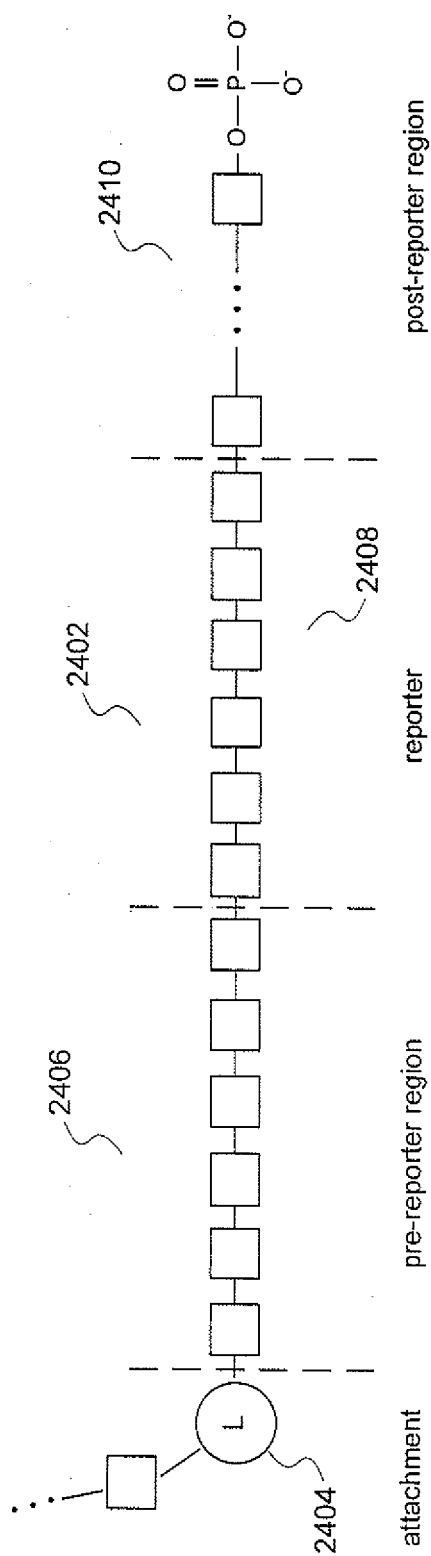


FIG. 24

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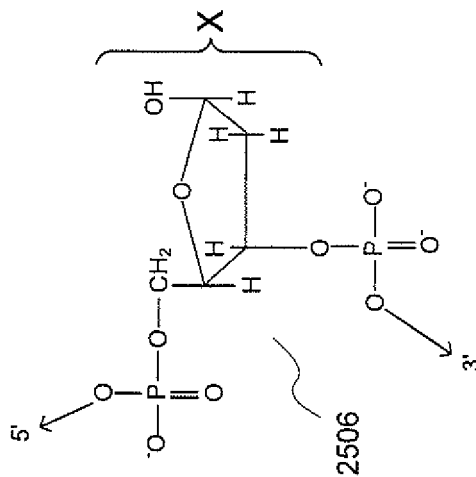
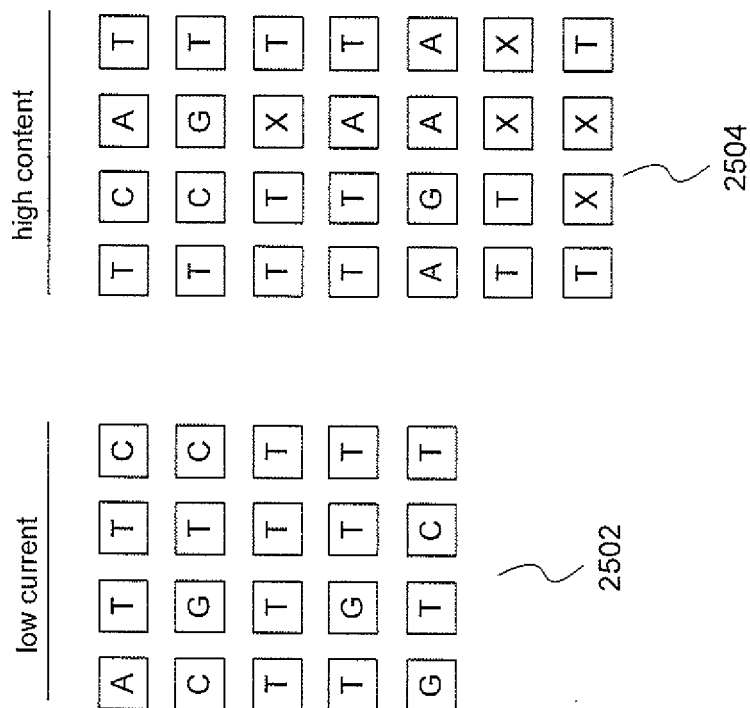


FIG. 25

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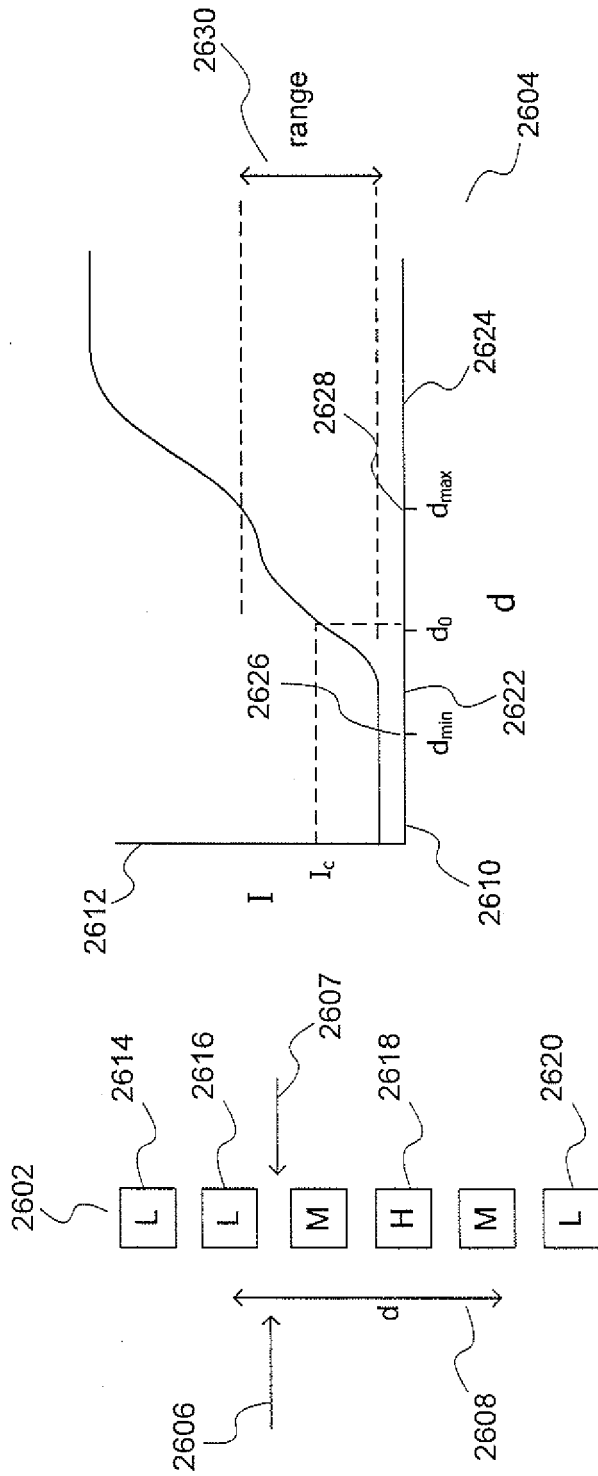


FIG. 26A

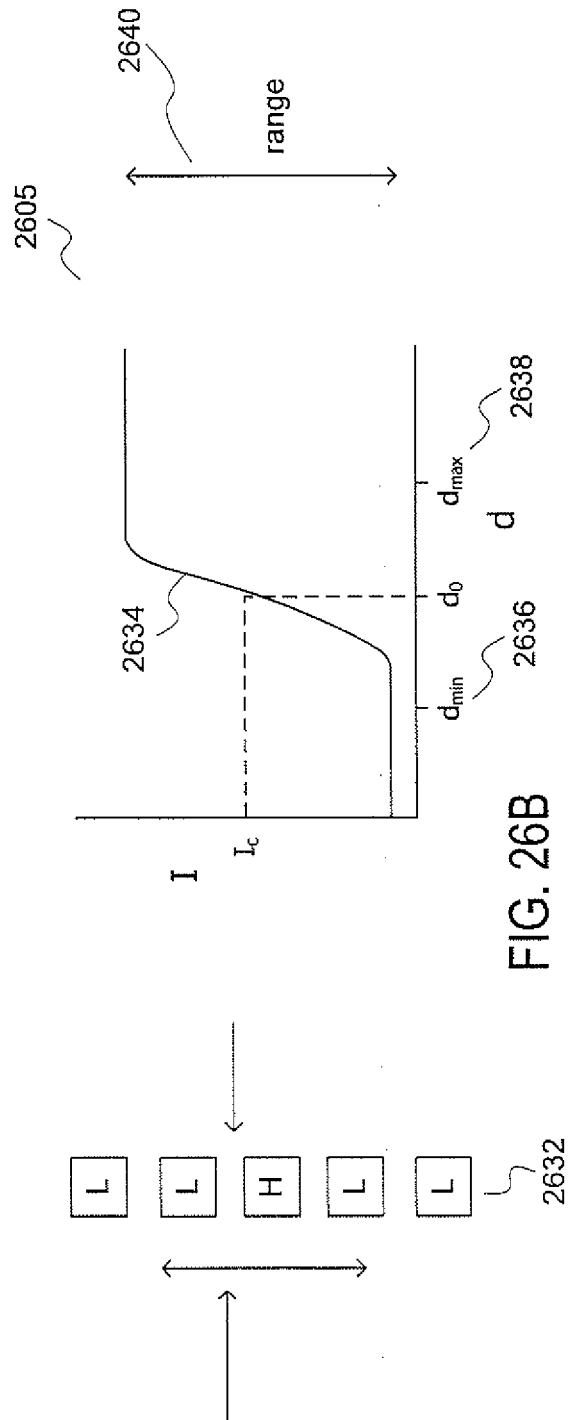
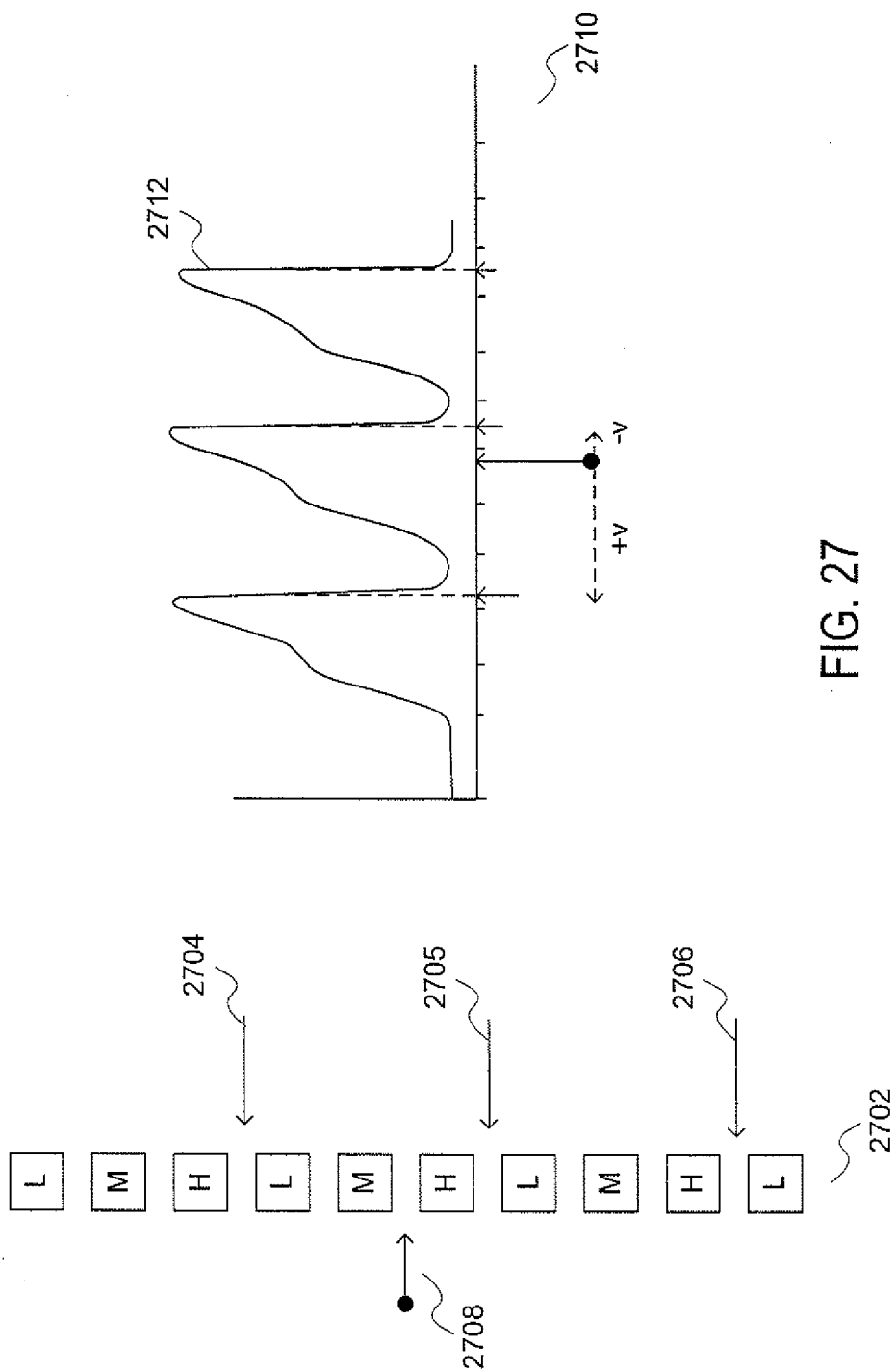


FIG. 26B

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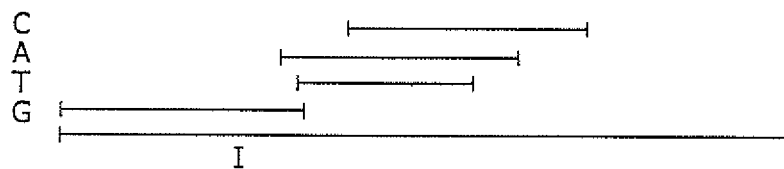


FIG. 28A

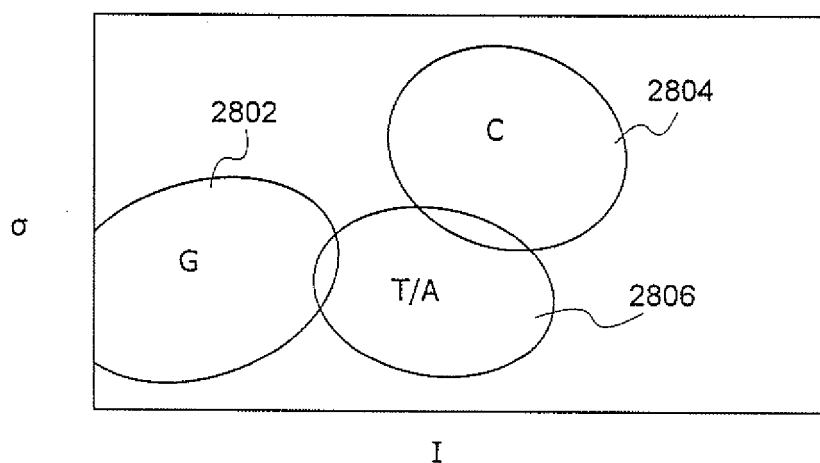


FIG. 28B

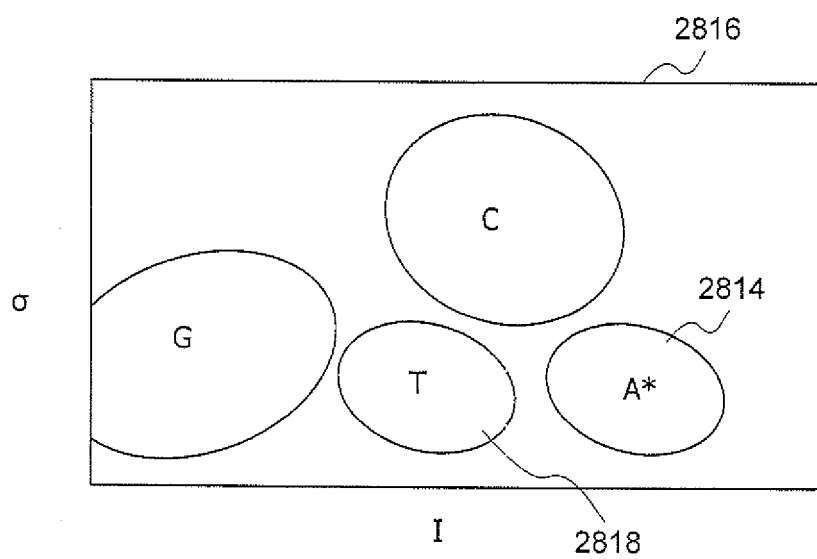
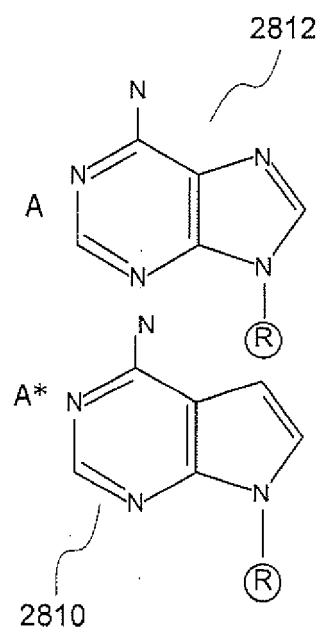


FIG. 28C



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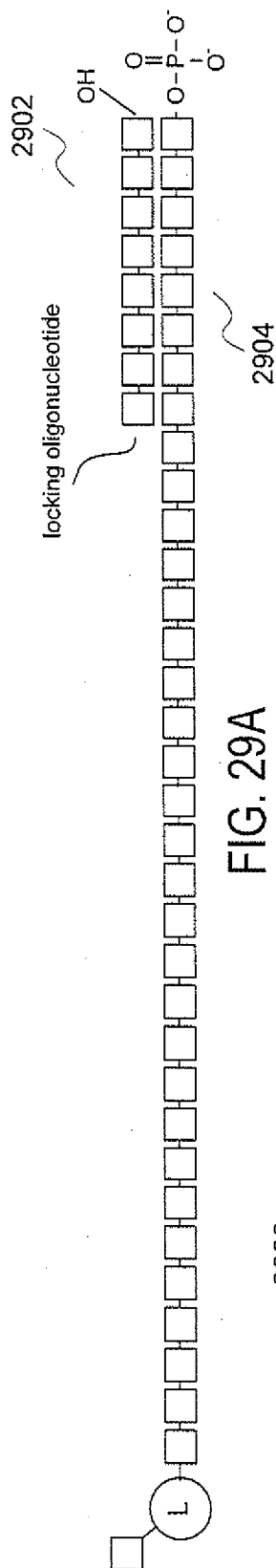


FIG. 29A

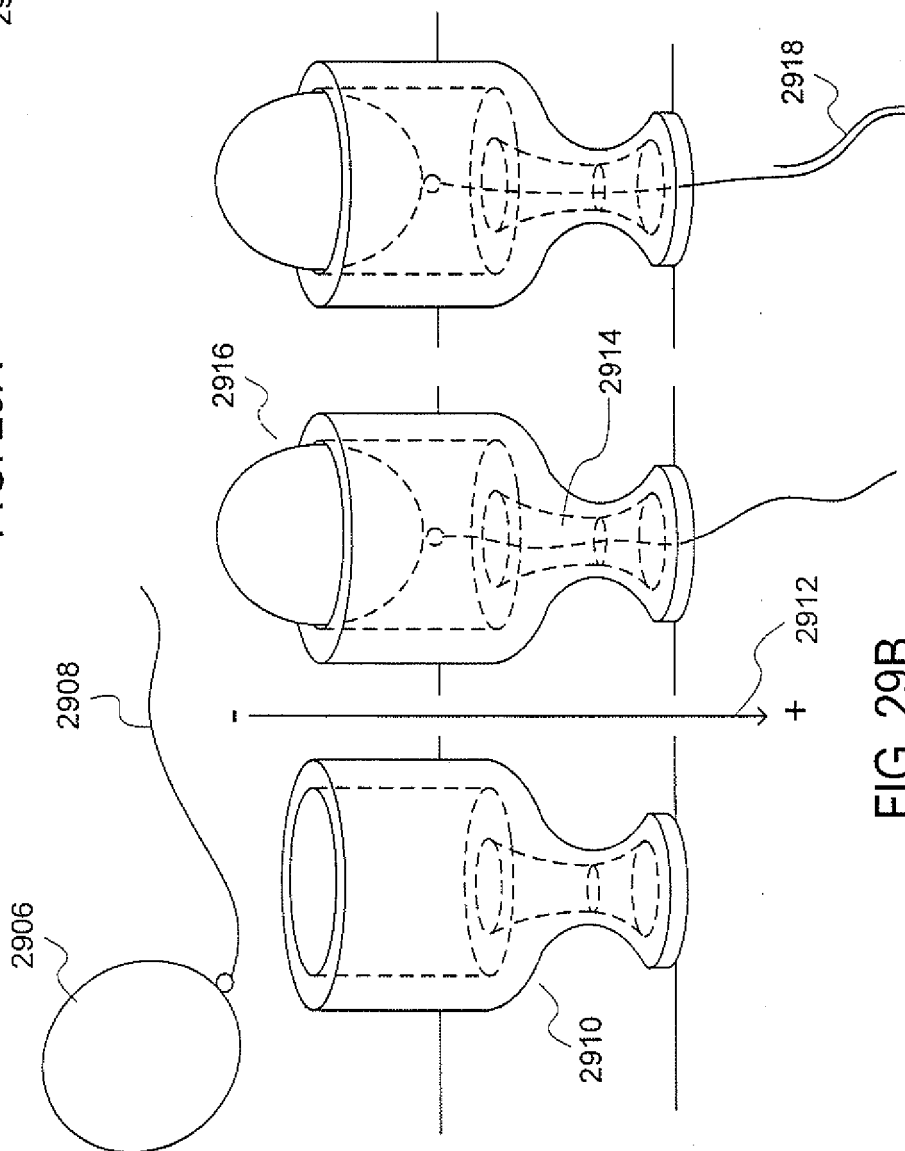


FIG. 29B

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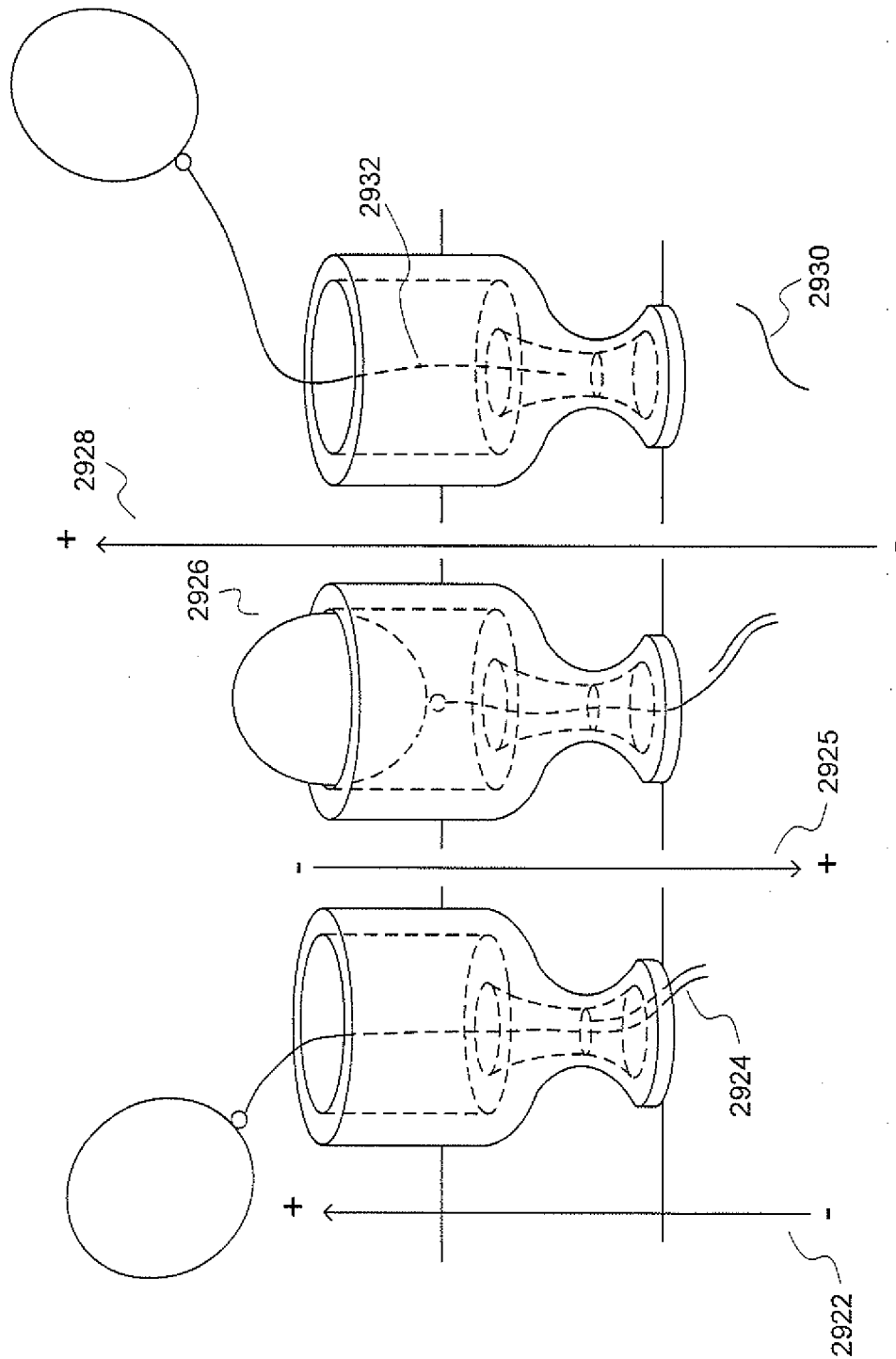


FIG. 29C

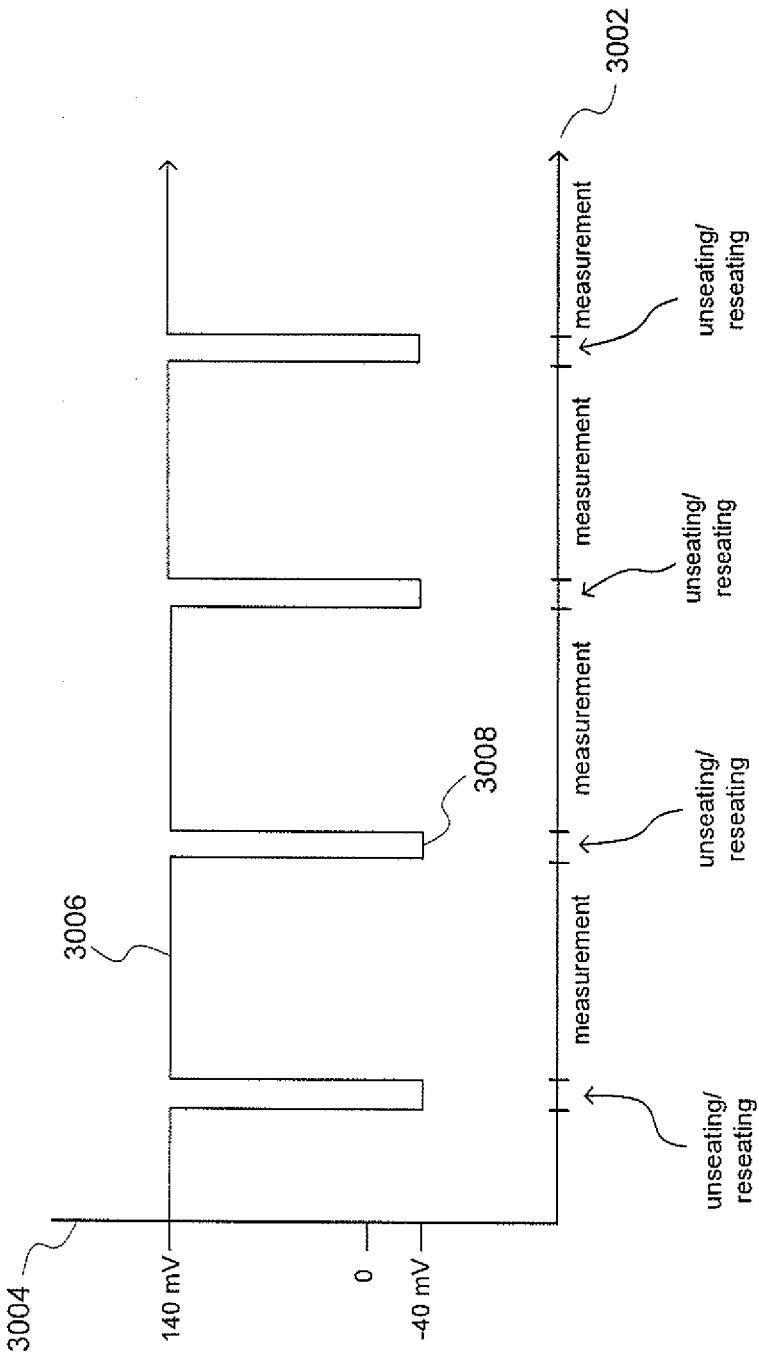


FIG. 30