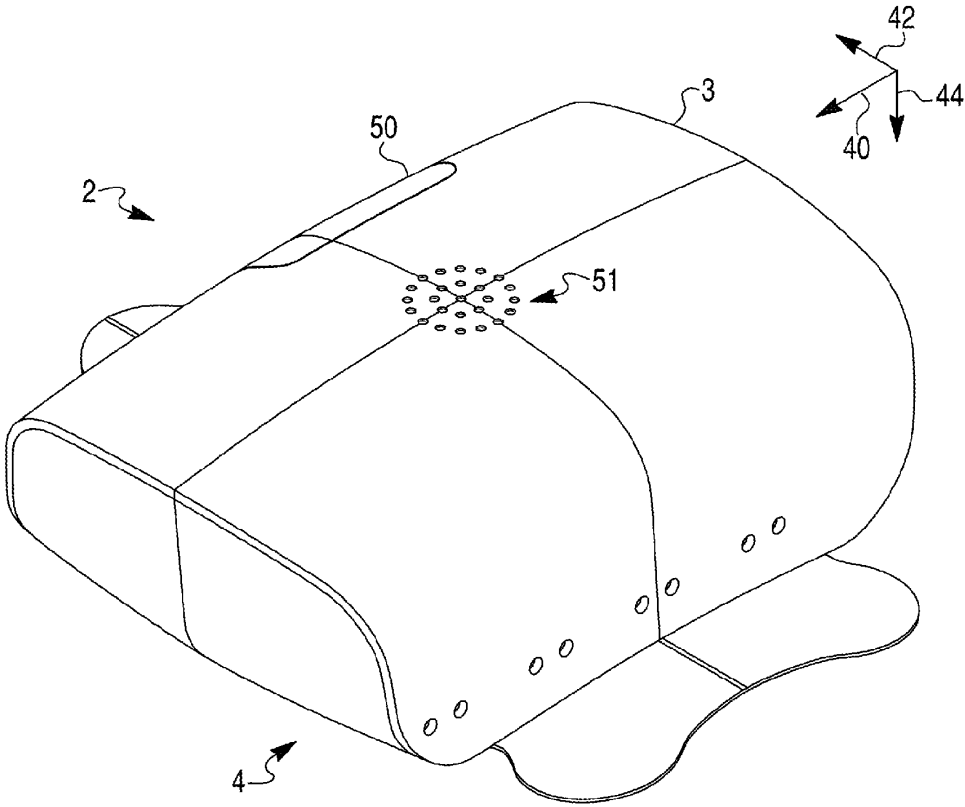


FIG. 1



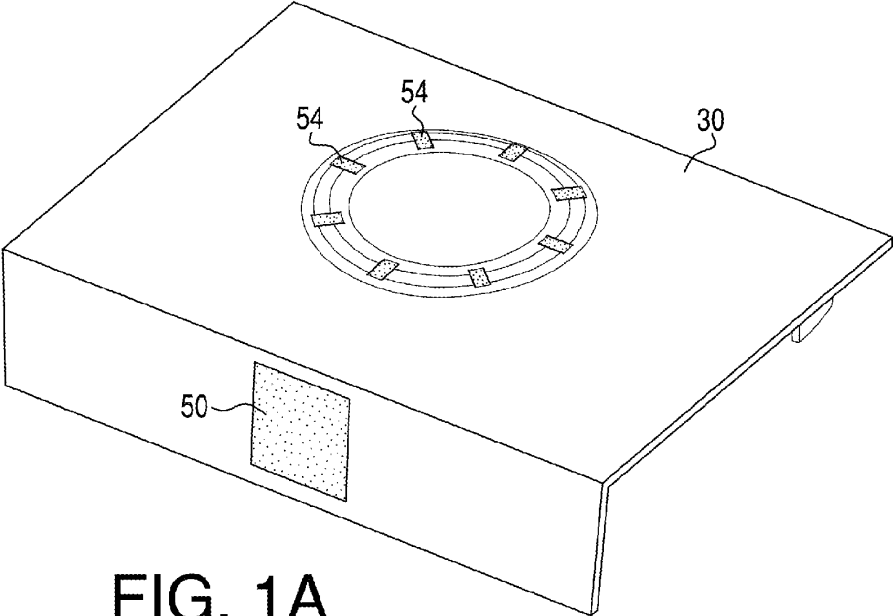


FIG. 1A

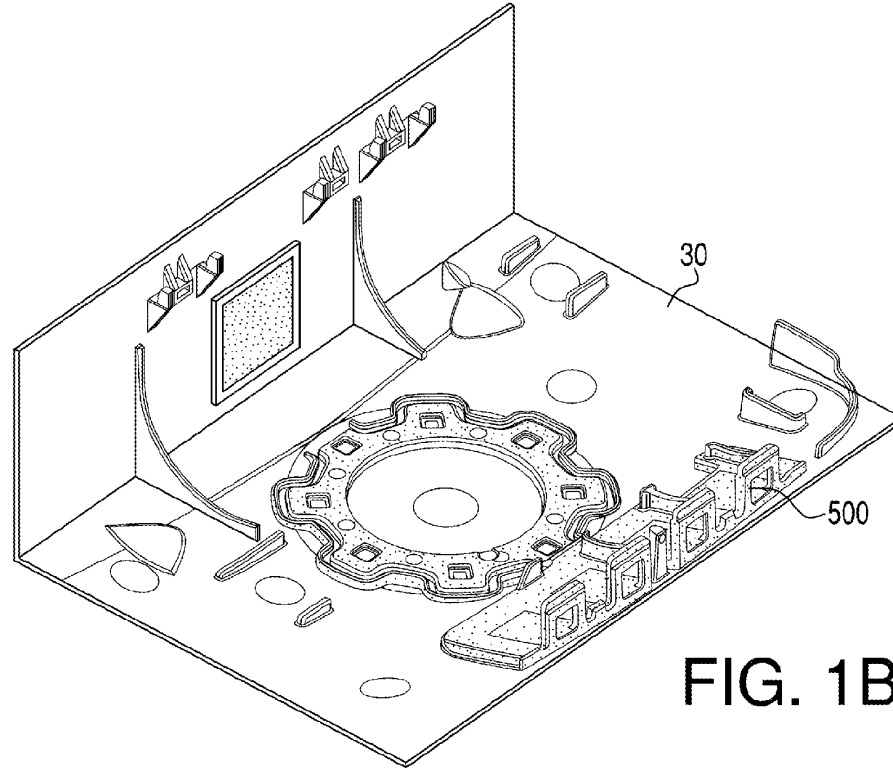


FIG. 1B

FIG. 2

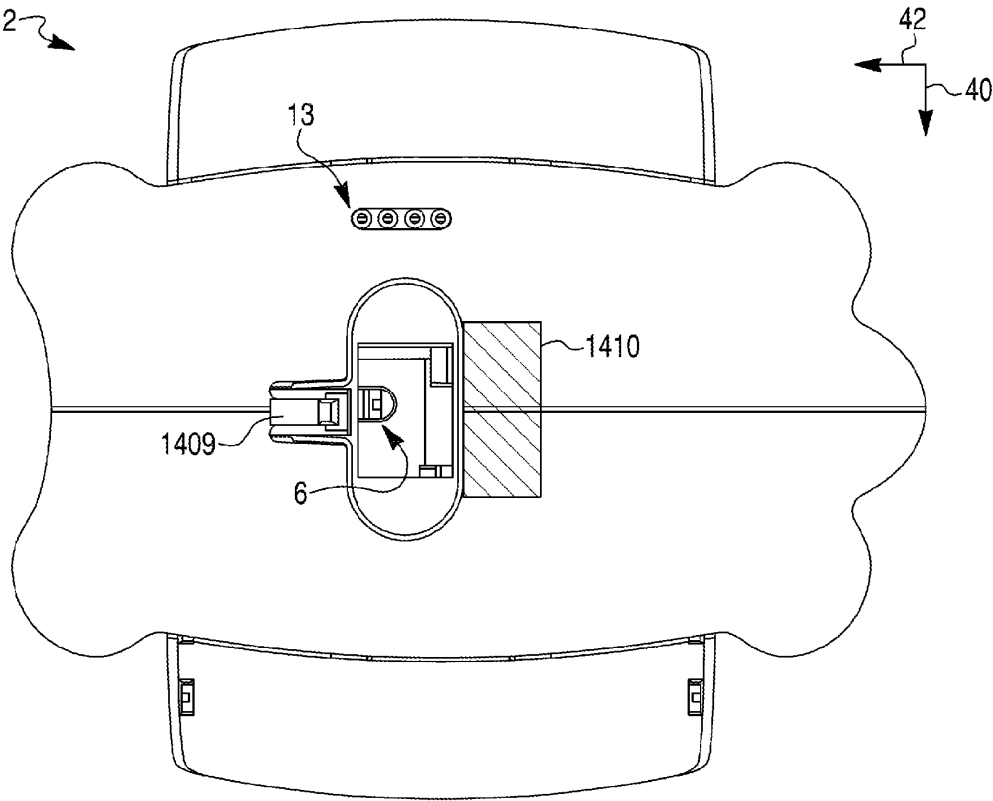


FIG. 3

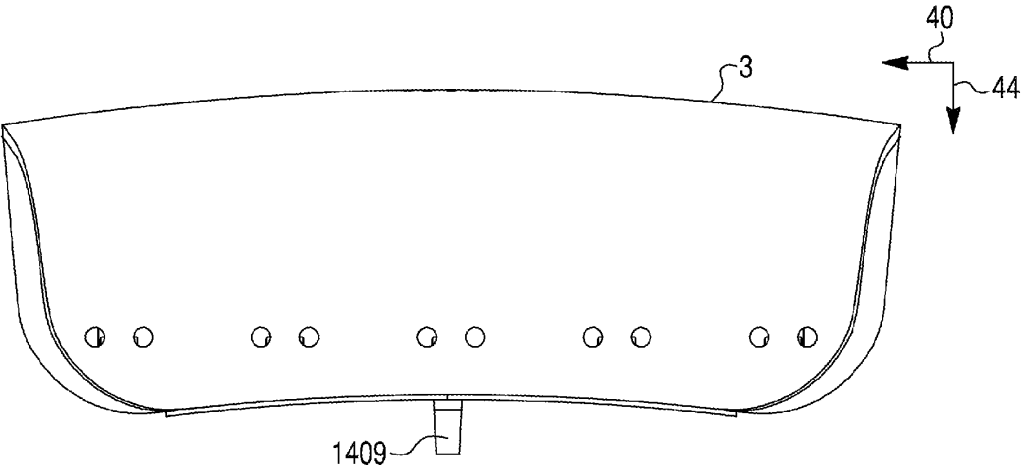


FIG. 3A

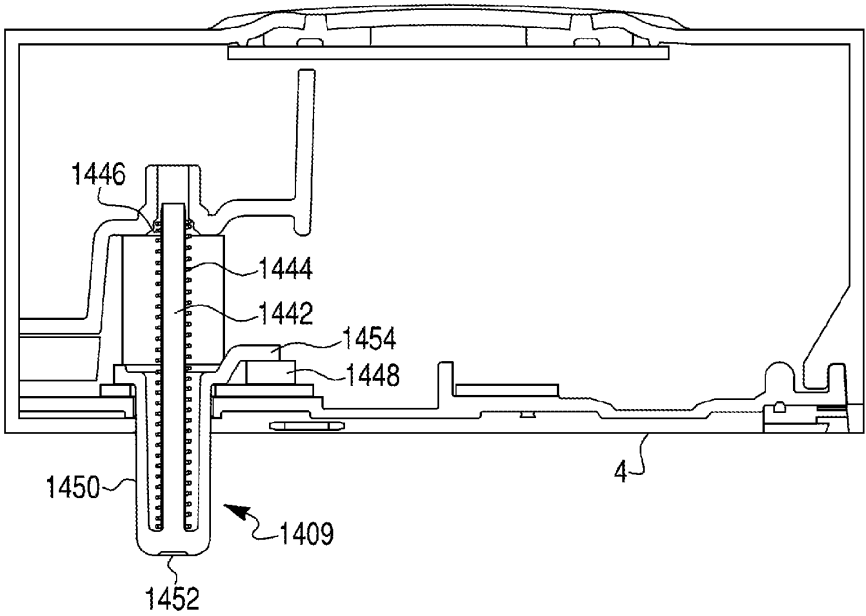


FIG. 3B

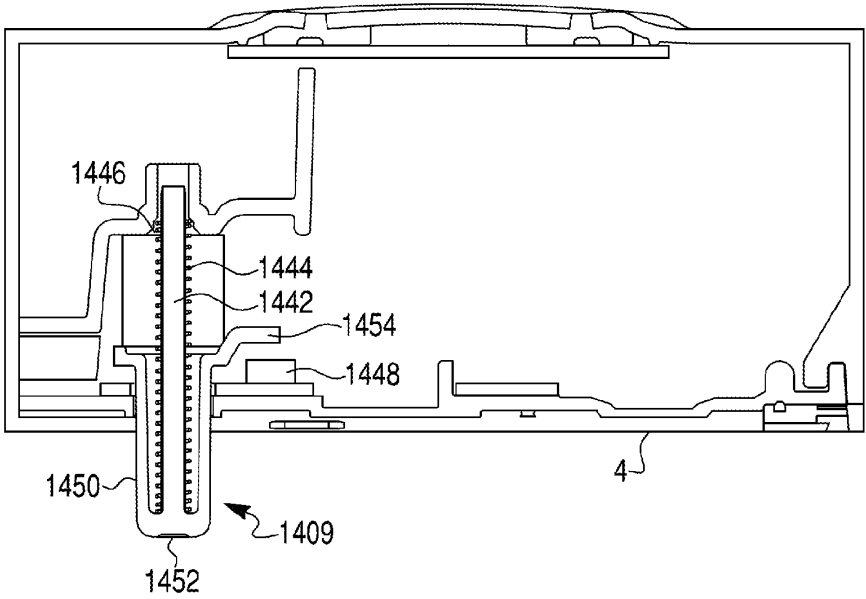


FIG. 3C

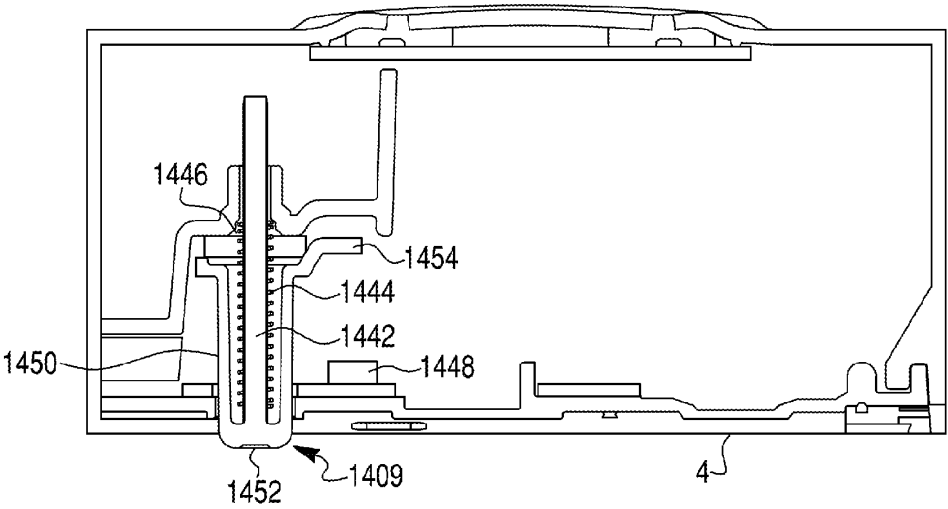


FIG. 4

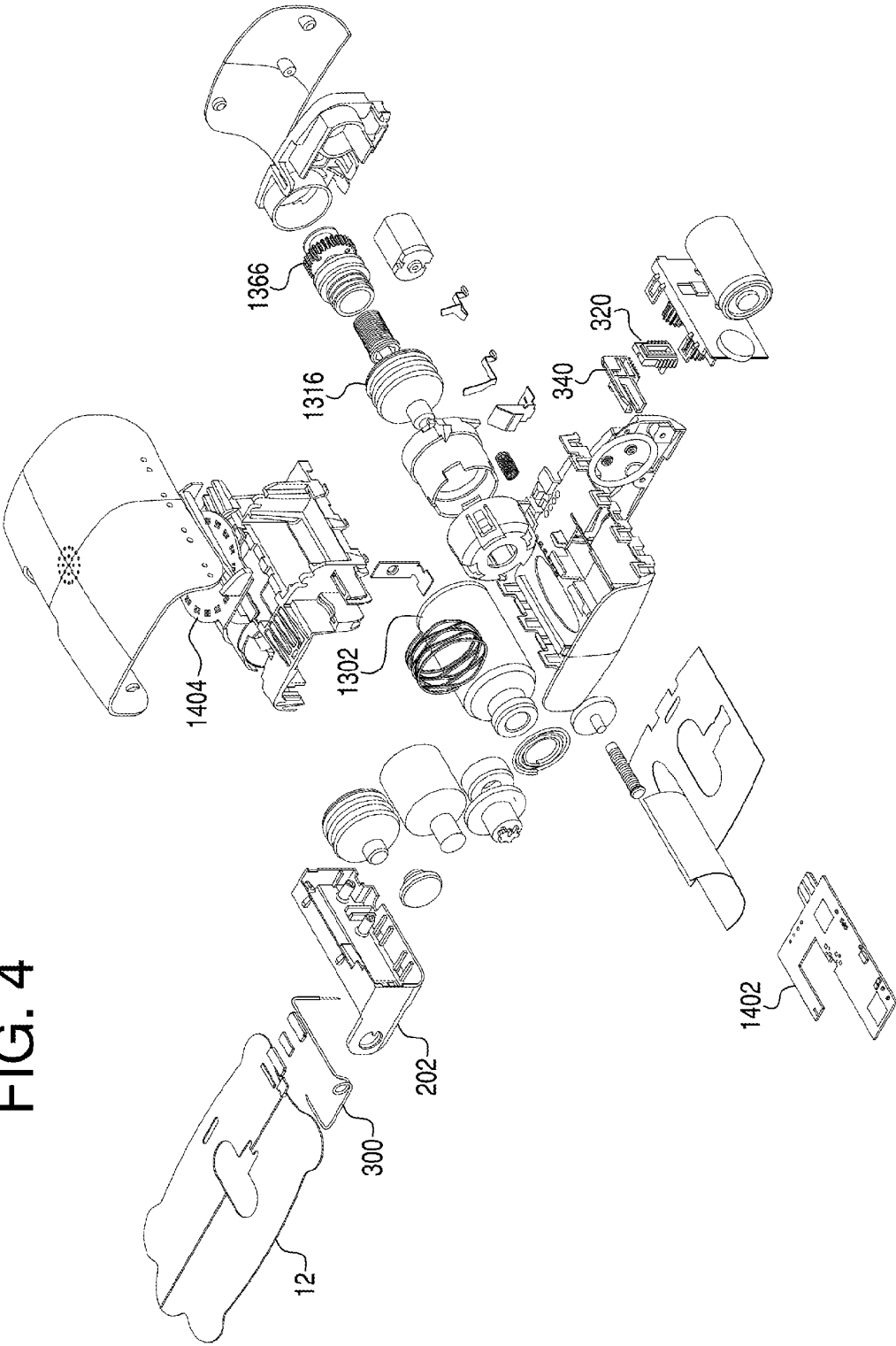


FIG. 4A

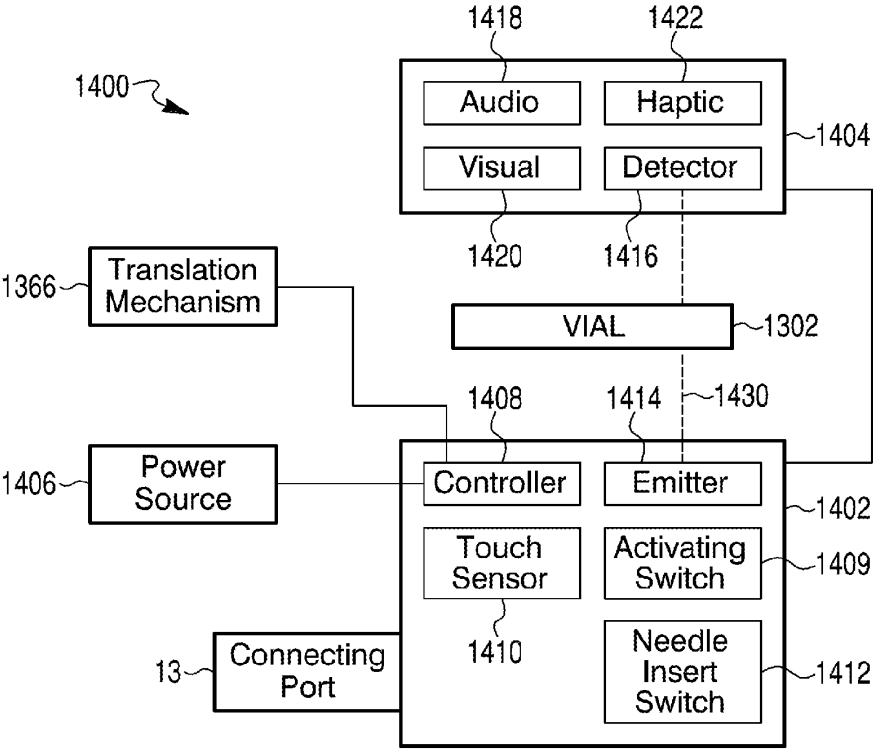


FIG. 4B

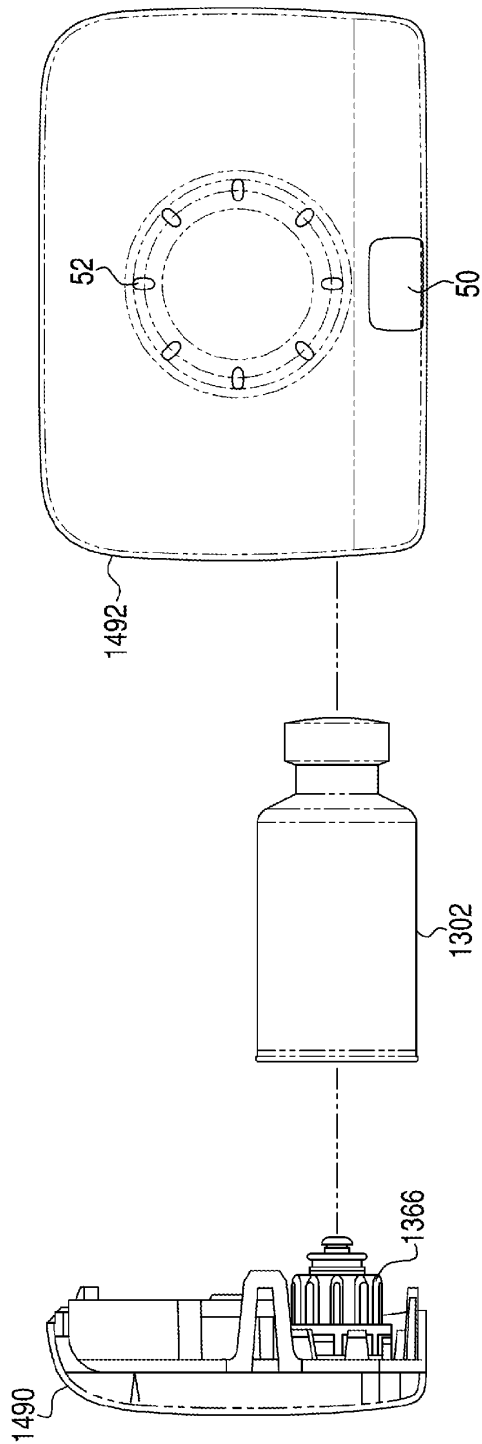


FIG. 4C

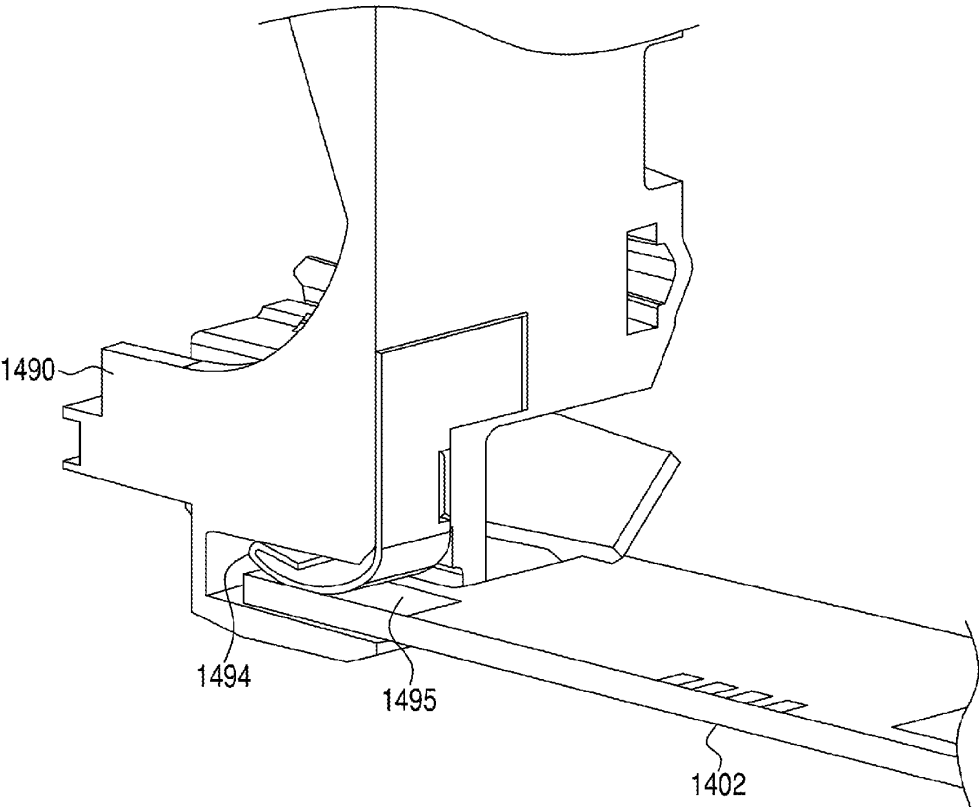


FIG. 5

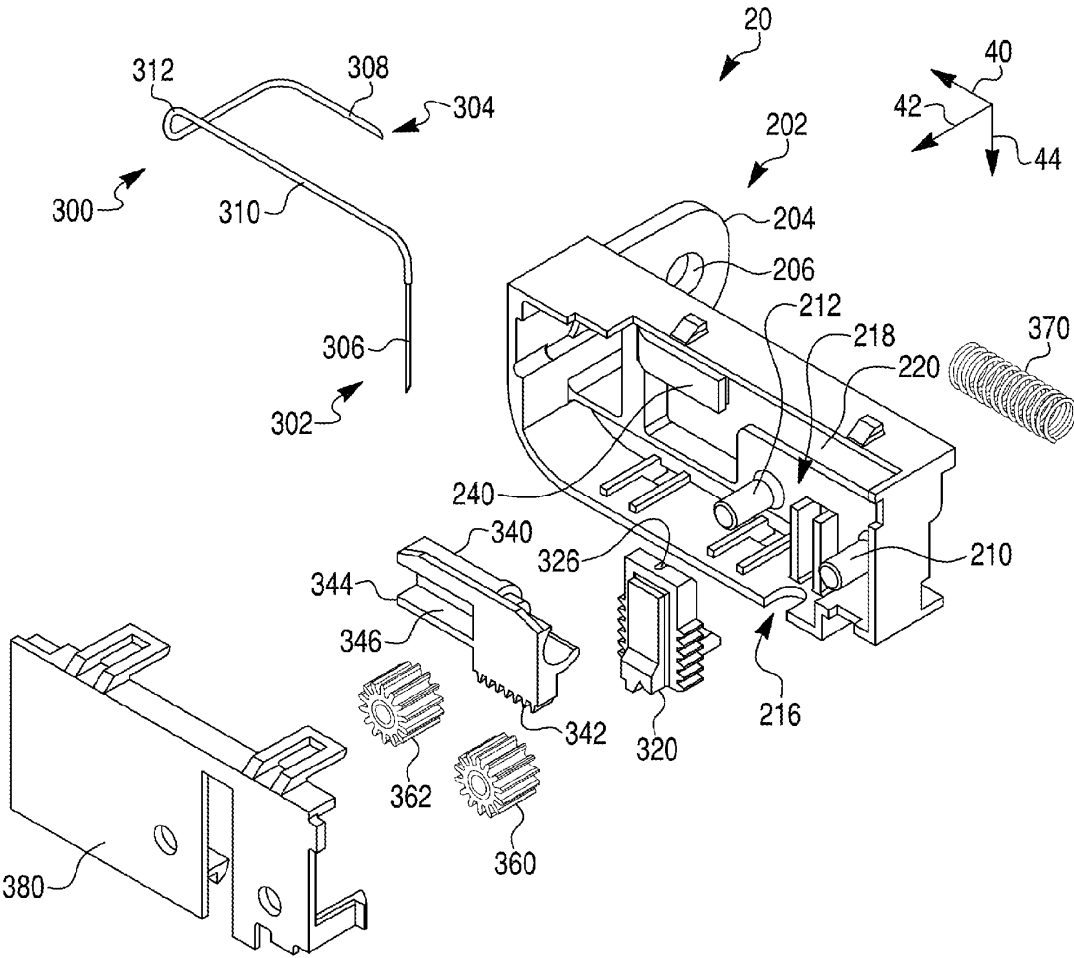


FIG. 5A

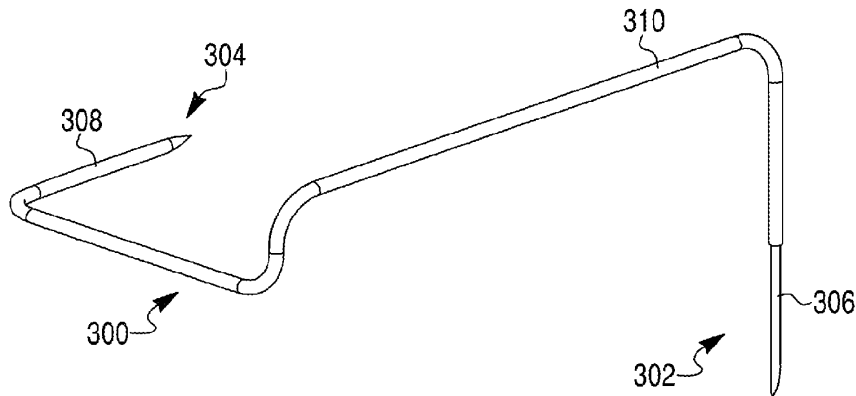


FIG. 5B

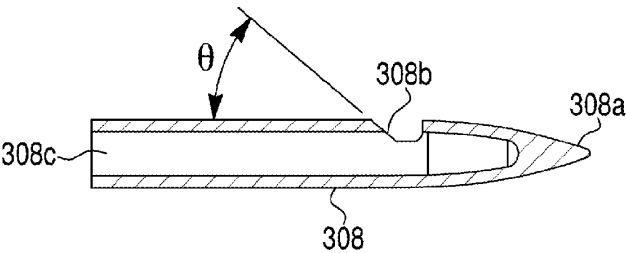


FIG. 6

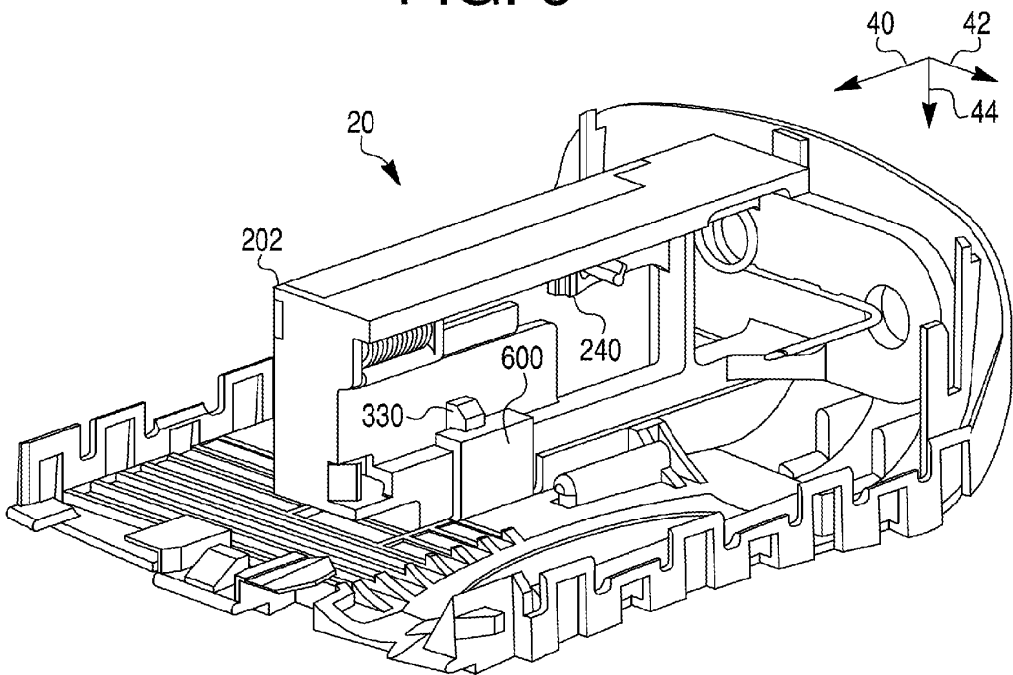


FIG. 7

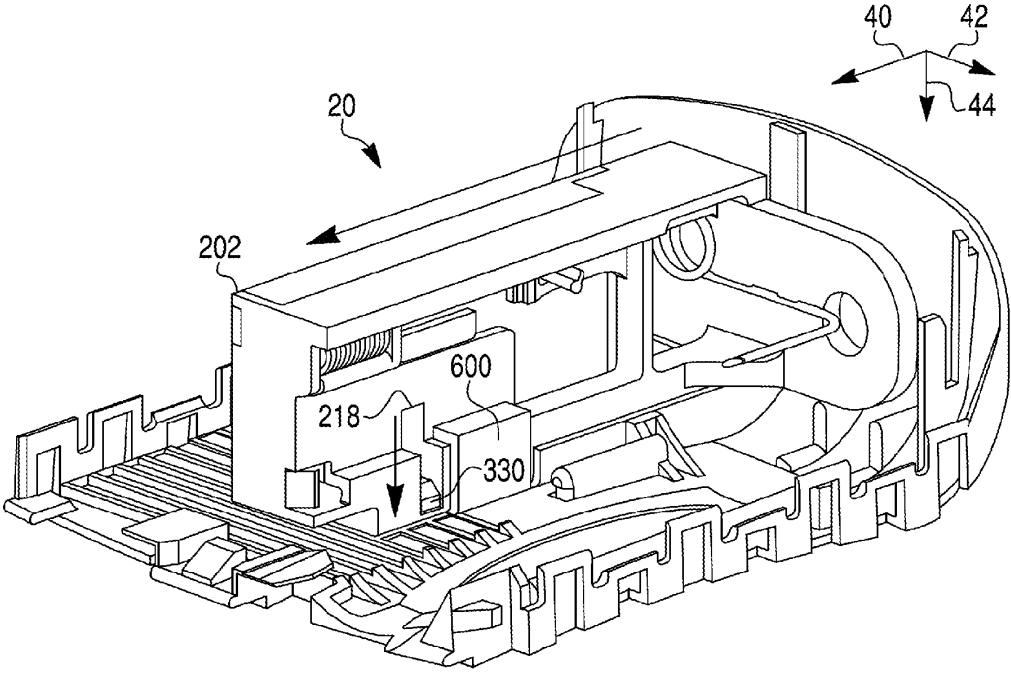


FIG. 8

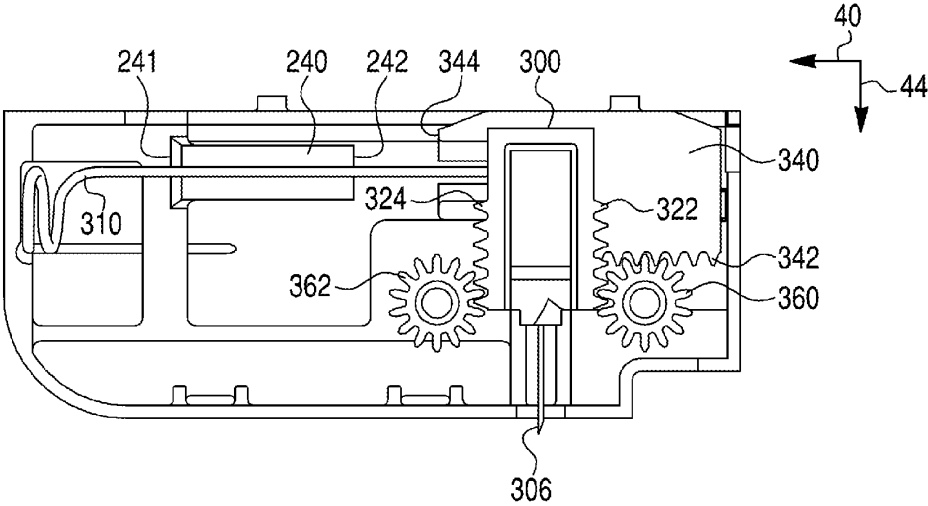


FIG. 9

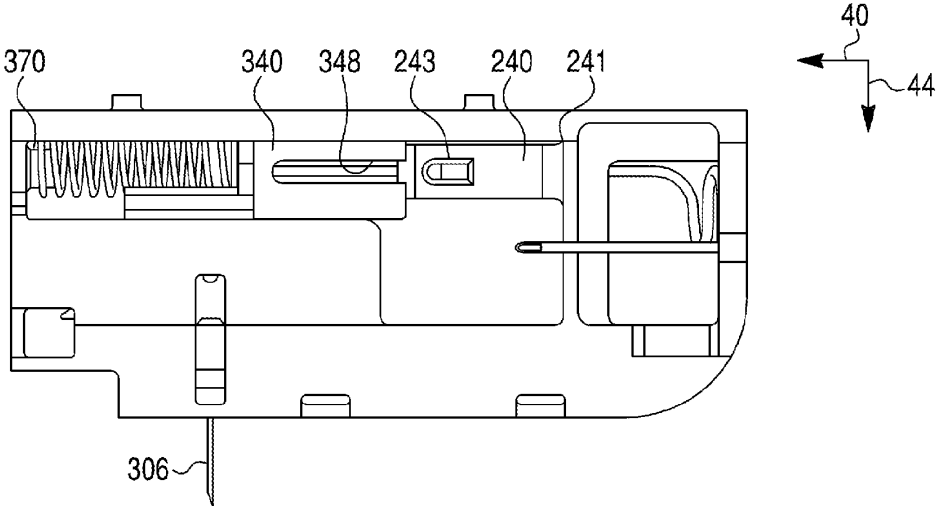


FIG. 10

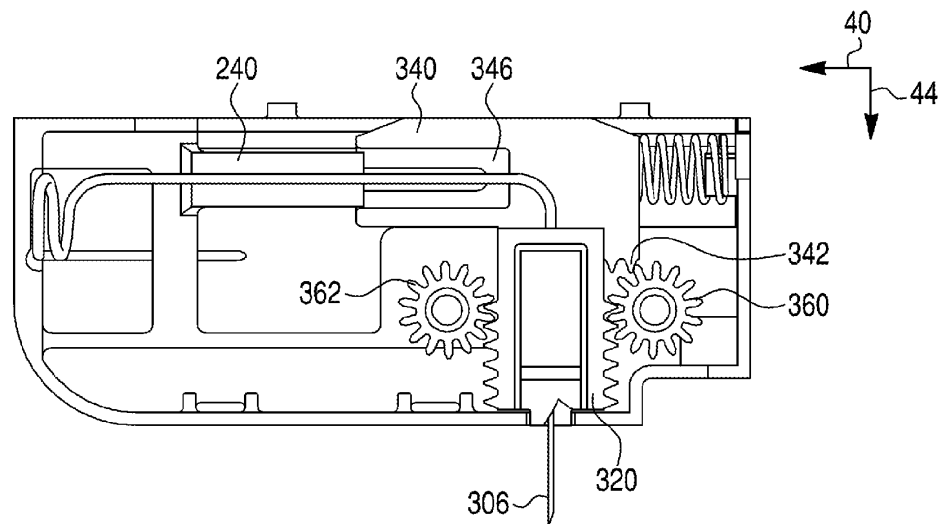


FIG. 11

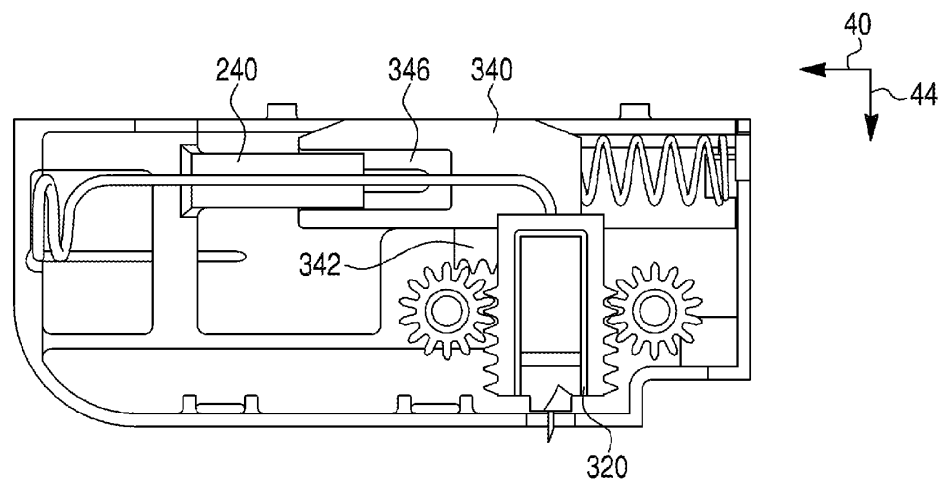


FIG. 12

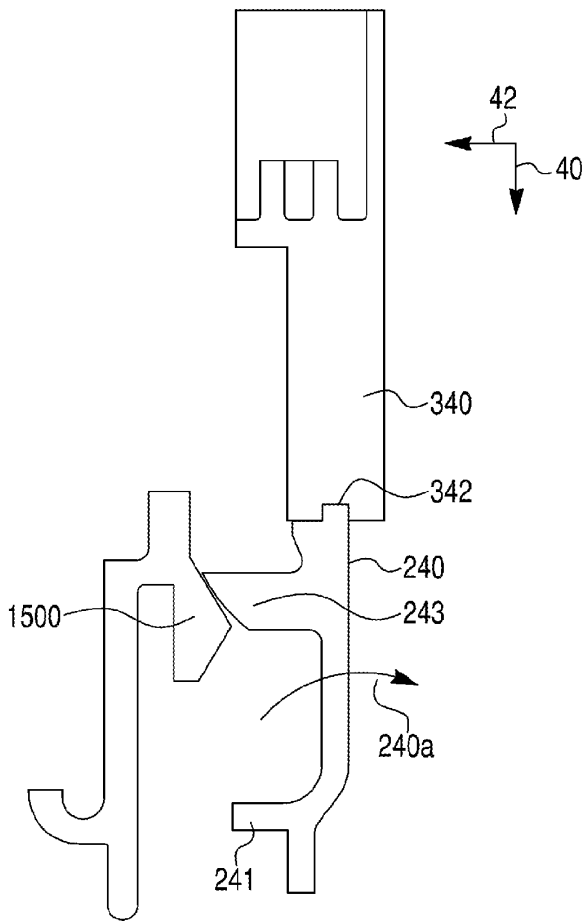


FIG. 13B

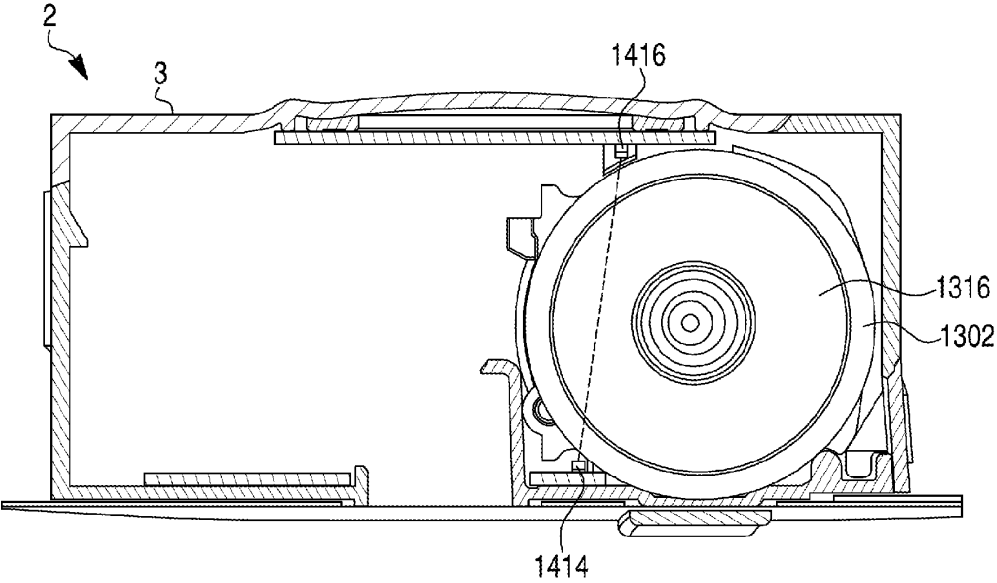
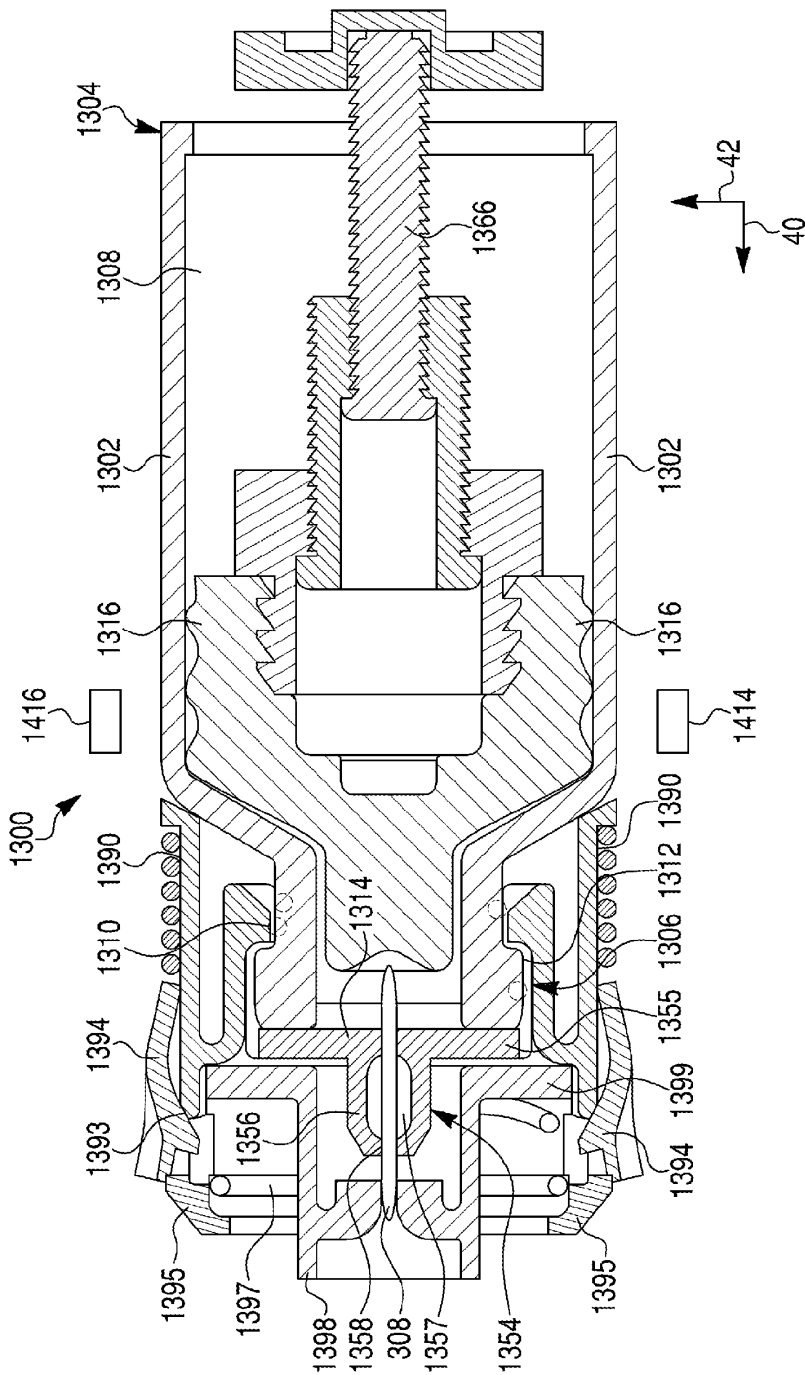


FIG. 14



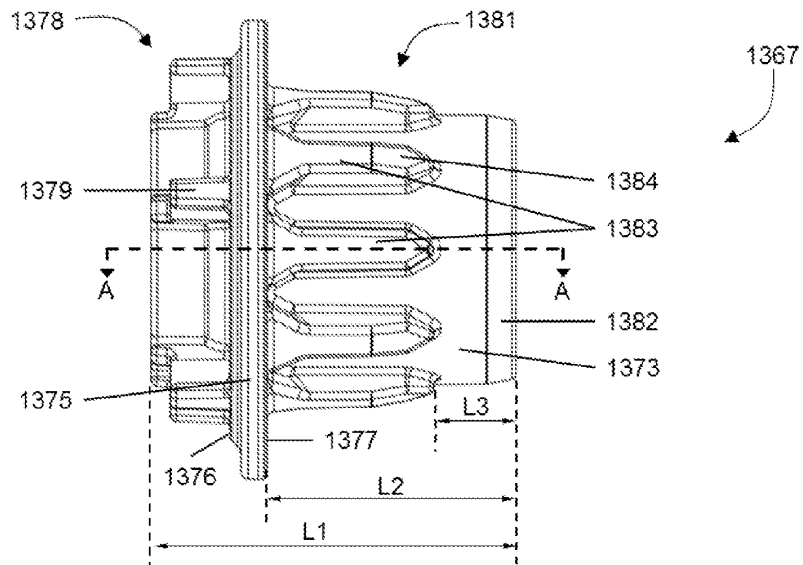


FIG. 14A

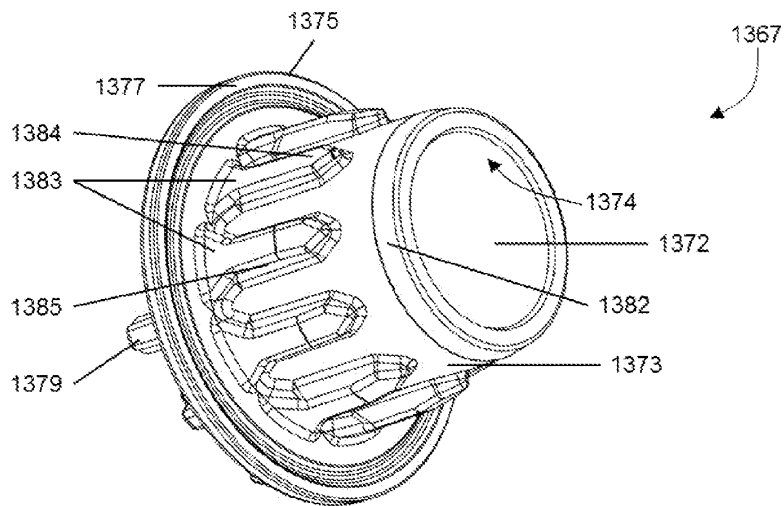


FIG. 14B

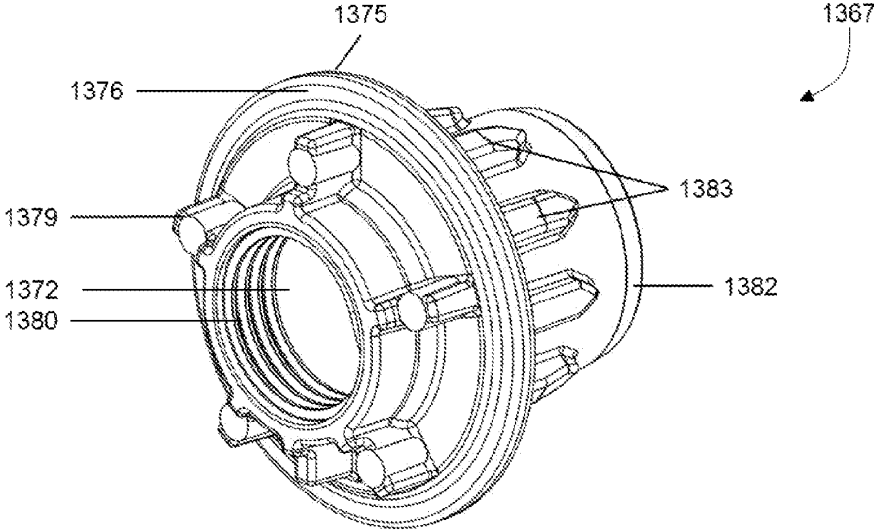


FIG. 14C

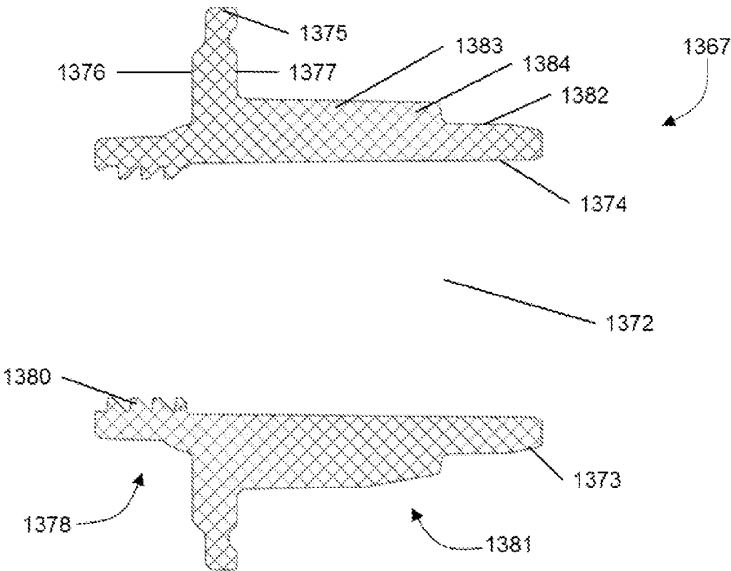
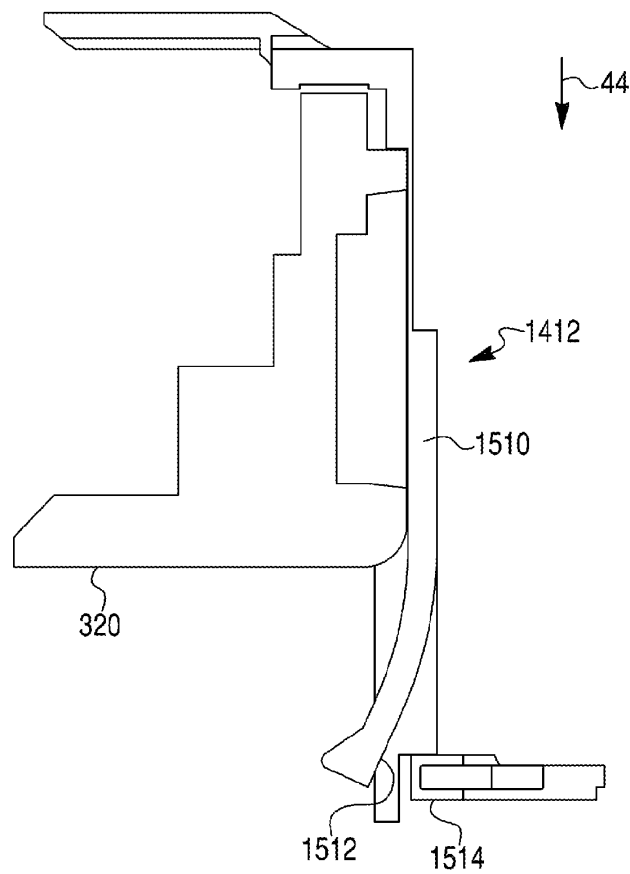
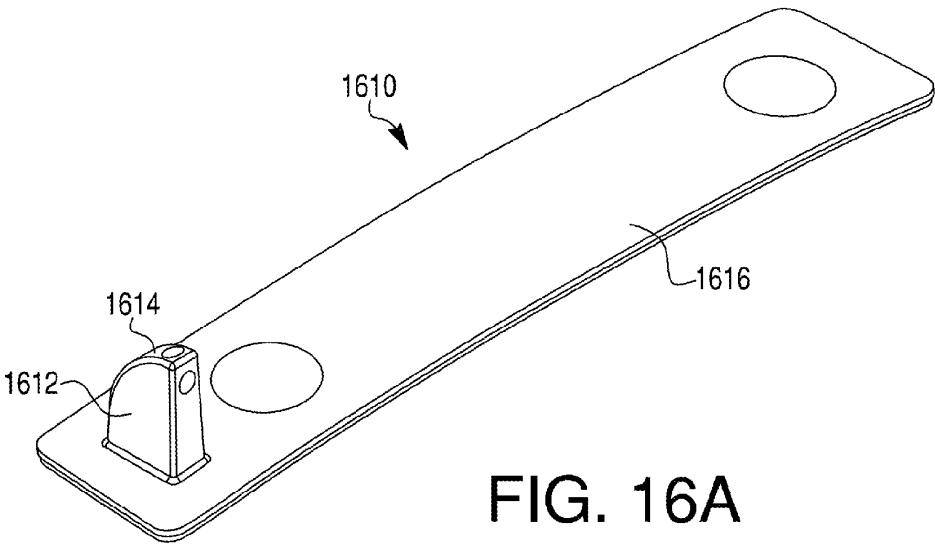


FIG. 14D

FIG. 15





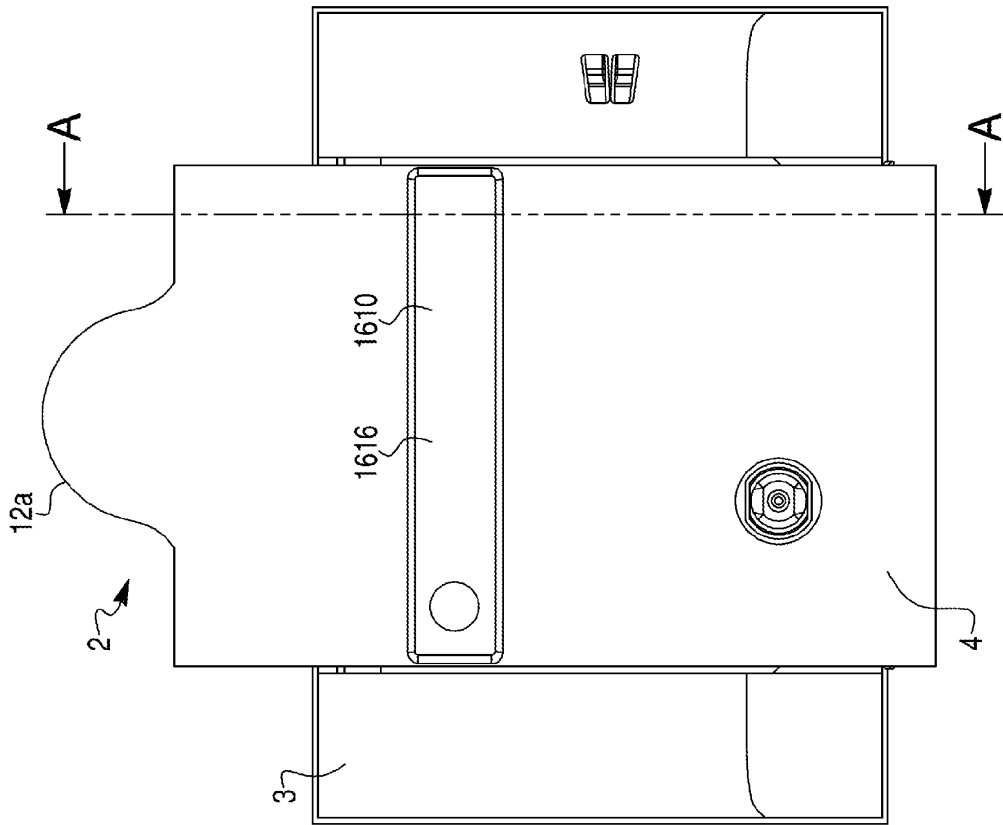


FIG. 16B

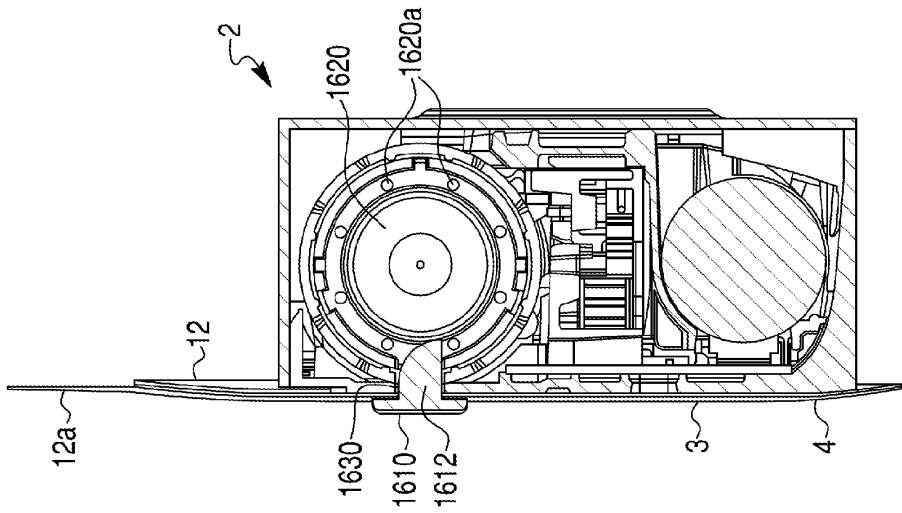


FIG. 16C

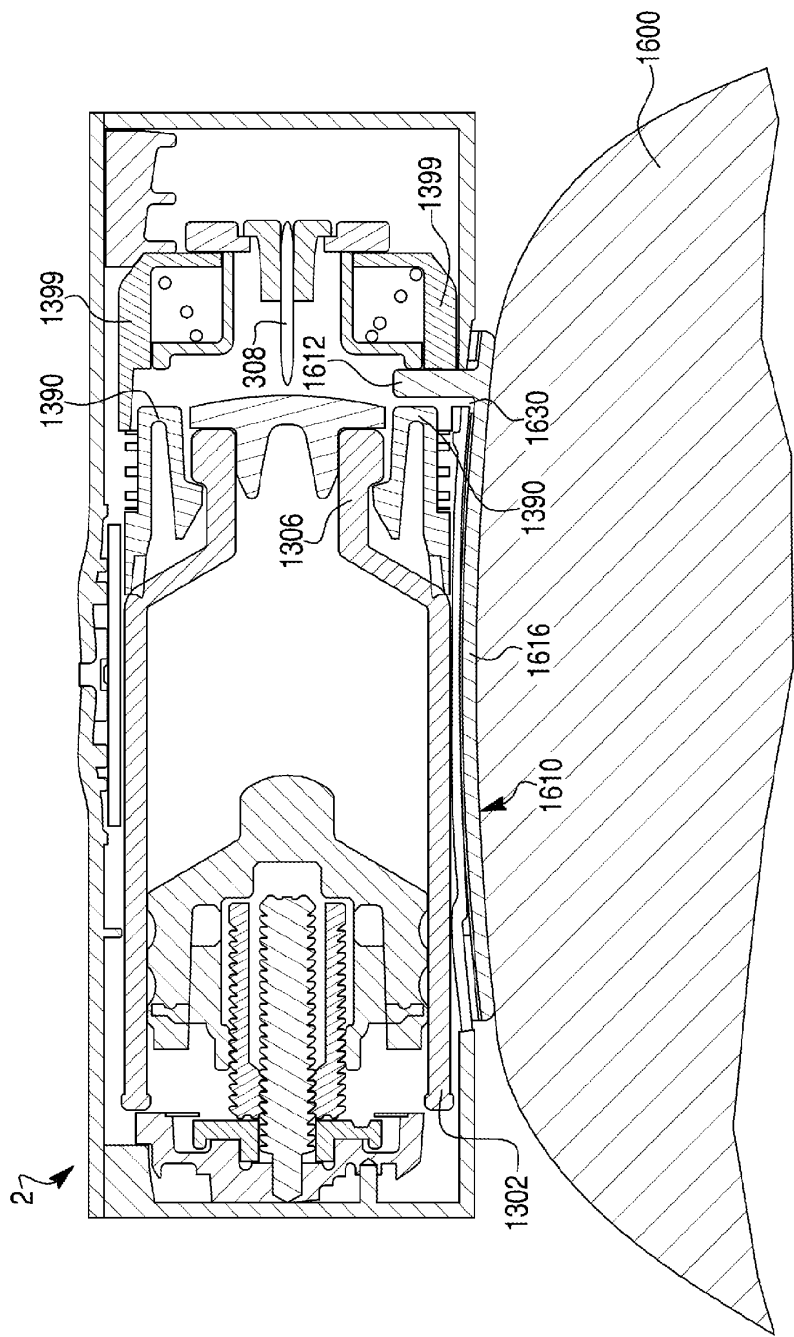


FIG. 16D

FIG. 16E

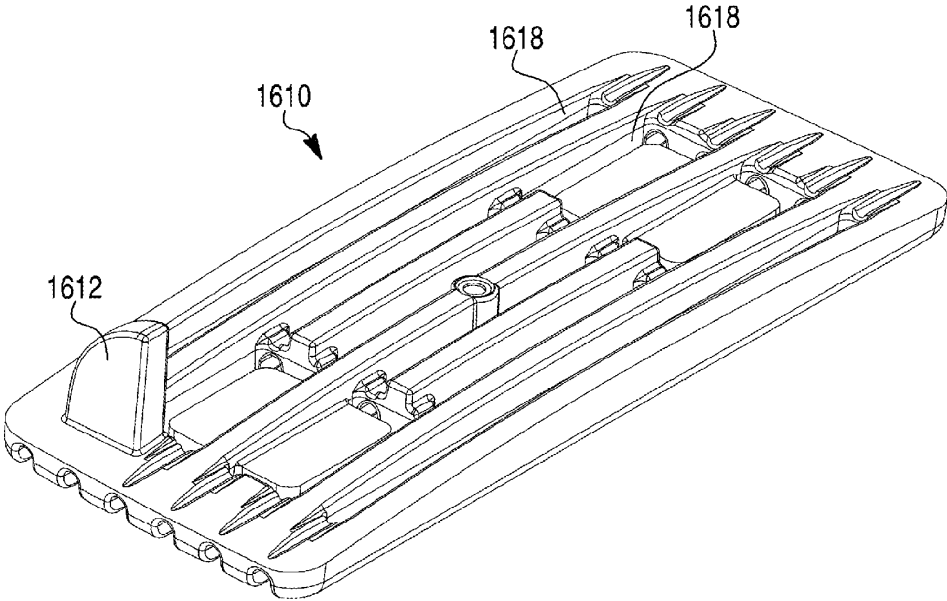


FIG. 16F

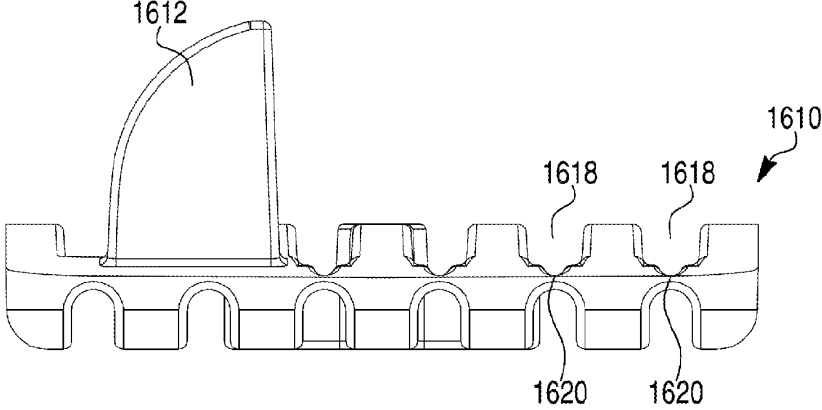


FIG. 17

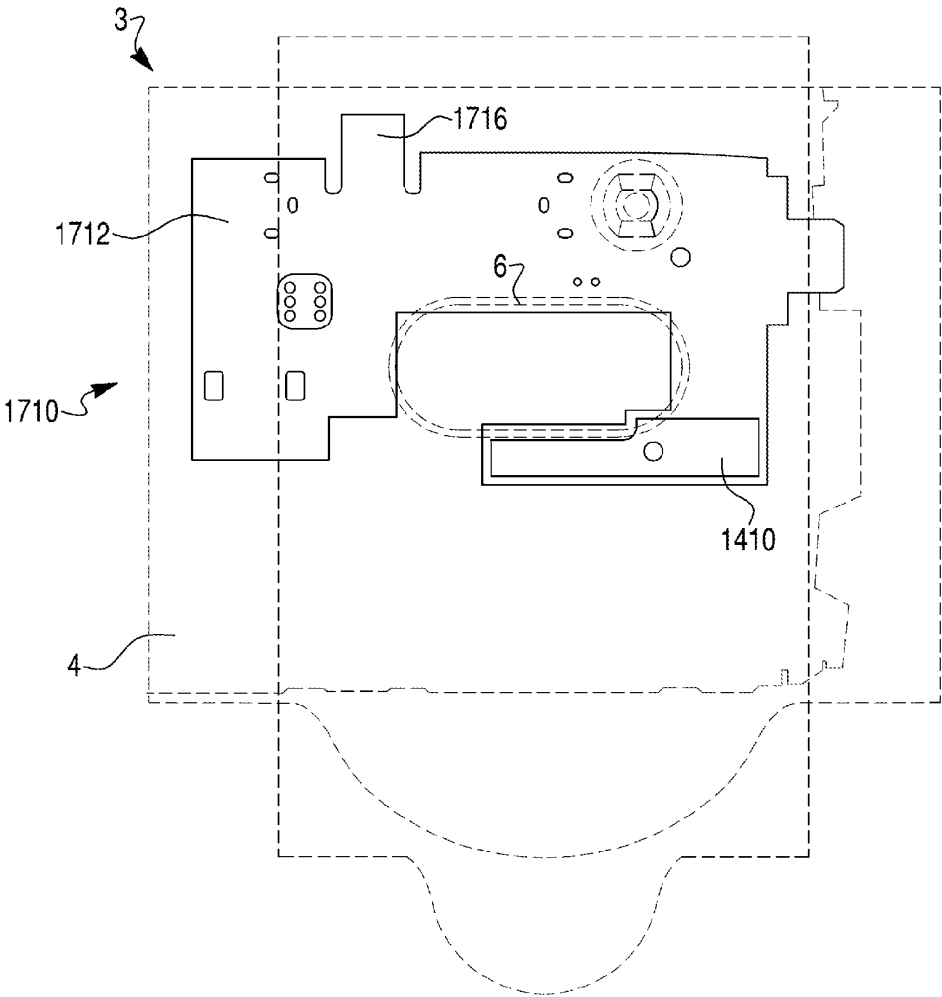


FIG. 17A

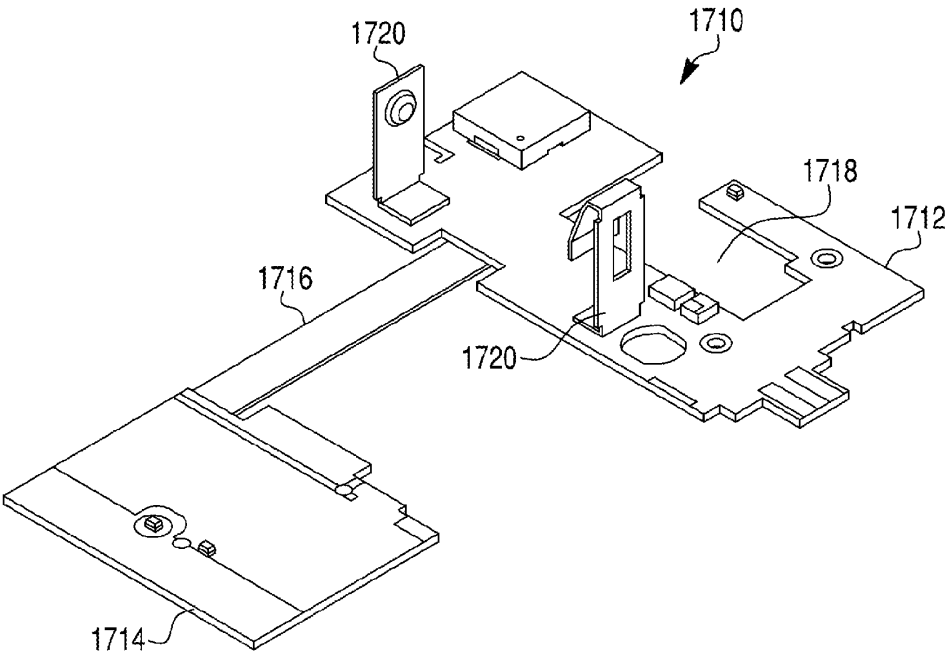


FIG. 18

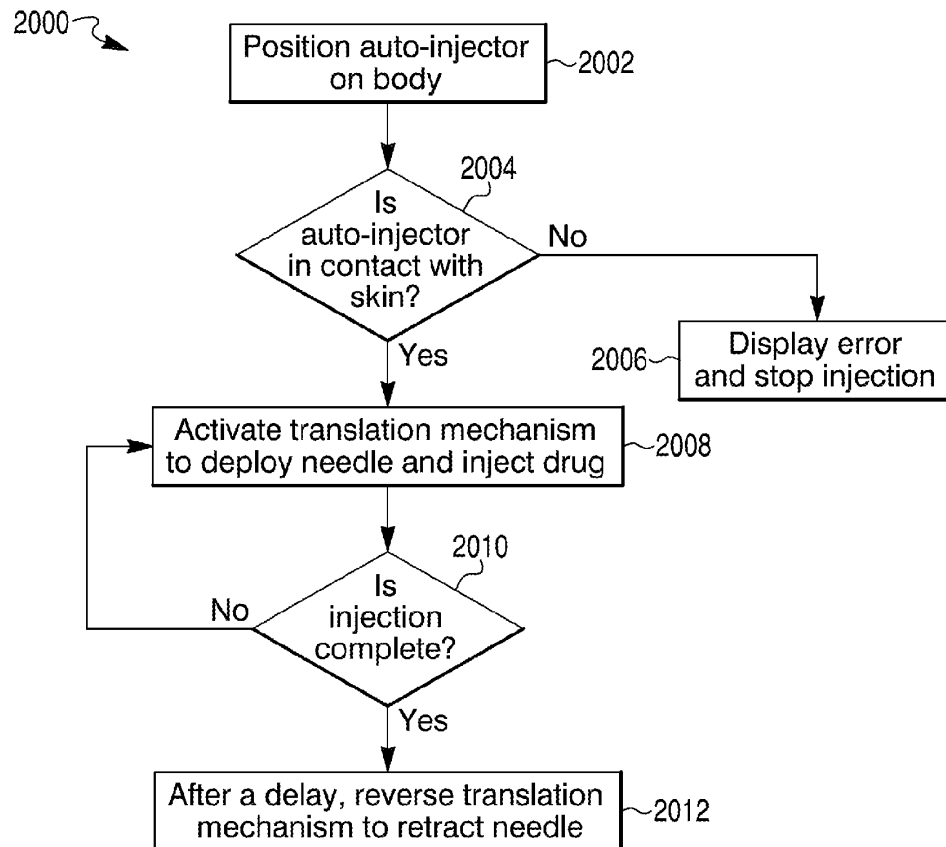
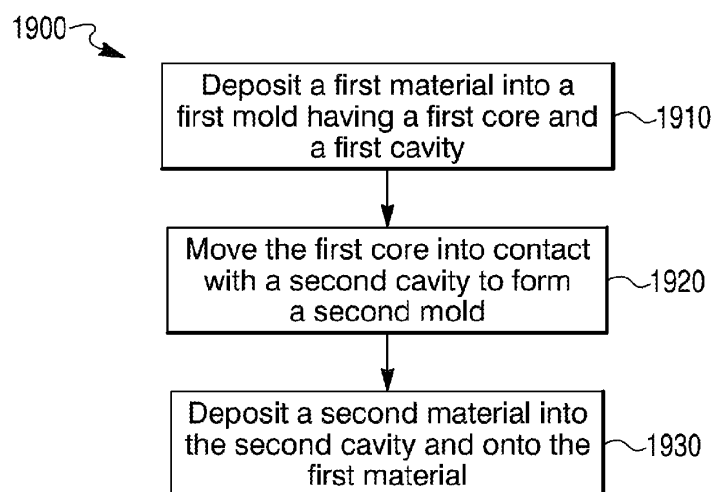
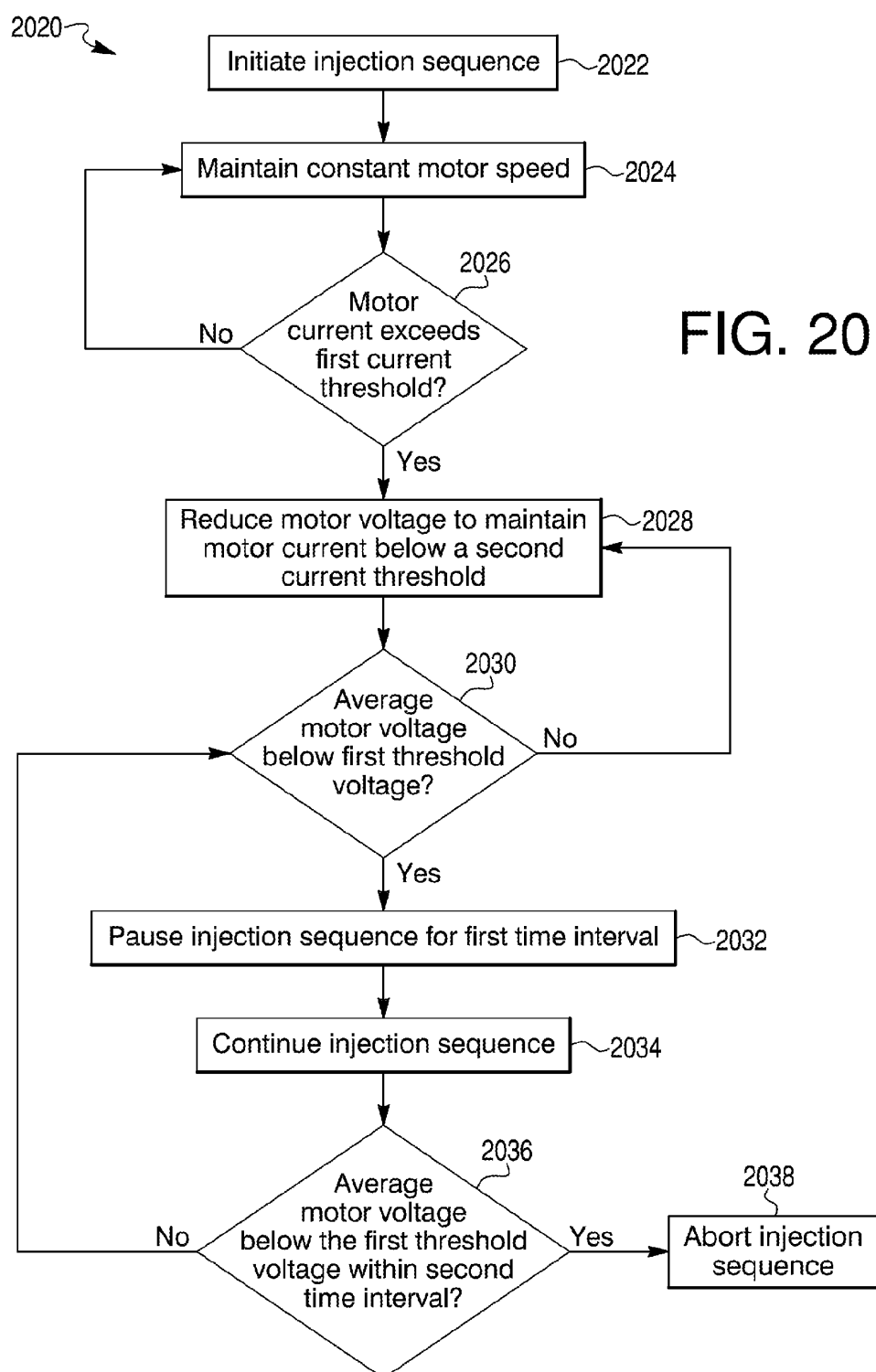


FIG. 19





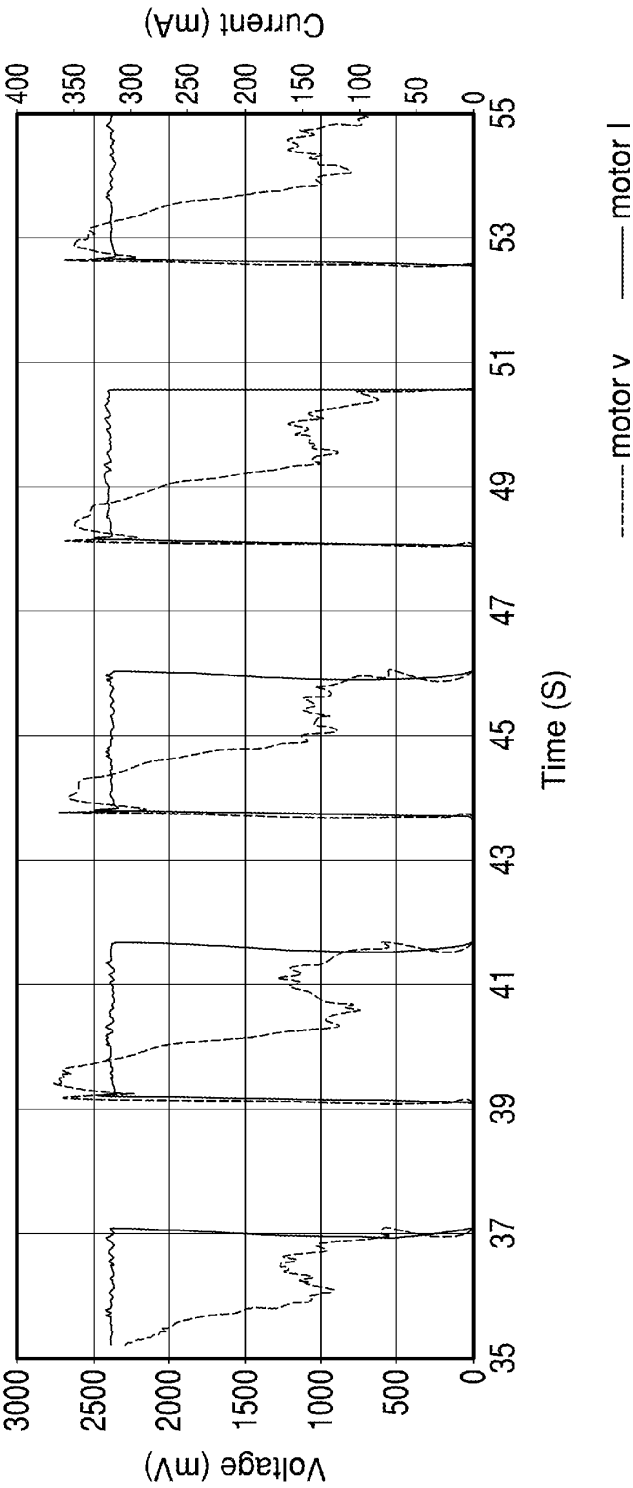


FIG. 20A

FIG. 20B

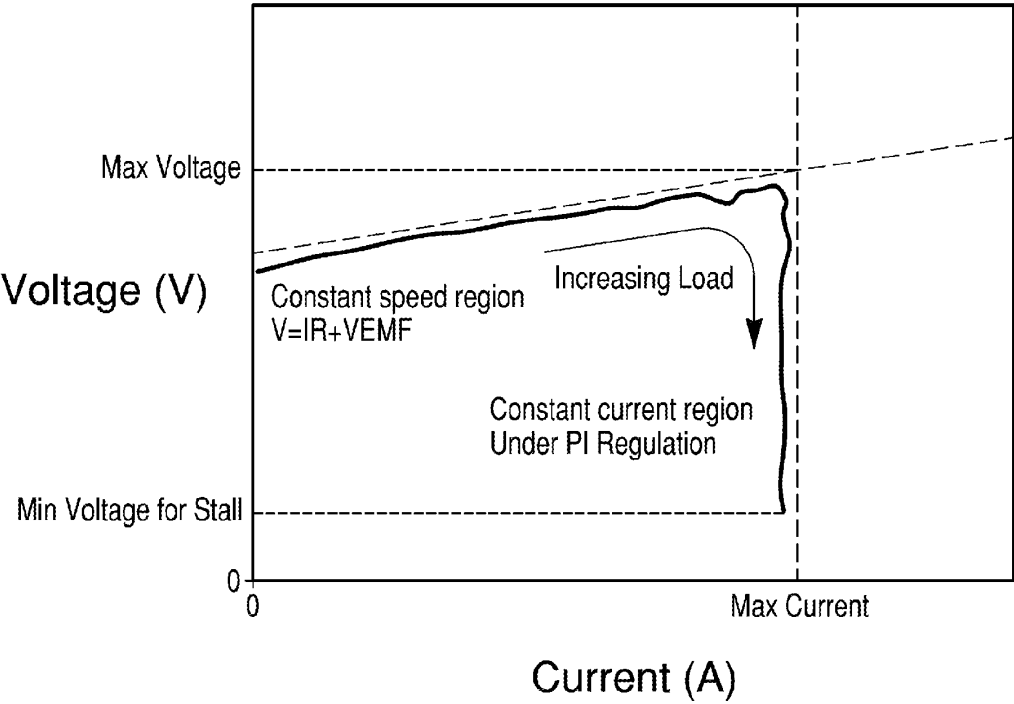
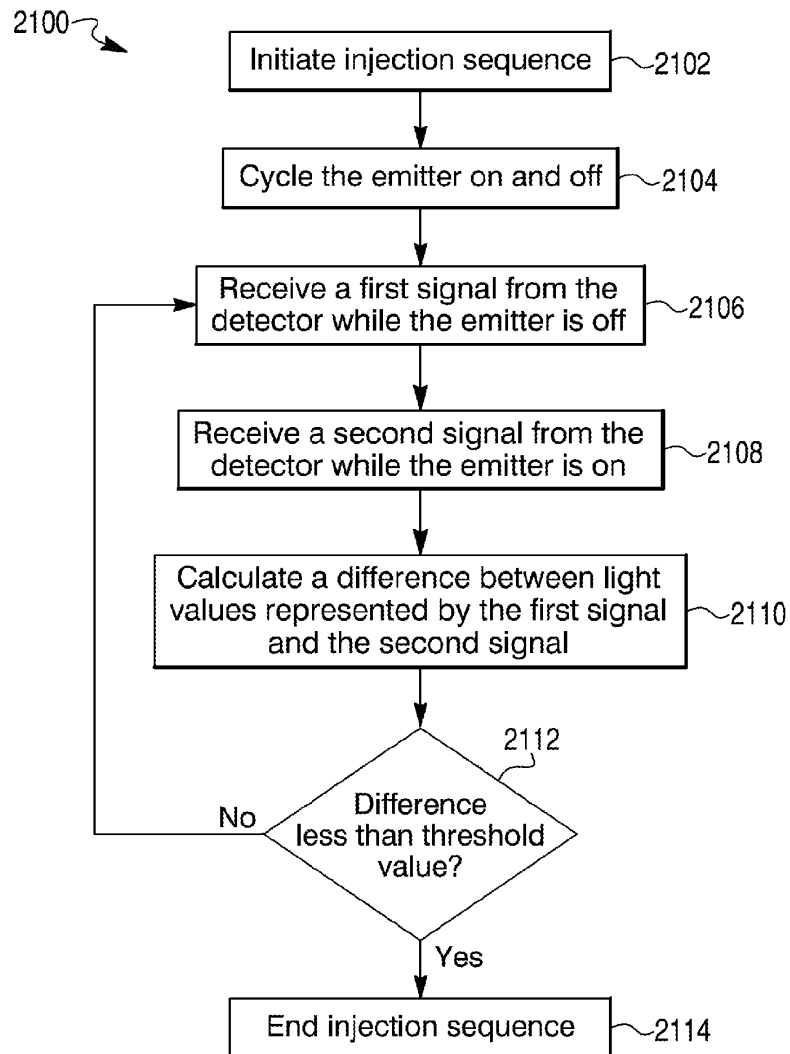


FIG. 21



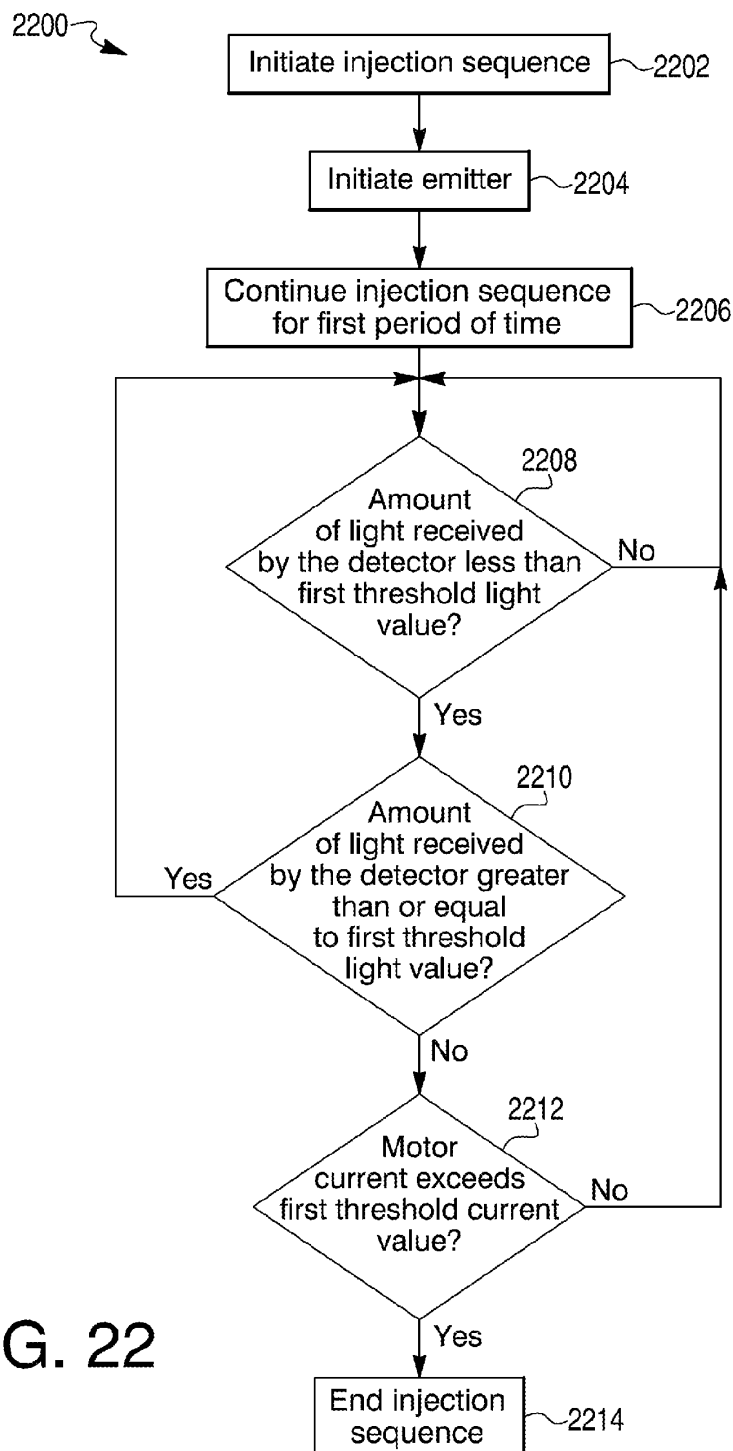
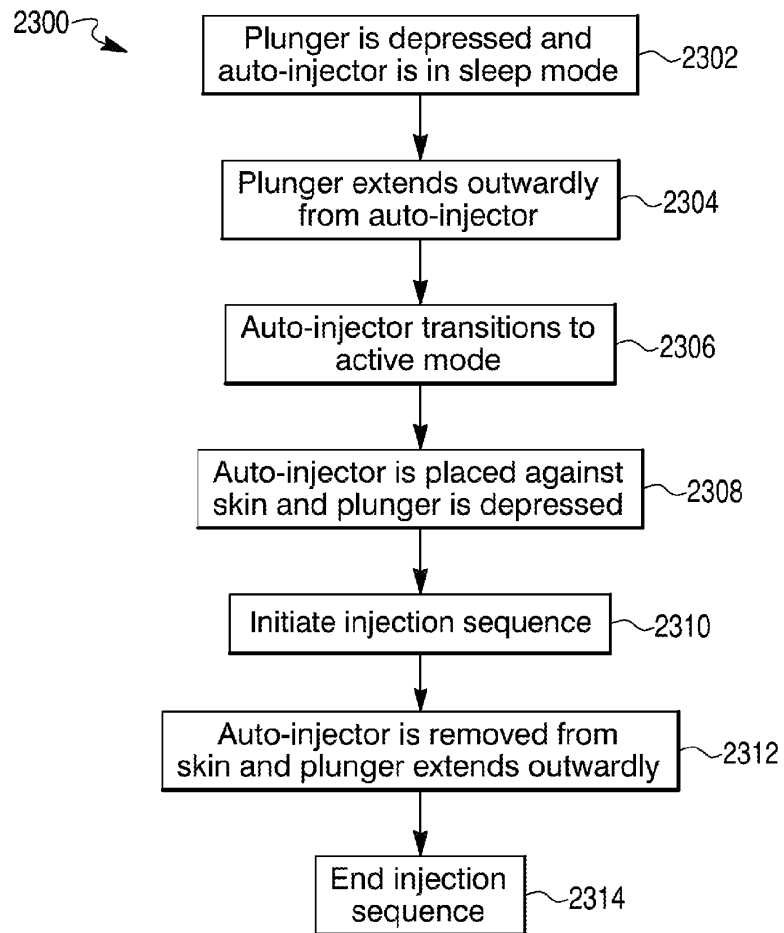


FIG. 23



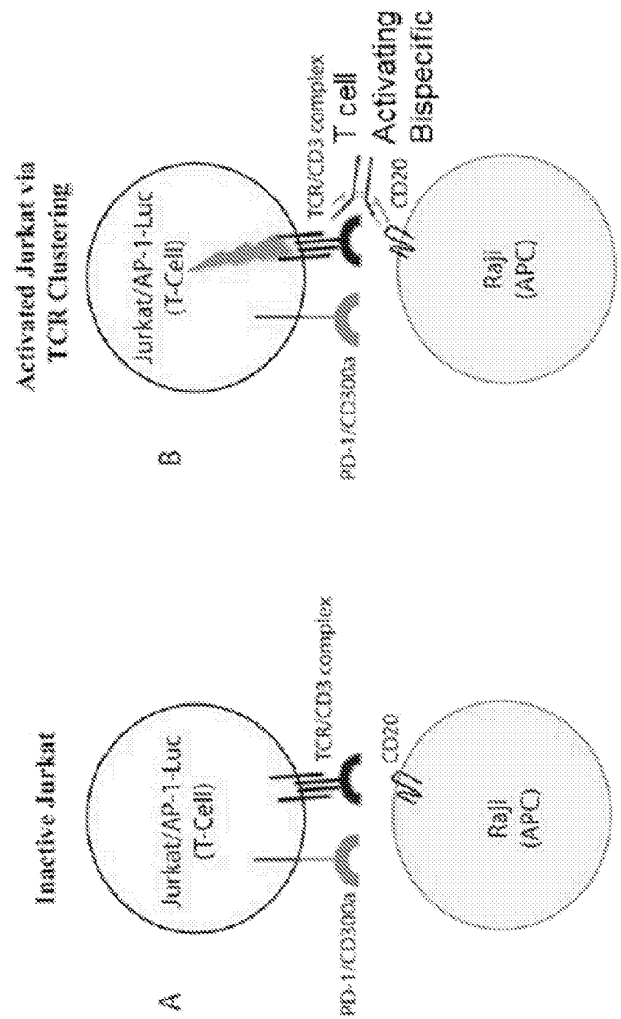


FIG. 24

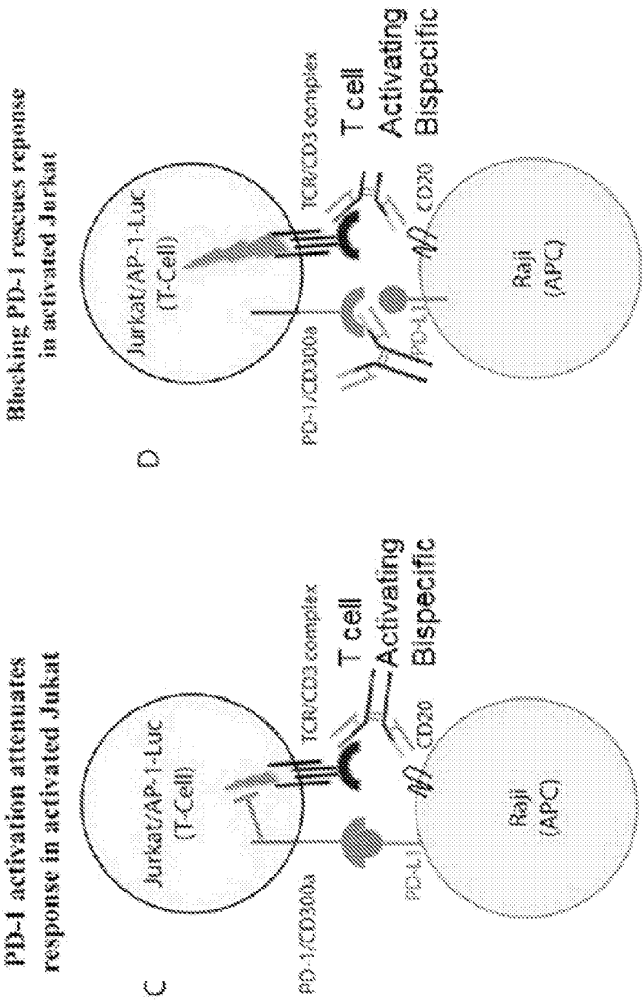


FIG. 24 (cont'd)

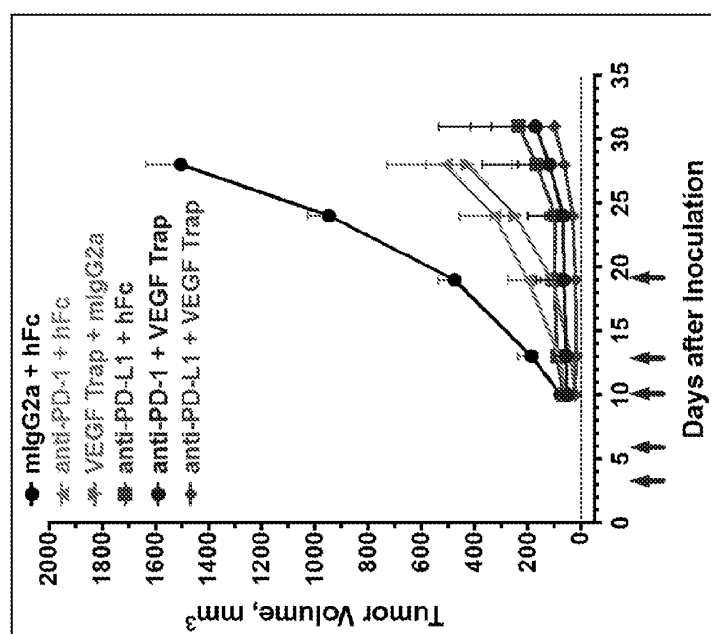


FIG. 25

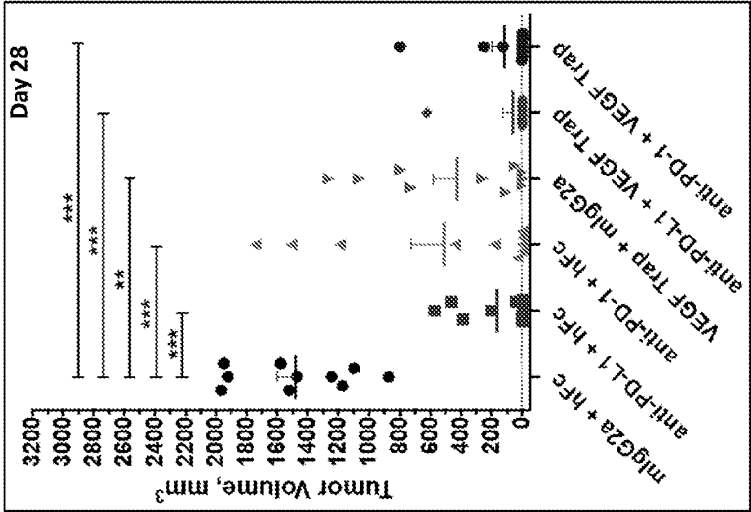


FIG. 26

Formulation	150 mg/mL mAb1, 10 mM Histidine										
Fill Volume	0.4 mL										
Container/Closure	2 mL Type 1 borosilicate glass vial with a FluroTec® coated 4432/50 butyl rubber stopper										
Excipients	pH	Color and Appearance	Turbidity (Increase in OD at 405 nm)	pH	% mAb1 Recovered by RP-UPLC	Purity by SE-UPLC			Charged Variants by CEX-UPLC		
						% HMW	% Native	% LMW	% Acidic	% Main	% Basic
Starting Material ^(a1)	-	Pass	0.00	-	100	3.4	96.1	0.5	26.2	48.9	24.9
-	5.3	Fail	Sample Gelled								
	5.6	Fail	Sample Gelled								
	5.9	Fail	0.40	5.8	95	49.3	49.9	0.8	32.5	39.1	28.4
	6.0	Fail	0.51	6.0	99	44.1	55.0	0.9	36.9	41.9	21.3
	6.4	Fail	0.65	6.3	98	38.1	61.0	0.9	45.9	34.8	19.4
	5.3	Pass	0.14	5.3	95	46.9	52.4	0.7	33.7	37.6	28.6
9% Sucrose	5.5	Pass	0.16	5.5	99	34.9	64.2	0.9	35.7	36.3	28.0
	5.9	Pass	0.13	5.8	100	25.5	73.6	1.0	36.0	37.2	26.8
	6.0	Pass	0.14	6.0	99	21.9	77.1	1.0	40.0	34.5	25.5
	6.4	Pass	0.15	6.3	98	19.6	79.4	1.0	48.9	26.7	24.4
	5.4	Fail	Sample Gelled								
	5.6	Fail	Sample Gelled								
5% Sucrose 70 mM Arginine	5.9	Fail	Sample Gelled								
	6.0	Fail	Sample Gelled								
	6.4	Fail	0.46	6.3	100	45.8	53.1	1.0	46.6	31.1	22.3

FIG. 27

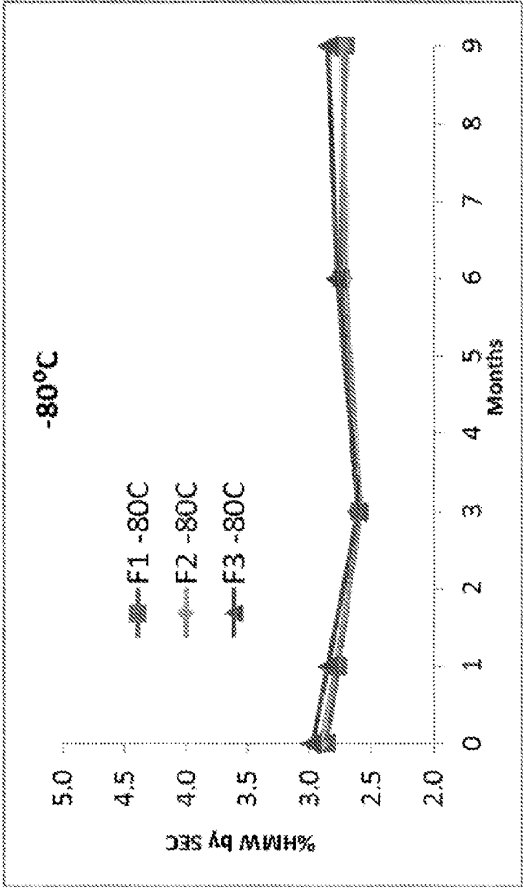


FIG. 28A

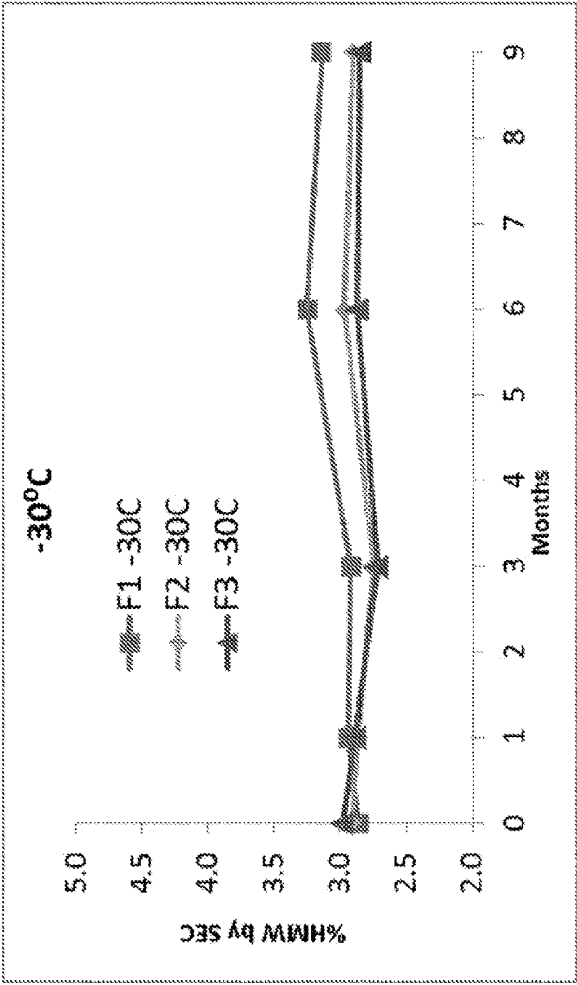


FIG. 28B

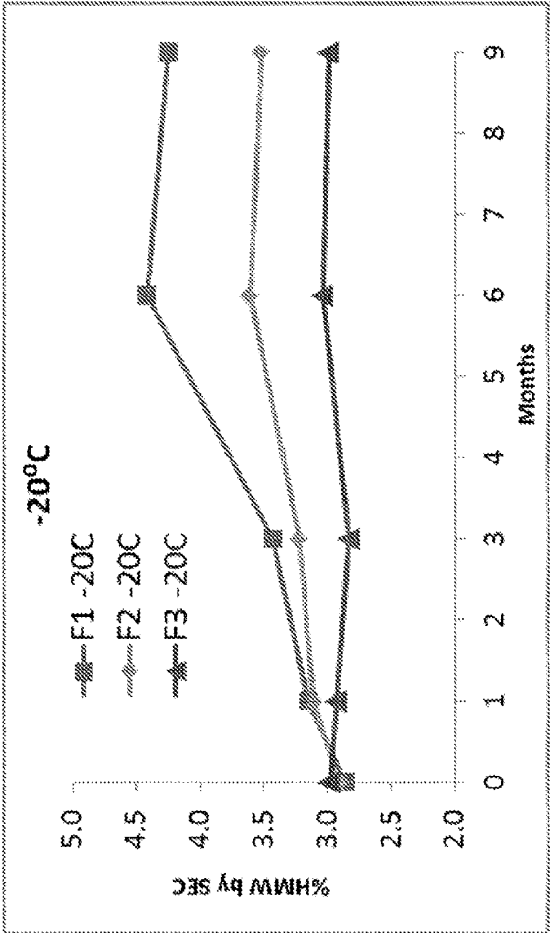


FIG. 28C

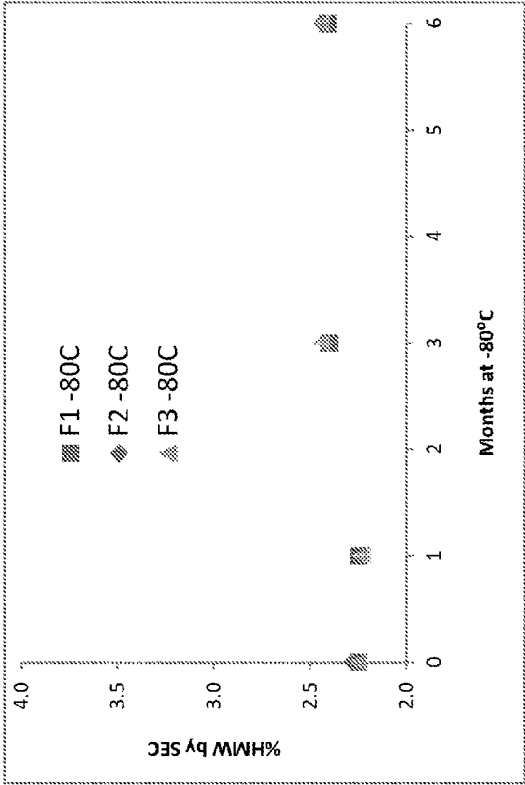


FIG. 29A

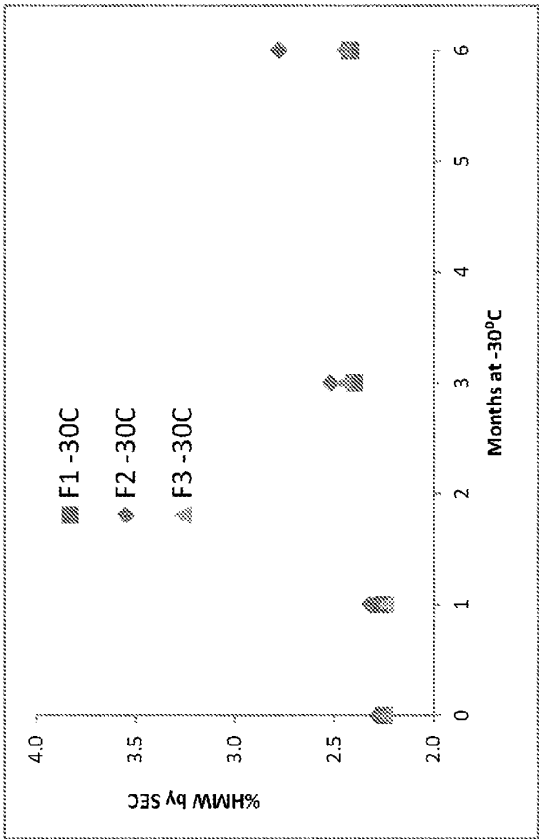


FIG. 29B

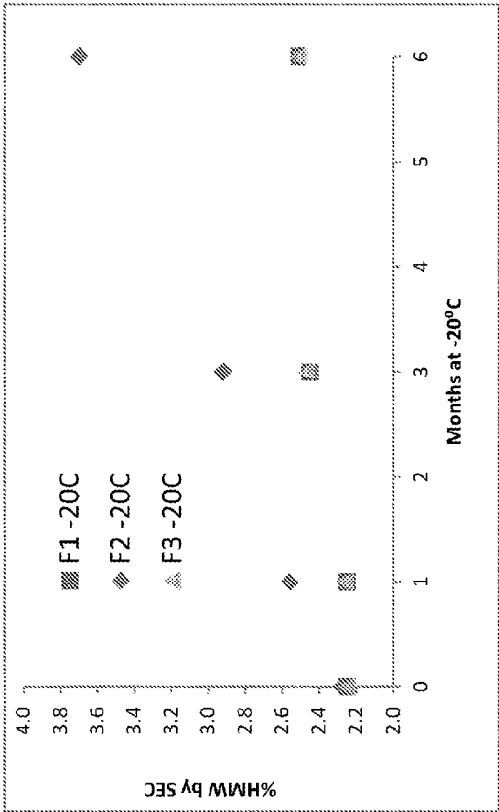


FIG. 29C

Formulation	Formulation Components									Viscosity (20C)
	RG2810 (mg/mL)	Histidine (mM)	pH	Sucrose (%)	Proline (%)	NaCl (mM)	Mg(OAc) ₂ (mM)	Arg-HCl (mM)	PS-80 (%)	
1	150	10	6.0	9.0						10.6
2	150	10	6.0	5.0				70.0		8.0
3	150	10	6.0	5.0		70.0				7.4
4	150	10	6.0	5.0			25.0			7.9
5	150	10	6.0	5.0	2.0					9.6
6	150	10	6.0		3.5					8.3
7	150	10	6.0		2.0			70.0		7.1
8	150	10	6.0		2.0	70.0				7.2
9	150	10	6.0		2.0		25.0			7.2
10	150	10	6.0	9		0	0	0	0.1	11.0
11	150	10	6.0	9		25			0.1	10.0
12	150	10	6.0	9		50			0.1	10.2
13	150	10	6.0	9		75			0.1	9.4
14	150	10	6.0	9		100			0.1	9.7
15	150	25	6.0	9					0.1	10.6
16	150	50	6.0	9					0.1	10.3
17	150	75	6.0	9					0.1	10.1
18	150	100	6.0	9					0.1	9.8
19	150	10	6.0	9			10		0.1	10.8
20	150	10	6.0	9			25		0.1	10.3
21	150	10	6.0	9			50		0.1	9.9
22	150	10	6.0	9				25	0.1	10.0
23	150	10	6.0	9				50	0.1	9.9
24	150	10	6.0	9				70	0.1	10.0

FIG. 30

Formulation	175 mg/mL mAb1, 10 mM Histidine (except F9 with 25 mM), 0.1% polysorbate 80										
Fill Volume	0.4 mL										
Container/Closure	2 mL Type 1 borosilicate glass vial with a FluroTec® coated 4432/50 butyl rubber stopper										
Excipients	Formulation No.	Color and Appearance	Turbidity (Increase in OD at 405 nm)	pH	% mAb1 Recovered by RP-UPLC	Purity by SE-UPLC			Charged Variants by CEX-UPLC		
						% HMW	% Native	% LMW	% Acidic	% Main	% Basic
Starting Material ^{a1)}	-	Pass	0.00	6.1	100	2.3	97.1	0.6	26.1	46.8	27.1
-	F1	Pass	0.20	6.1	72	51.4	48.0	0.6	28.1	44.9	27.0
9% sucrose	F2	Pass	0.08	6.1	94	26.6	72.6	0.8	30.0	42.9	27.1
5% sucrose, 1.5% Proline	F3	Pass	0.06	6.1	93	31.1	68.1	0.7	30.2	43.5	26.3
5% sucrose, 3.0% Proline	F4	Pass	0.07	6.1	93	28.9	70.3	0.8	30.4	43.3	26.3
3.0% Proline	F5	Pass	0.16	6.1	88	45.5	53.9	0.6	28.7	41.9	29.4
5% sucrose, 1.5% Proline 25 mM Argine	F6	Pass	0.13	6.1	94	39.5	59.8	0.7	28.2	41.5	30.3
5% sucrose, 1.5% Proline 25 mM Mg(OAc) ₂	F7	Pass	0.15	6.2	91	41.1	58.1	0.8	32.7	35.5	31.8
5% sucrose, 1.5% Proline 25 mM NaCl	F8	Pass	0.16	6.1	84	40.4	58.9	0.7	28.7	42.0	29.3
5% sucrose, 1.5% Proline 25 mM Histidine	F9	Pass	0.13	6.1	90	40.0	59.2	0.7	28.9	43.8	27.3

Fig. 31