

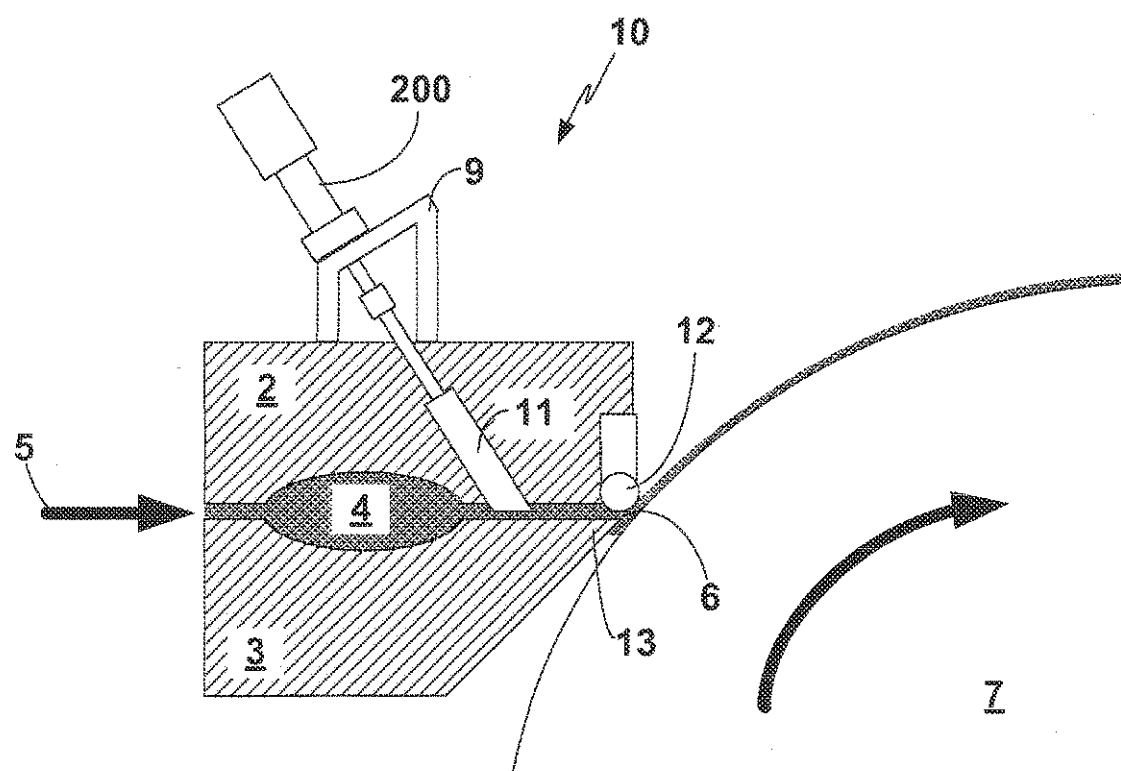


FIG. 1A

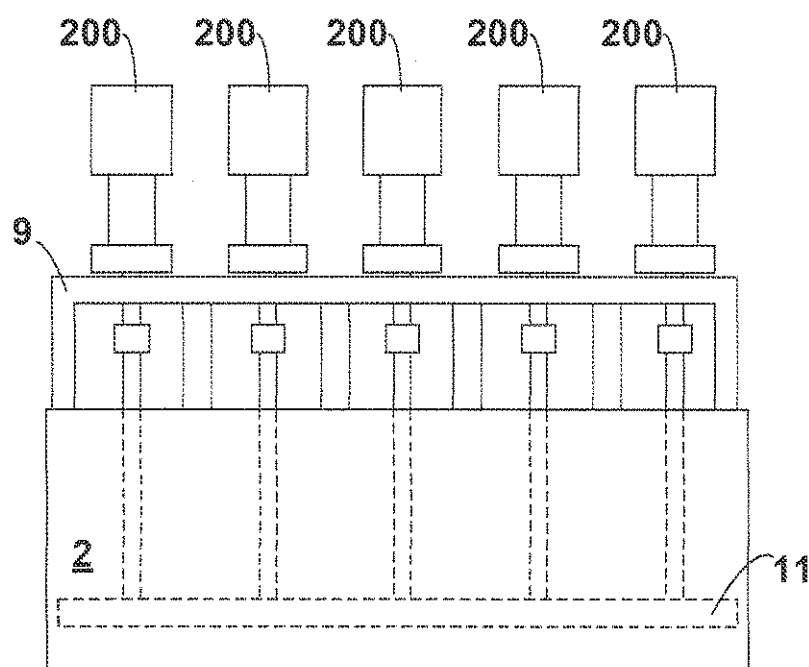


FIG. 1B

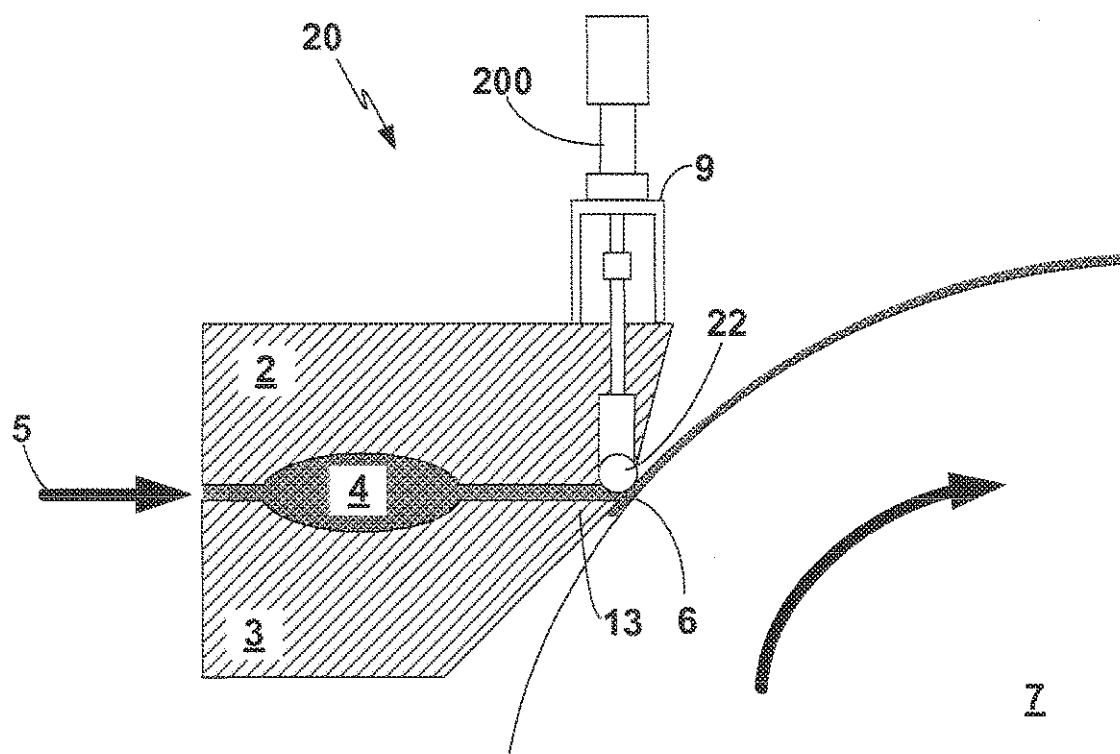


FIG. 2

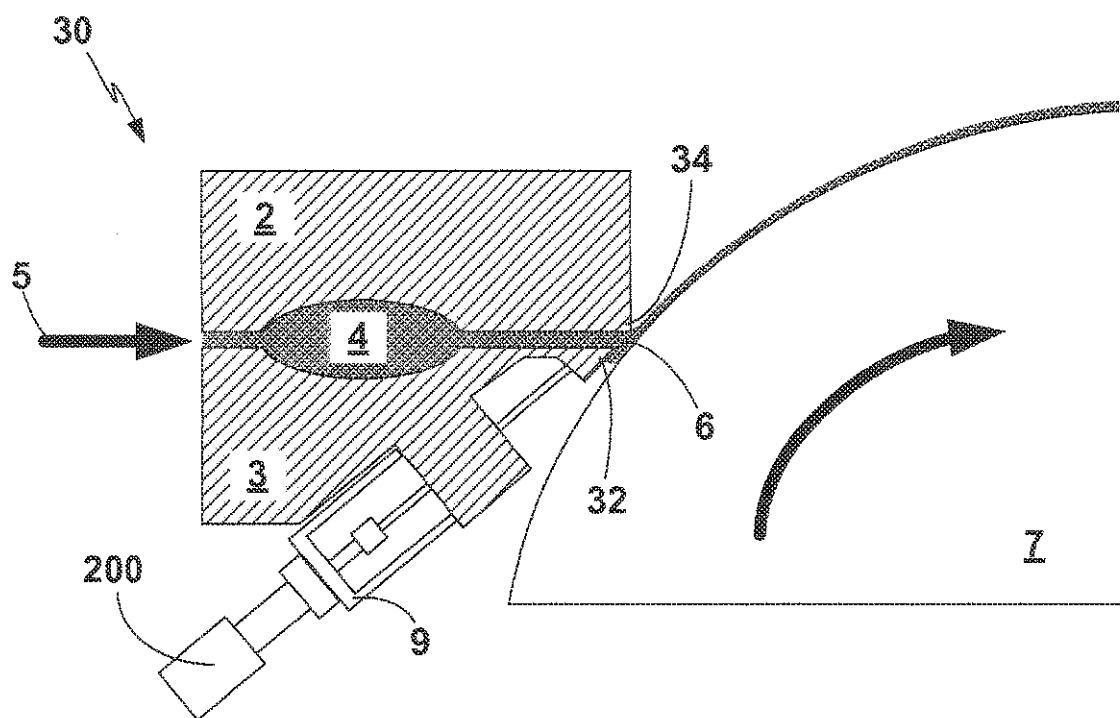
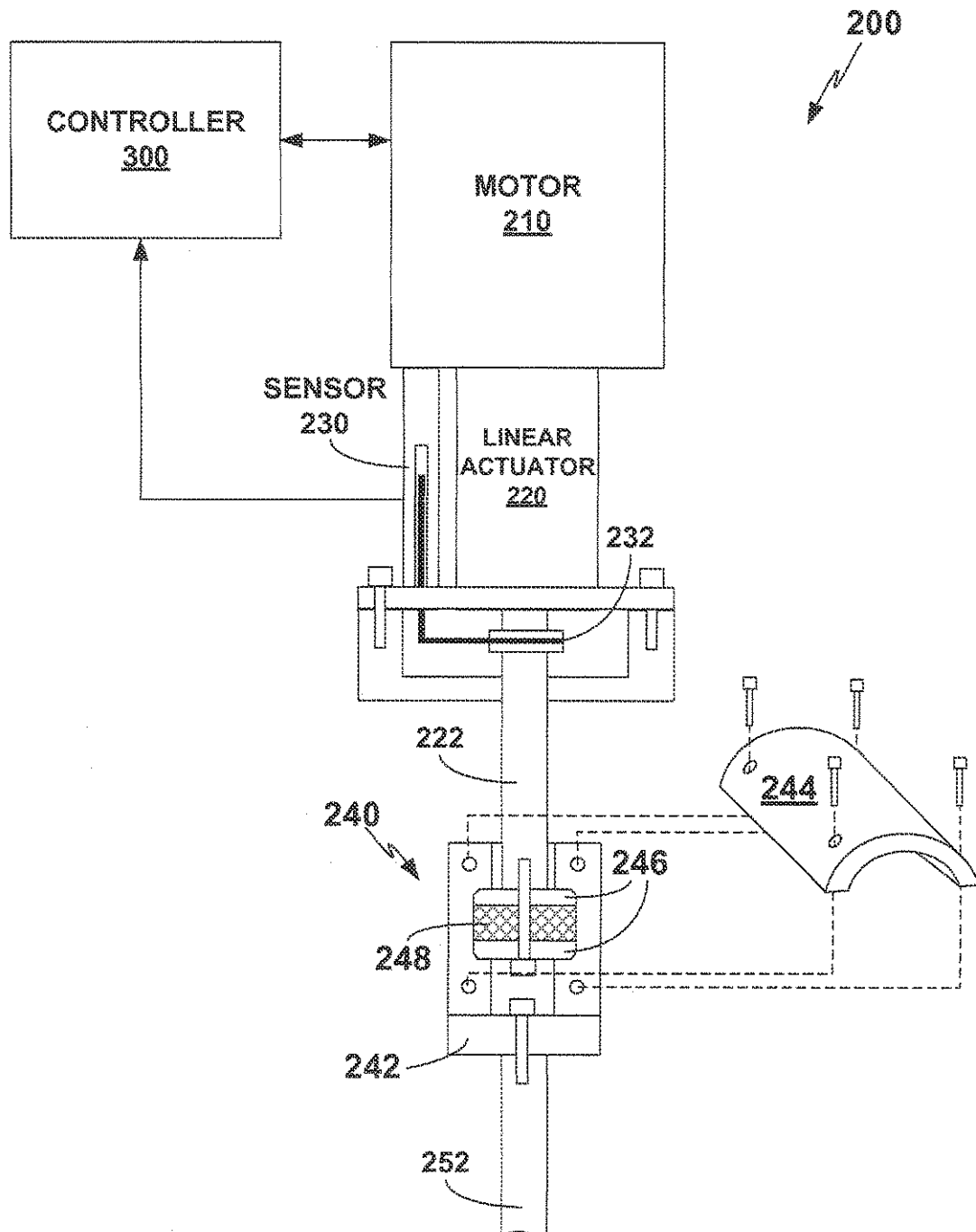


FIG. 3

**FIG. 4**

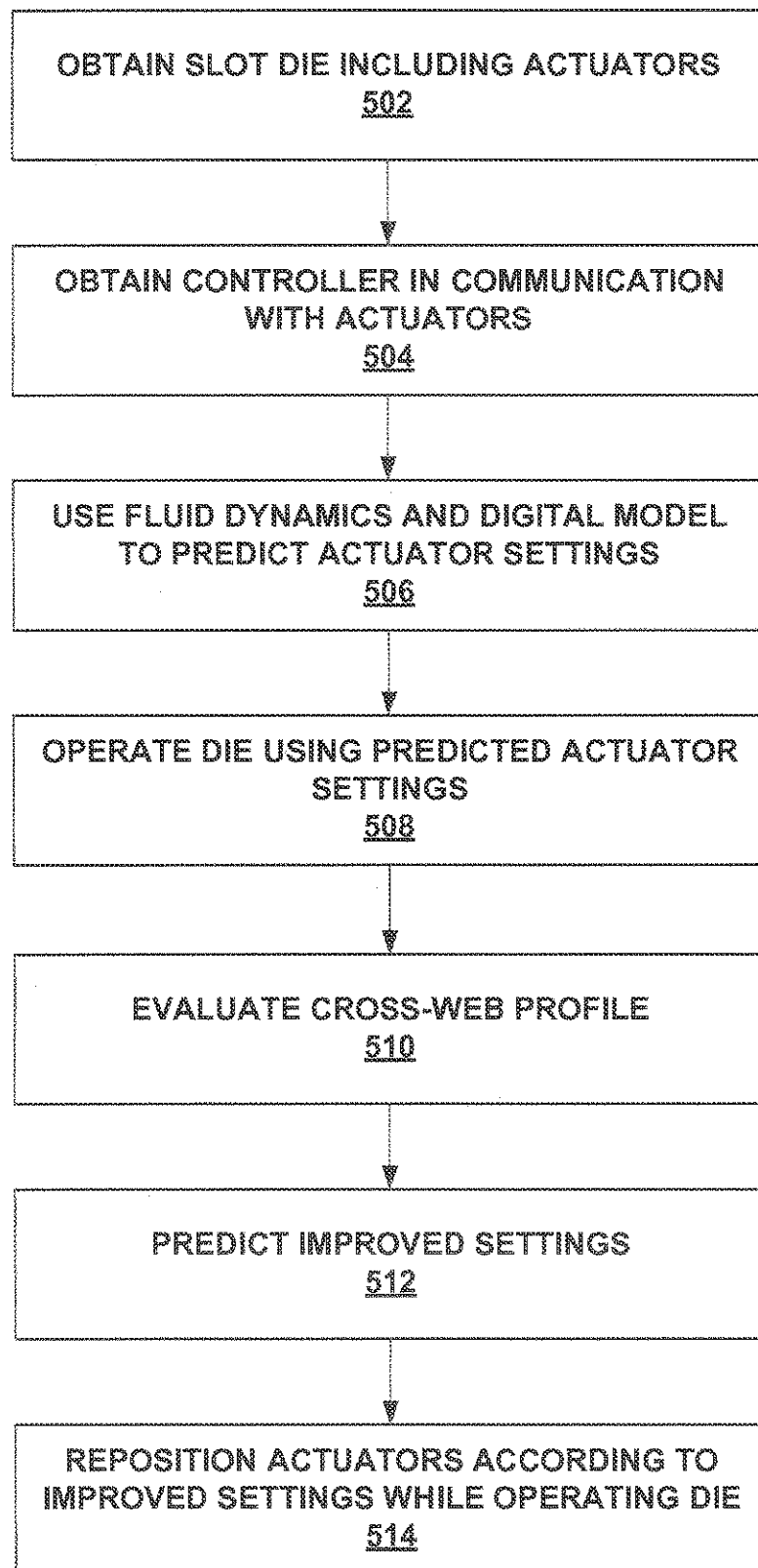


FIG. 5

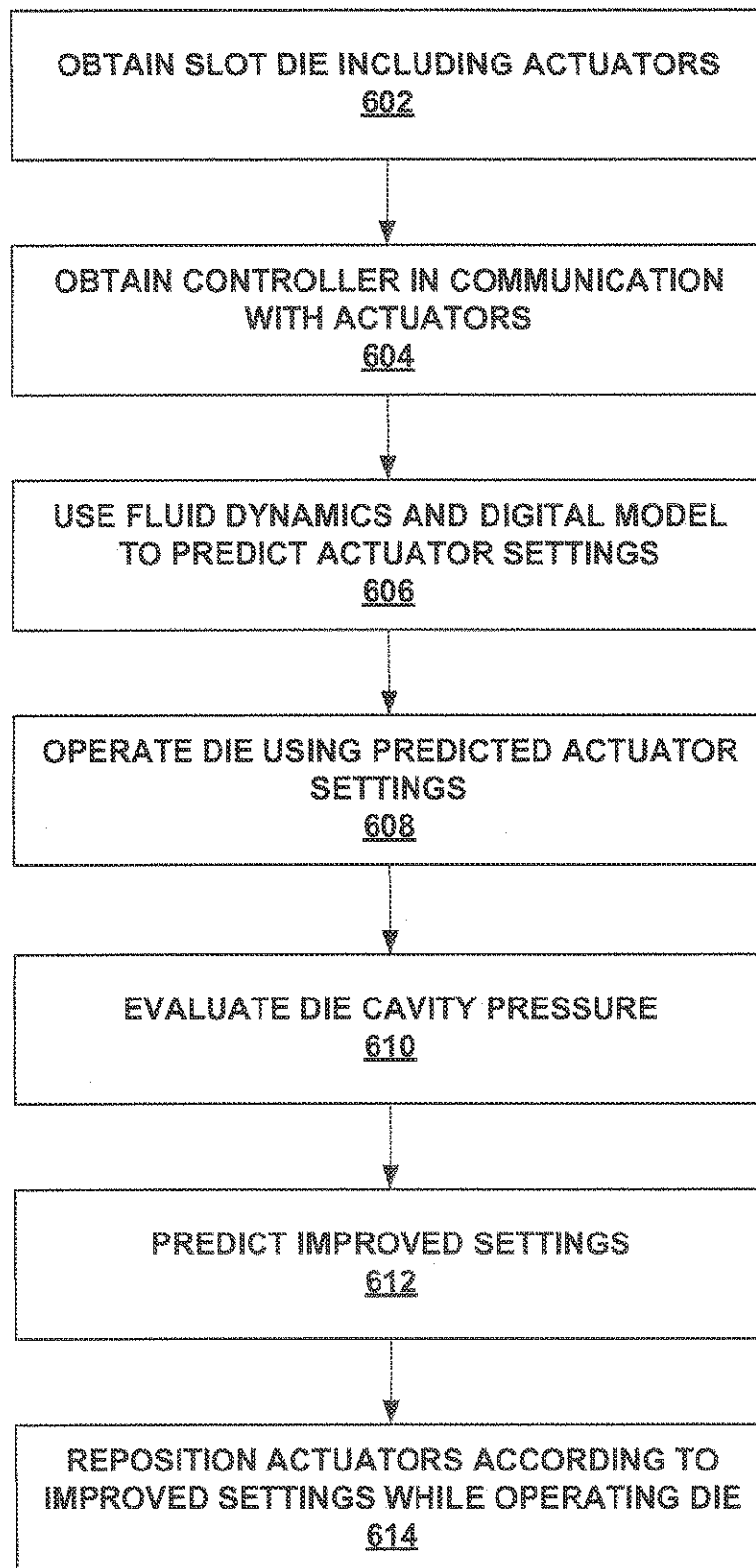


FIG. 6

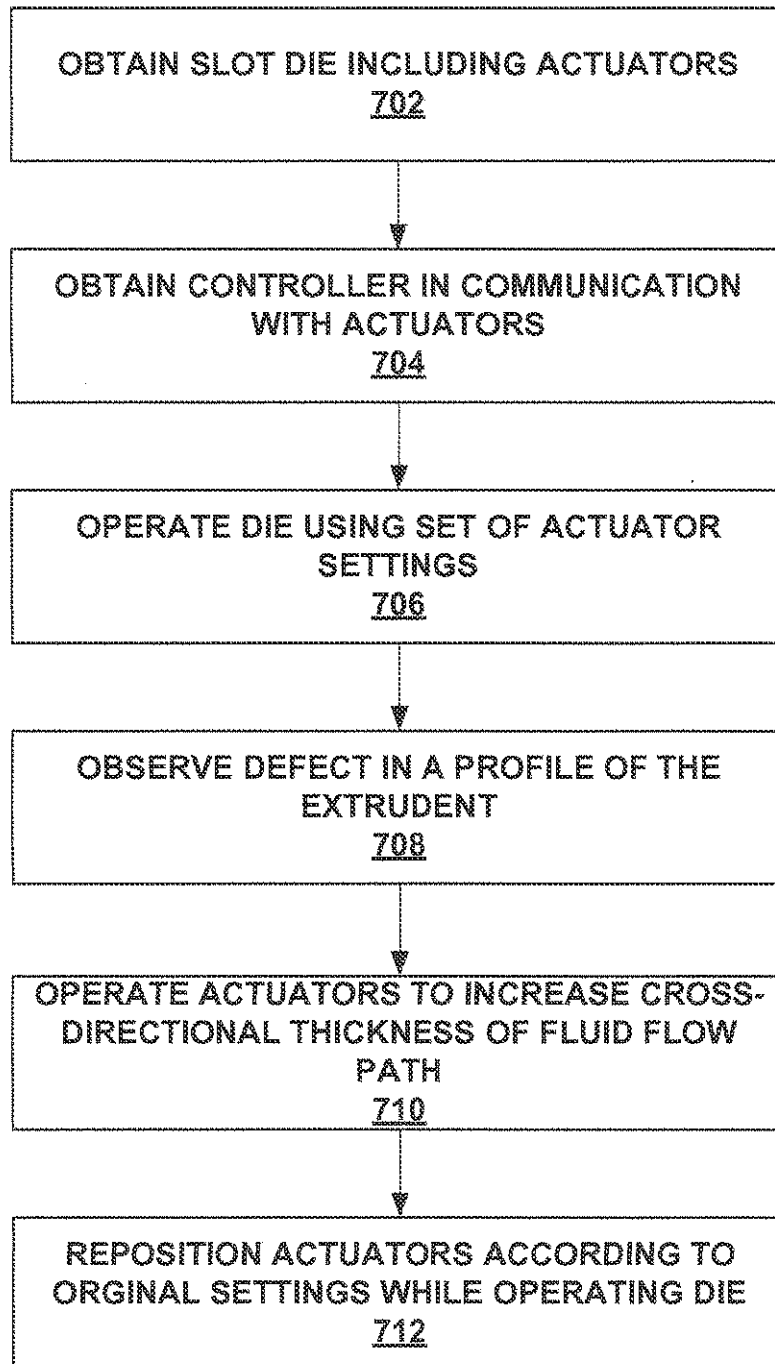


FIG. 7

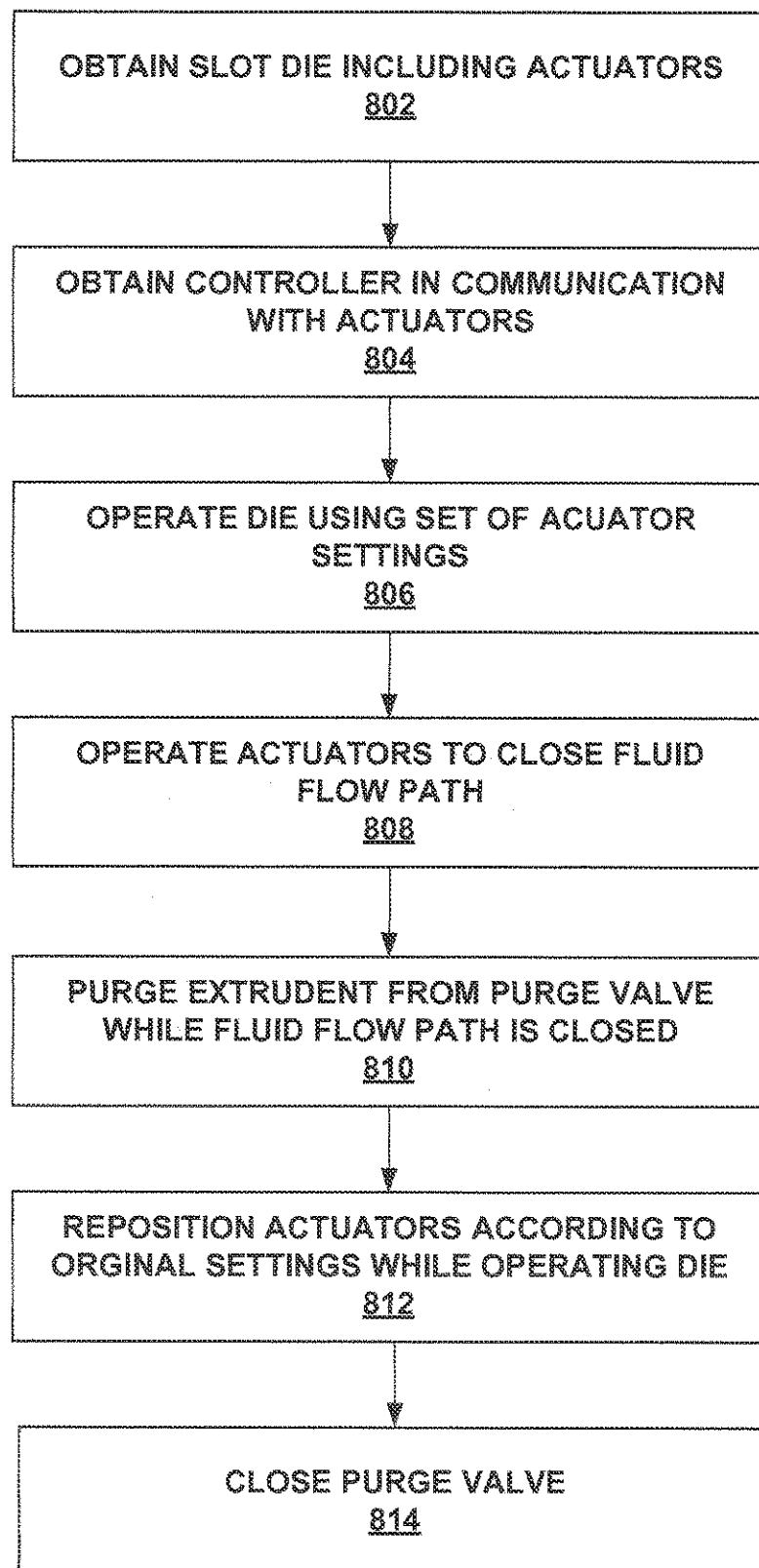


FIG. 8

900

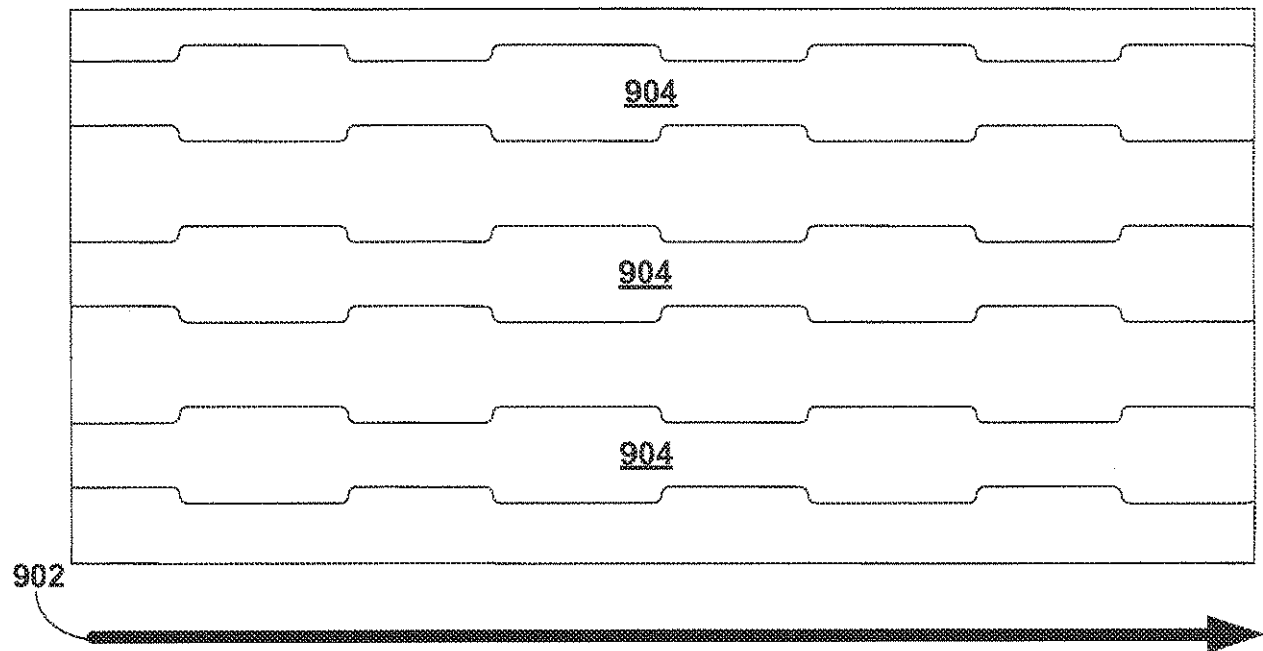


FIG. 9

910

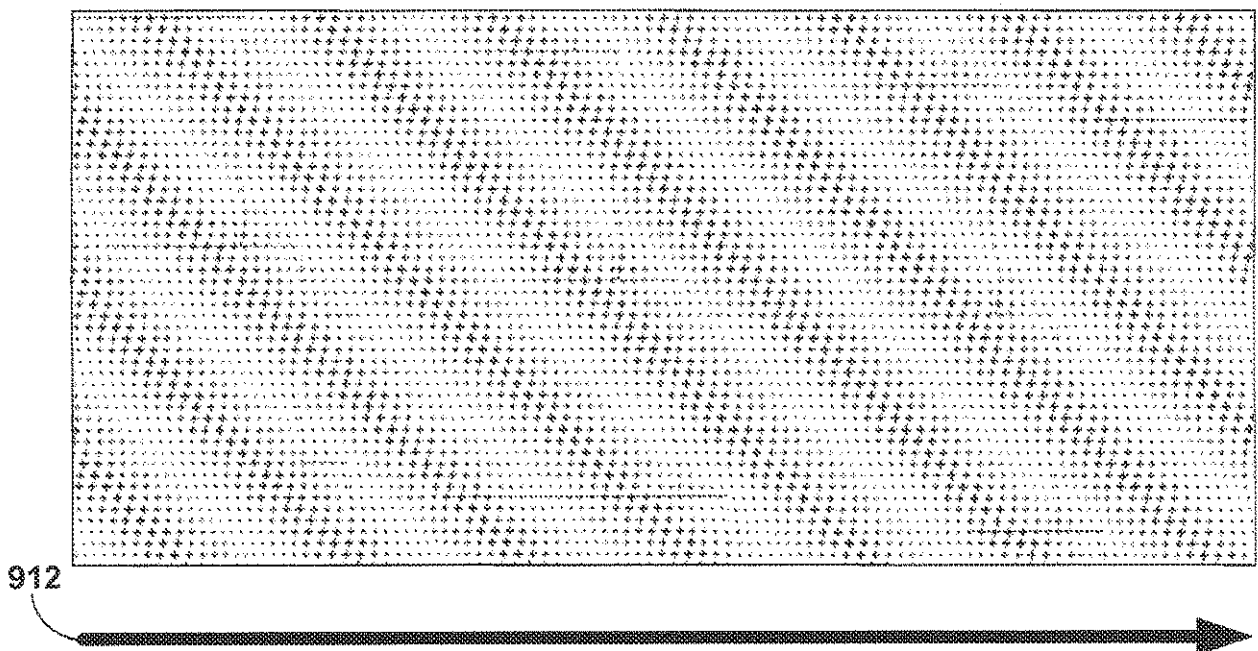


FIG. 10

REPLACEMENT SHEET

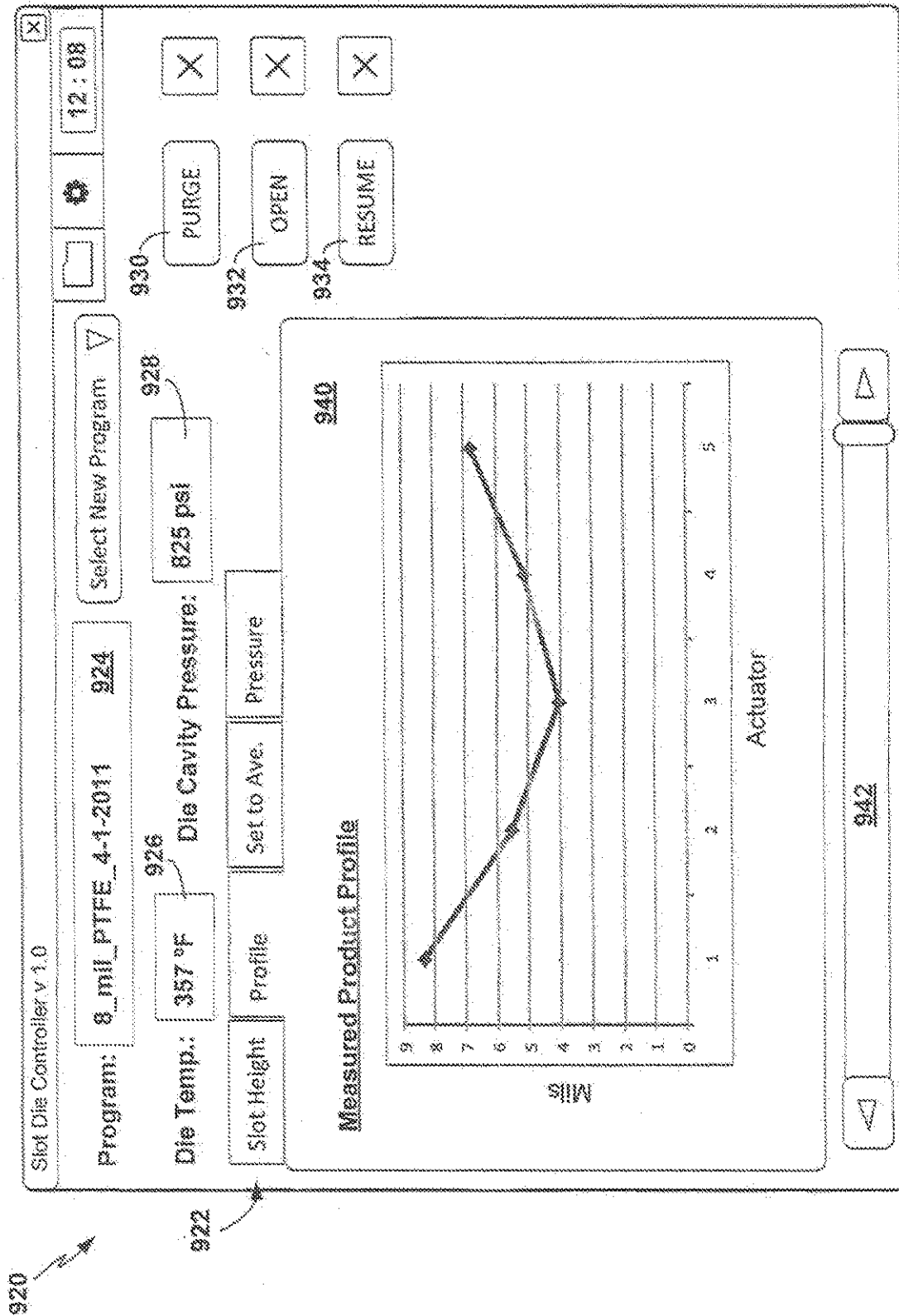


FIG. 11A

REPLACEMENT SHEET

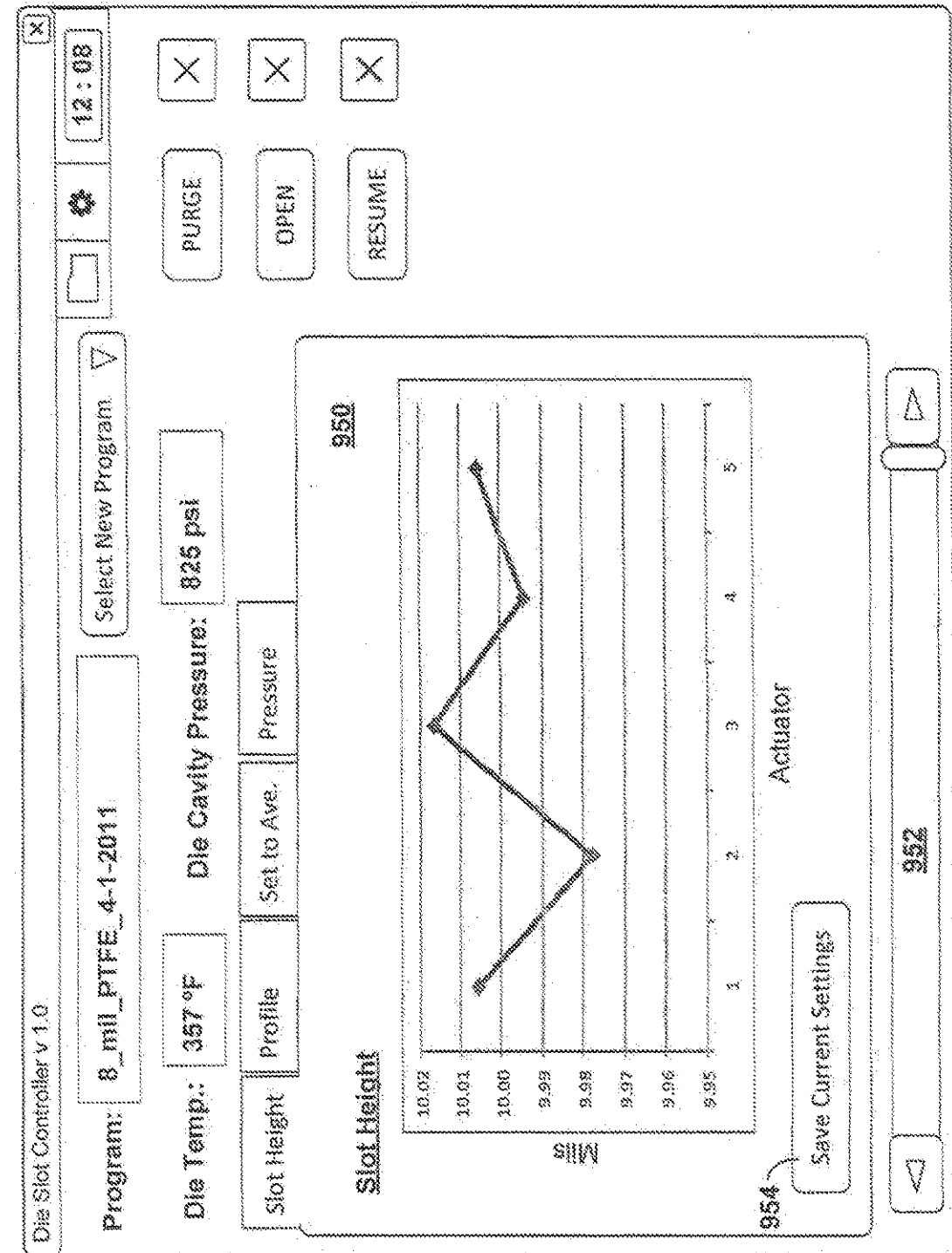


FIG. 11B

REPLACEMENT SHEET

Die Slot Controller v 1.0

Program: 8_mil_PTFE_4-1-2011

Select New Program

12:08

Die Temp.: 357 °F

Die Cavity Pressure: 825 psi

Slot Height

Profile

Set to Ave.

Pressure

PURGE

OPEN

RESUME

920

Auto-select Setpoints According to Average Profile Thickness

Actuator Current Position (Units)	-1799	-1804	-1797	-1801	-1799
Actual Current Height (mils)	10.01	9.98	10.02	9.99	10.01
Grains/4x6 from Gauge (NDC)	8.36	8.53	8.04	8.15	8.77
Avg. Grains/4x6 from Gauge (NDC)	8.97	8.97	8.97	8.97	8.97
Calculated Height (mils)	8.94	10.24	11.41	10.50	9.59
New Set Point (Units)	-1391	-1758	-1547	-1711	-1873

964

Update New Setpoints

966

Initiate Set to Average

FIG. 11C

REPLACEMENT SHEET

Die Slot Controller v 1.0

Program: 8_mil_PTFE_4-1-2011 Select New Program

Die Temp.: 357 °F Die Cavity Pressure: 825 psi

Slot Height Profile Set to Ave. Pressure

Auto-select Setpoints According to Selected Die Cavity Pressure

Actuator	1	2	3	4	5
Initial Slot Height (mils)	20	20	20	20	20
Initial Set Point (Units)	0	0	0	0	0
Actuator Current Position (Units)	-1799	-1804	-1797	-1801	-1799
Actual Current Height (mils)	10.01	9.98	10.02	9.99	10.01
Calculated Height (mils)	10.27	10.24	10.28	10.26	10.27
New Set Point (Units)	-1751	-1756	-1749	-1753	-1751

Die Cavity Pressure: 825 psi

Set New Pressure: 800 psi

Update New Setpoints

Initiate Set to Pressure

PURGE

OPEN

RESUME

12:08

FIG. 11D

REPLACEMENT SHEET

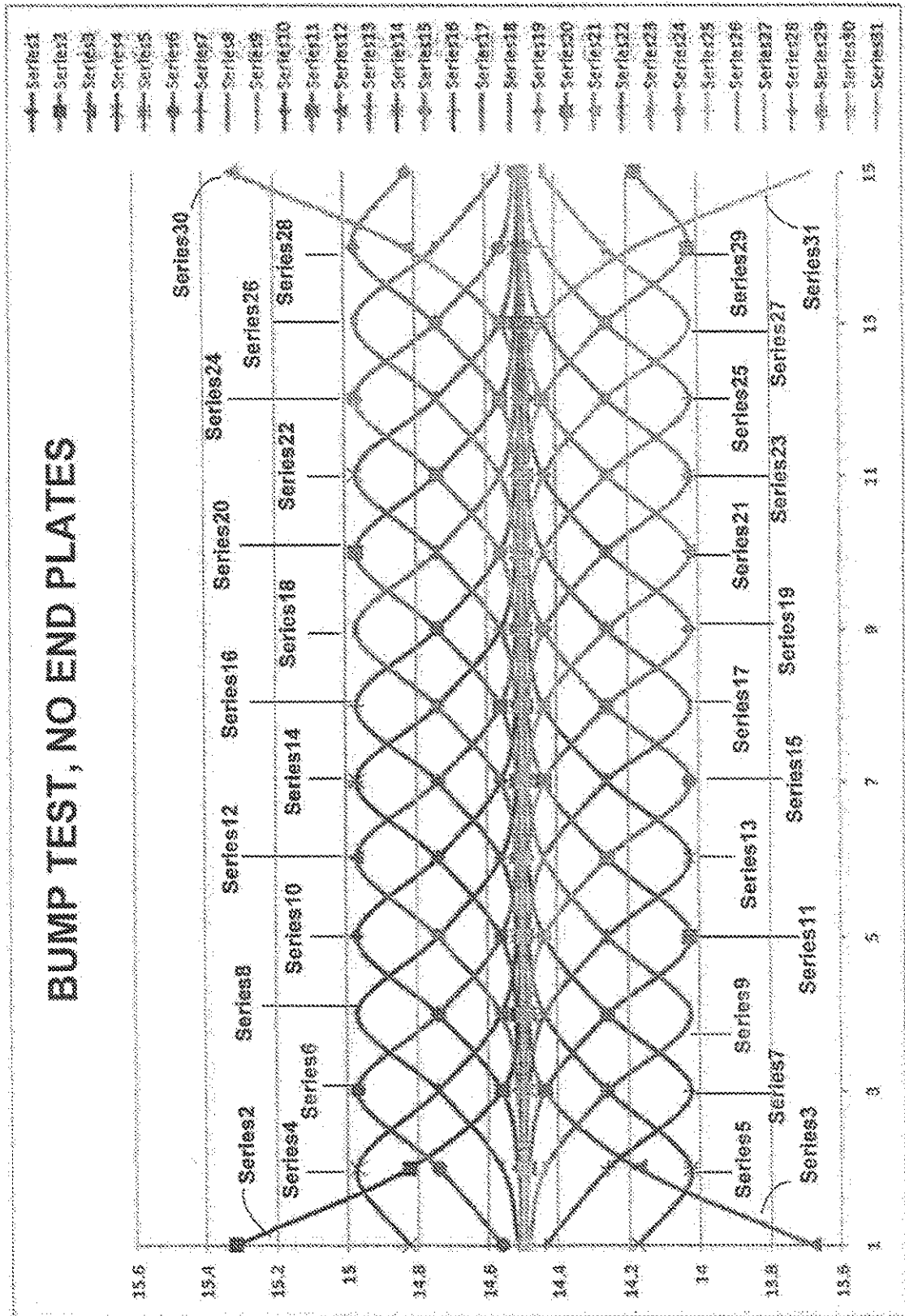


FIG. 12

REPLACEMENT SHEET

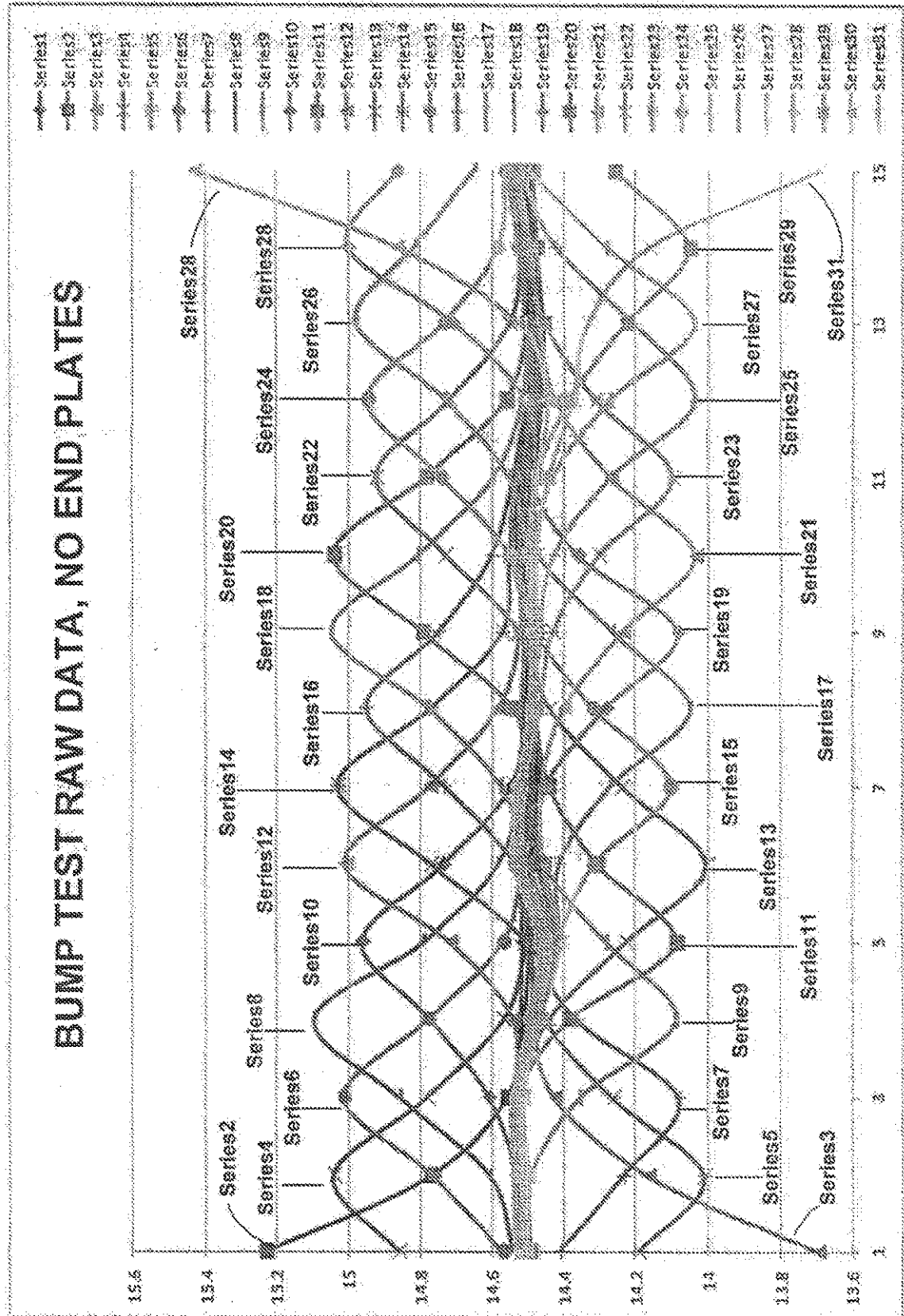


FIG. 13

REPLACEMENT SHEET

Positive Bump:

	1*	2*	3*	4*	5*	6*	7*
a	b	b	b	b	b	b	b
	1	2	4	6	8	10	12
Gap1	0	0.003	0.033	0.042	0.013	-0.014	-0.011
Gap2	0	0.026	0.526	0.25	0.091	0.018	0.002
Gap3	0	0.037	0.28	0.49	0.337	0.085	0.014
Gap4	0	-0.007	0.049	0.259	0.577	0.253	0.021
Gap5	0	-0.018	-0.01	0.054	0.275	0.448	0.2
Gap6	0	-0.021	-0.023	-0.002	0.056	0.218	0.49
Gap7	0	-0.018	-0.026	-0.011	0.02	0.046	0.272
Gap8	0	-0.023	-0.033	-0.022	0.002	-0.004	0.069
Gap9	0	-0.023	-0.038	-0.032	-0.009	-0.013	0.012
Gap10	0	-0.024	-0.041	-0.028	-0.007	-0.015	0
Gap11	0	-0.024	-0.033	-0.023	0.004	-0.013	-0.001
Gap12	0	-0.025	-0.032	-0.018	0.011	-0.01	-0.003
Gap13	0	-0.023	-0.03	-0.011	0.018	0.005	0.009
Gap14	0	-0.023	-0.021	-0.01	0.02	0.004	0.01
Gap15	0	-0.022	0	-0.012	0.04	0.02	0.017

FIG. 14 - 1

REPLACEMENT SHEET

Positive Bump (cont'd):

8*	9*	10*	11*	12*	13*	14*	15*
b	b	b	b	b	b	b	b
16	18	20	22	24	26	28	30
-0.009	-0.002	-0.008	-0.021	-0.005	0.005	-0.018	-0.021
0.009	0.003	0.009	0.013	0.002	0.023	-0.005	-0.015
0.008	0.002	0.006	0.003	0.011	0.02	0.003	0.004
-0.038	-0.039	-0.045	-0.047	-0.021	-0.026	-0.031	-0.04
-0.07	-0.077	-0.089	-0.091	-0.045	-0.051	-0.054	-0.061
0.018	-0.019	-0.043	-0.044	0.021	0.017	0.012	0.008
0.232	0.075	0.034	-0.01	0.032	0.023	0.021	0.023
0.437	0.264	0.027	0.034	-0.021	-0.026	-0.03	-0.019
0.239	0.537	0.285	0.017	-0.017	-0.02	-0.032	-0.018
0.076	0.279	0.513	0.203	0.026	-0.026	-0.045	-0.032
0.022	0.077	0.283	0.404	0.22	0.032	-0.039	-0.048
0.007	0.02	0.065	0.222	0.451	0.232	0.011	-0.05
0.009	0.011	0.015	0.063	0.244	0.489	0.219	0.037
0.006	0.011	0.006	0.018	0.078	0.31	0.43	0.33
0.023	0.026	0.023	0.025	0.046	0.131	0.143	0.116

FIG. 14 - 2

REPLACEMENT SHEET

Negative Bump:

	1-	2-	3-	4-	5-	6-	7-
	c	c	c	c	c	c	c
	3	5	7	9	11	13	15
Gap1	-0.031	-0.037	-0.116	-0.003	-0.034	-0.019	-0.003
Gap2	-0.041	-0.505	-0.231	-0.021	-0.008	-0.006	-0.013
Gap3	-0.096	-0.269	-0.443	-0.167	-0.008	-0.004	-0.002
Gap4	-0.04	-0.069	-0.156	-0.433	-0.134	-0.077	-0.038
Gap5	-0.028	-0.018	-0.03	-0.234	-0.429	-0.288	-0.097
Gap6	-0.023	-0.008	-0.031	-0.061	-0.212	-0.513	-0.2
Gap7	-0.02	-0.001	-0.034	-0.01	-0.059	-0.263	-0.197
Gap8	-0.03	-0.009	-0.036	-0.004	-0.033	-0.073	-0.196
Gap9	-0.032	-0.011	-0.034	-0.001	-0.029	-0.013	-0.03
Gap10	-0.031	-0.011	-0.037	-0.004	-0.023	-0.008	-0.018
Gap11	-0.025	-0.001	-0.039	-0.003	-0.021	-0.004	-0.017
Gap12	-0.029	-0.002	-0.034	-0.007	-0.014	-0.001	-0.013
Gap13	-0.031	-0.011	-0.028	-0.016	-0.004	-0.007	-0.018
Gap14	-0.03	-0.014	-0.023	-0.017	-0.005	-0.005	-0.022
Gap15	-0.031	-0.033	-0.026	-0.035	-0.012	-0.023	-0.014

FIG. 14 - 3

REPLACEMENT SHEET

Negative Bump (cont'd):

Q-	9-	10-	11-	12-	13-	14-	15-
c	c	c	c	c	c	c	c
17	19	21	23	25	27	29	31
-0.021	-0.023	-0.02	-0.02	-0.005	-0.014	-0.008	-0.023
-0.014	-0.014	-0.004	-0.015	-0.001	-0.006	0.002	0.002
-0.005	-0.006	-0.006	-0.006	0.005	0.006	0.008	-0.005
-0.047	-0.046	-0.055	-0.037	-0.025	-0.027	-0.028	-0.046
-0.102	-0.091	-0.103	-0.064	-0.052	-0.051	-0.05	-0.074
-0.104	-0.053	-0.061	0.002	0.015	0.02	0.017	-0.003
-0.231	-0.052	-0.038	0.012	0.023	0.026	0.024	0.009
-0.465	-0.232	-0.114	-0.049	-0.032	-0.025	-0.026	-0.032
-0.247	-0.427	-0.276	-0.079	-0.043	-0.029	-0.023	-0.035
-0.055	-0.166	0.492	-0.226	-0.097	-0.046	-0.027	-0.049
-0.011	-0.028	-0.251	-0.423	-0.252	-0.09	-0.046	-0.078
-0.005	-0.007	-0.073	-0.185	-0.45	0.227	0.113	-0.127
0.003	-0.001	-0.018	-0.035	-0.28	-0.451	-0.266	-0.157
0.005	0.004	-0.009	-0.006	-0.081	-0.224	-0.451	-0.145
0.022	0.021	0.011	0.018	0.008	0.018	0.26	0.023

FIG. 14 - 4

REPLACEMENT SHEET

	A	B	C	D	E	F	G	H	I	J
1	PDSA Position Calculator									
2	(Drive to Average - Direct Ct Thickness)									
3										
4	Actuator	1	2	3	4	5	6	7	8	9
5	Initial Set Height (mils)	14.351	14.46	14.699	14.678	14.622	14.541	14.414	14.287	14.268
6	To Lip Stiffness Calculator									
7	Initial Set Point (Units)	981	859	685	-510	-757	-840	-756	-739	-1001
8	To Lip Stiffness Calculator									
9	Actuator Current Pos. (inches)	-981	-859	-685	-510	-757	-840	-756	-739	-1001
10	To Lip Stiffness Calculator									
11	Actual Current Height (mils)	14.351	14.460	14.699	14.678	14.622	14.541	14.414	14.287	14.268
12	From Lip Stiffness Calculator									
13	Entered Desired Slot, mil	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
14	Usually a Flat Uniform Slot									
15	New Set Point (Units)	-980	-801	-791	-524	-787	-853	-745	-739	-852
16	From Lip Stiffness Calculator									
17	Actuator Change - Units	21	58	-108	-14	-30	-13	11	57	49
18										
19										
20										

FIG. 15 - 1

REPLACEMENT SHEET**Pdsa Posaiton Calculator (cont'd)**

K	L	M	N	O	P	Q	R
10	11	12	13	14	15		
14.29	14.269	14.319	14.371	14.255	14.116	From Die Slot Measurements (Capacitac)	
-648	-743	-694	-840	-944	-1130	From PDSA Actuator Positions	
-448	-743	-694	-840	-944	-1130		
14.293	14.269	14.339	14.371	14.255	14.116	14.40	Average
14.50	14.50	14.50	14.50	14.50	14.50		
-629	-676	-673	-840	-897	-1056	To PDSA Actuator Positions	
19	67	21	0	47	74		

FIG. 15 - 2

REPLACEMENT SHEET

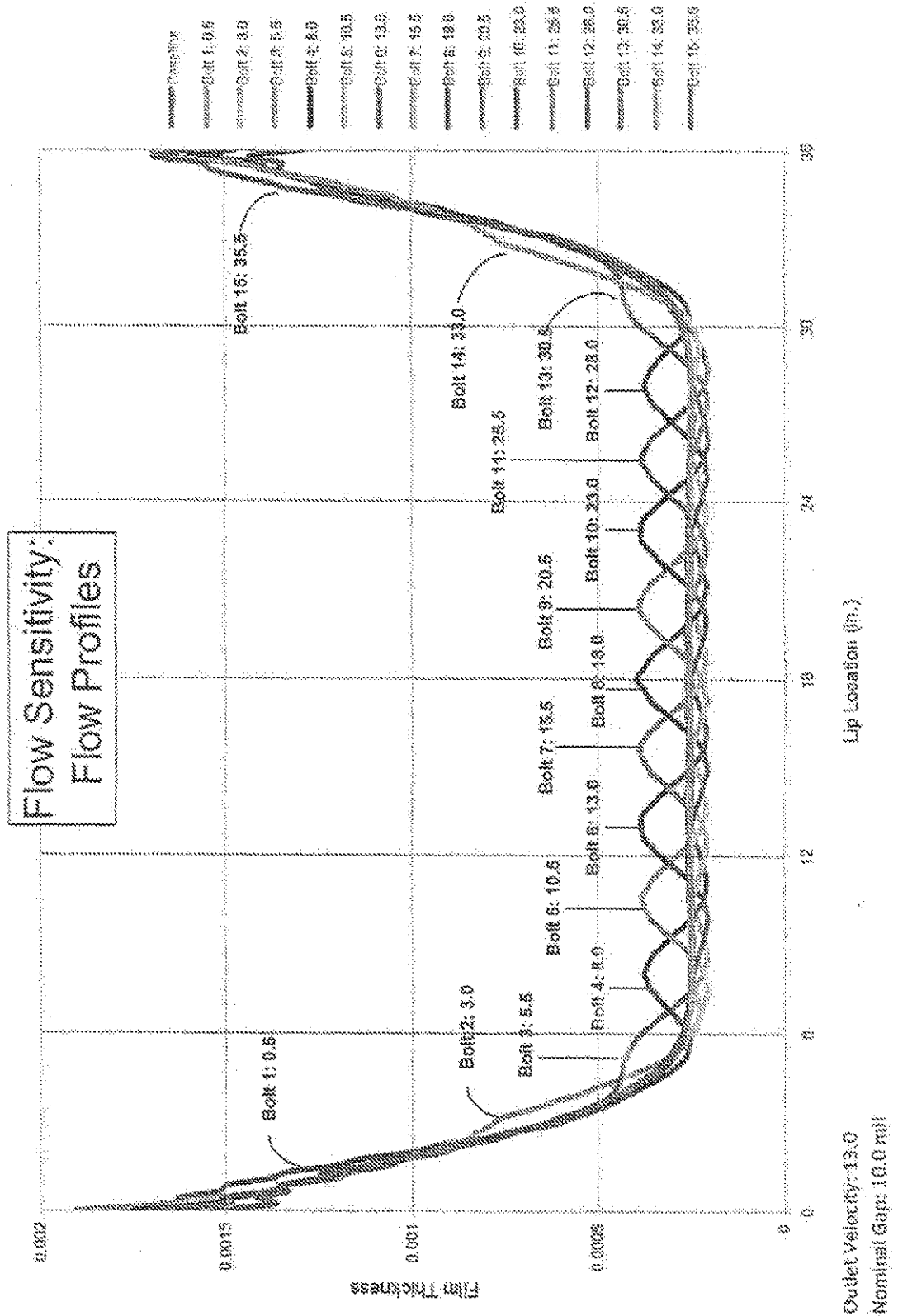


FIG. 16

REPLACEMENT SHEET

**Flow sensitivity measurement is
normalized to the central thickness

Flow Sensitivity: Bolt 4
Location: 8.0

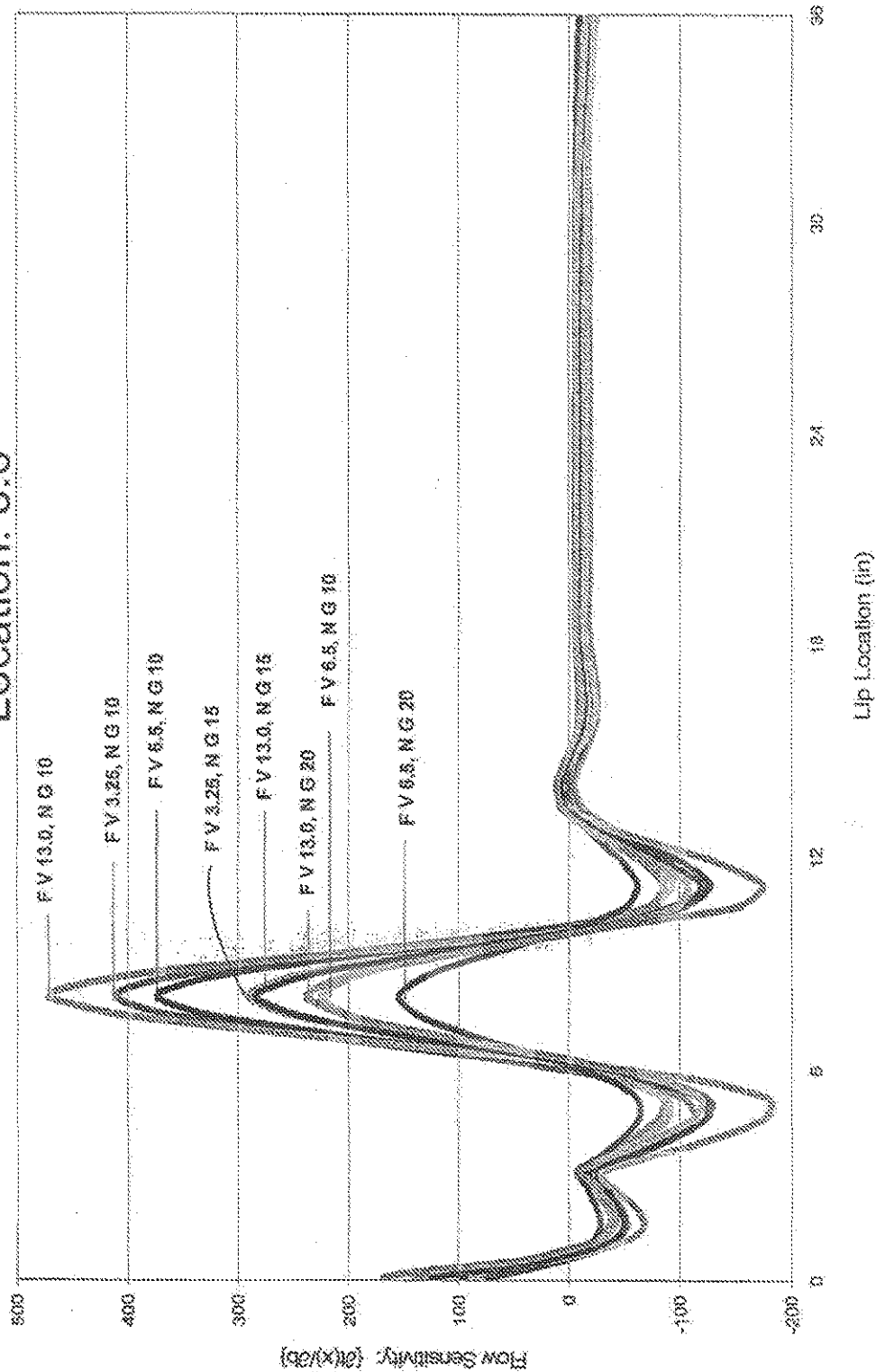


FIG. 17

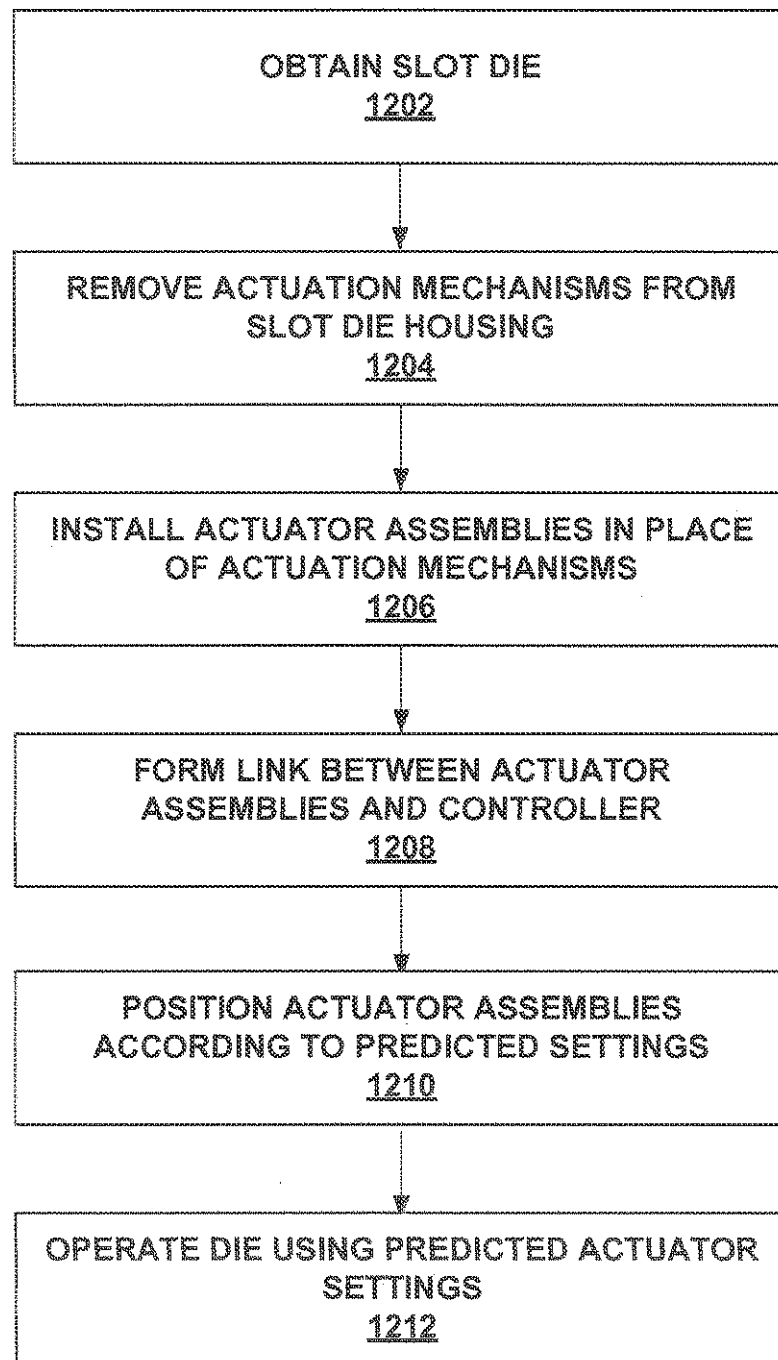


FIG. 18