

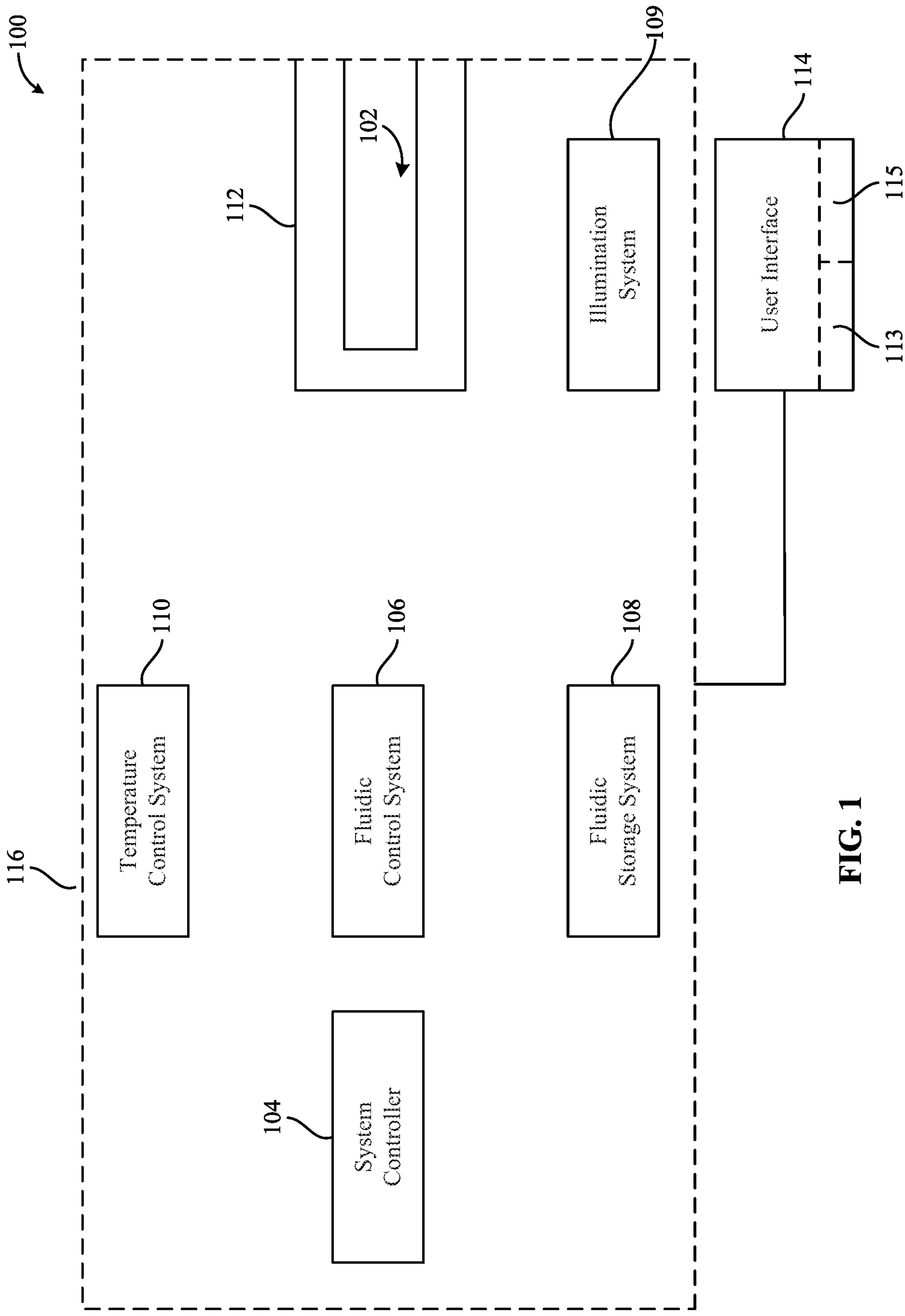
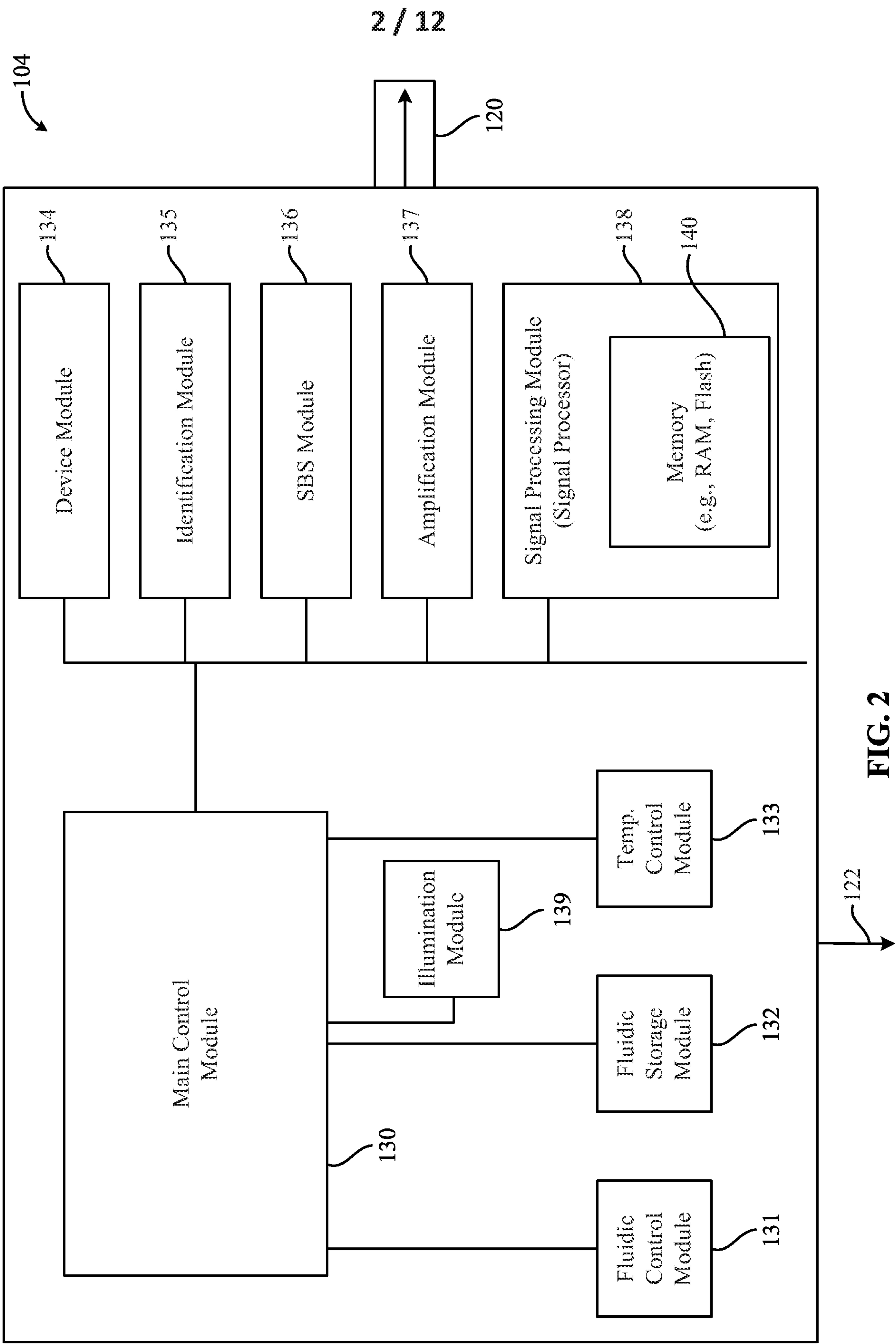


FIG. 1



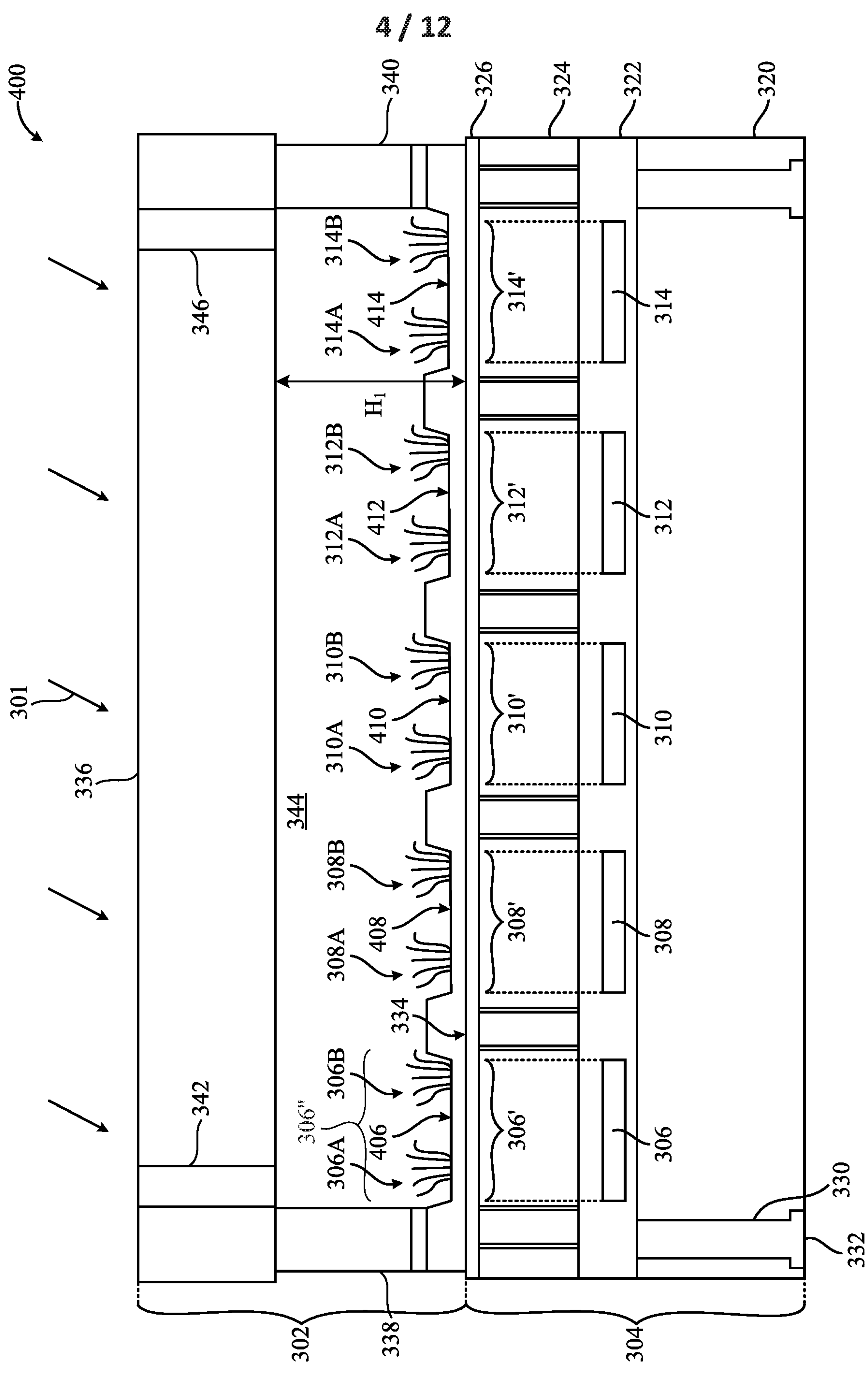
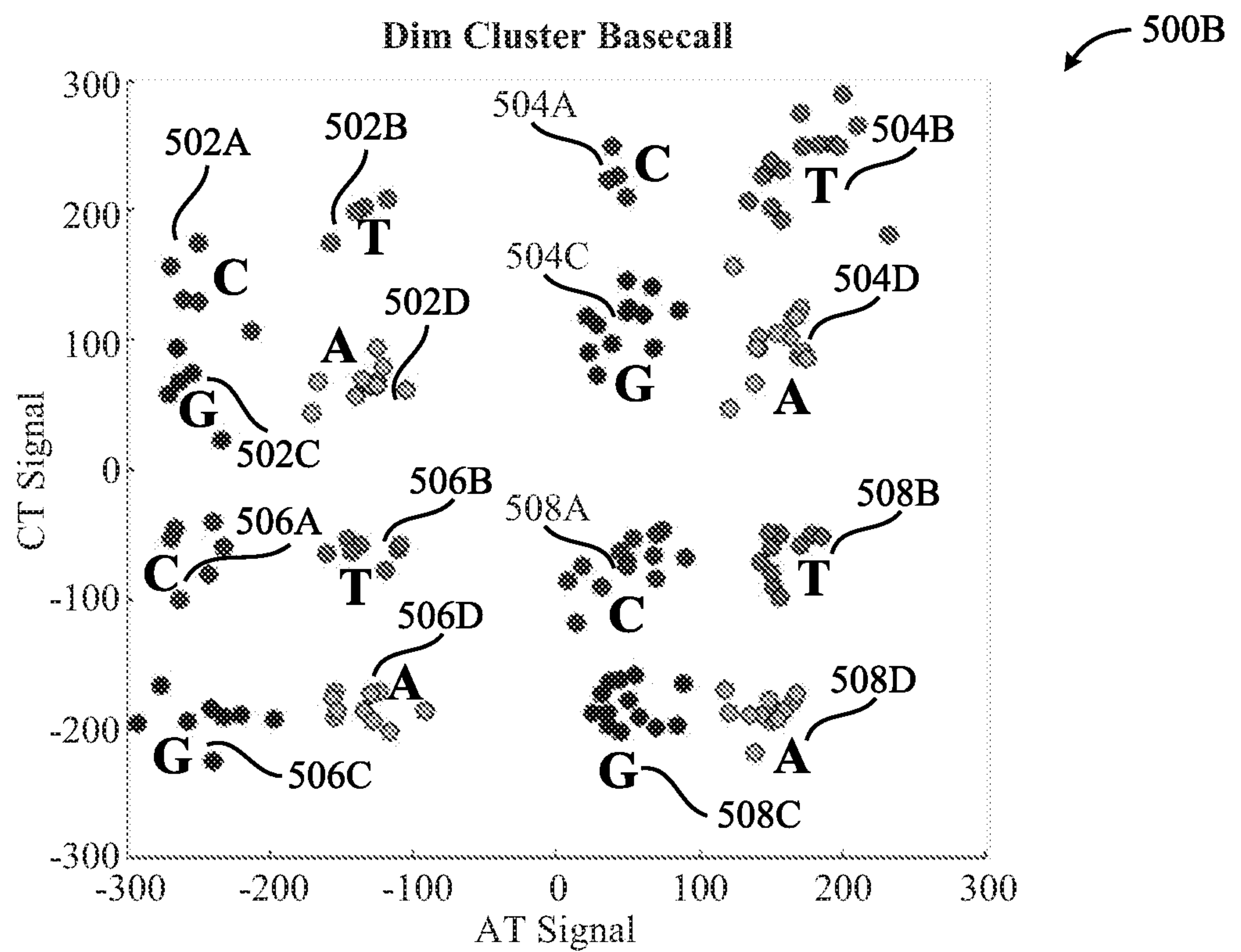
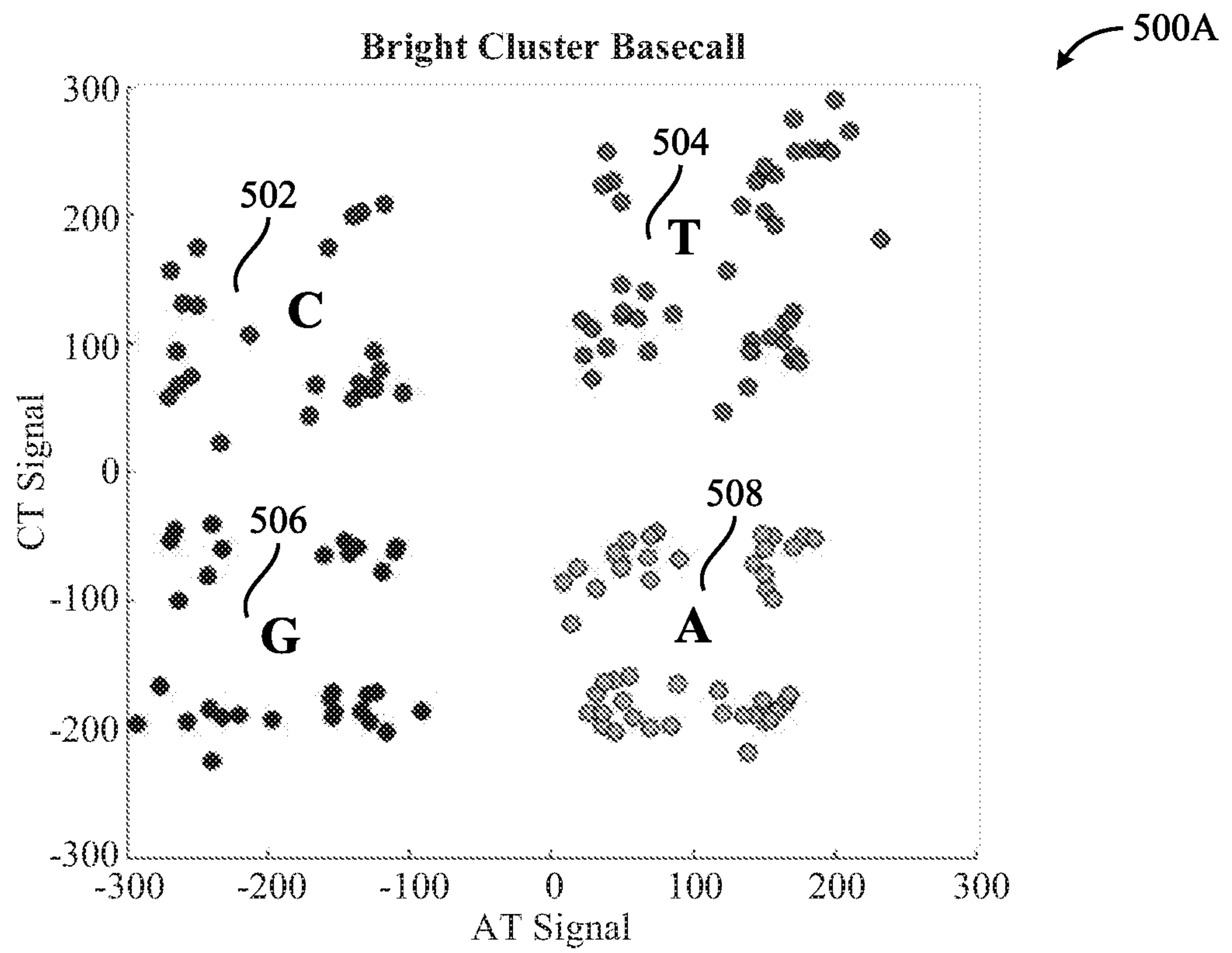


FIG. 4



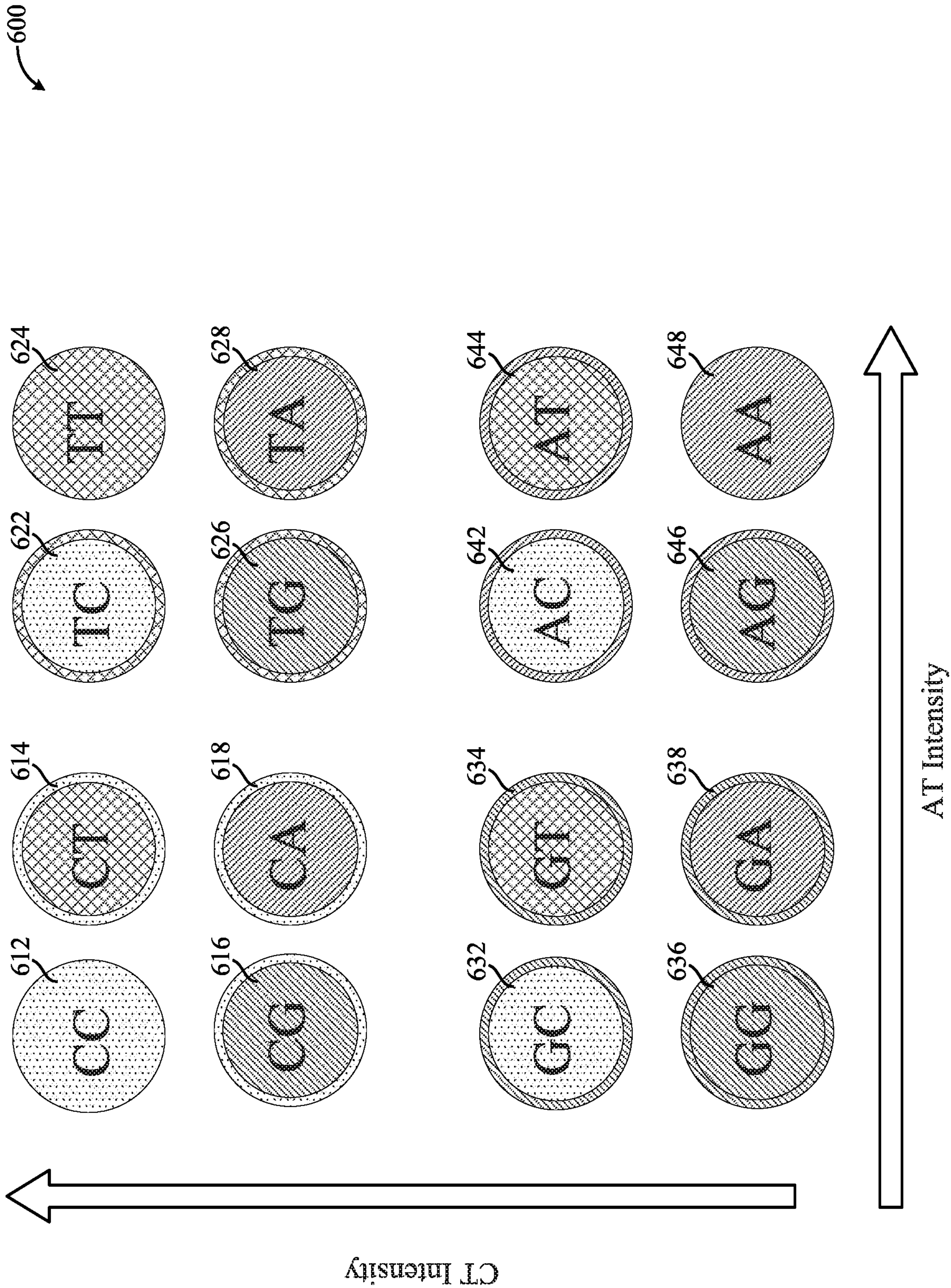


FIG. 6

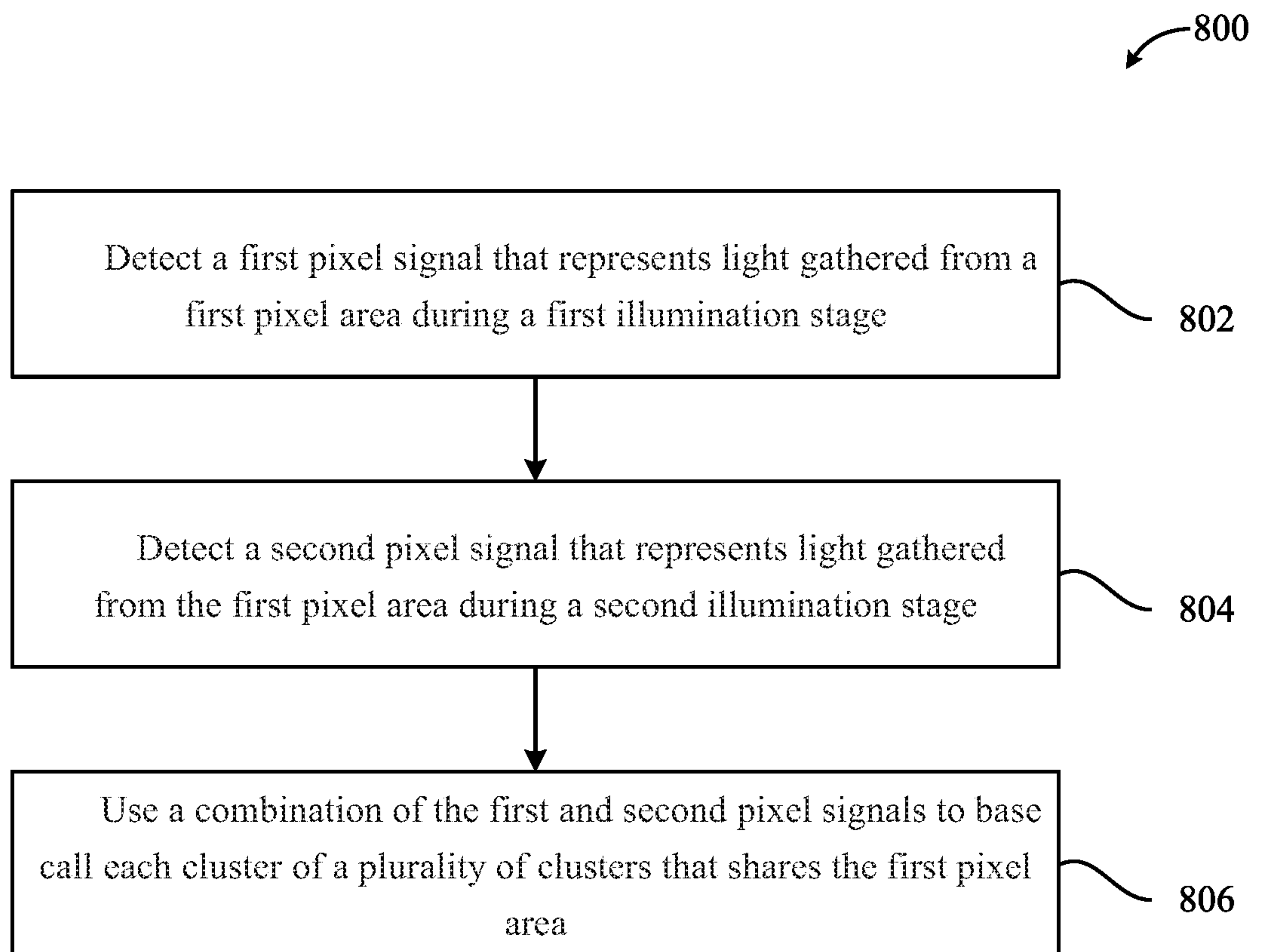
AT Signal		CT Signal
A	1	0
C	0	1
G	0	0
T	1	1

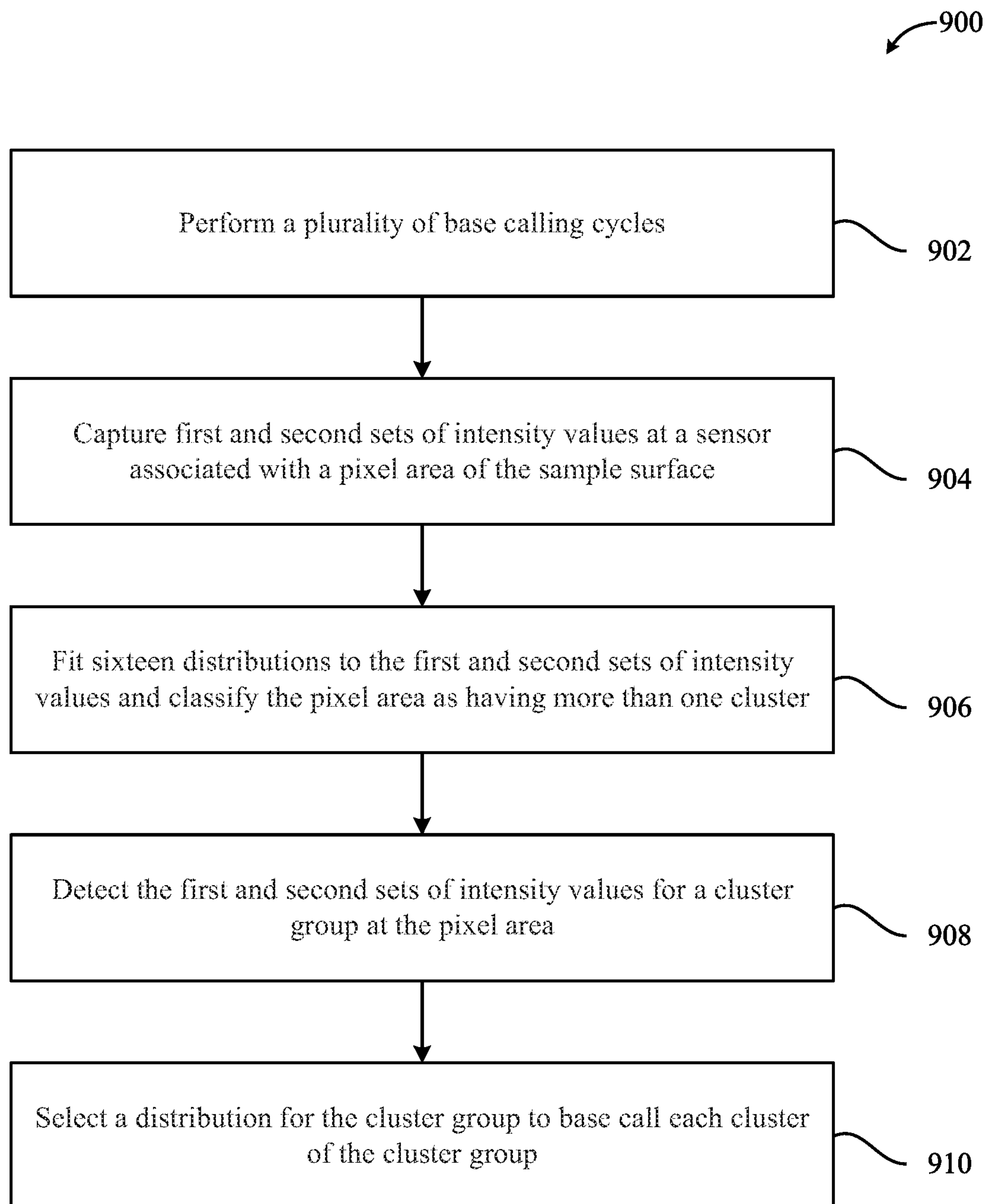
FIG. 7A

Bright to Dim Cluster Intensity Ratio -- 0.7:0.3

Bins 701	Bright Cluster 702	Dim Cluster 704	AT Signal 706	CT Signal 710 708	AT Signal Portions 706A		CT Signal Portions 708A	
					Bright Cluster	Dim Cluster	Bright Cluster	Dim Cluster
Bin 1	A	A	1	0	0.7	0.3	0	0
Bin 2	A	C	0.7	0.3	0.7	0	0	0.3
Bin 3	A	G	0.7	0	0.7	0	0	0
Bin 4	A	T	1	0.3	0.7	0.3	0	0.3
Bin 5	C	A	0.3	0.7	0	0.3	0.7	0
Bin 6	C	C	0	1	0	0	0.7	0.3
Bin 7	C	G	0	0.7	0	0	0.7	0
Bin 7	C	T	0.3	1	0	0.3	0.7	0.3
Bin 9	G	A	0.3	0	0	0.3	0	0
Bin 10	G	C	0	0.3	0	0	0	0.3
Bin 11	G	G	0	0	0	0	0	0
Bin 12	G	T	0.3	0.3	0	0.3	0	0.3
Bin 13	T	A	1	0.7	0.7	0.3	0.7	0
Bin 14	T	C	0.7	1	0.7	0	0.7	0.3
Bin 15	T	G	0.7	0.7	0.7	0	0.7	0
Bin 16	T	T	1	1	0.7	0.3	0.7	0.3

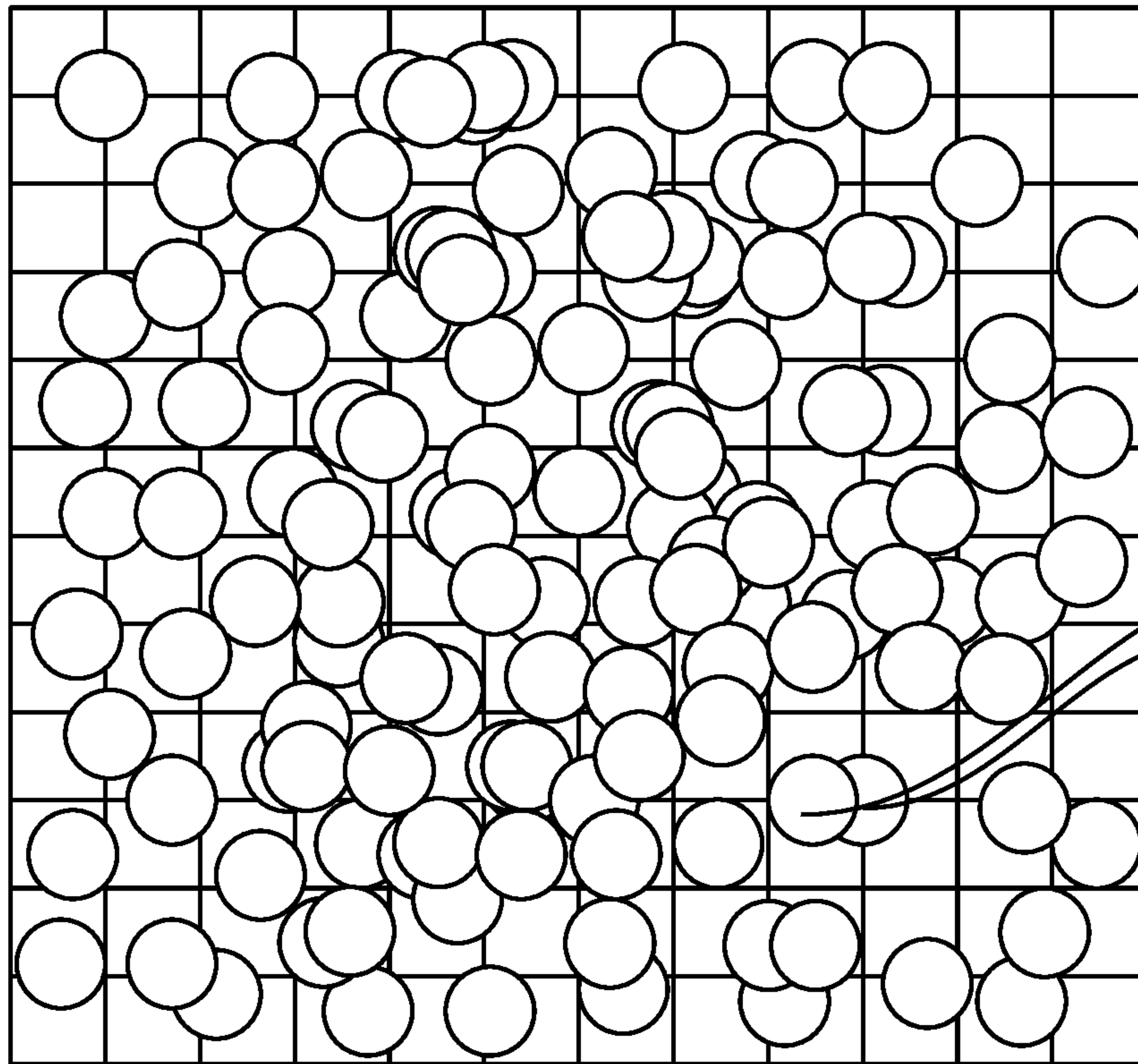
FIG. 7B

**FIG. 8**

**FIG. 9**

Cluster Locations

1000



1002
1004

Illumination Patterns

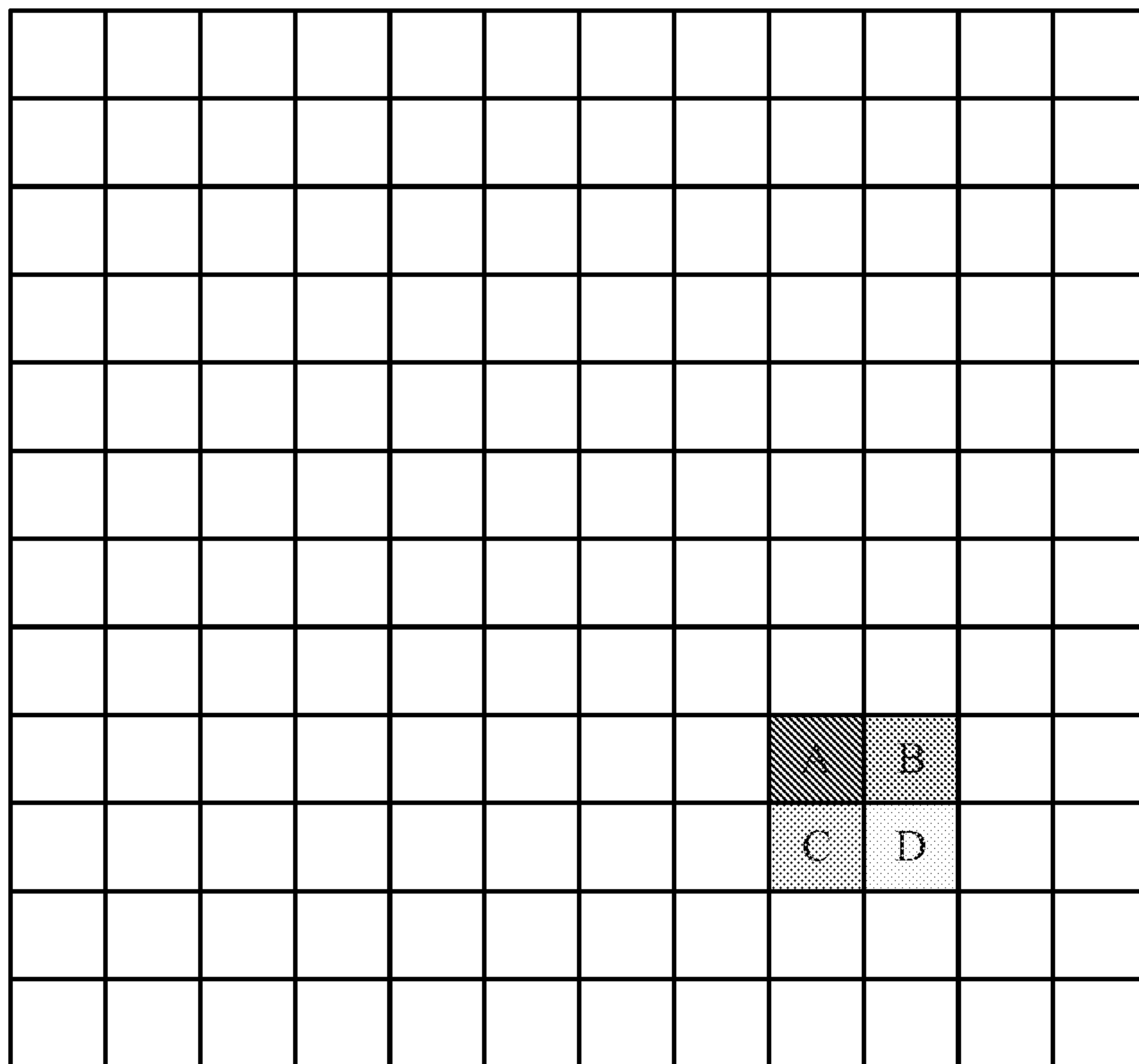


FIG. 10

Side View

Dual Well

1100A

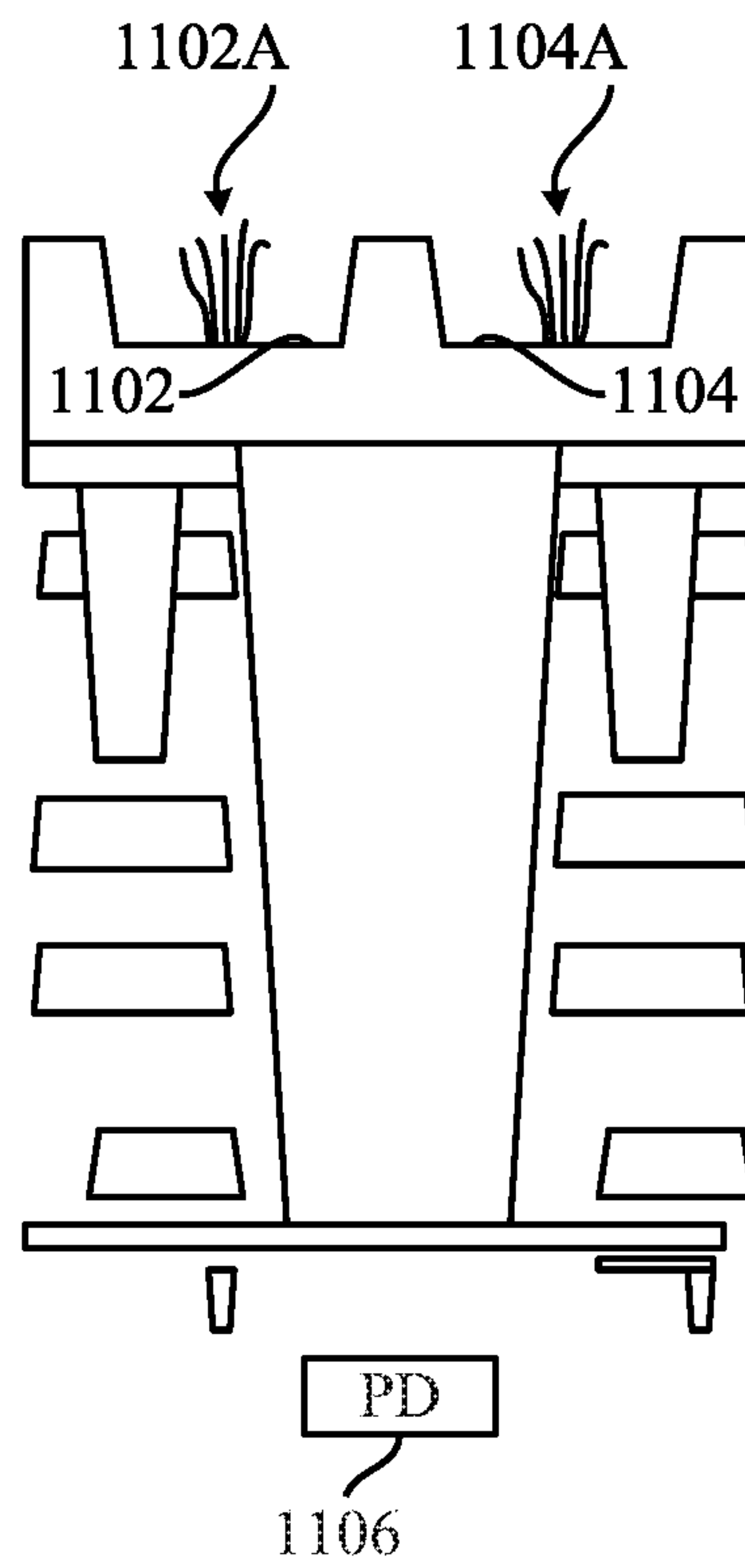


FIG. 11A

Top View

Dual Well

1100B

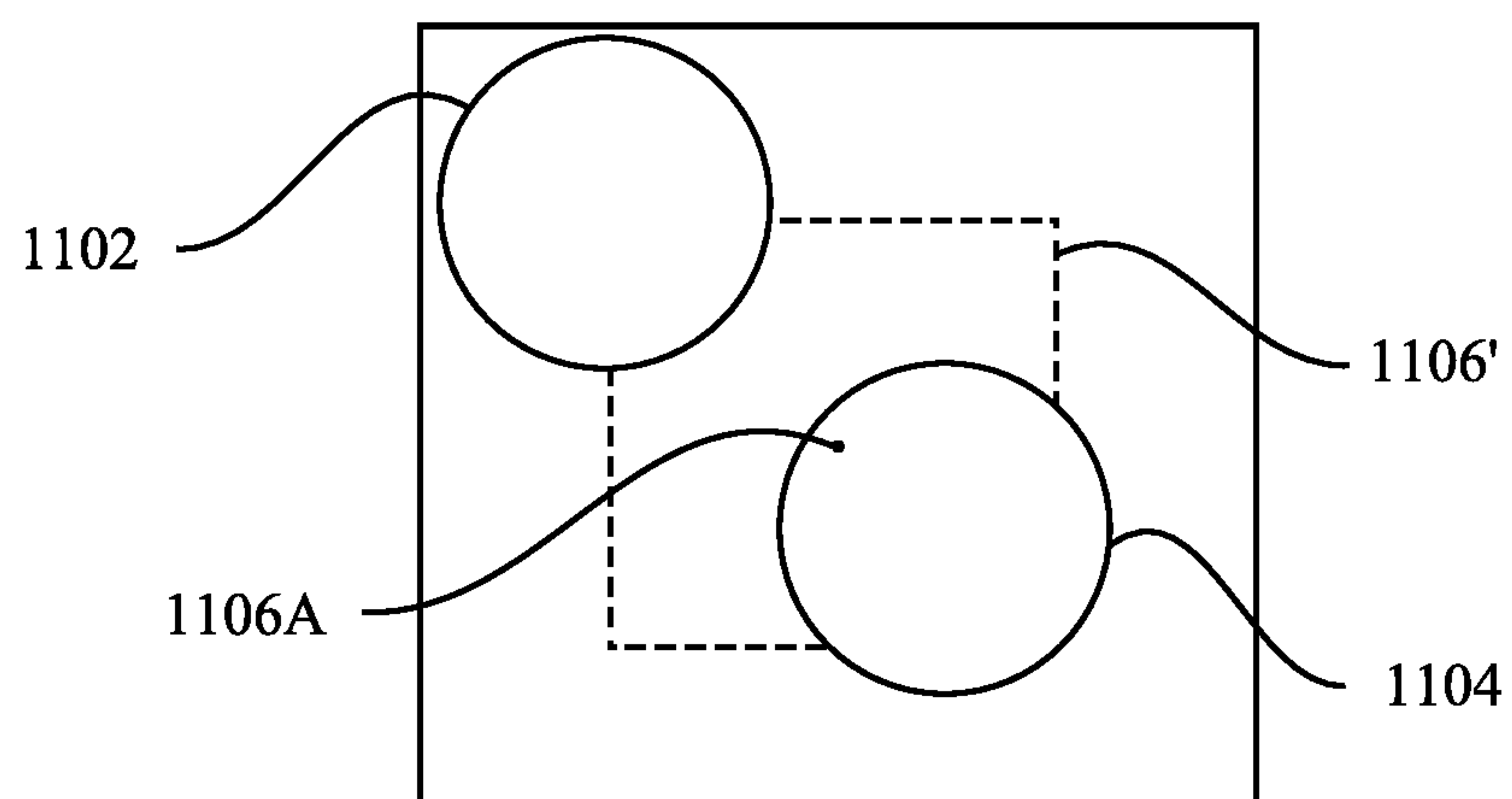


FIG. 11B

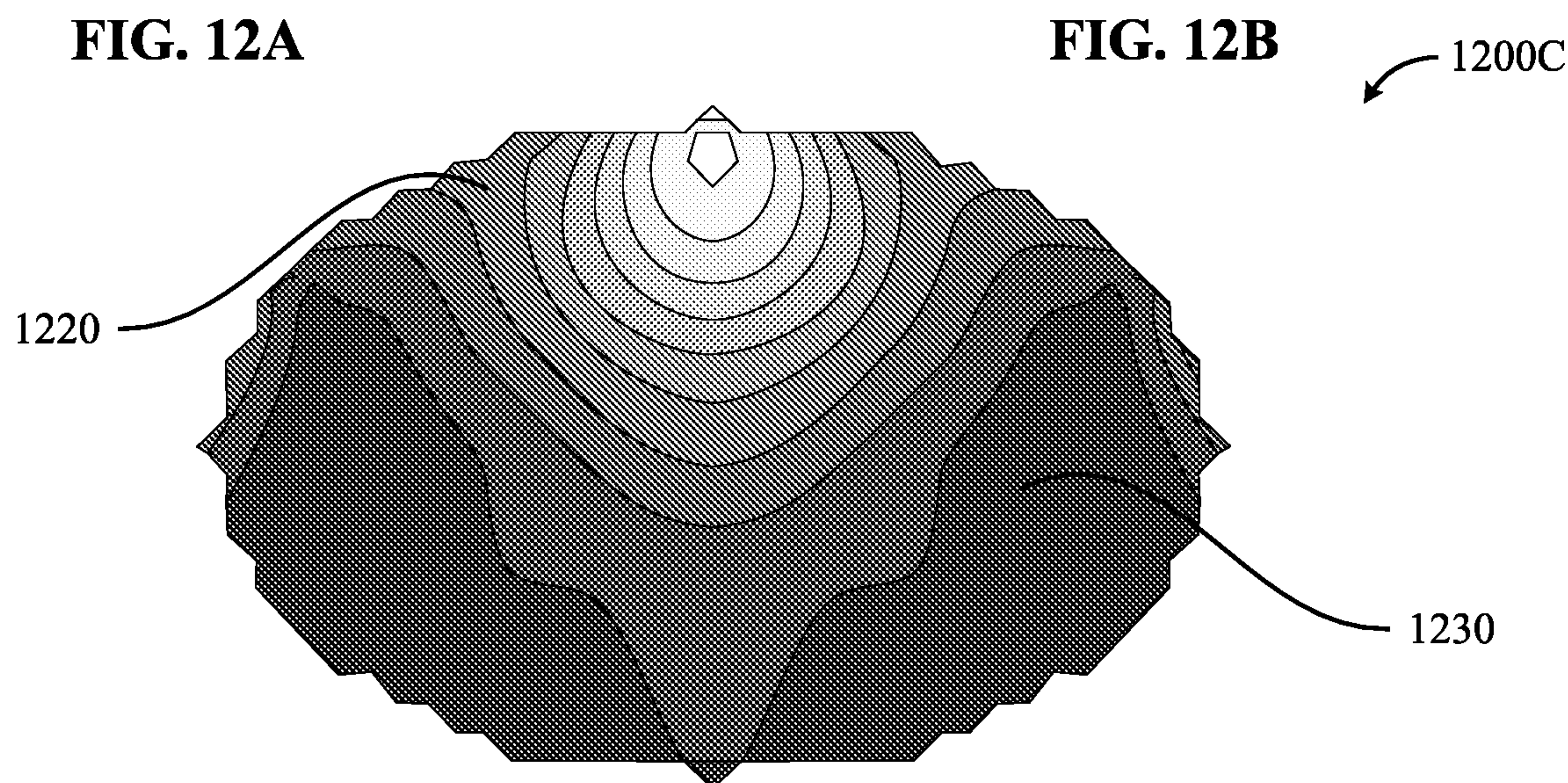
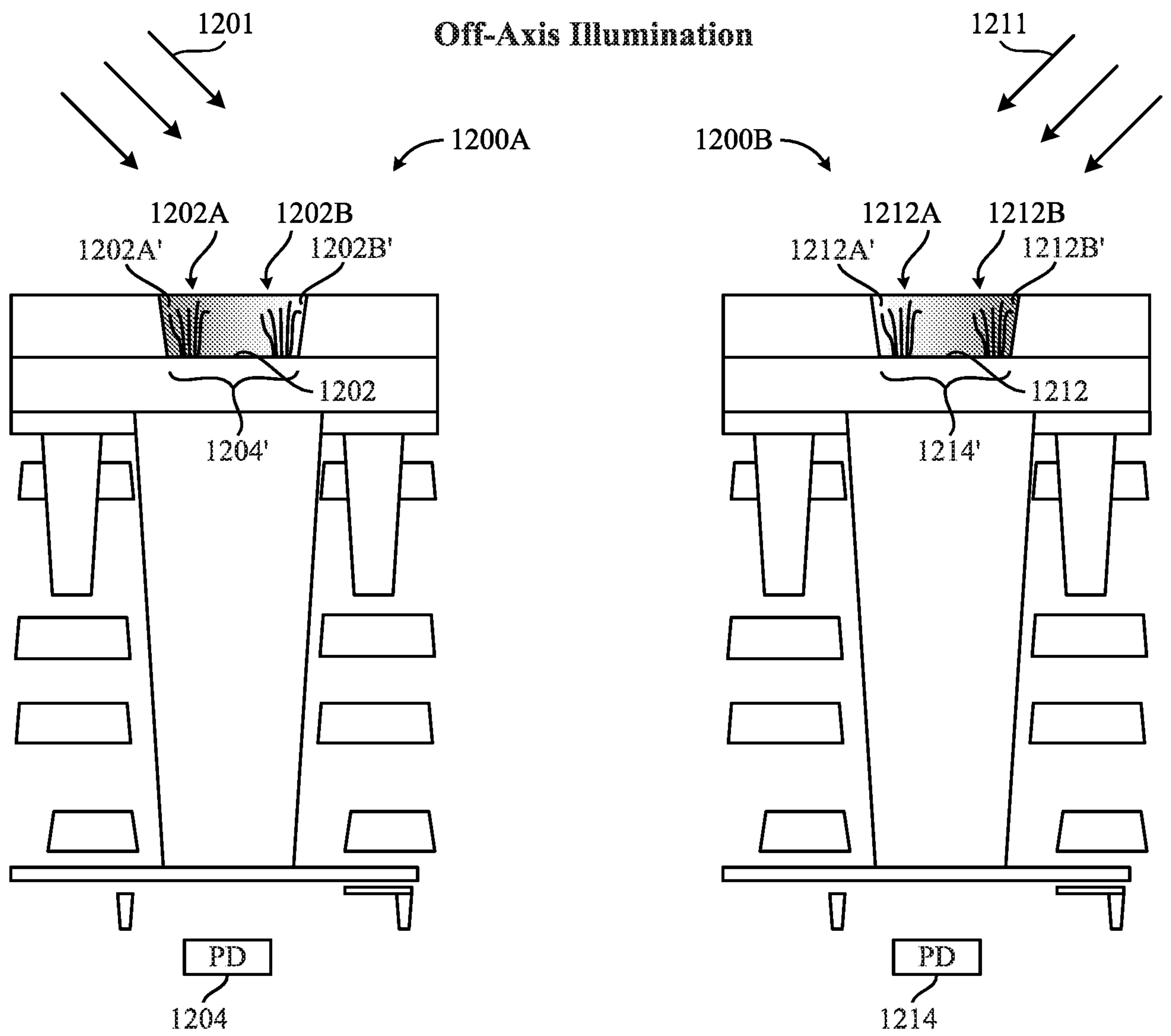


FIG. 12C