

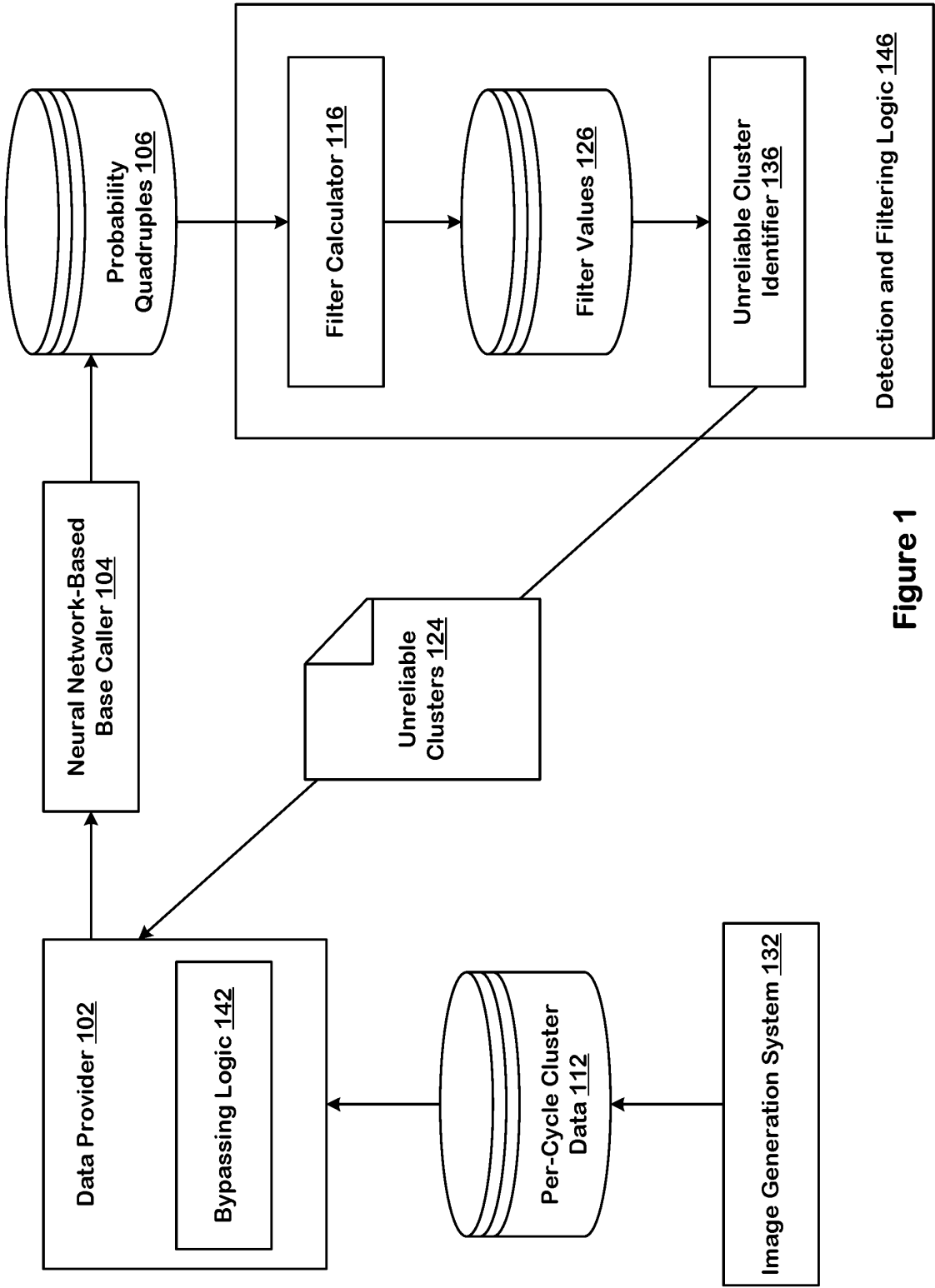


Figure 1

Softmax Function

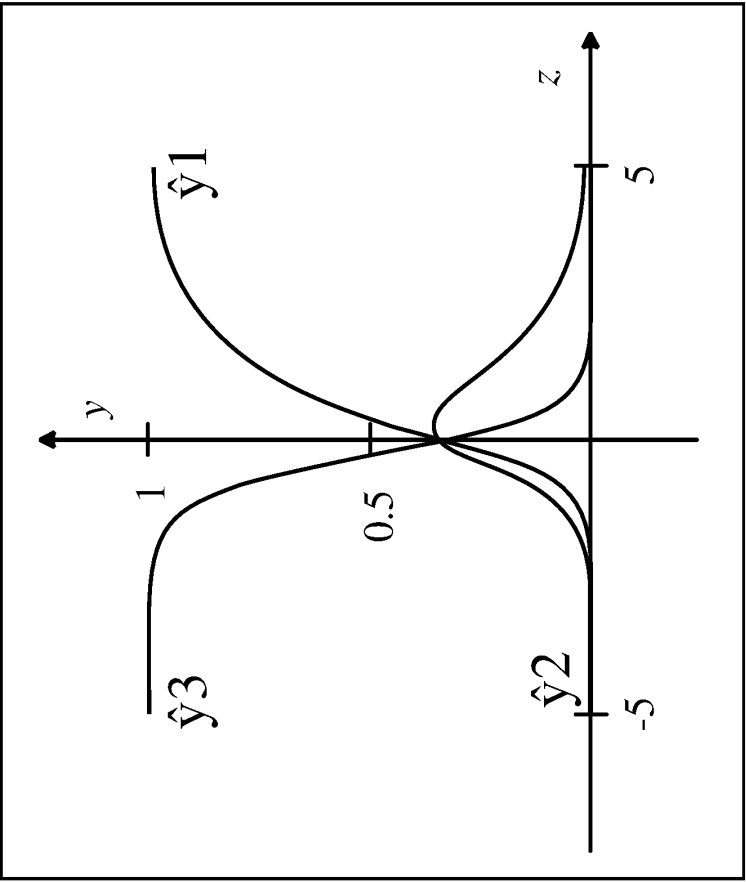


Figure 2A

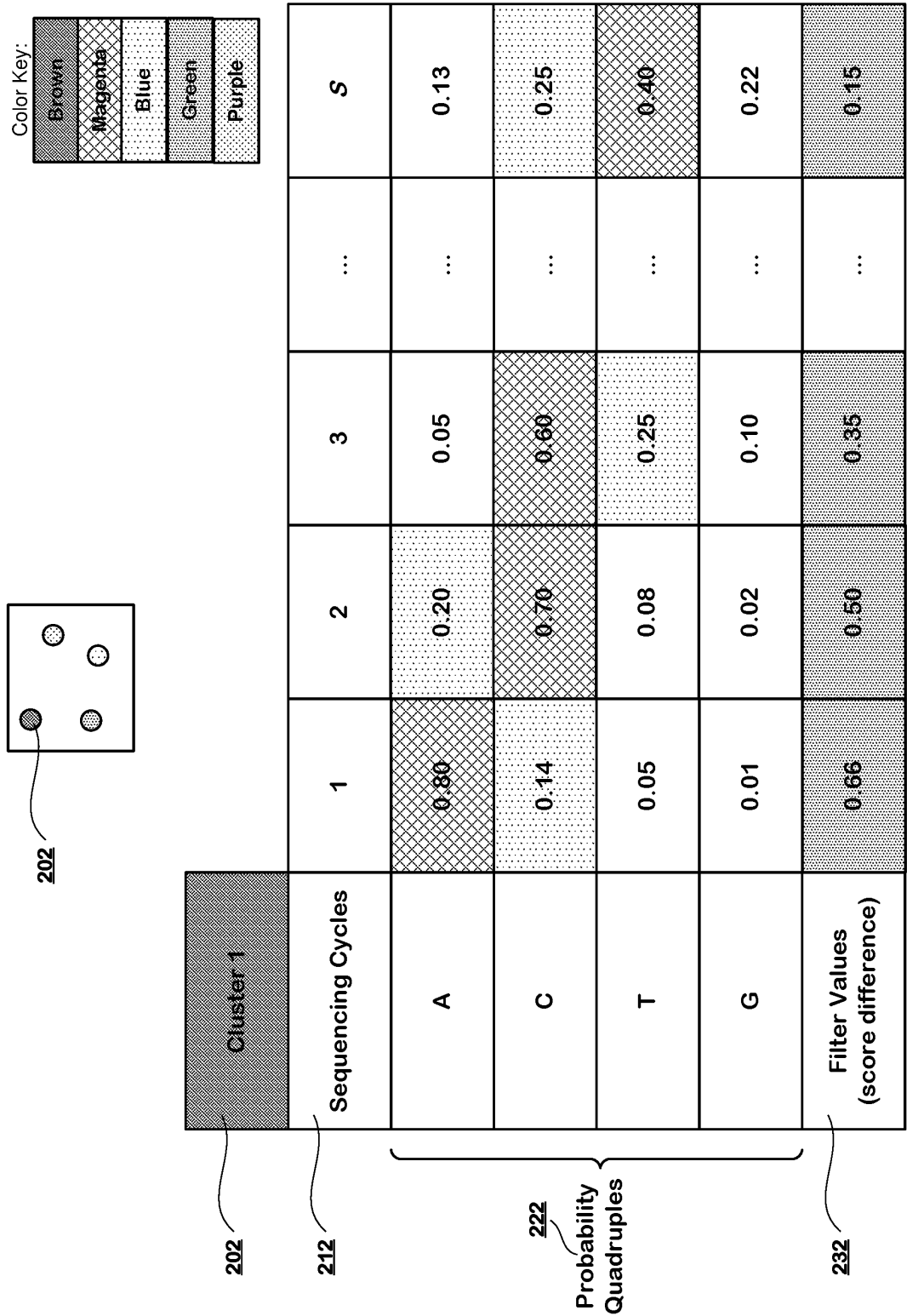


Figure 2B

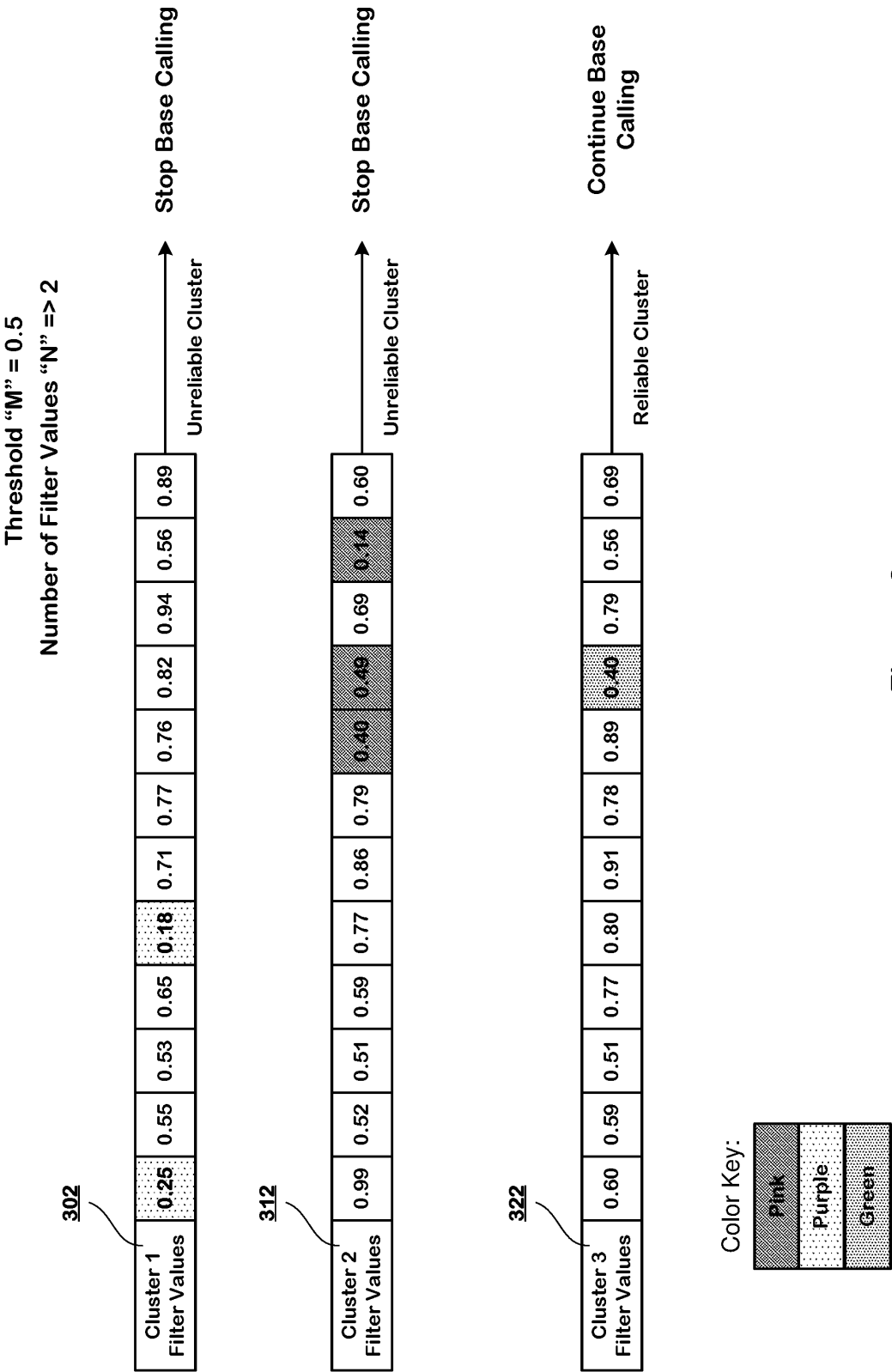
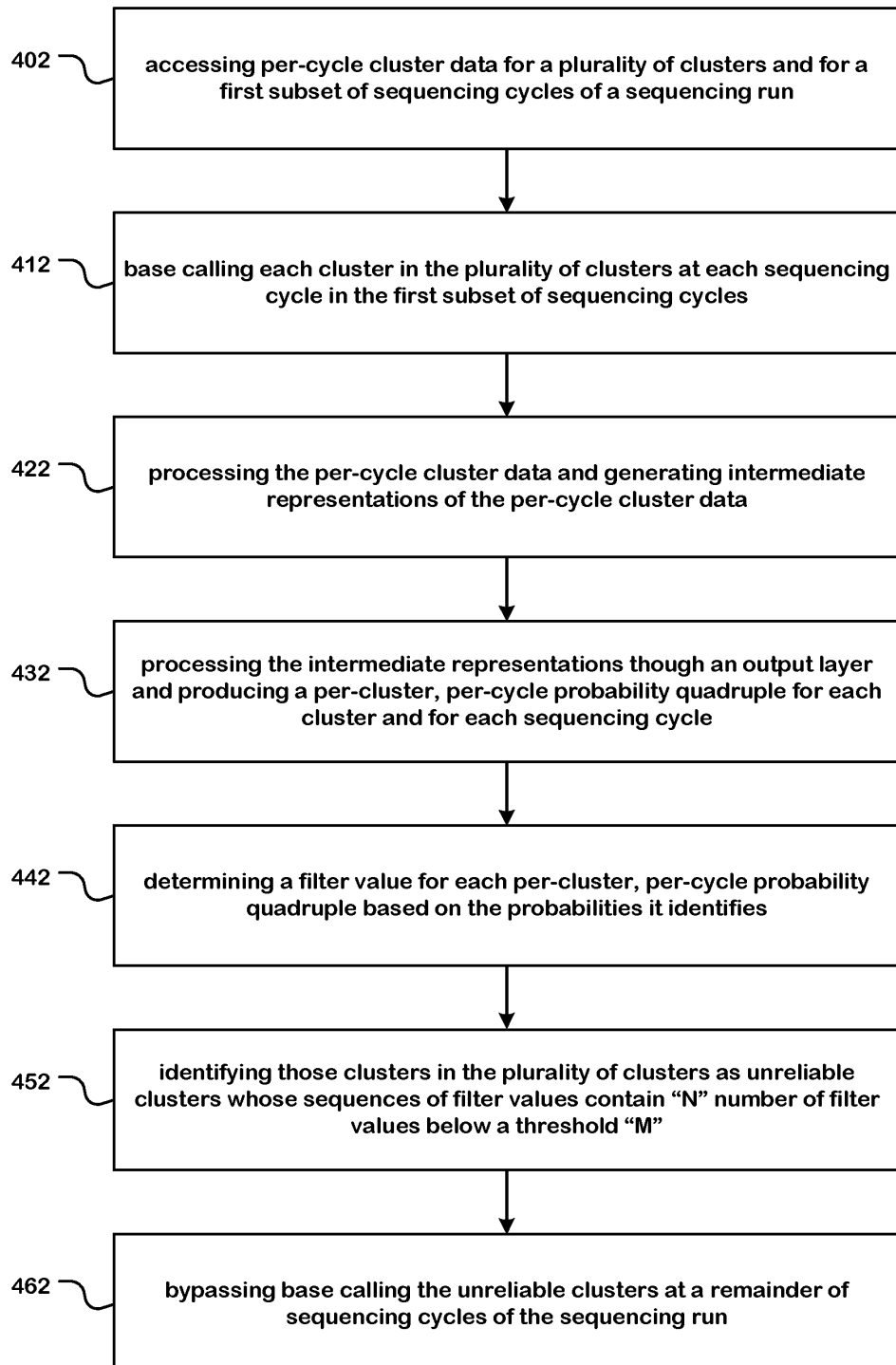


Figure 3

**Figure 4**

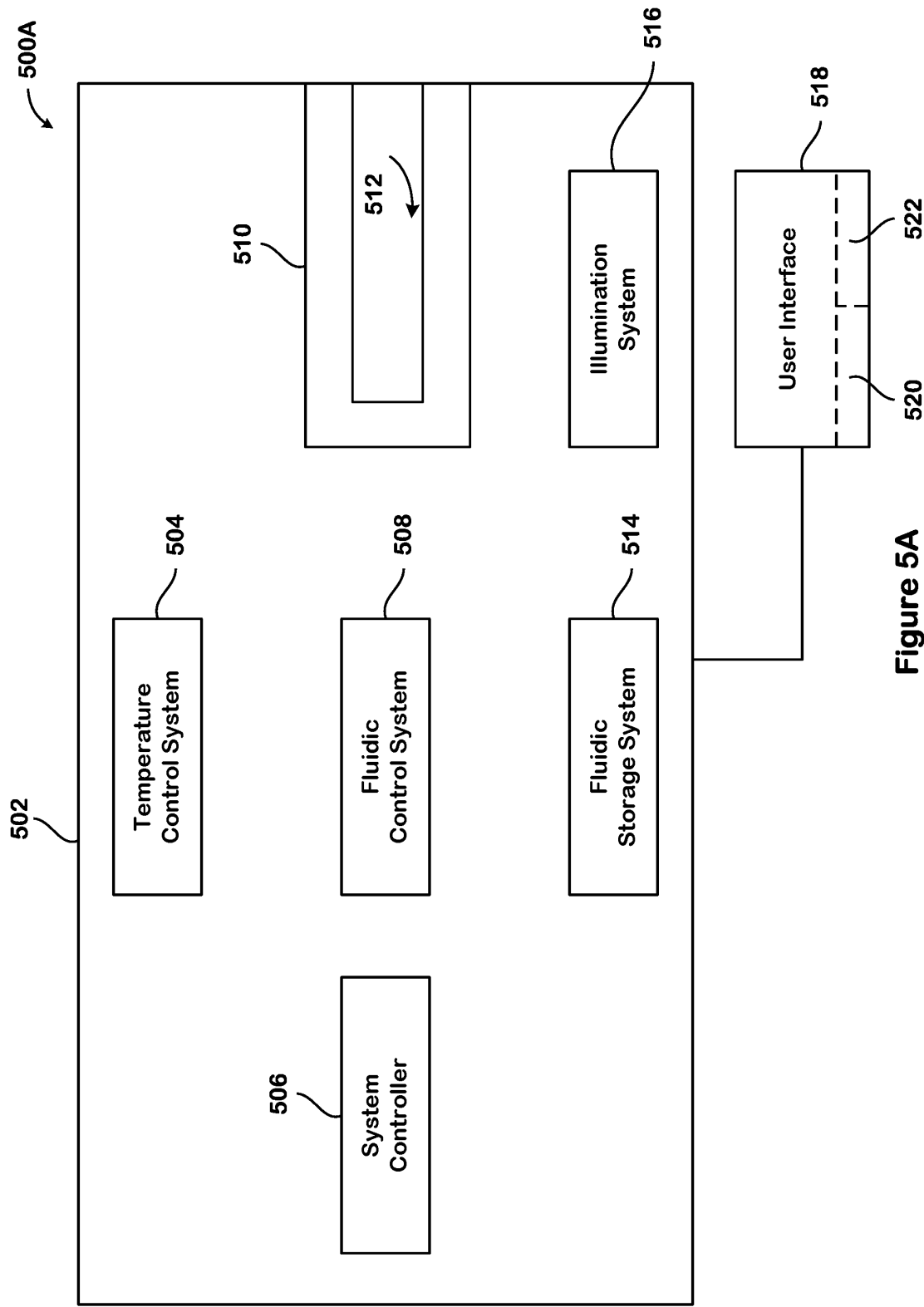


Figure 5A

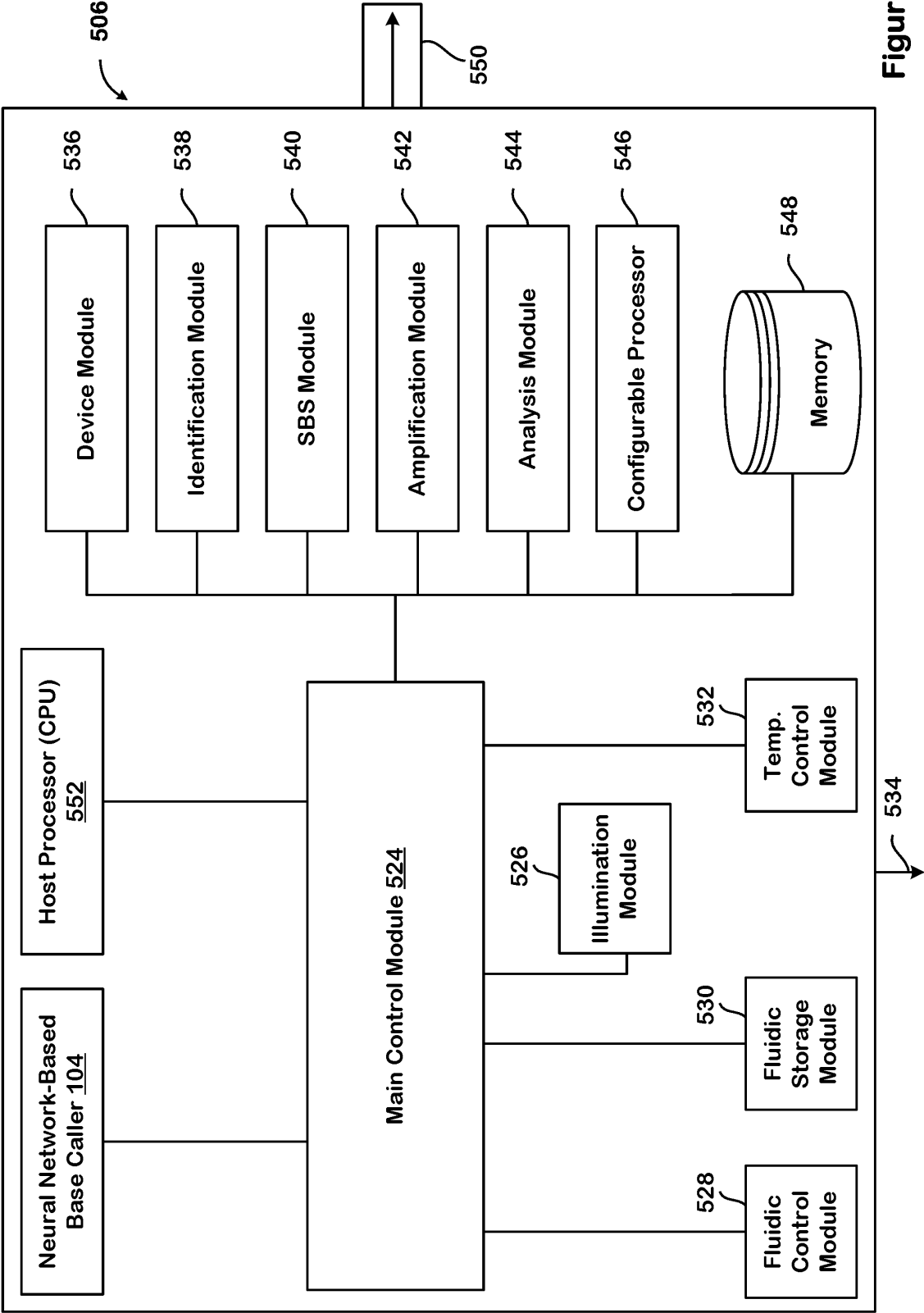


Figure 5B

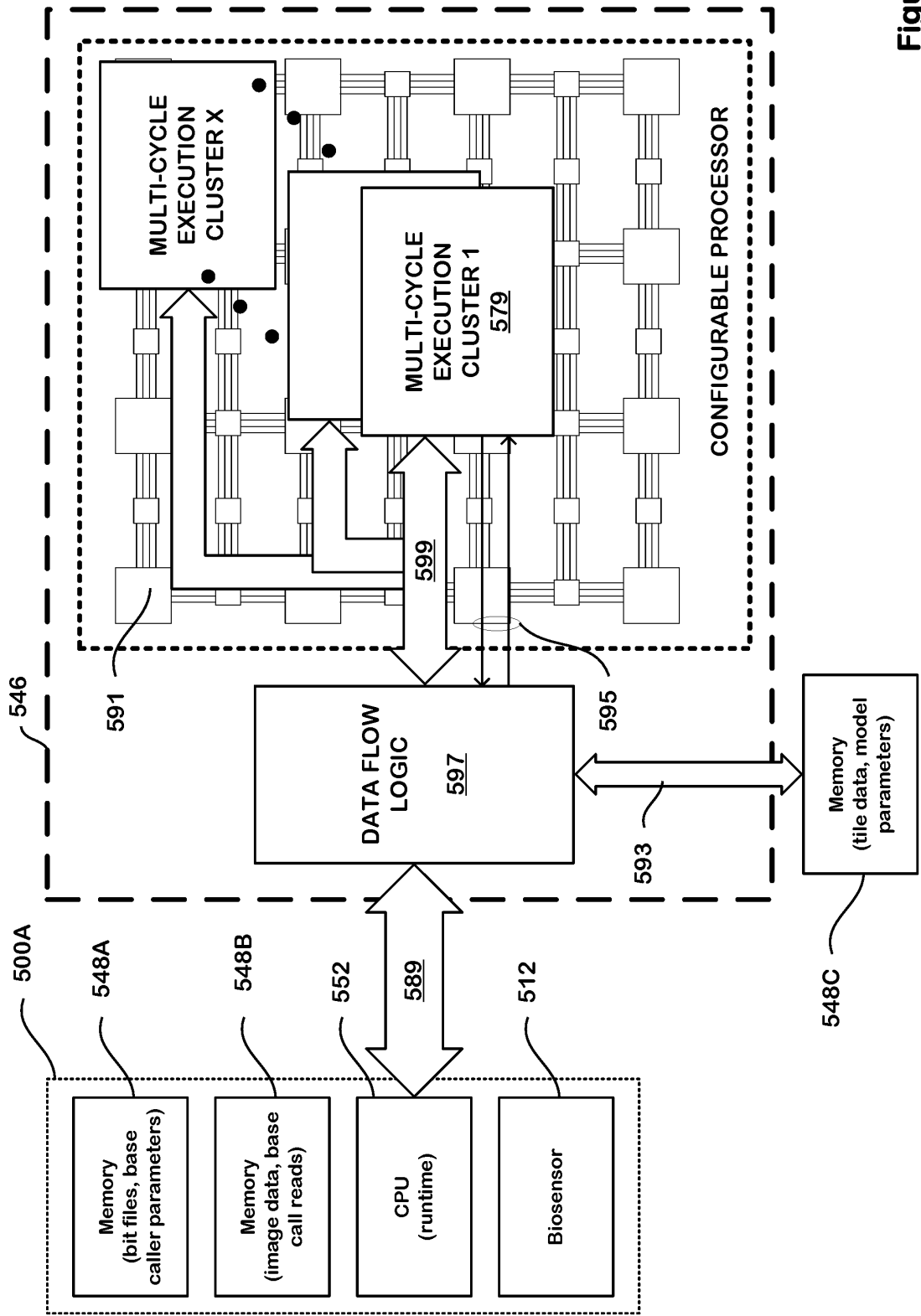


Figure 5C

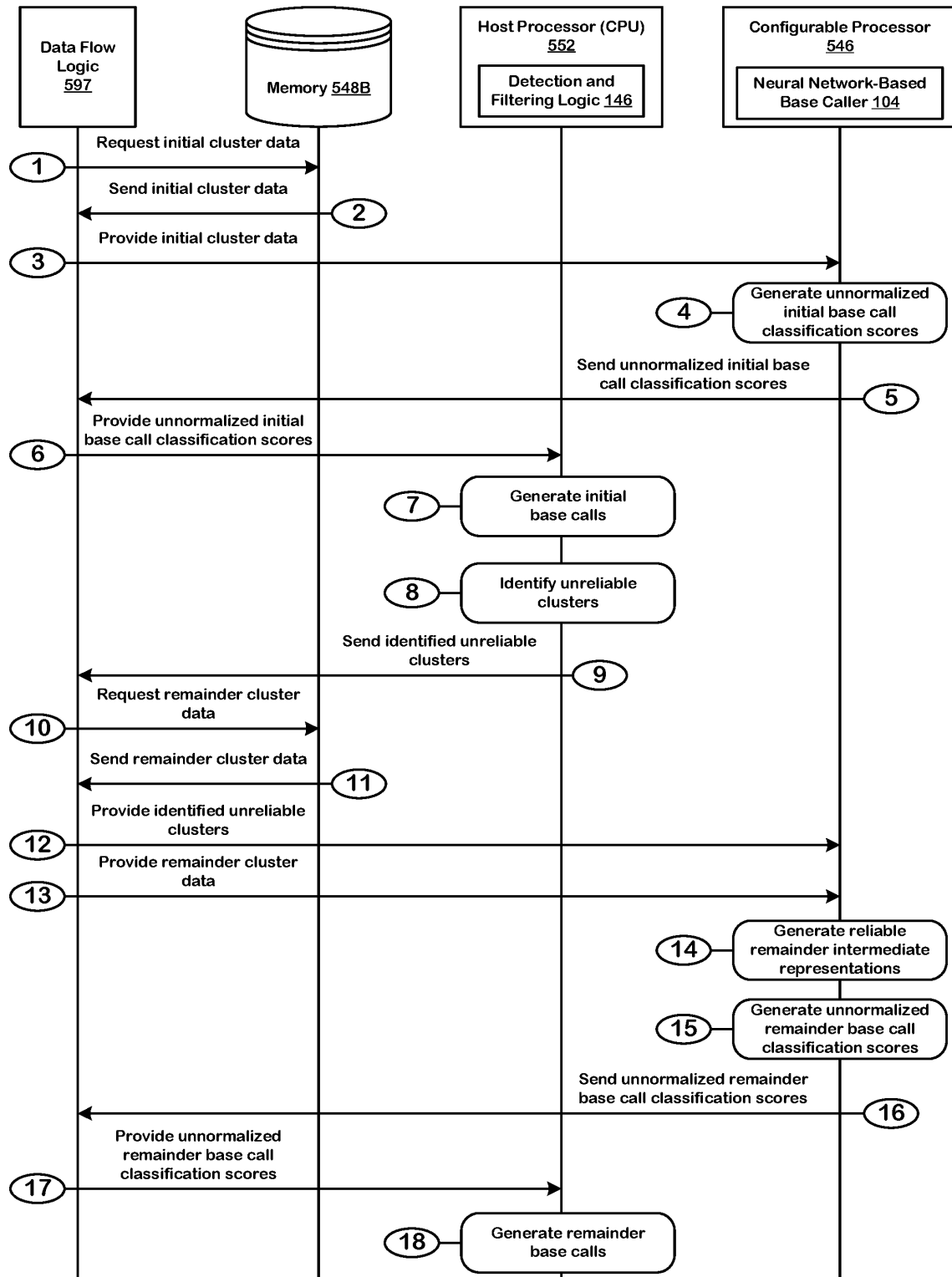


Figure 6

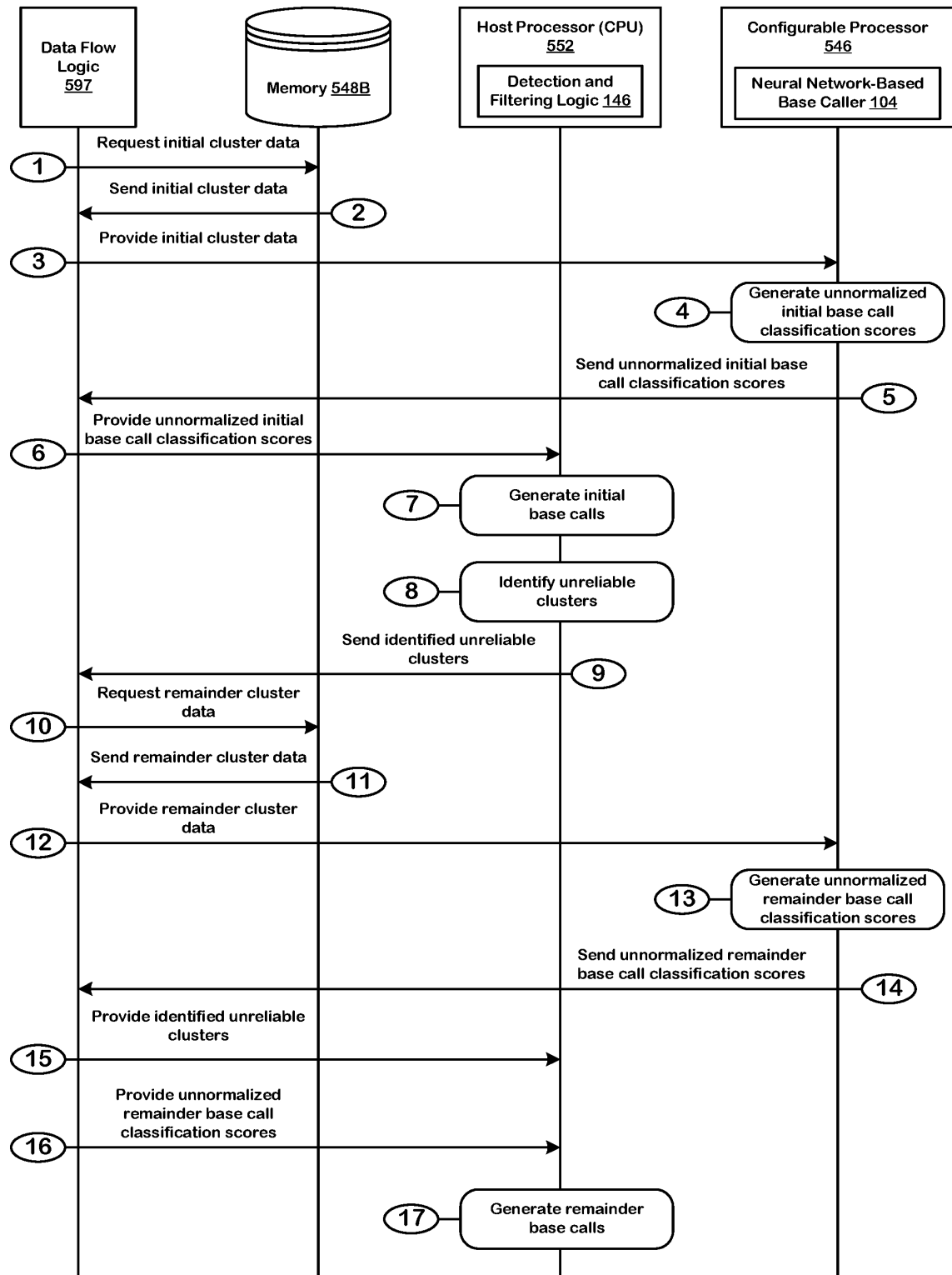


Figure 7

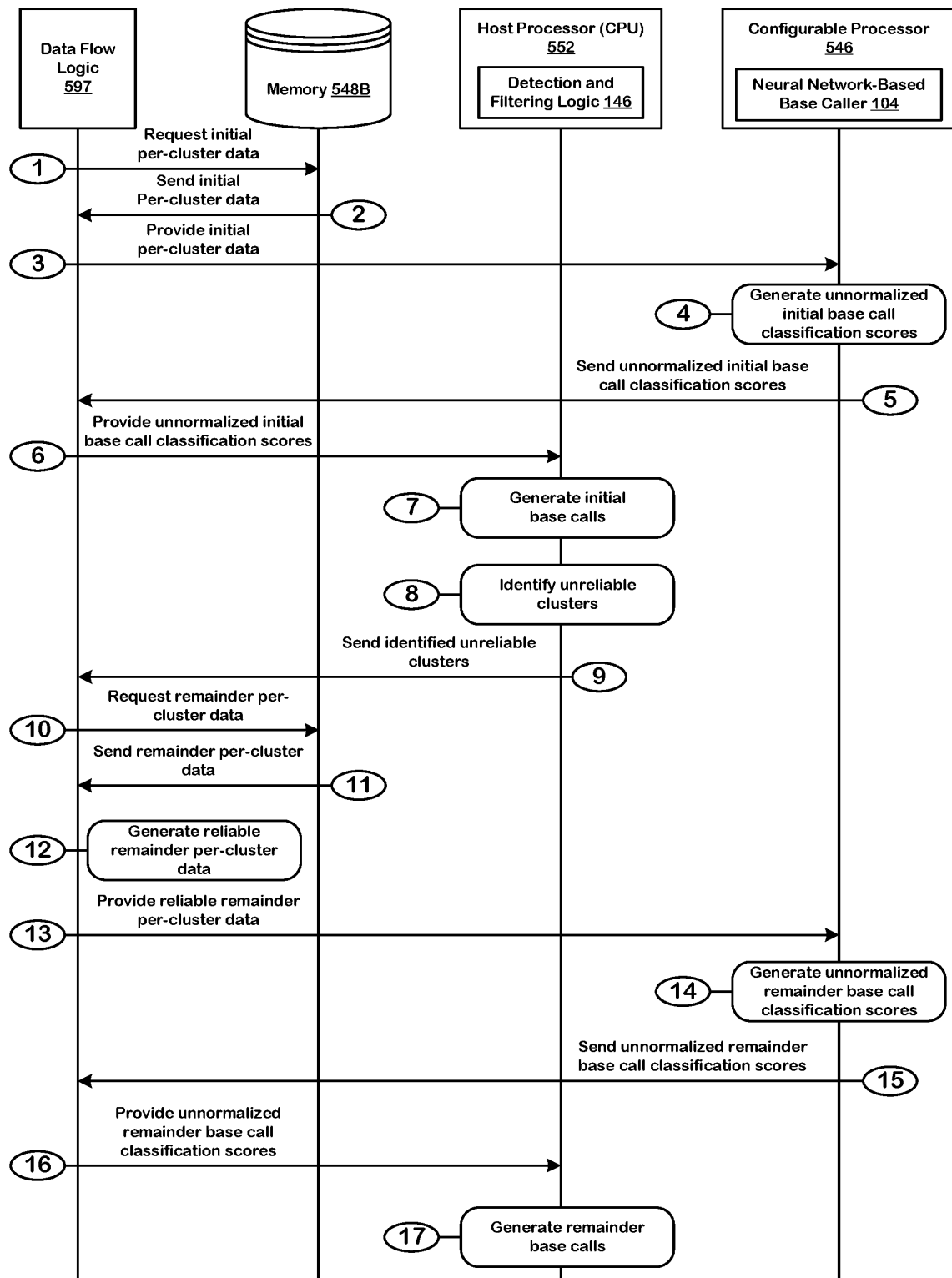


Figure 8

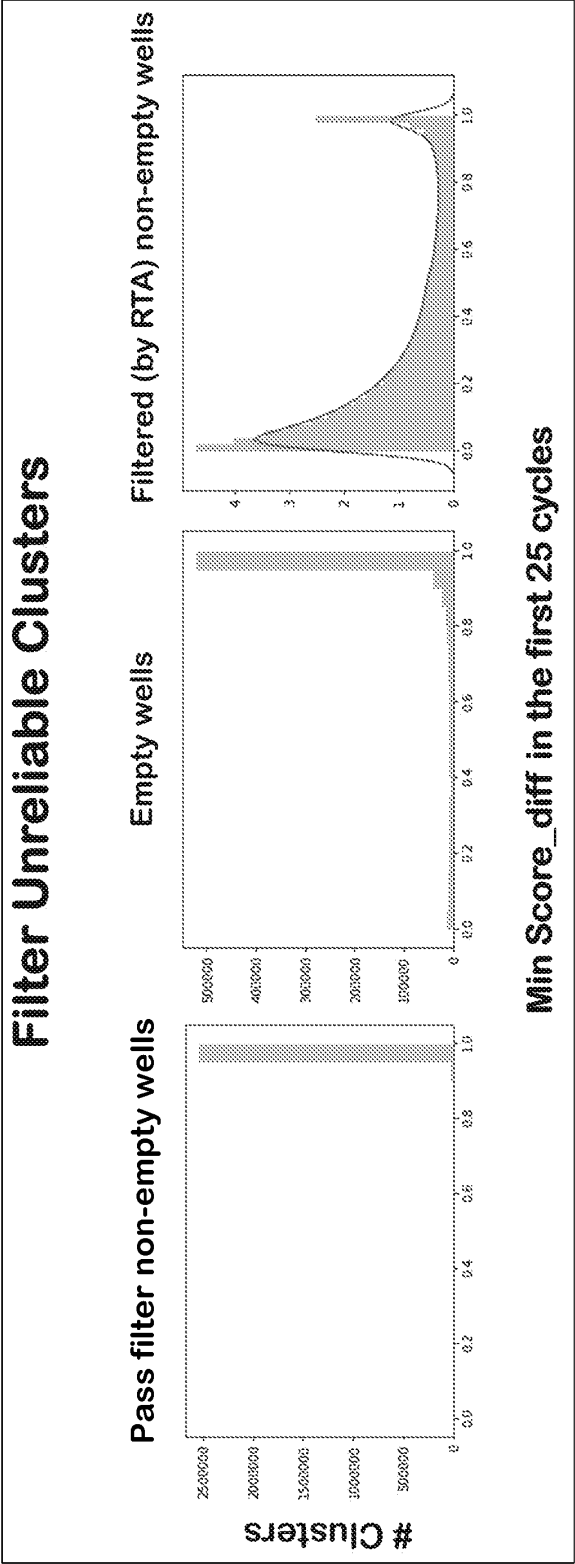


Figure 9

	DL_filtered (0.8)	DL_filtered (0.9)	DL_RTAF_PF	RTA
Num reads	2,757,019	2,719,624	2,659,133	2,659,133
% Aligned	99.12%	99.20%	99.09%	98.97%
% Duplicate	11.18%	11.11%	10.83%	10.8%
Non-dup proper read pairs	2,331,560	2,305,552	2,260,069	2,254,786
Mismatch rate	0.74%	0.70%	0.66%	0.89%
Q30	89.64%	90.14%	90.75%	87.25%
Soft clipped bases	3.98%	3.88%	3.86%	4.21%
Total aligned bases	1,311,272,306	1,295,953,865	1,266,033,133	1,259,202,263
% Aligned bases	95.12%	95.30%	95.22%	94.76%

Figure 10

	DL_filtered (0.8)	DL_filtered (0.9)	DL_filtered (0.97)	DL_RTAF PF	RTA
Num reads	2,757,019	2,719,624	2,667,546	2,659,133	2,659,133
% Aligned	99.12%	99.20%	99.25%	99.09%	98.97%
% Duplicate	11.18%	11.11%	10.98%	10.83%	10.8%
Non-dup proper read pairs	2,331,560	2,305,552	2,267,695	2,260,069	2,254,786
Mismatch rate	0.74%	0.70%	0.66%	0.66%	0.89%
Q30	89.64%	90.14%	90.75%	90.75%	87.25%
Soft clipped bases	3.98%	3.88%	3.79%	3.86%	4.21%
Total aligned bases	1,311,272,306	1,295,953,865	1,273,034,405	1,266,033,133	1,259,202,263
% Aligned bases	95.12%	95.30%	95.45%	95.22%	94.76%

Figure 11

Run: 180511_A00101_0380_BH3LFGDRXX
2 lanes, 9 tiles for each

	Score_diff>0.97	RTA_chastity
Num reads	56,297,491	55,790,870
% Aligned	99.30%	99.16%
% Duplicate	8.32%	8.24%
Non-dup proper read pairs	49,205,307	48,752,456
Mismatch rate	0.69%	0.67%
Q30	90.18%	90.33%
Soft clipped bases	3.73%	3.74%
Total aligned bases	26,893,981,373	26,610,947,876
% Aligned bases	95.54%	95.40%

Figure 12

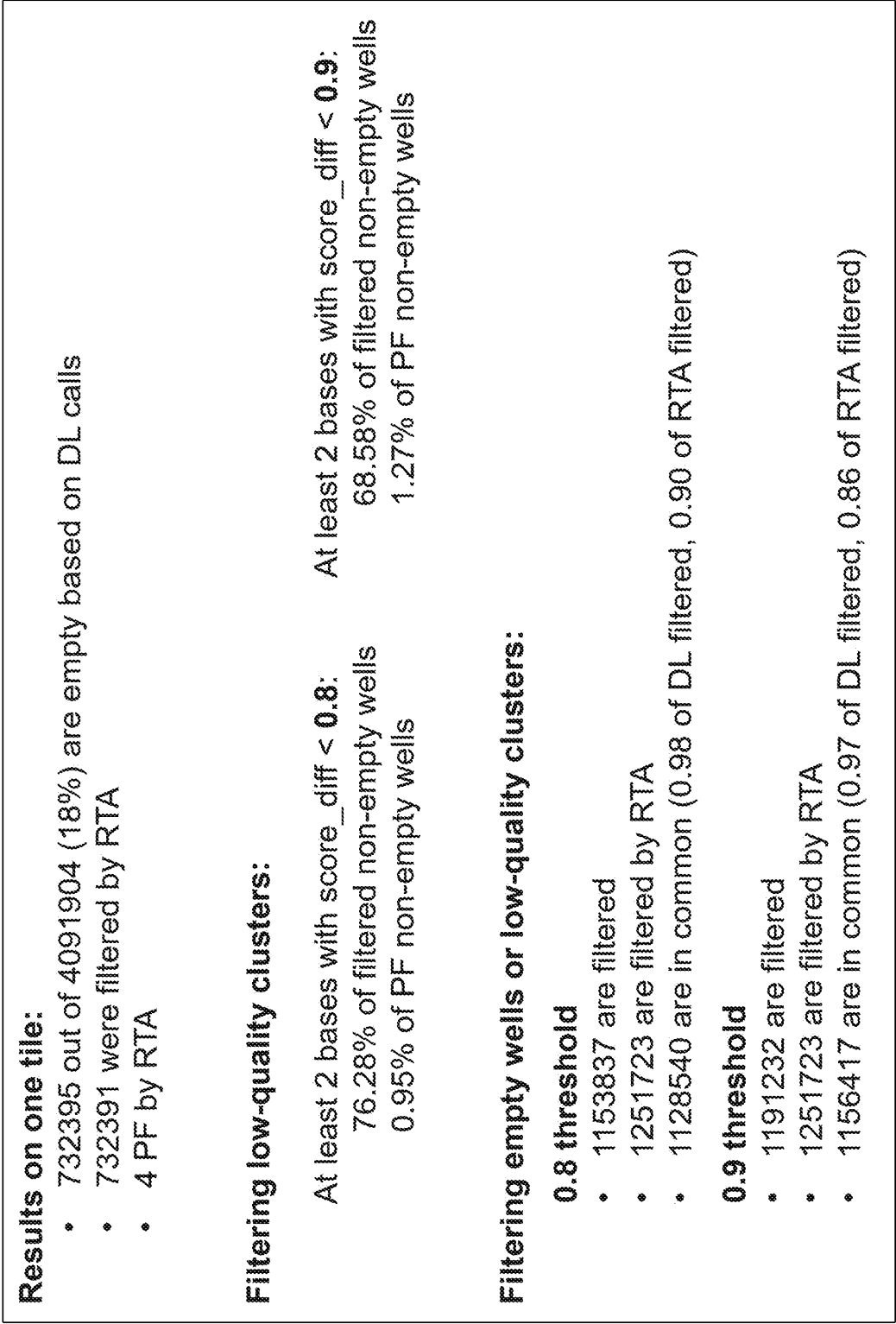


Figure 13

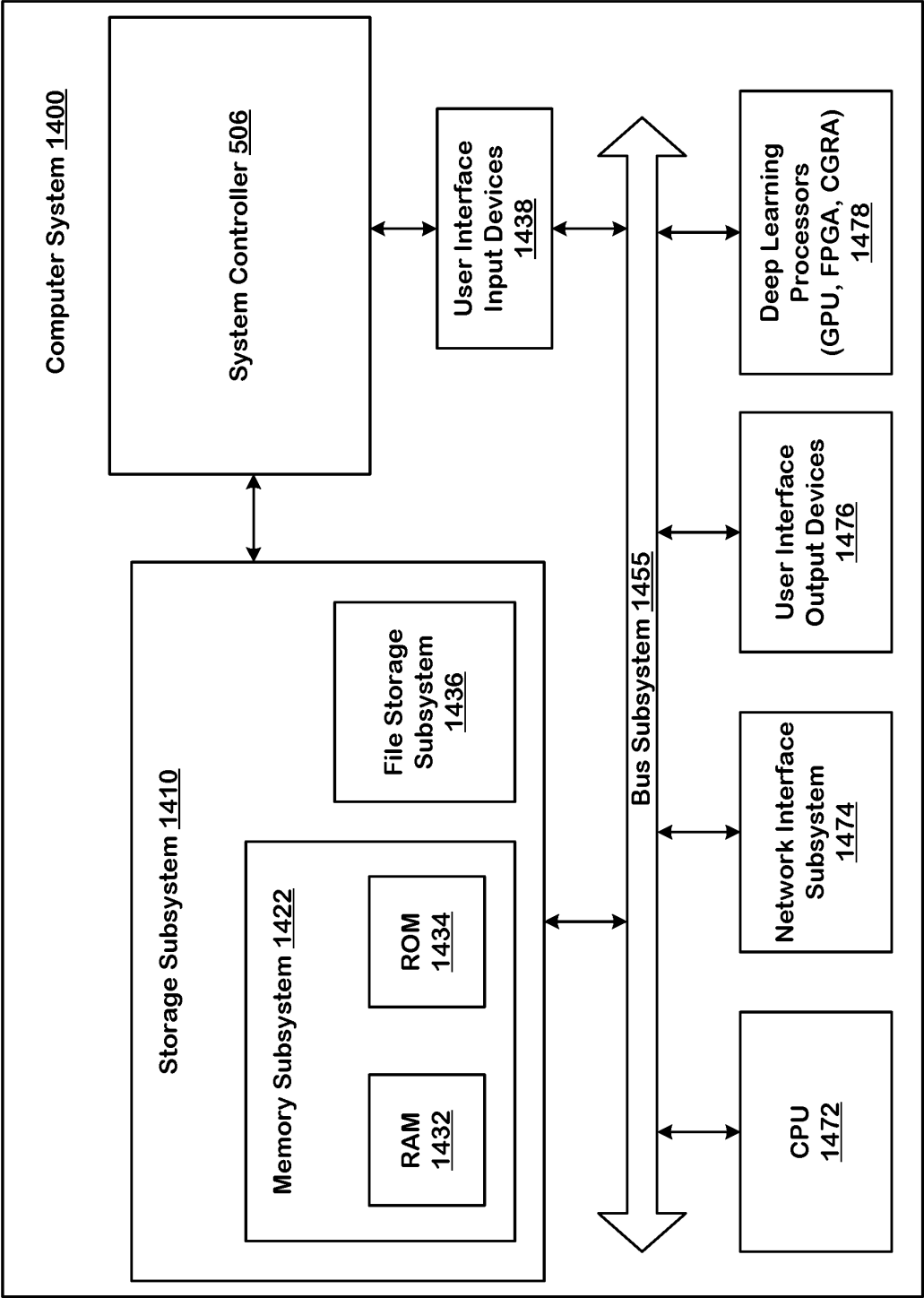


Figure 14