

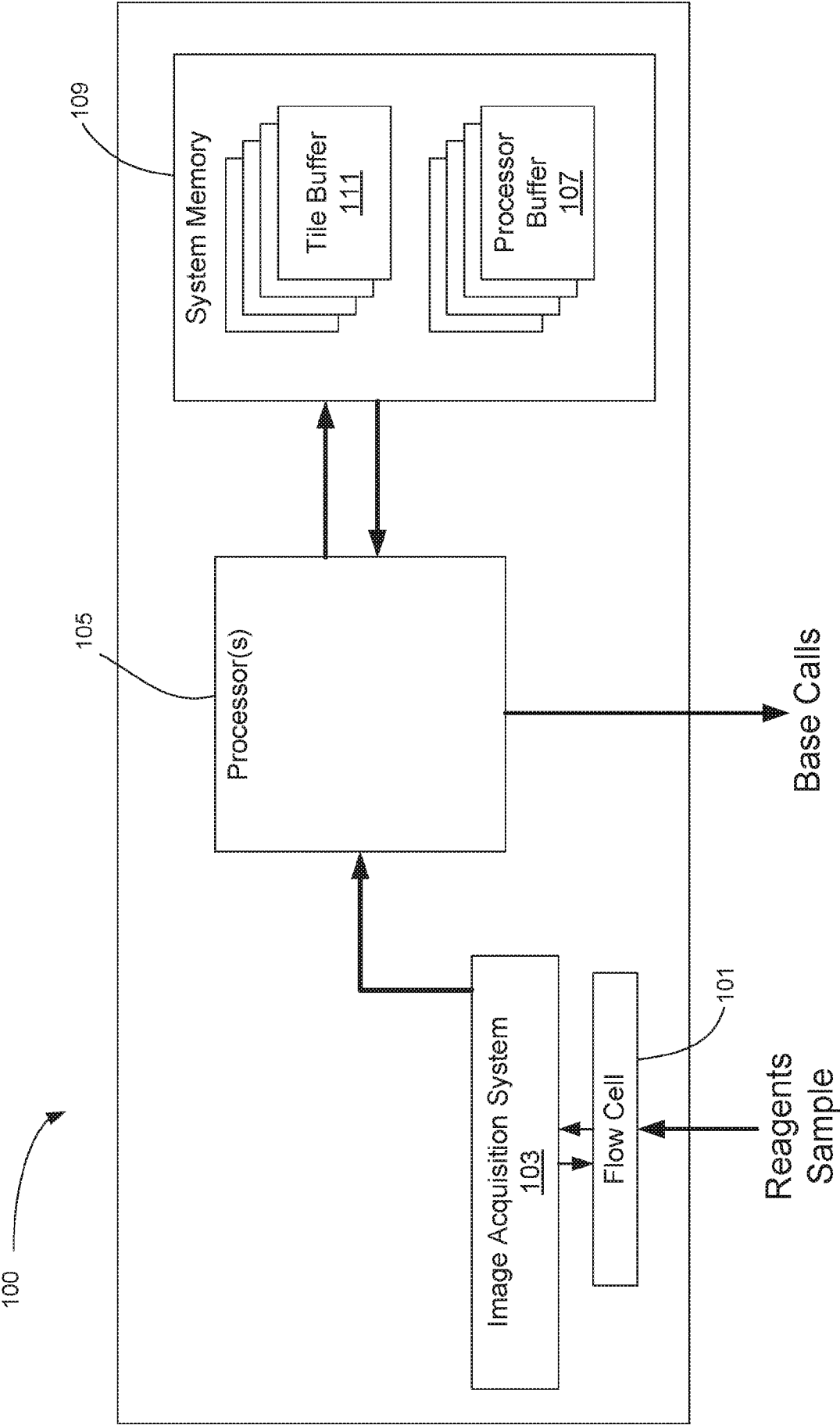


Figure 1

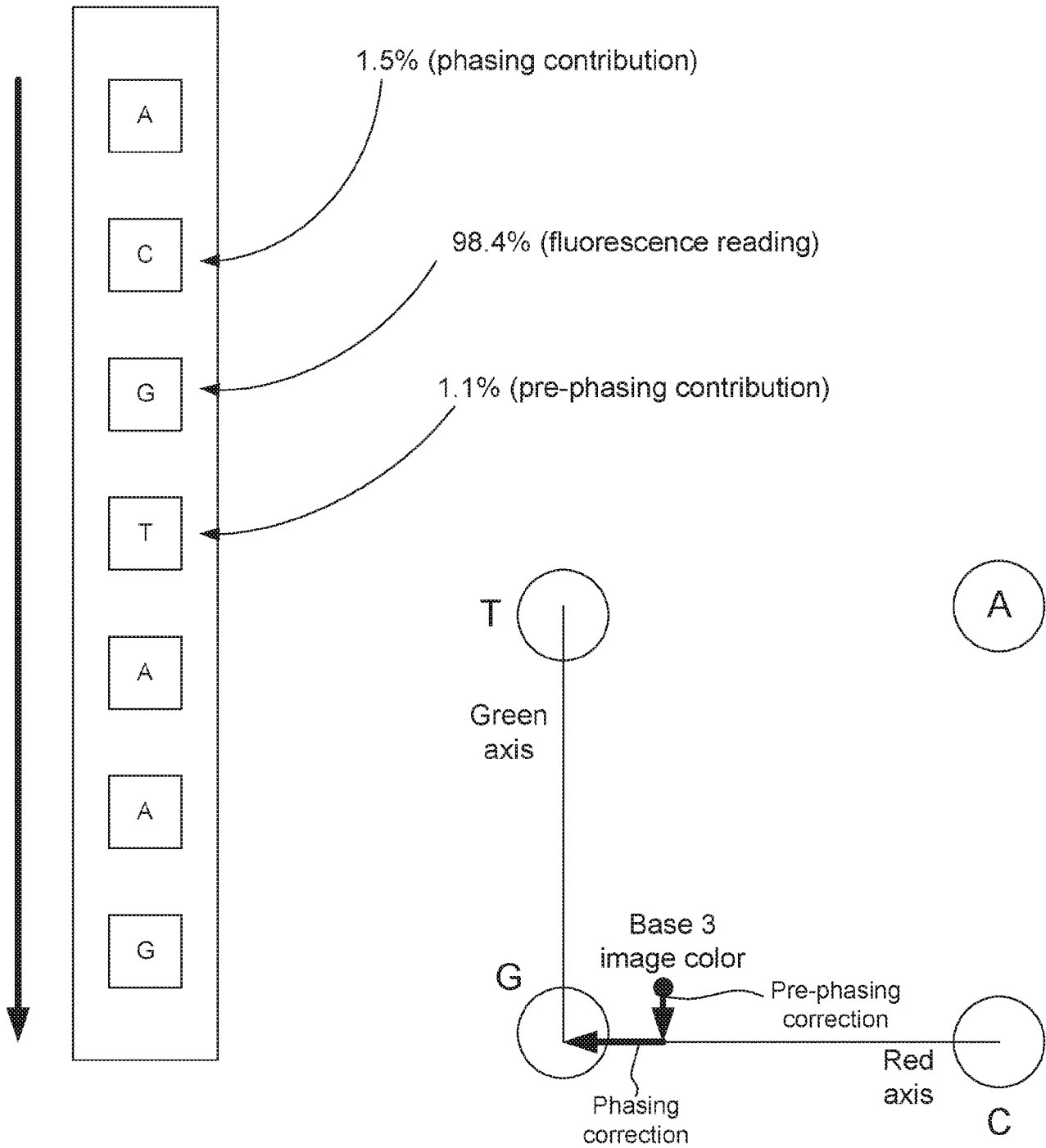


Figure 2

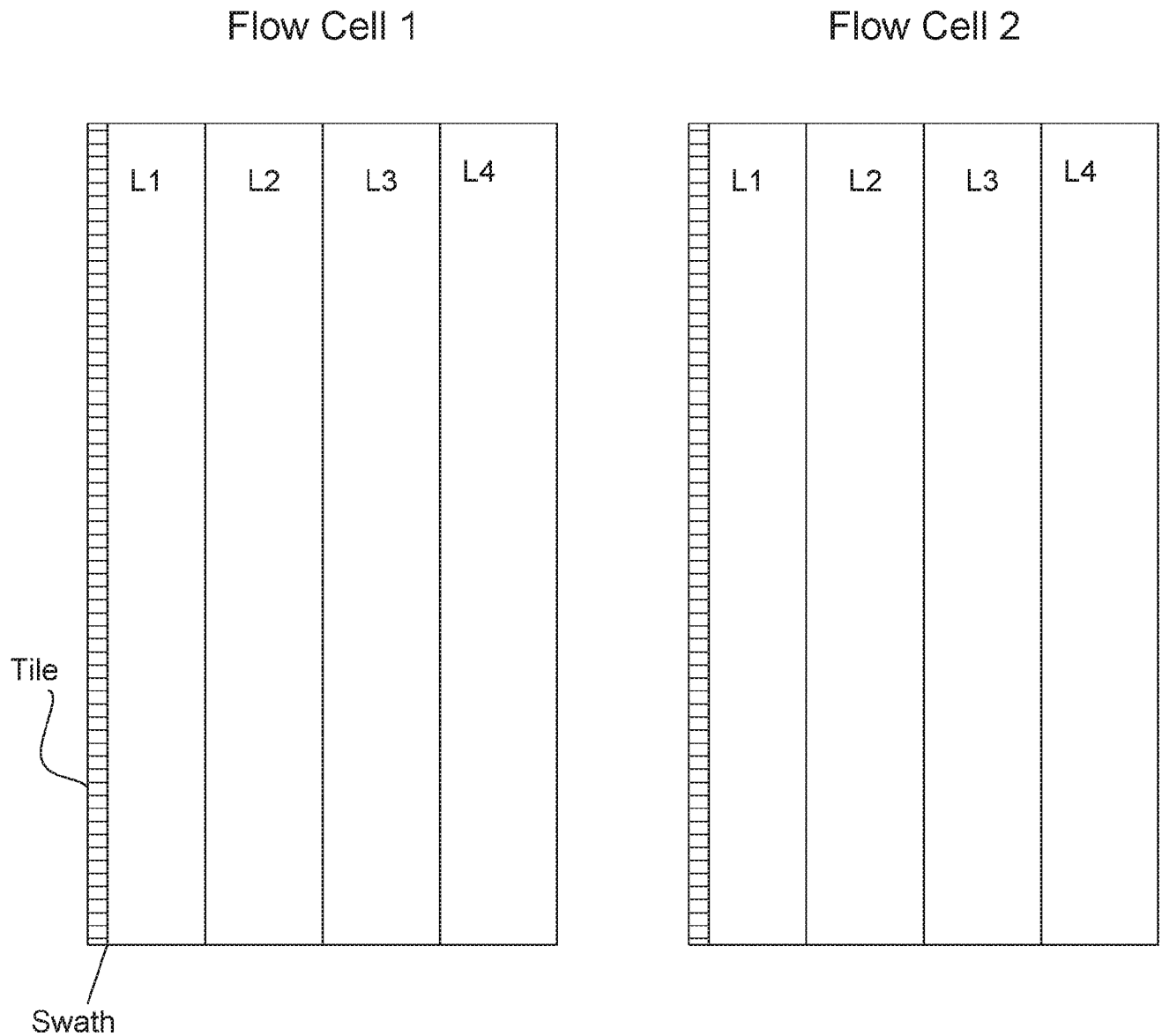


Image Data Per Cycle
Processed in Real Time

2 Flow Cells
2 Surfaces/Flow Cell
4 Lanes/Surface
6 Swaths/Lane
120 Tiles/Swath
8000+ Tiles of Data Per Cycle

Figure 3

Cluster Number	1	2	3	4	5	6	7	8	9	10	11	12
Color Value (Channel 1)	468	695	1255	521	753	1452	1355	1255	598	720	1193	422
Color Value (Channel 2)	1321	1466	1326	498	463	1384	632	558	452	1467	1369	1278

Figure 4

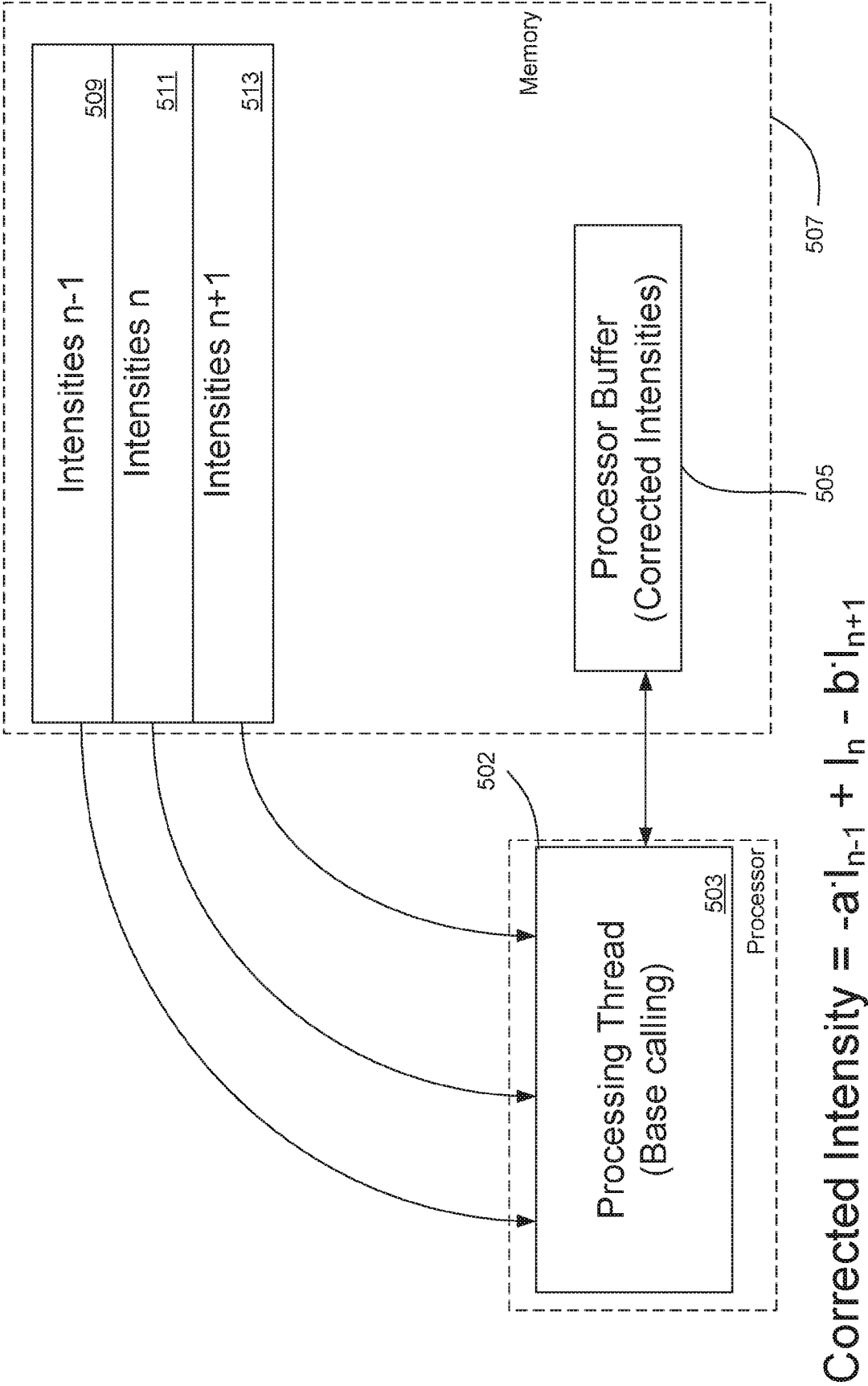


Figure 5

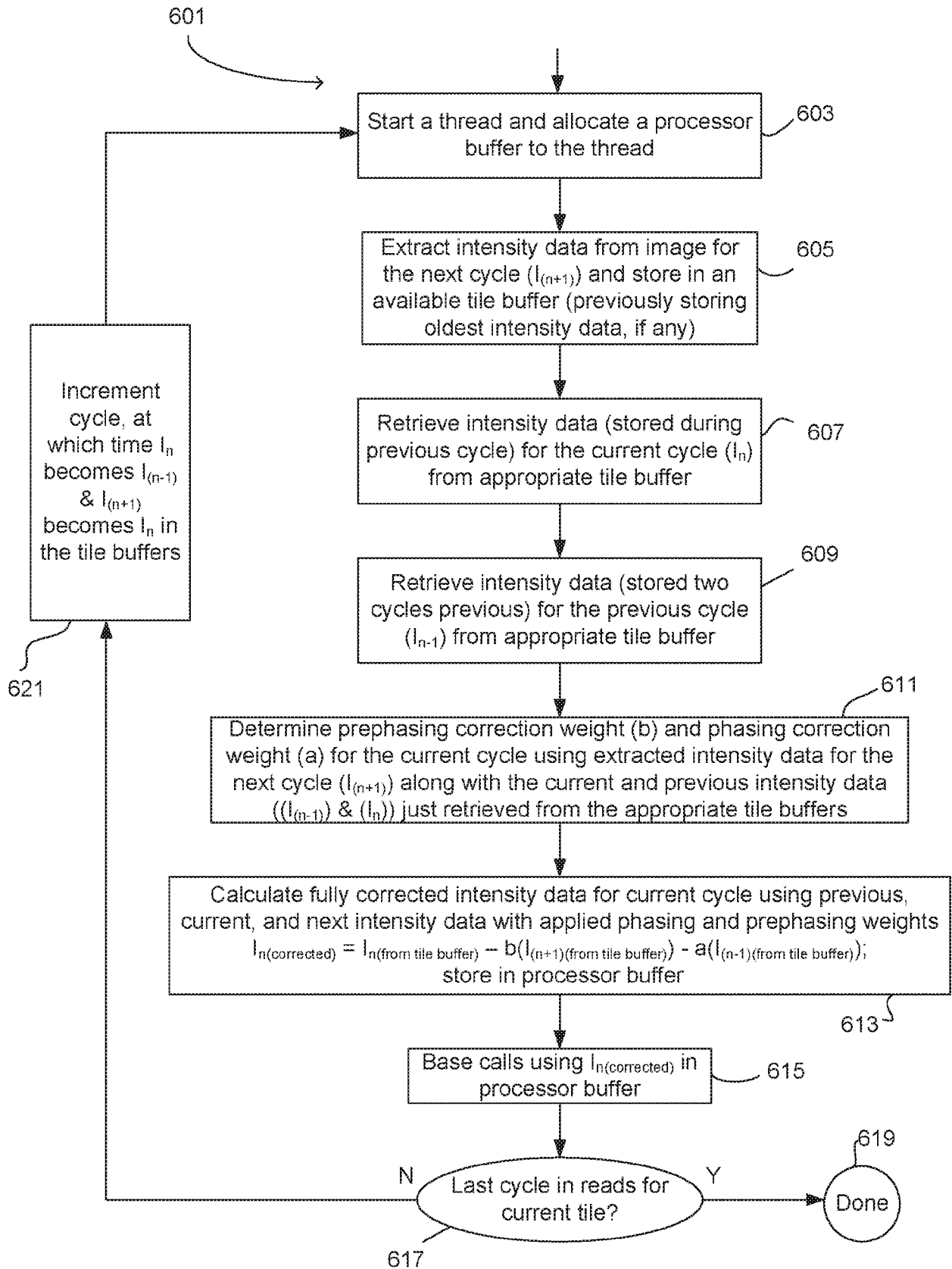
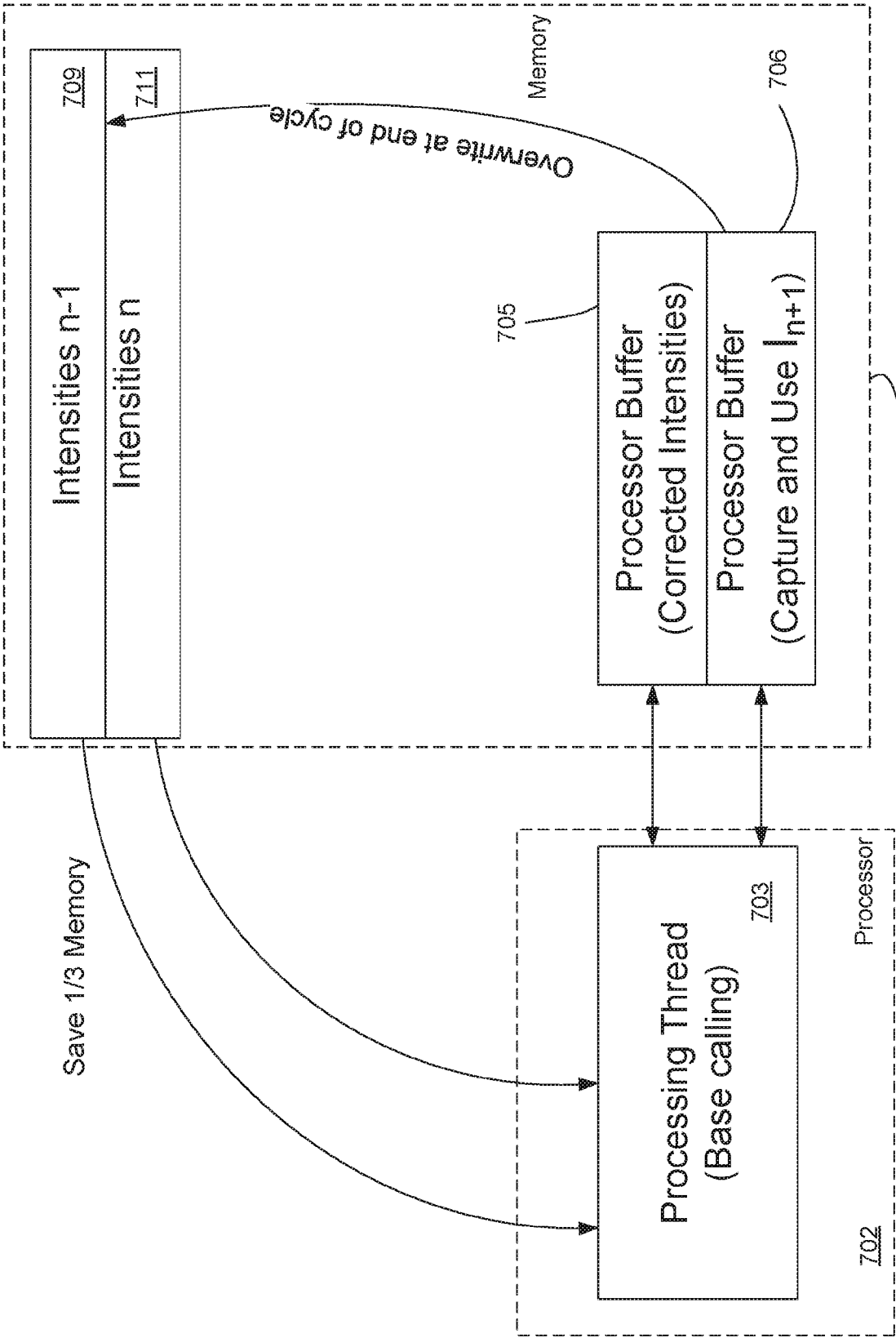
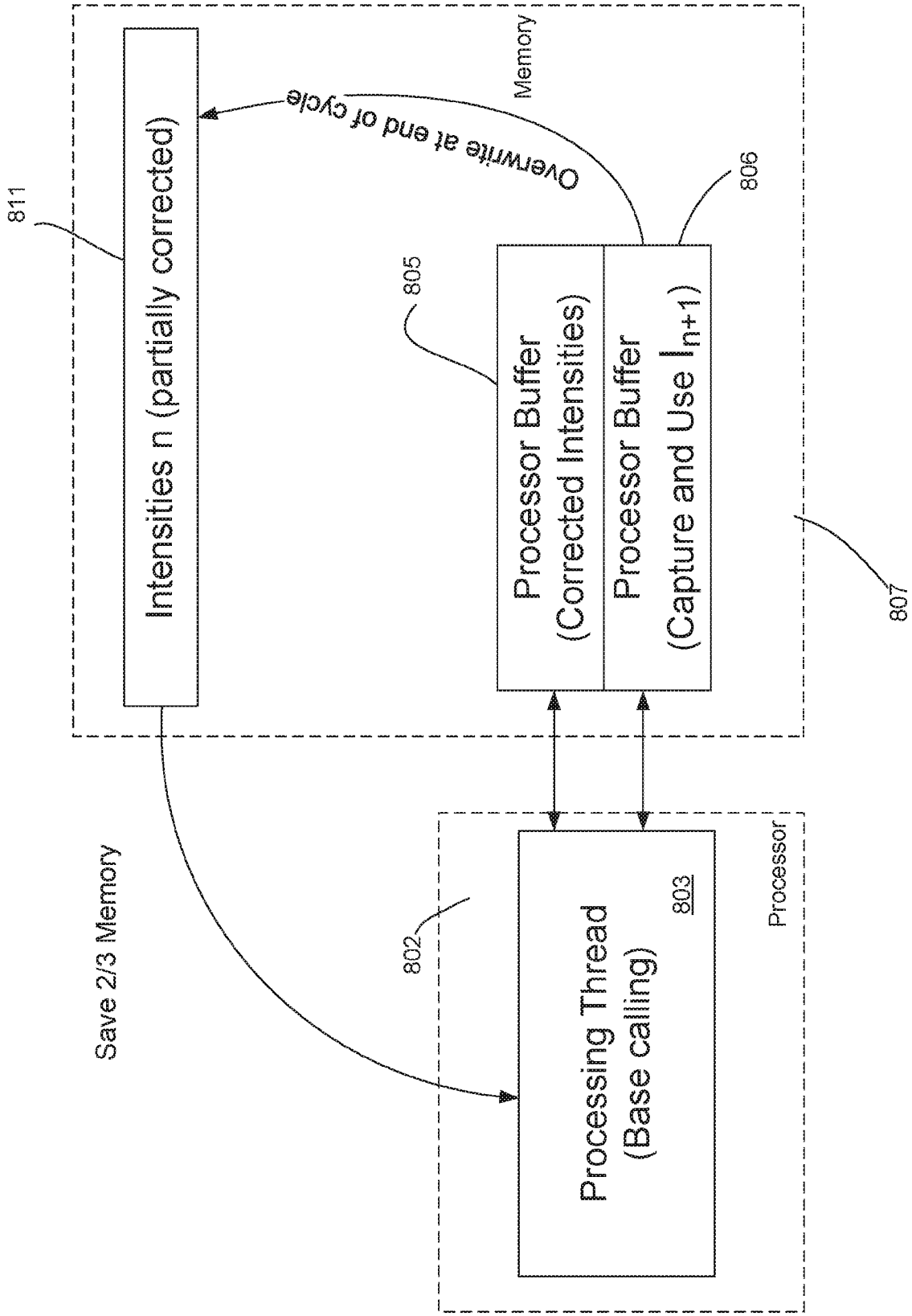


Figure 6



$$\text{Corrected Intensity} = -a \cdot I_{n-1} + I_n - b \cdot I_{n+1}$$

Figure 7



$$\text{Corrected Intensity} = -a \cdot I_{n-1} + I_n - b \cdot I_{n+1}$$

Figure 8

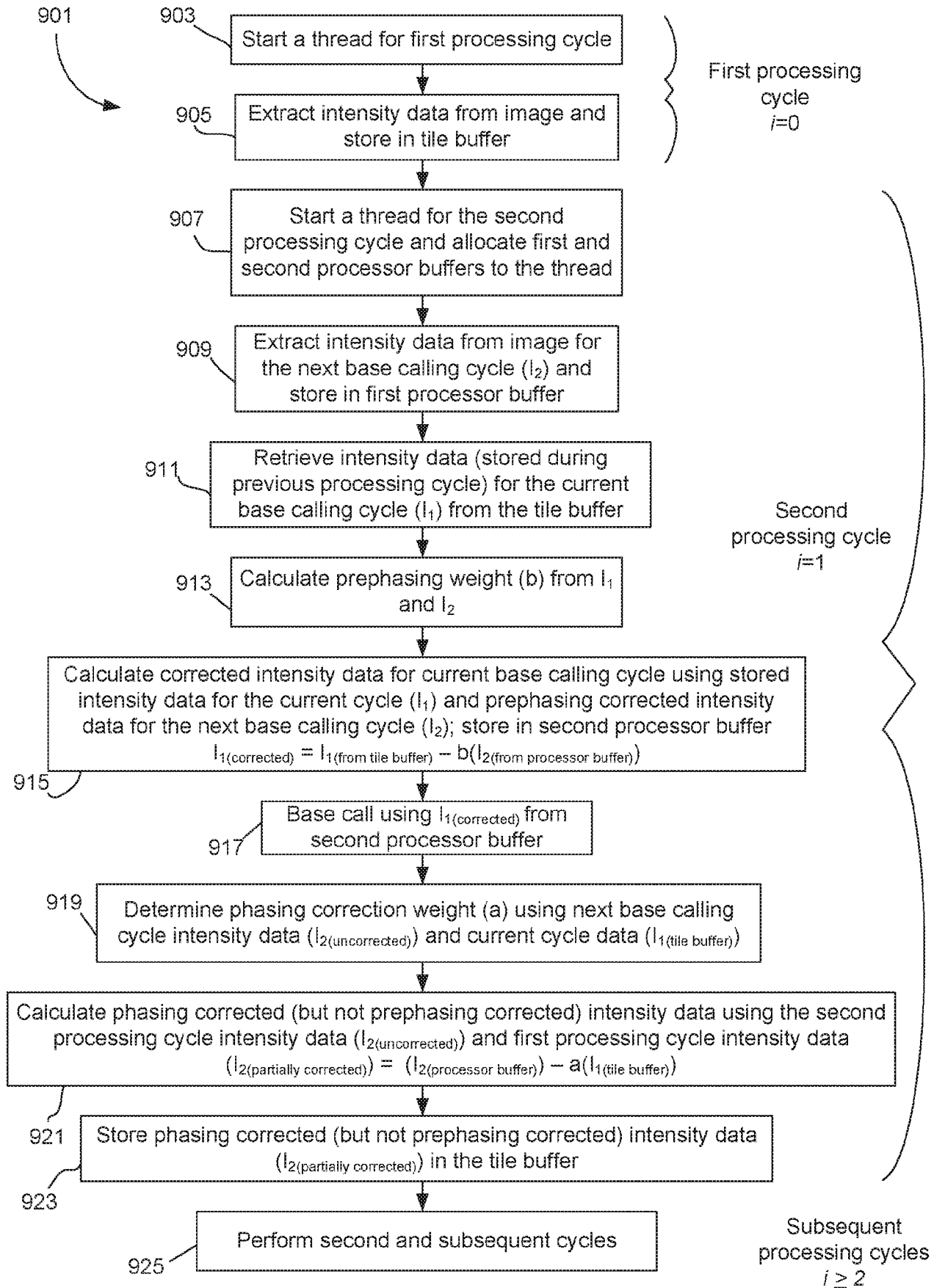


Figure 9

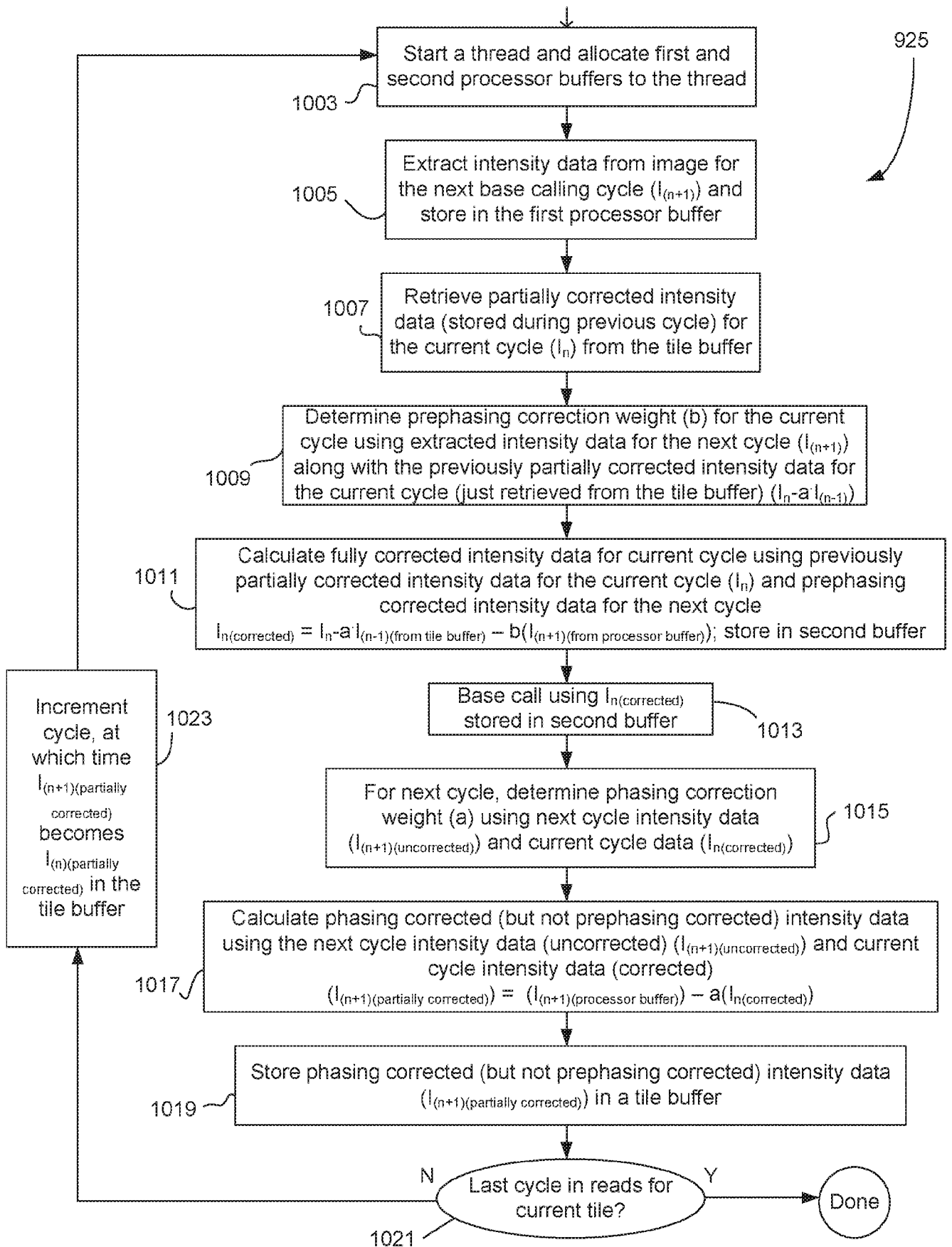


Figure 10

	Density (K/mm2)	Clusters PF (%)	Cycles Err Rated	Aligned (%)	Error Rate (%)
Baseline	206 +/- 0	81.32 +/- 0.69	150	1.43 +/- 0.01	1.38 +/- 0.00
New	206 +/- 0	81.80 +/- 0.00	150	1.42 +/- 0.00	1.41 +/- 0.00

	Tiles	Density (K/mm2)	Clusters PF (%)	Aligned (%)	Error Rate (%)
baseline	1	3815 +/- 0	65.39 +/- 0.00	1.43 +/- 0.00	1.89 +/- 0.00
new	1	3815 +/- 0	65.39 +/- 0.00	1.43 +/- 0.00	1.95 +/- 0.00

Figure 11