

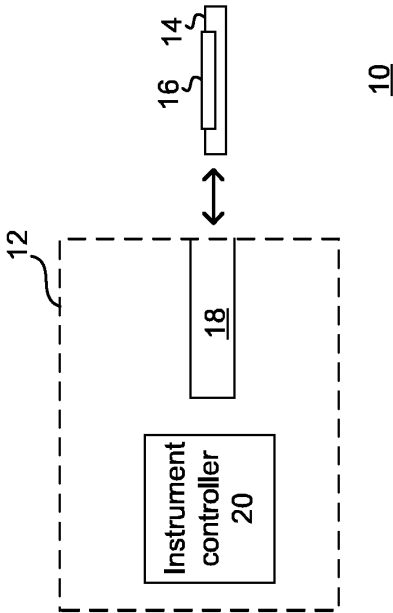


FIG. 1

100

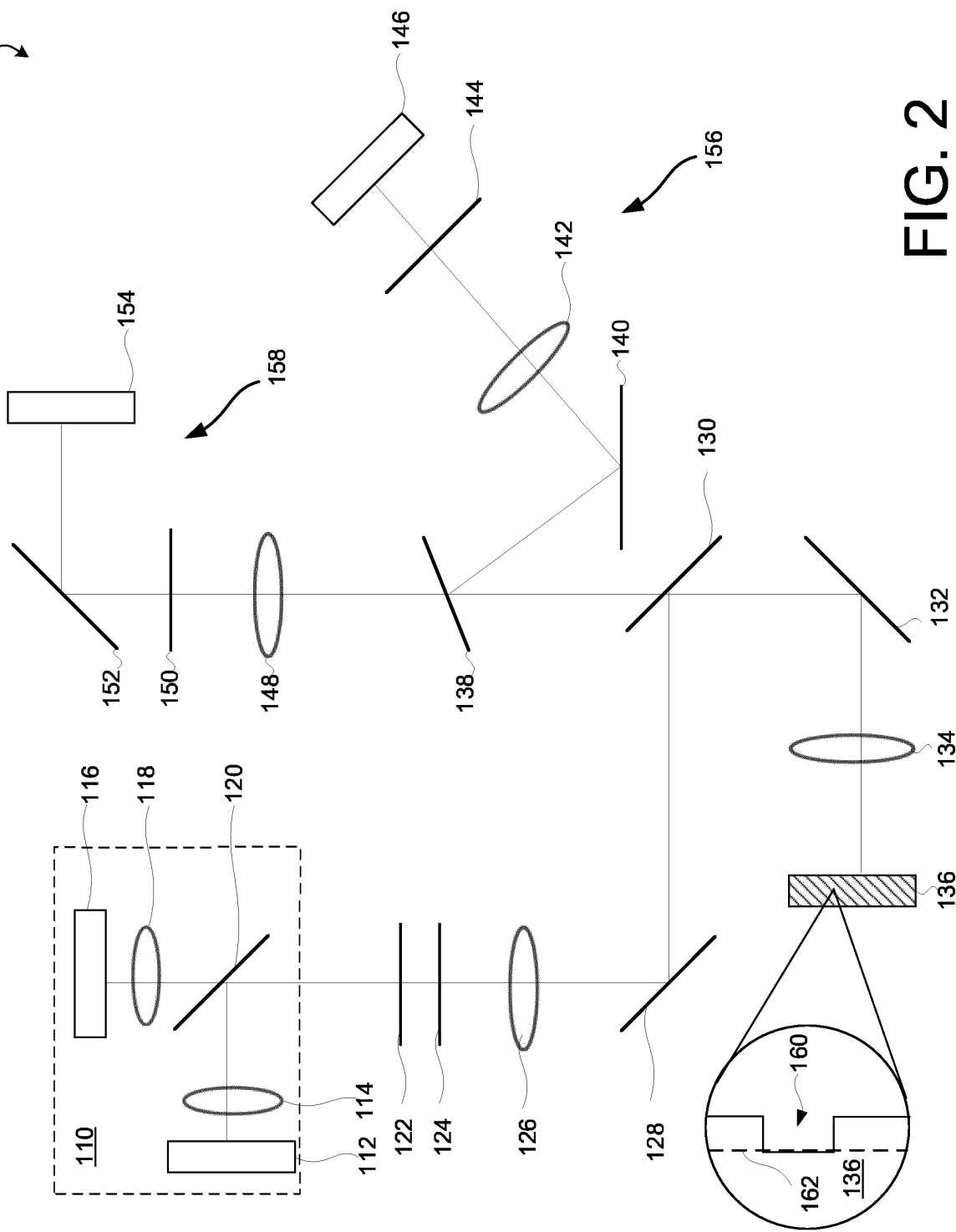


FIG. 2

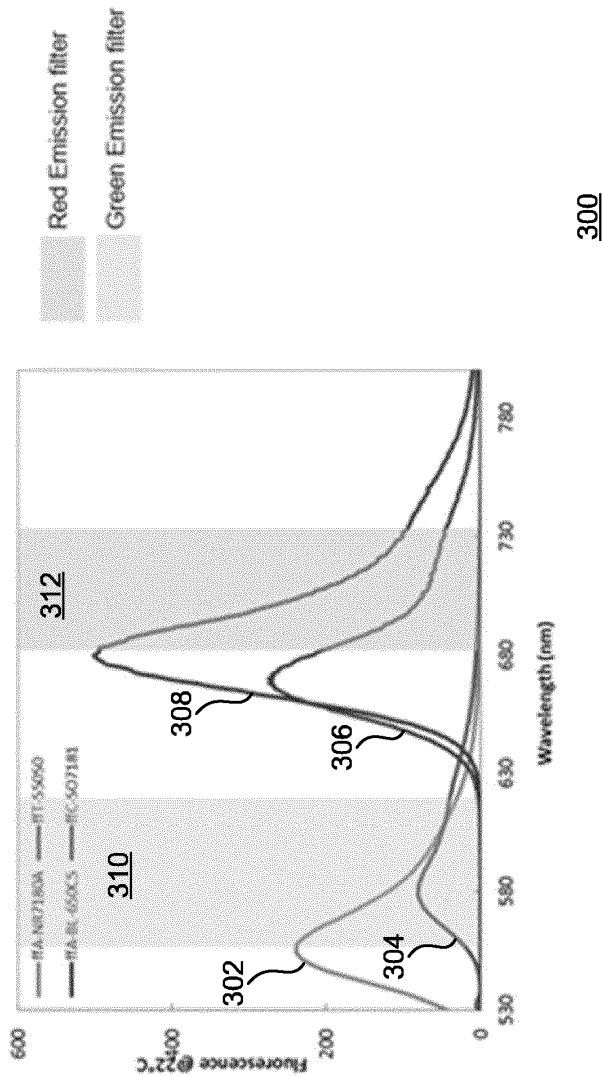


FIG. 3

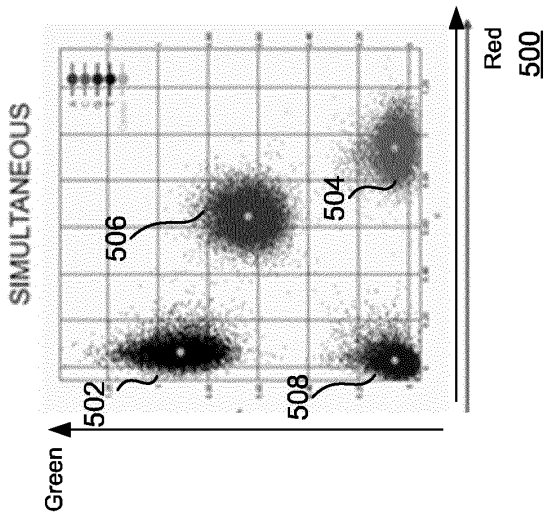


FIG. 5

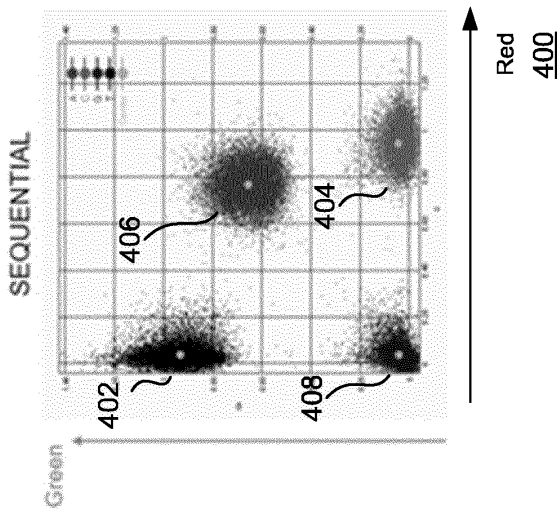


FIG. 4

R/G Long Sequencing run (151 cycles)

SEQUENTIAL ILLUMINATION

600

Read 1

Lane	Tiles	Density (K/mm2)	Clusters FF (%)	Legacy Phasing/Pre phasing rate	Phasing slope/offset	Prephasing slope/offset	Reads (Δ)	Reads FF (Δ)	% >= Q30 (Last 10 Cycles)	Yield(G)	Cycles Err Rated	Aligned (%)	Error Rate 35 cycle (%)	Error Rate 75 cycle (%)	Error Rate 100 cycle (%)	Intensity Cycle 1
1	8	217 ± 3	96.23 ± 0.95	0.121 / 0.180	0.090 / 1.401	0.141 / 1.930	1.05	1.01	95.37	0.15	150	99.39 ± 0.28	0.11 ± 0.00	0.16 ± 0.01	0.20 ± 0.01	603 ± 163

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SIMULTANEOUS ILLUMINATION

602

Read 1

Lane	Tiles	Density (K/mm2)	Clusters FF (%)	Legacy Phasing/Pre phasing rate	Phasing slope/offset	Prephasing slope/offset	Reads (Δ)	Reads FF (Δ)	% >= Q30 (Last 10 Cycles)	Yield(G)	Cycles Err Rated	Aligned (%)	Error Rate 35 cycle (%)	Error Rate 75 cycle (%)	Error Rate 100 cycle (%)	Intensity Cycle 1
1	38	231 ± 61	75.28 ± 15.57	0.289 / 0.375	0.144 / 2.720	0.237 / 3.484	5.32	3.8	61.64	0.57	150	98.42 ± 0.64	0.17 ± 0.04	0.28 ± 0.03	0.43 ± 0.13	587 ± 123

FIG. 6

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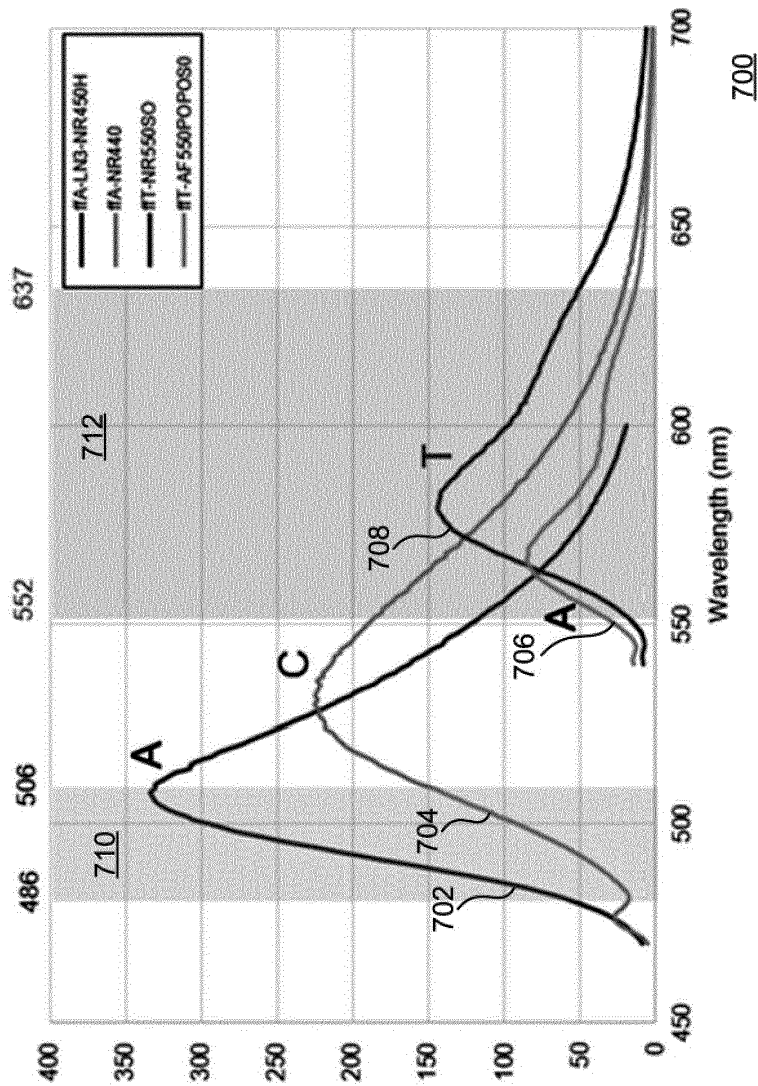


FIG. 7

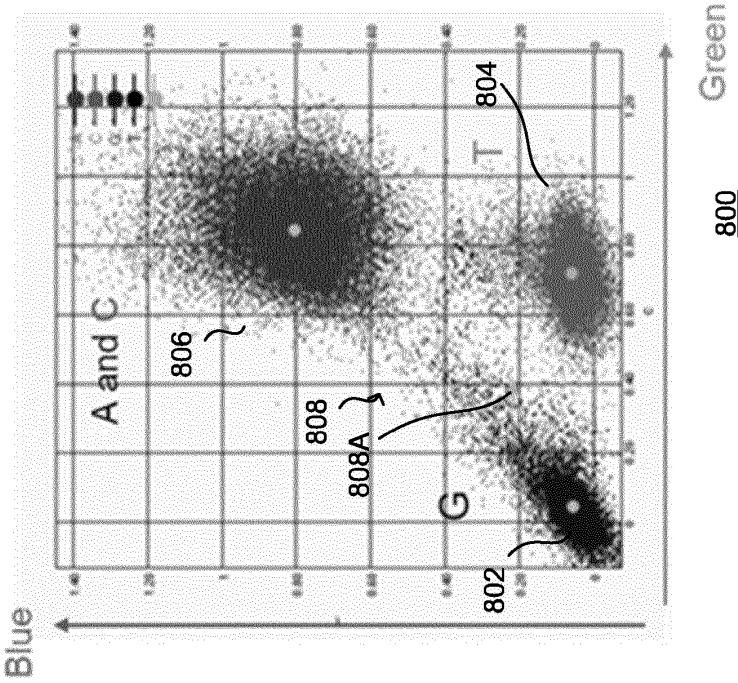


FIG. 8

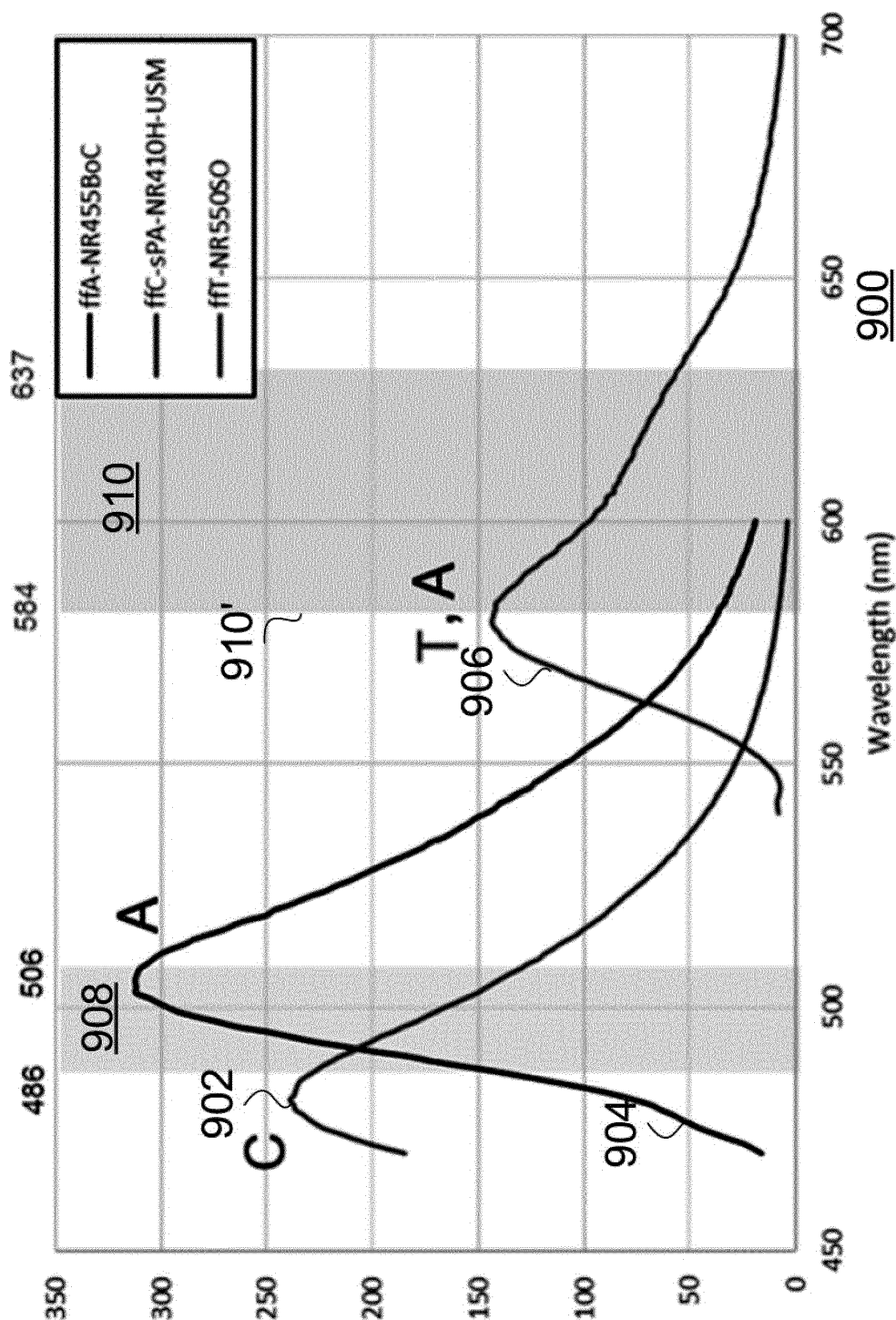
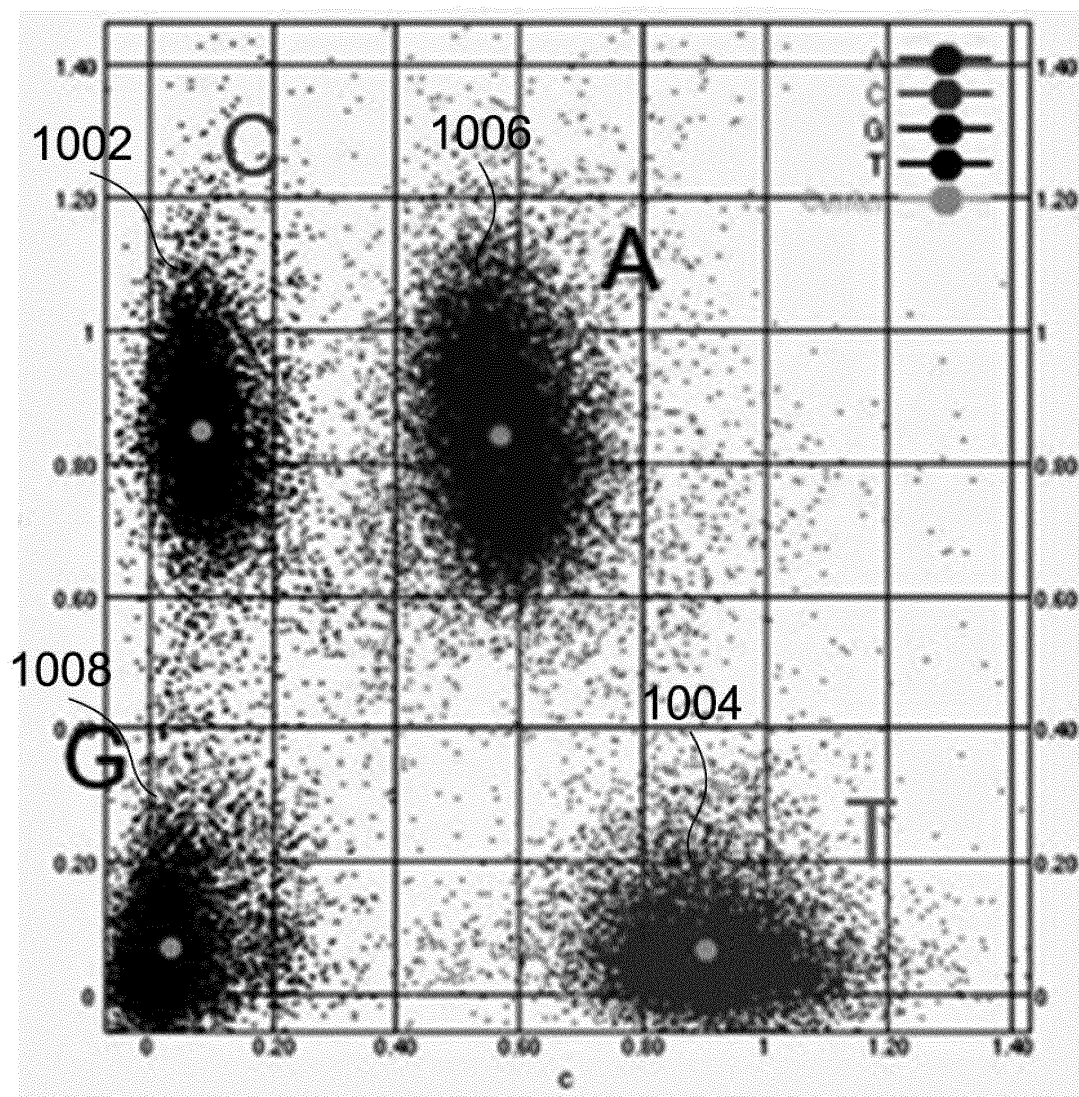


FIG. 9

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• C-NR410

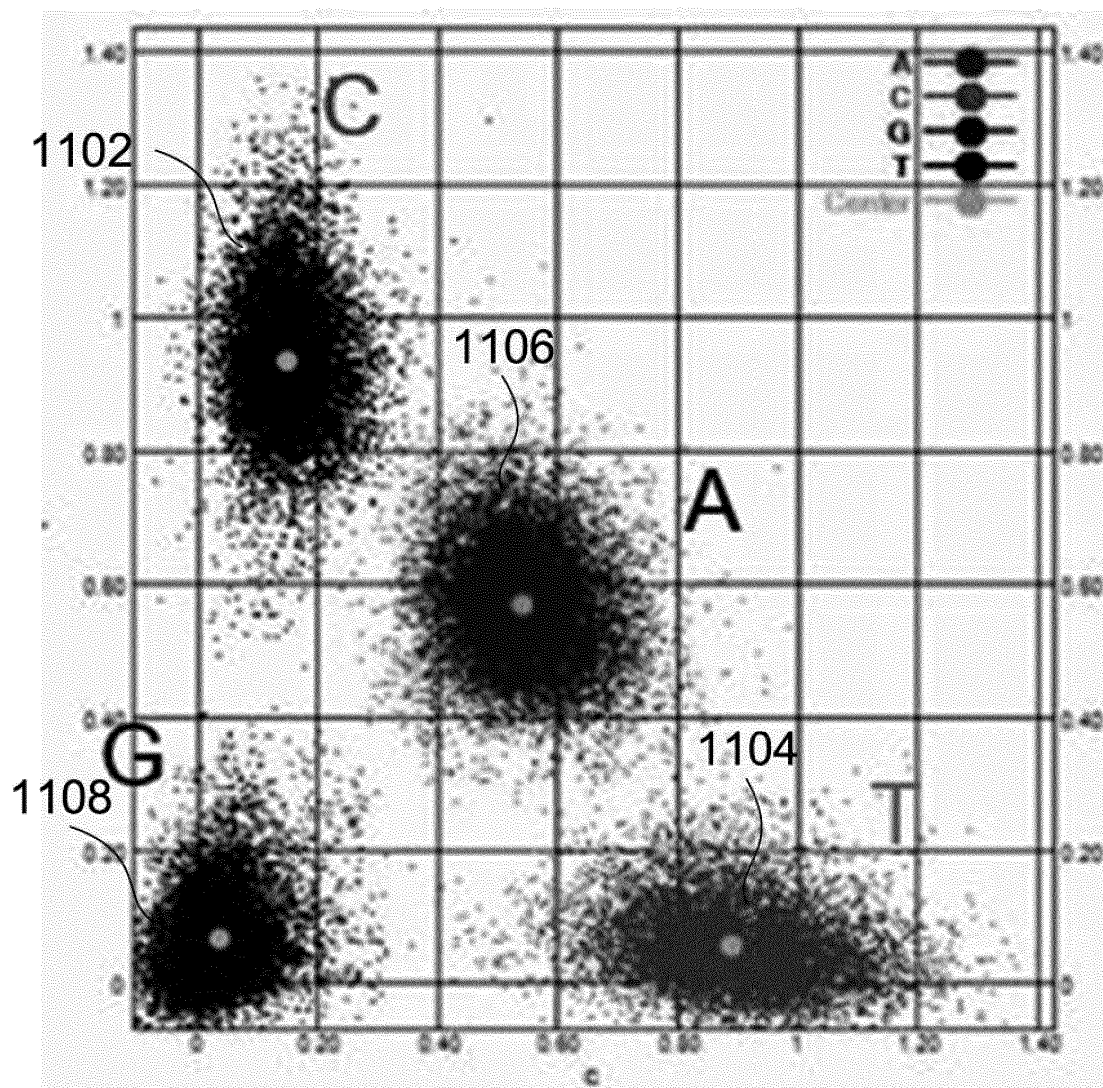
1000

- A-BL-NR455BoC/A-BL-NR550S0 (1/1)
- darkG
- T-NR550S0

FIG. 10

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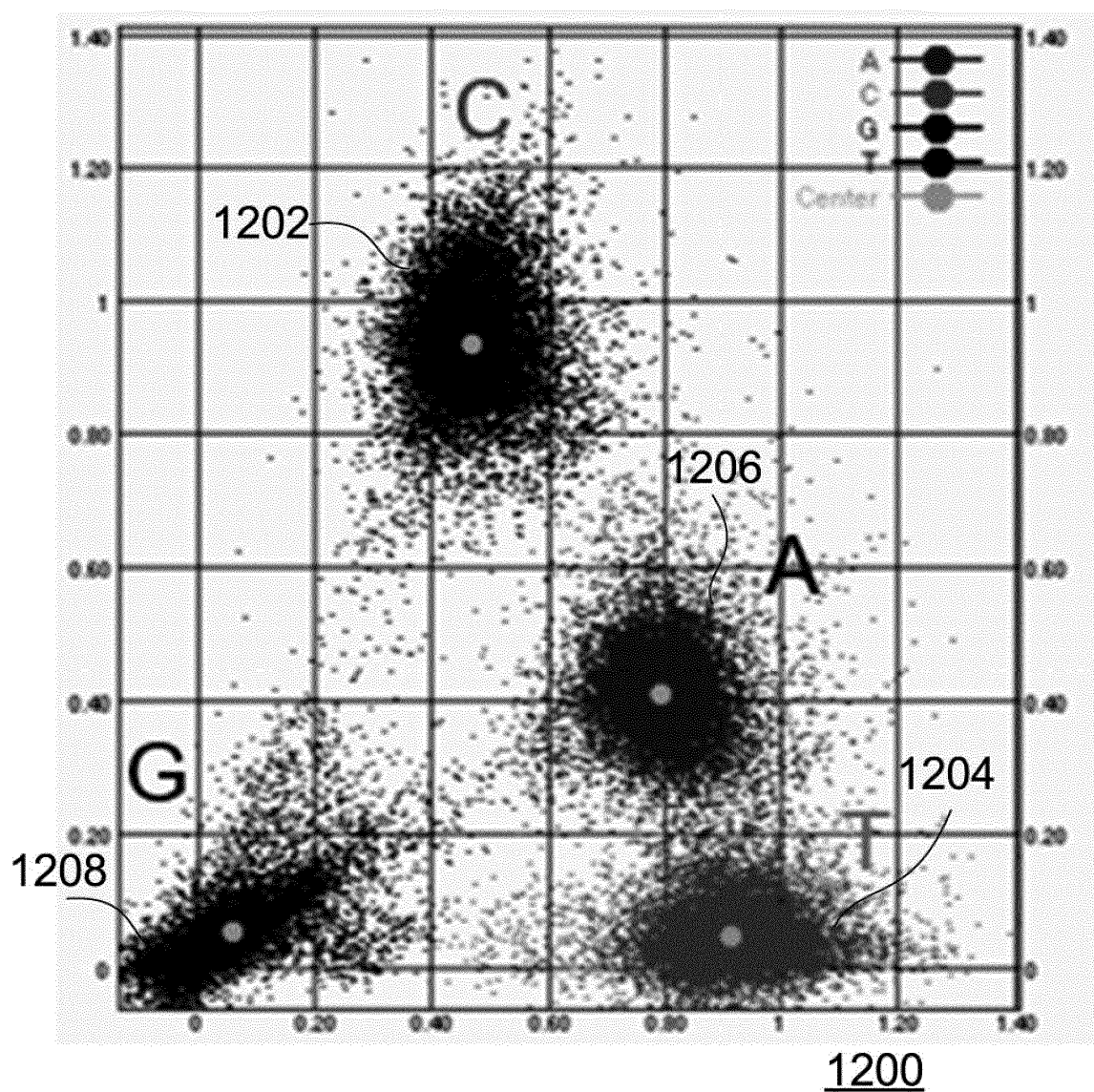
• C-NR425

1100

- A-BL-NR455BoC/A-NR550S0 (1/1)
 - darkG
 - T-NR550S0
- FIG. 11

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- C-BL-NR455BoC

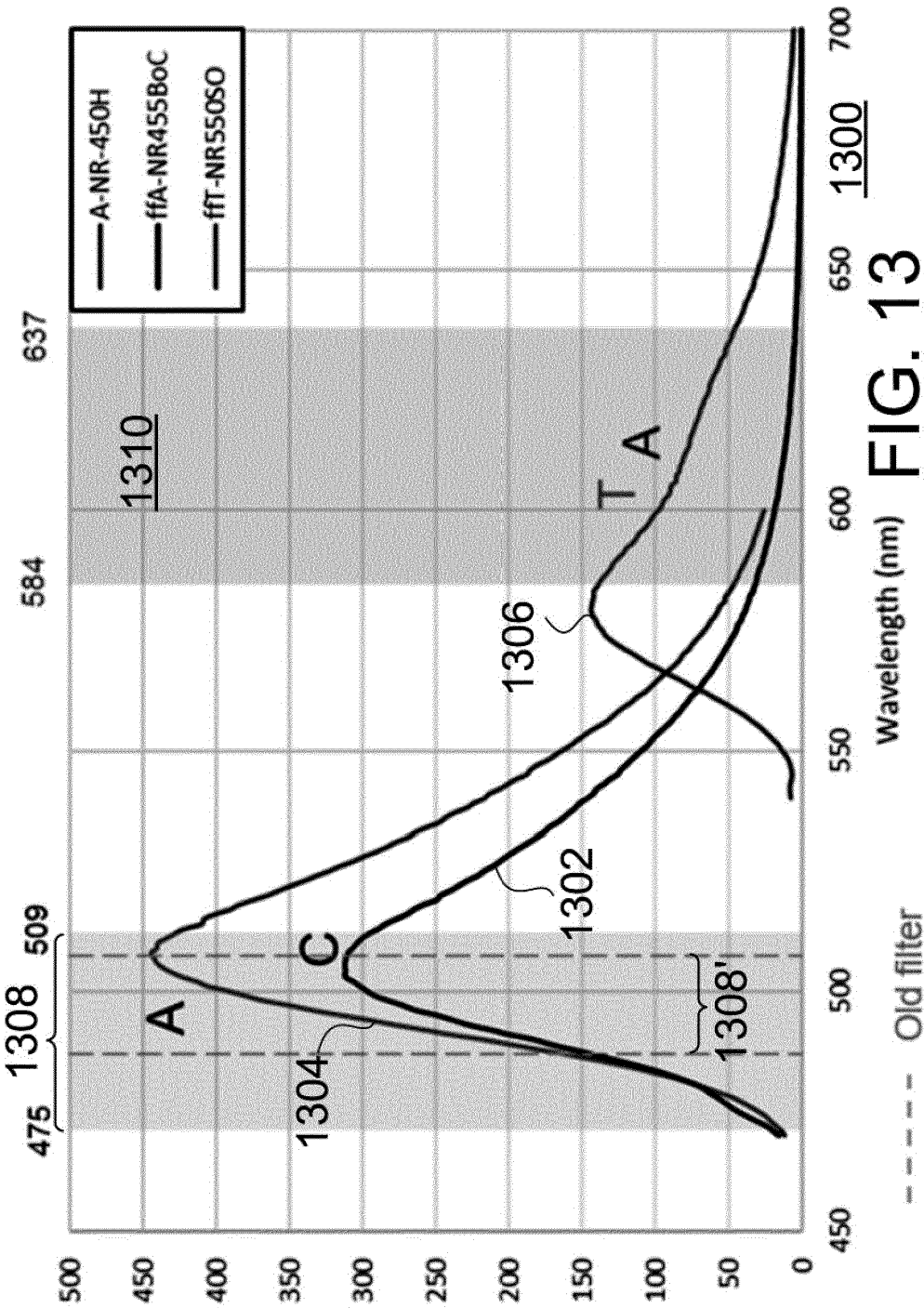


- A-NR450H/A-BL-NR550S0
(0.75/1.25)
- darkG

FIG. 12

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Blue Filter improvement



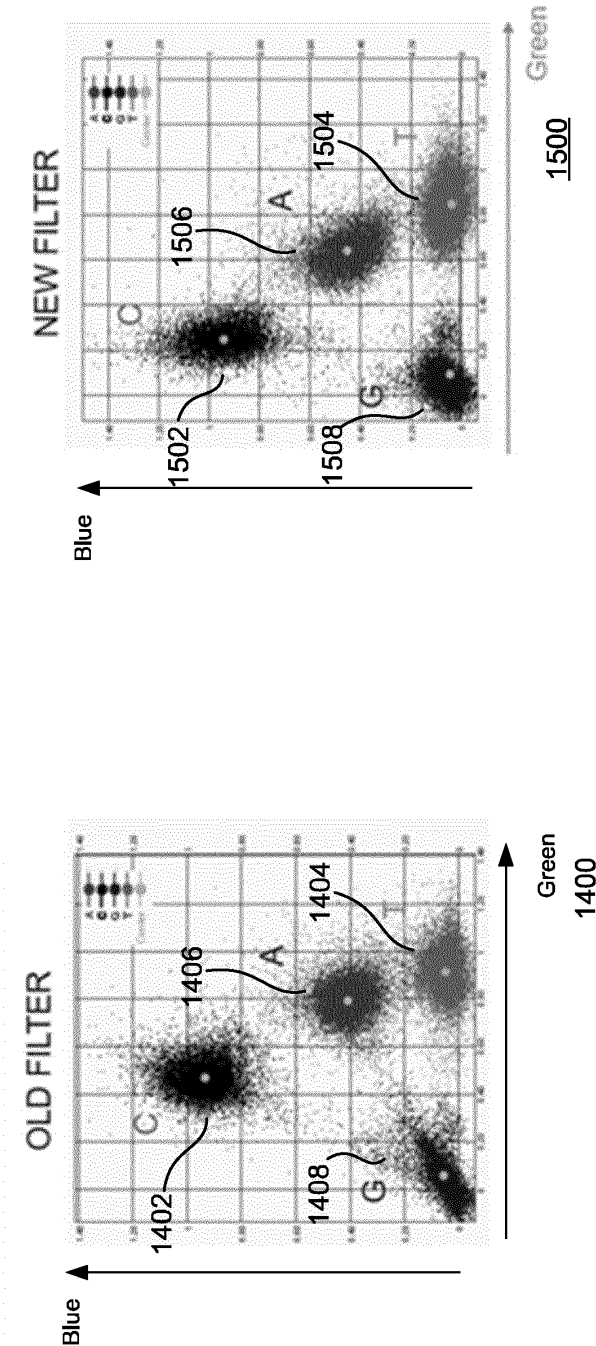


FIG. 15

FIG. 14

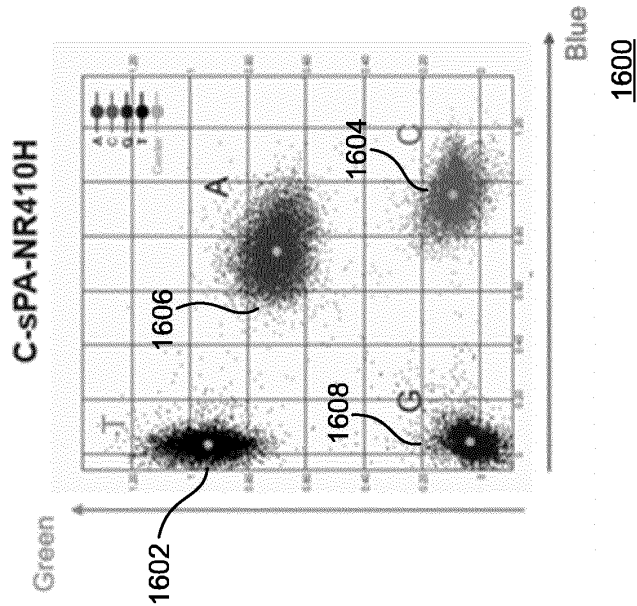


FIG. 16

B/G Long Sequencing run (S2C)

Run Summary

Level	Yield Total (G)	Projected Total Yield (G)	Aligned (%)	Error Rate (%)	Intensity Cycle 1	% >= Q30 (Last 10 Cycles)	% >= Q30
Read 1	0.07	0.07	99.49	1.44	540	26.21	61.42
Read 2	0.07	0.07	99.12	2.24	587	16.48	50.27
Non-Indexed Total	0.14	0.14	99.31	1.84	563	21.35	55.35
Total	0.14	0.14	99.31	1.84	563	21.35	55.35

1700

Read 1

Lane	Tiles	Density (K/mm2)	Clusters PF/Phas/Frep/ as (%)	Phasing equation	Frep/phas equation	Reads (ΔI)	Reads PF (ΔI)	% >= Q30	% >= Q30 (Last 10 Cycles)	Yield (G)	Cycles Err Rated	Aligned (%)	Error Rate (%)	Error Rate 35 cycle (%)	Error Rate 75 cycle (%)	Error Rate 100 cycle (%)	Intensity Cycle 1
1	12	107 +/- 2	98.46 +/- 0.06	0.157 / 0.057*c - 4.449	0.381*c + 4.955	0.46	0.45	61.42	26.21	0.07	150	99.49 +/- 0.03	1.44 +/- 0.07	0.10 +/- 0.00	0.14 +/- 0.01	0.24 +/- 0.01	540 +/- 19

1702

Read 2

Lane	Tiles	Density (K/mm2)	Clusters PF/Phas/Frep/ as (%)	Phasing equation	Frep/phas equation	Reads (ΔI)	Reads PF (ΔI)	% >= Q30	% >= Q30 (Last 10 Cycles)	Yield (G)	Cycles Err Rated	Aligned (%)	Error Rate (%)	Error Rate 35 cycle (%)	Error Rate 75 cycle (%)	Error Rate 100 cycle (%)	Intensity Cycle 1
1	12	107 +/- 2	98.46 +/- 0.06	0.164 / 0.033*c - 6.599	0.346*c + 4.232	0.46	0.45	50.27	16.48	0.07	150	99.12 +/- 0.70	2.24 +/- 0.07	0.10 +/- 0.02	0.16 +/- 0.01	0.35 +/- 0.01	587 +/- 29

1704

FIG. 17

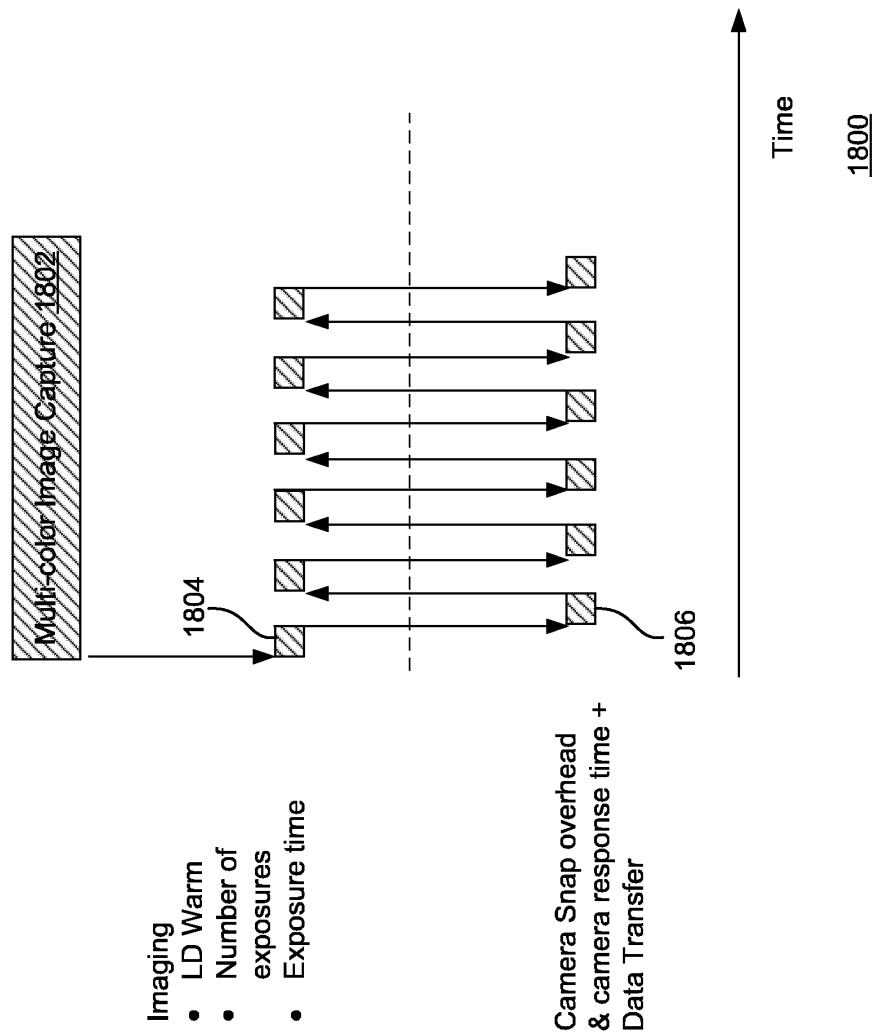


FIG. 18

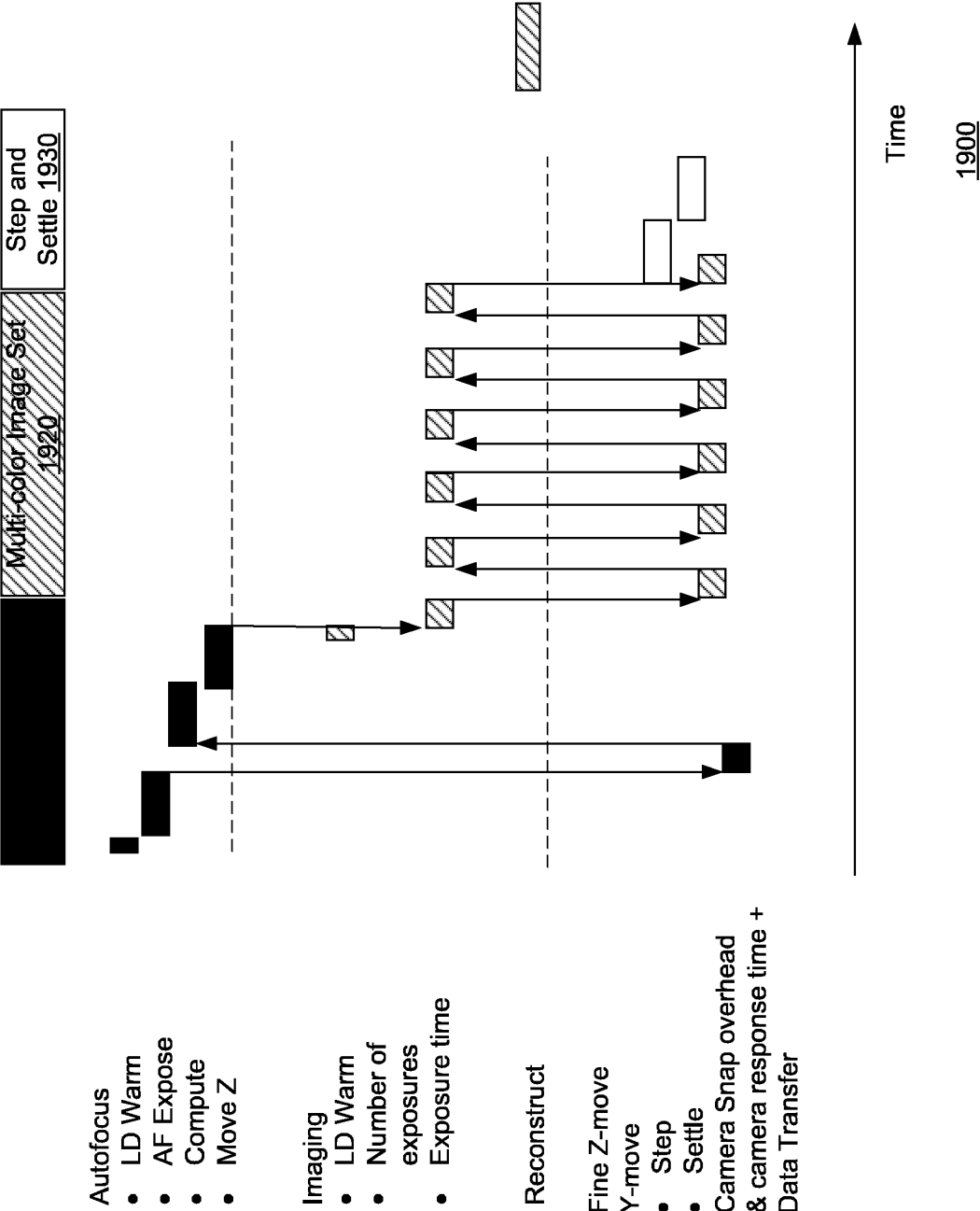


FIG. 19

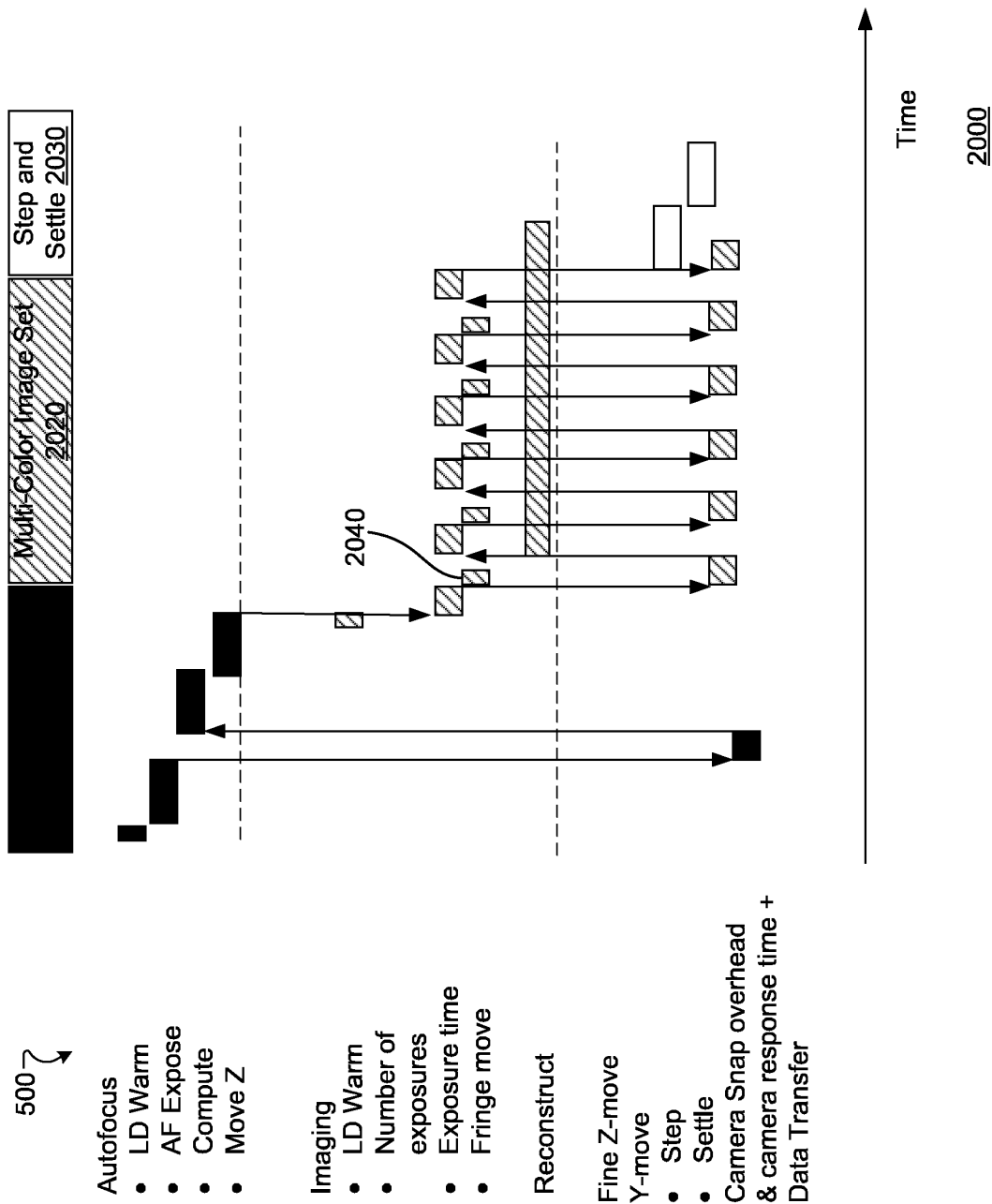


FIG. 20

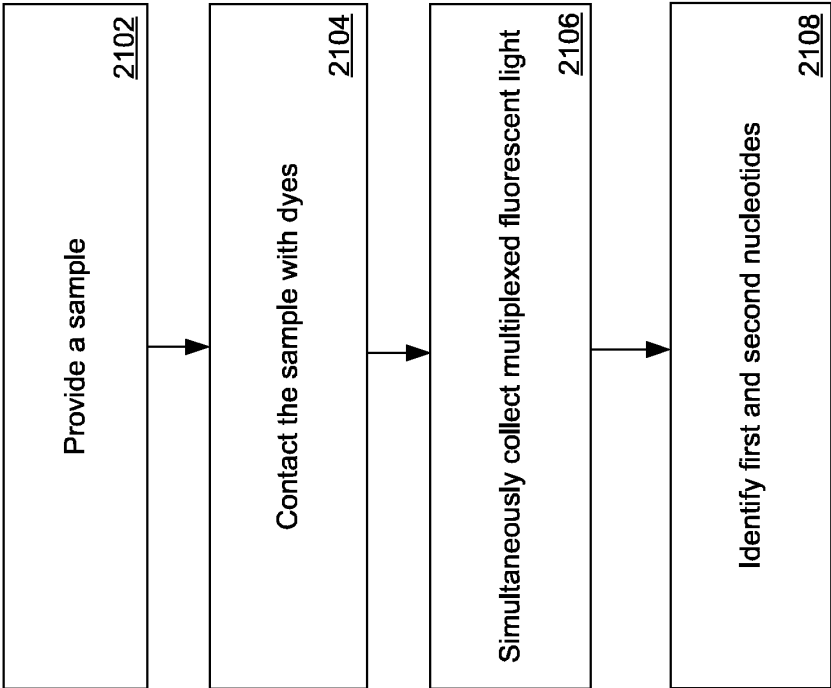


FIG. 21

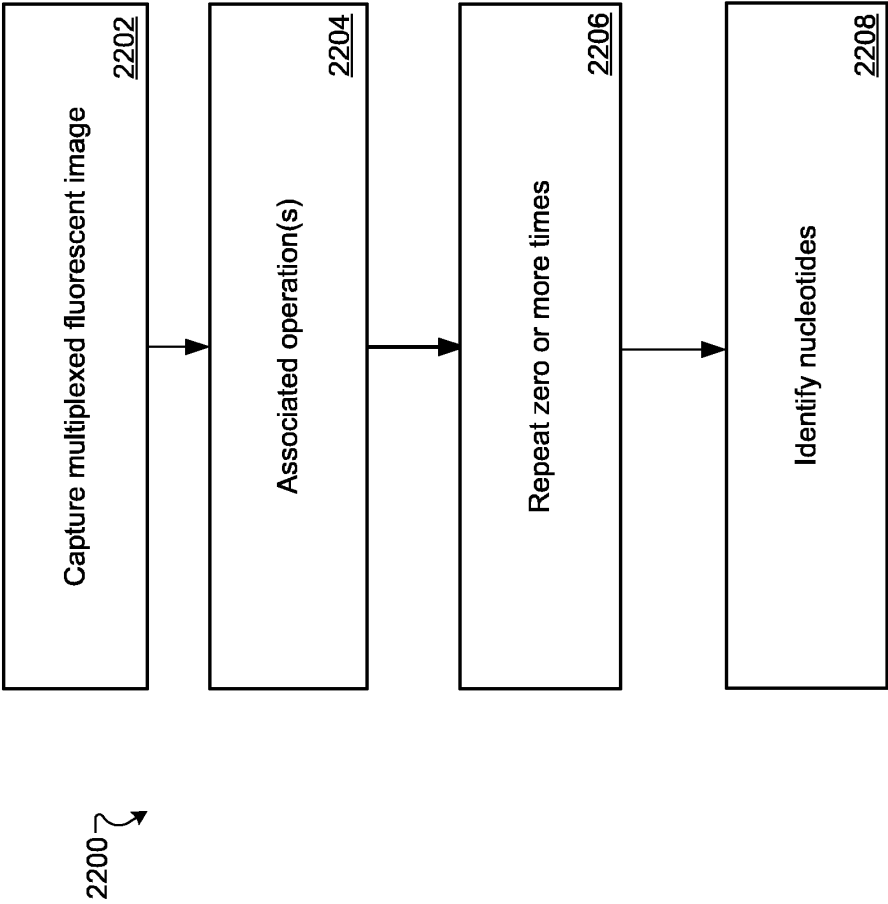


FIG. 22

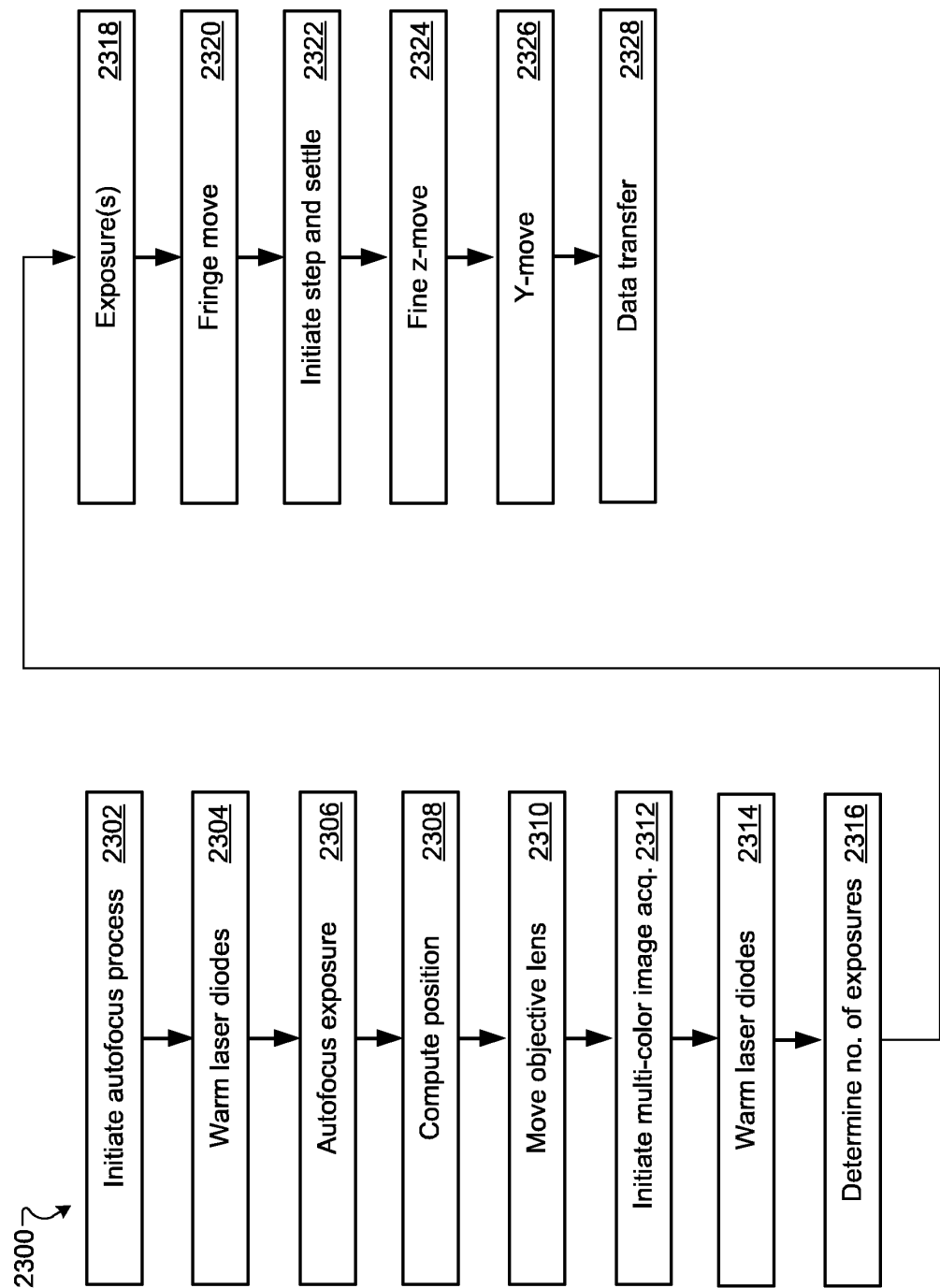


FIG. 23

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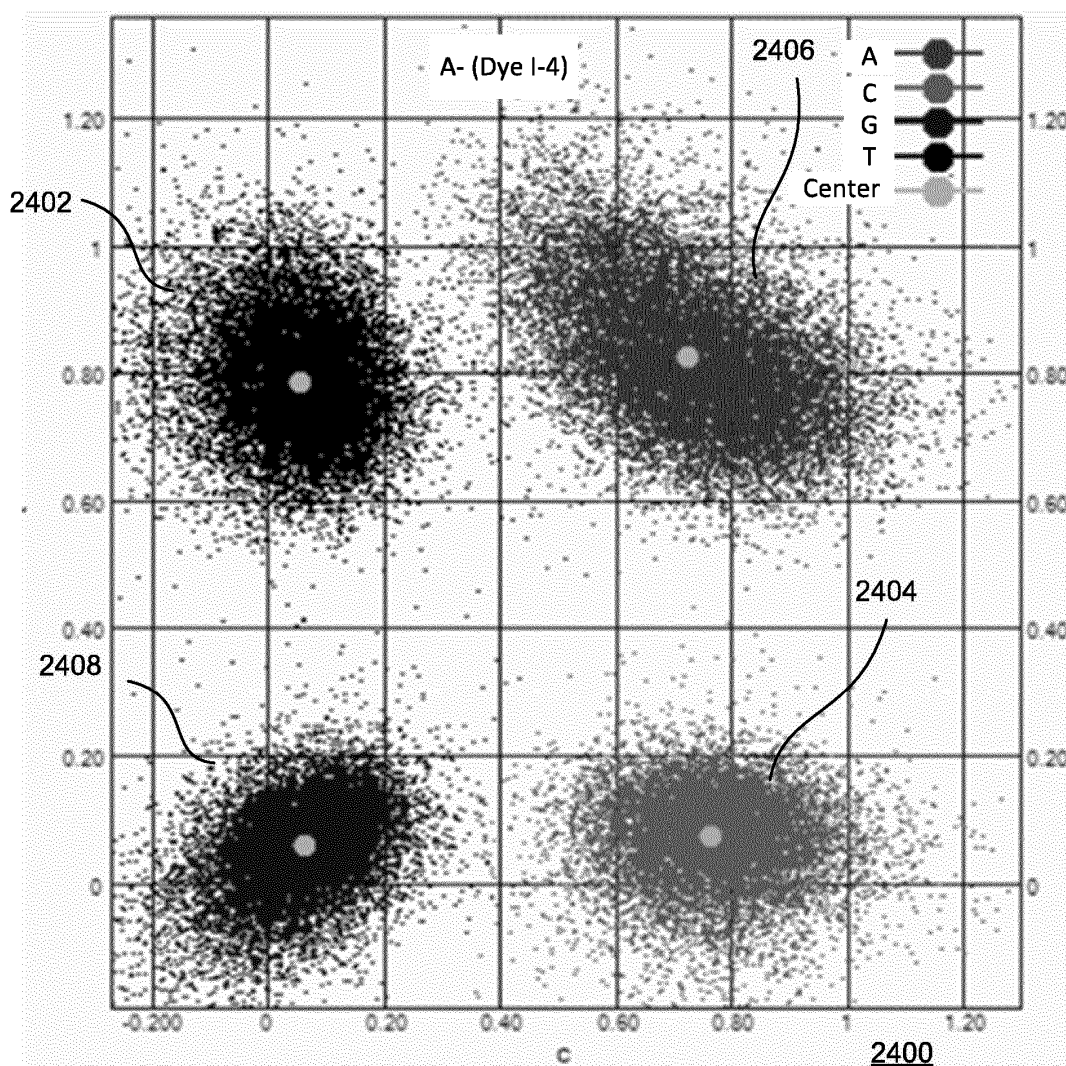


FIG. 24

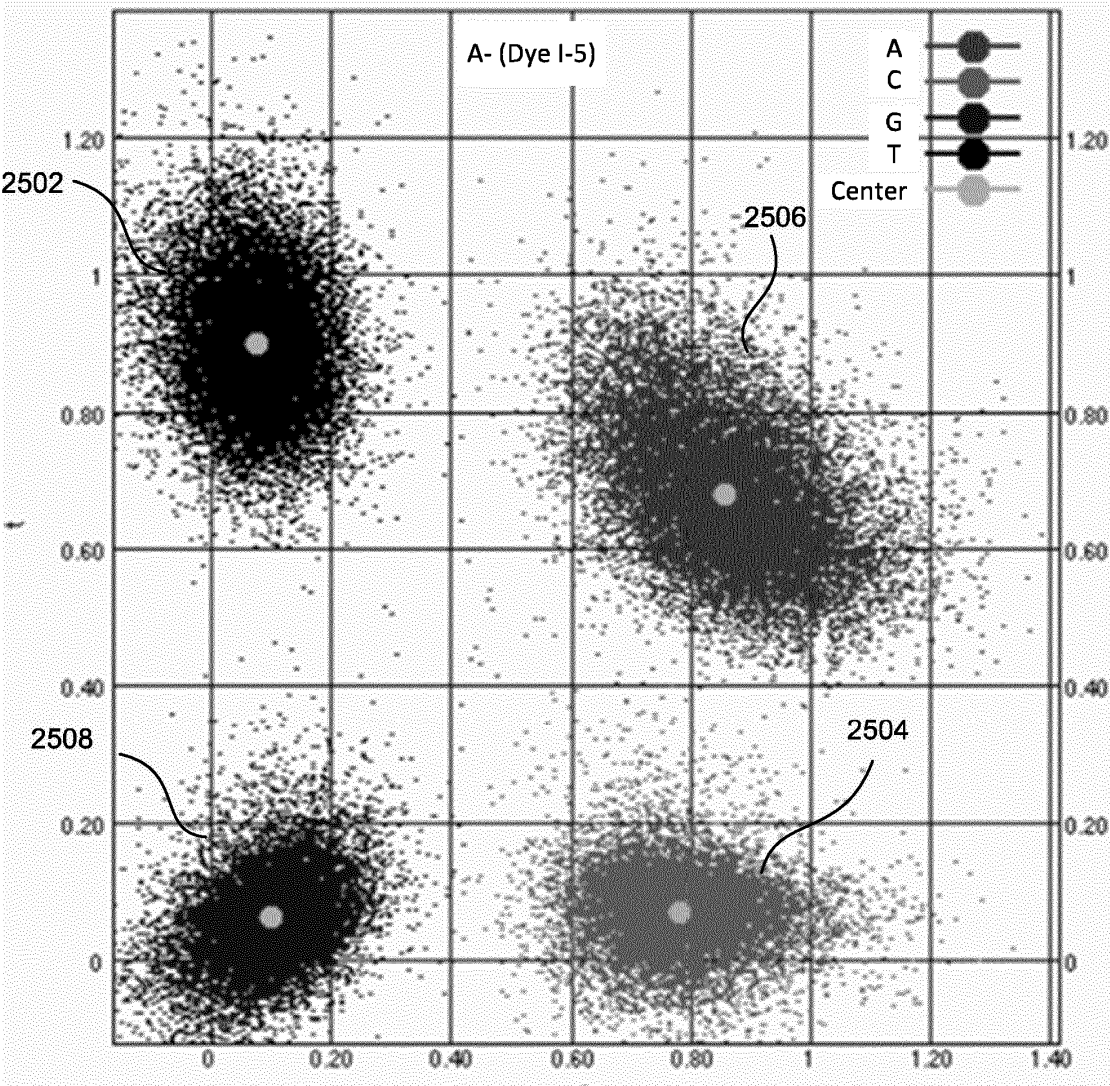


FIG. 25

2500

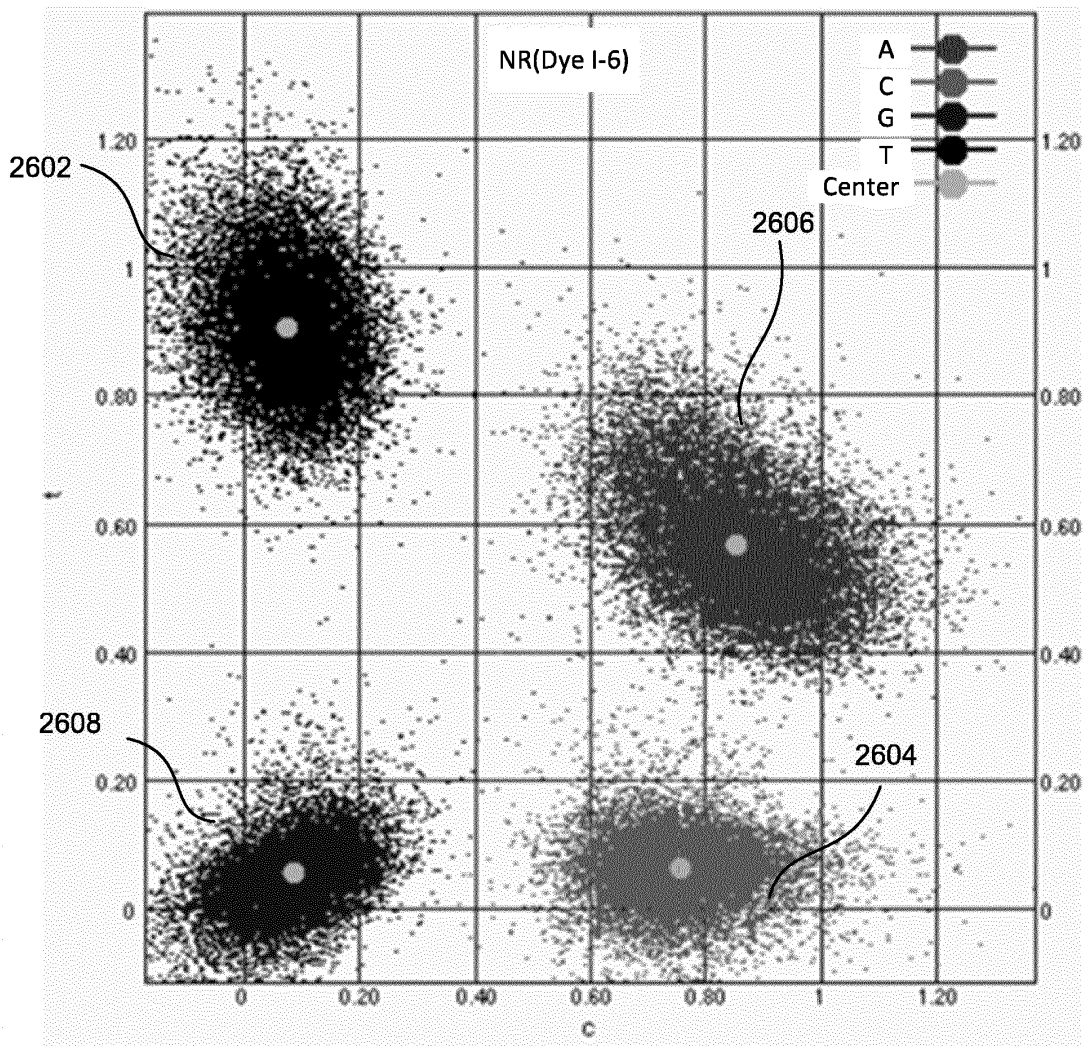


FIG. 26

2600