

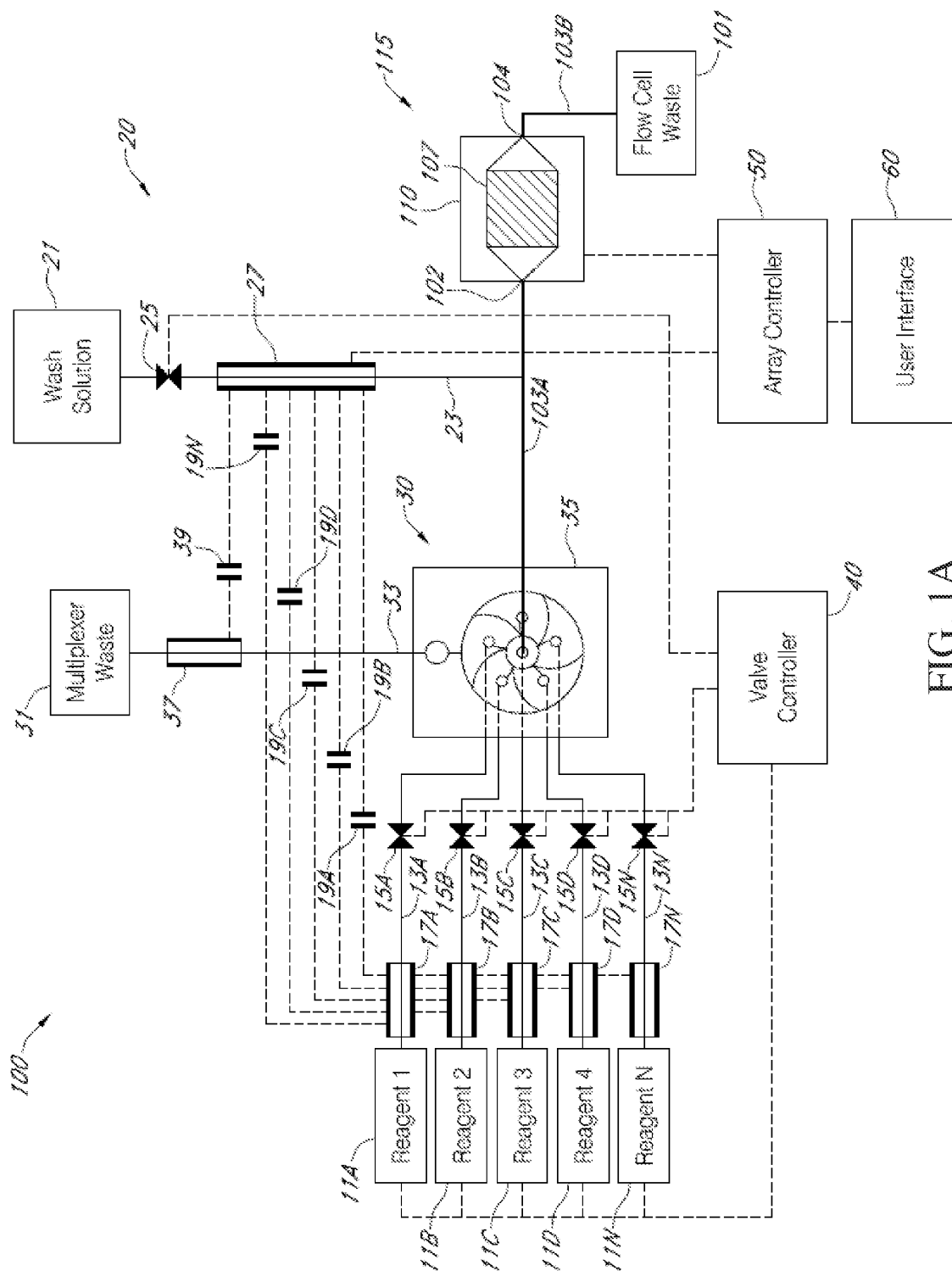


FIG. 9A

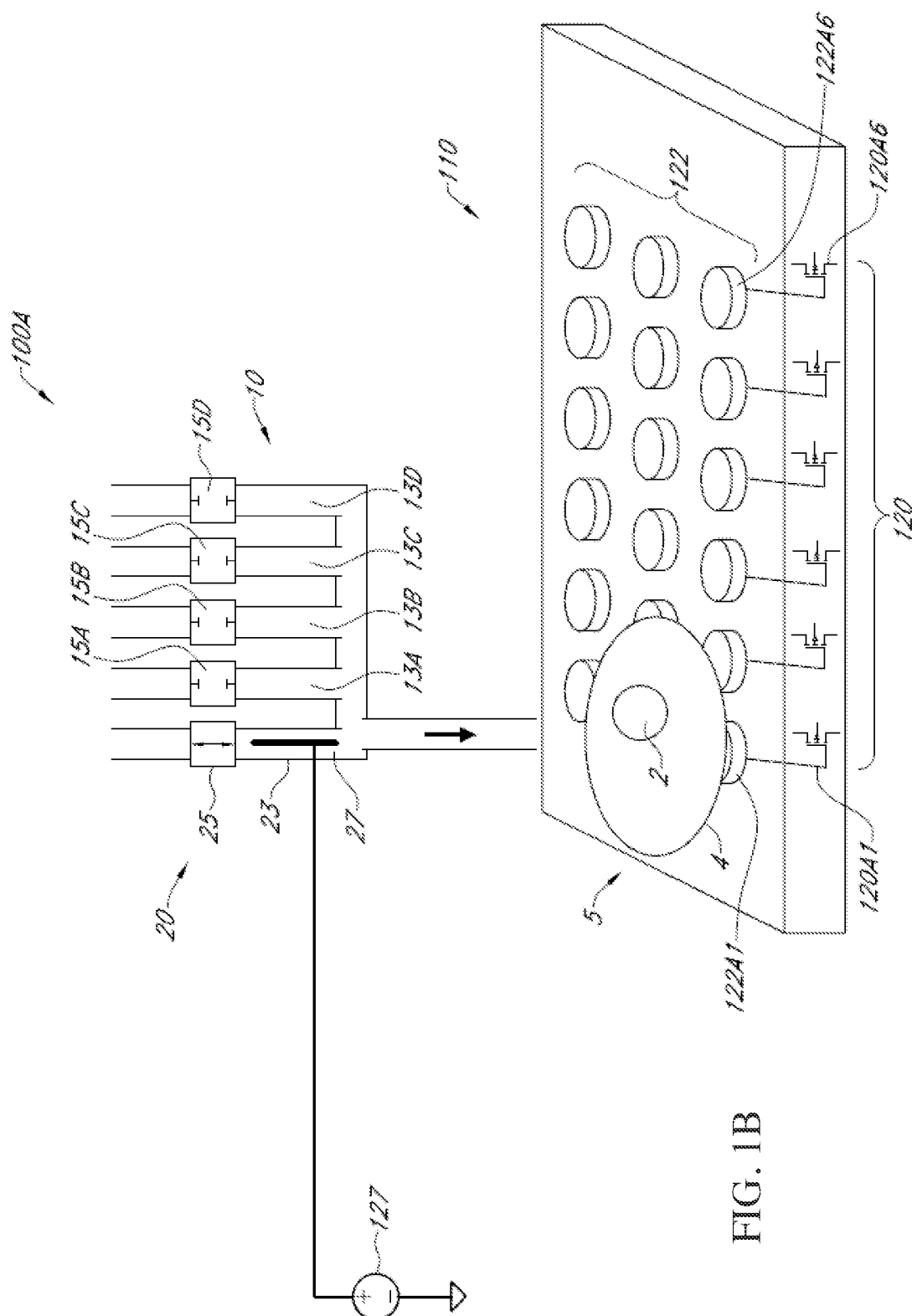
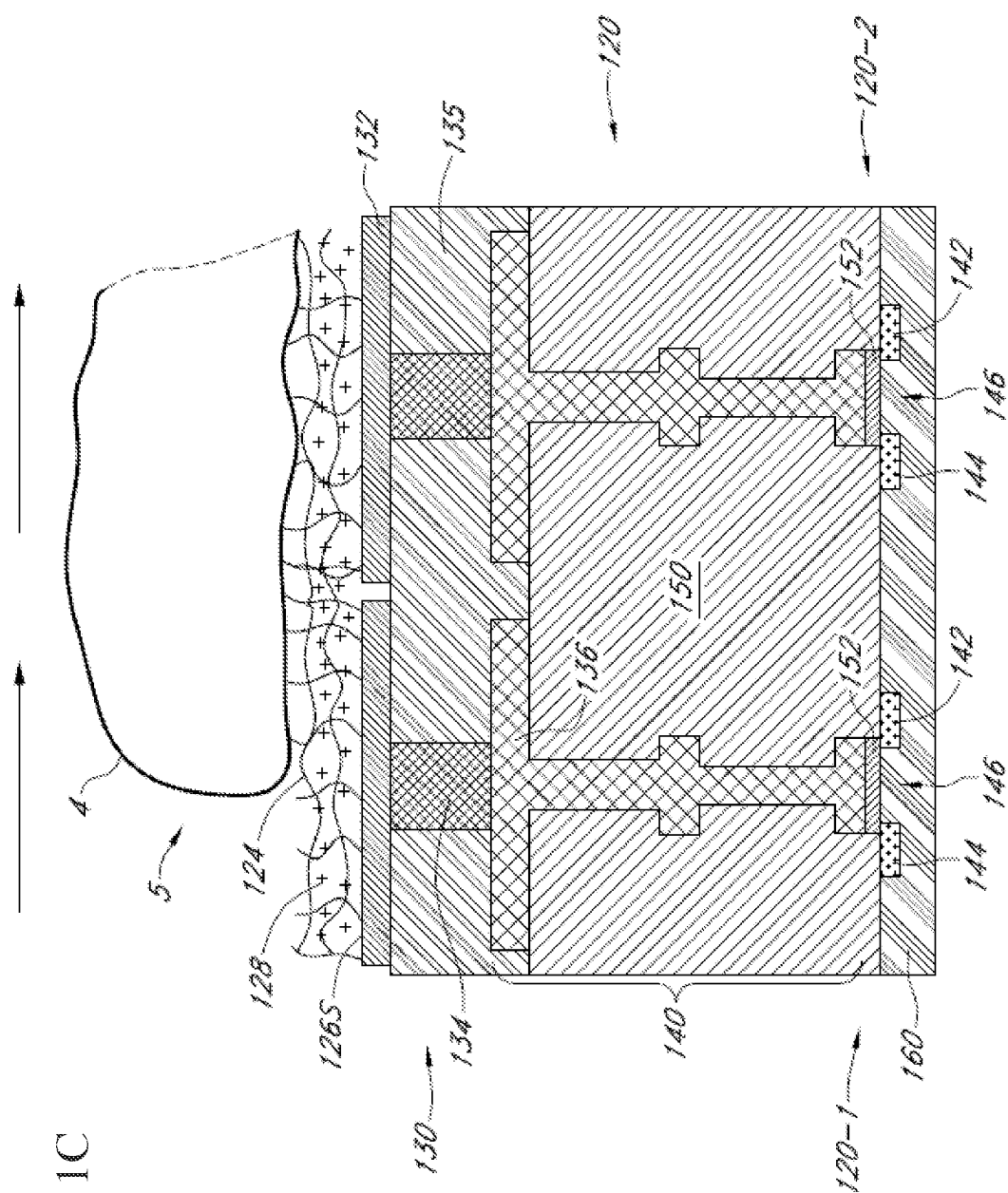


FIG. 13



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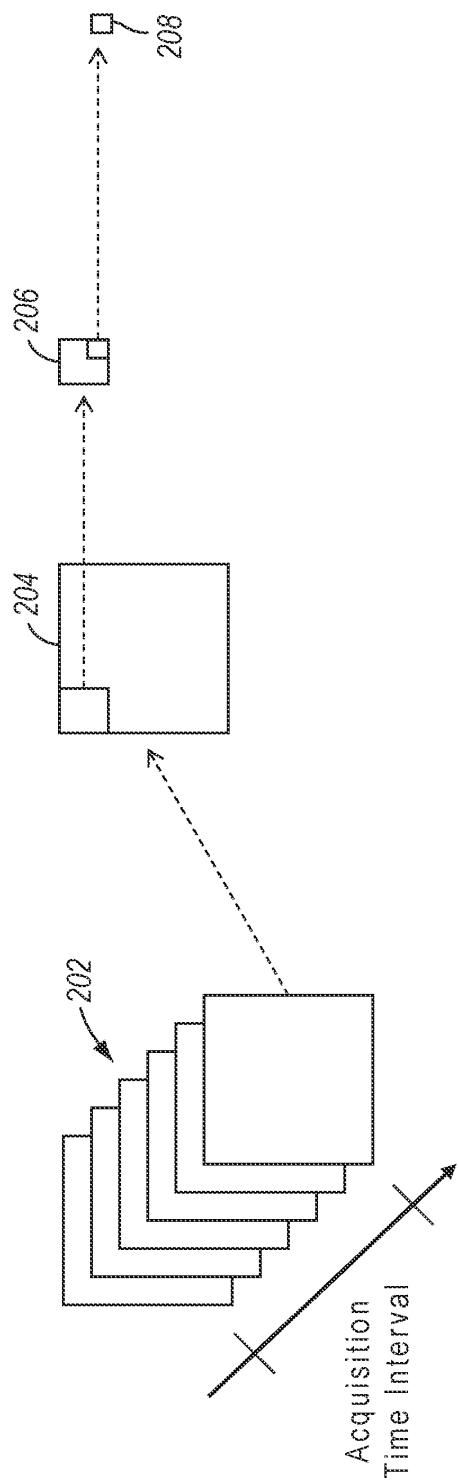


FIG. 2A

Table 1

Device	Pixels per Device	Pitch (μm)	Pixel Size ($\mu\text{m} \times \mu\text{m}$)	Pixel Area $\mu\text{m}^2/\text{pixel}$	FR _{max} per Device (fps)	FR _{max} per Row (fps)
A	20M	3.36	2.910 x 3.360	9.78	240	75,000
B	40M	3.36	2.910 x 3.360	9.78	120	75,000
C	165M	1.68	1.453 x 1.680	2.44	30	75,000
D	300M	1.26	1.093 x 1.262	1.38	30	162,000
E	660M	0.85	0.733 x 0.846	0.62	15	162,000

FIG. 2B

Cell Size	Device	Pitch (μm)	Pixel Size ($\mu\text{m} \times \mu\text{m}$)	Pixel Area $\mu\text{m}^2/\text{pixel}$	Pixel per Cell Area	% Pixel Coverage	Rows per Cell ID	FR _{max} per Row (fps)	FR _{max} per Row _{Cell ID} (fps)
Extra large $\overline{D} = 100 \mu\text{m}$ $\overline{A} = 7854 \mu\text{m}^2$	Chip 1	3.36	2.910 x 3.360	9.78	803	0.1%	30	75,000	2,500
	Chip 2	1.68	1.453 x 1.680	2.44	3,219	0.03%	60	75,000	1,250
	Chip 3	1.26	1.093 x 1.262	1.38	5,691	0.02%	79	162,000	2,051
	Chip 4	0.85	0.733 x 0.846	0.62	12,668	0.008%	118	162,000	1,373
Large $\overline{D} = 50 \mu\text{m}$ $\overline{A} = 1964 \mu\text{m}^2$	Chip 1	3.36	2.910 x 3.360	9.78	201	0.5%	15	75,000	5,000
	Chip 2	1.68	1.453 x 1.680	2.44	805	0.1%	30	75,000	2,500
	Chip 3	1.26	1.093 x 1.262	1.38	1,423	0.07%	40	162,000	4,050
	Chip 4	0.85	0.733 x 0.846	0.62	3,168	0.03%	59	162,000	2,746
Medium $\overline{D} = 25 \mu\text{m}$ $\overline{A} = 491 \mu\text{m}^2$	Chip 1	3.36	2.910 x 3.360	9.78	50	0.2%	7	75,000	10,714
	Chip 2	1.68	1.453 x 1.680	2.44	201	0.5%	15	75,000	5,000
	Chip 3	1.26	1.093 x 1.262	1.38	356	0.2%	20	162,000	8,100
	Chip 4	0.85	0.733 x 0.846	0.62	792	0.1%	29	162,000	5,587
Small $\overline{D} = 10 \mu\text{m}$ $\overline{A} = 78 \mu\text{m}^2$	Chip 1	3.36	2.910 x 3.360	9.78	8	12%	3	75,000	25,000
	Chip 2	1.68	1.453 x 1.680	2.44	32	3%	6	75,000	12,500
	Chip 3	1.26	1.093 x 1.262	1.38	56	2%	8	162,000	20,250
	Chip 4	0.85	0.733 x 0.846	0.62	126	0.8%	12	162,000	13,500
Very Small $\overline{D} = 5 \mu\text{m}$ $\overline{A} = 20 \mu\text{m}^2$	Chip 1	3.36	2.910 x 3.360	9.78	2	50%	1	75,000	75,000
	Chip 2	1.68	1.453 x 1.680	2.44	8	12%	3	75,000	25,000
	Chip 3	1.26	1.093 x 1.262	1.38	14	7%	4	162,000	40,500
	Chip 4	0.85	0.733 x 0.846	0.62	32	3%	6	162,000	27,000

FIG. 2C

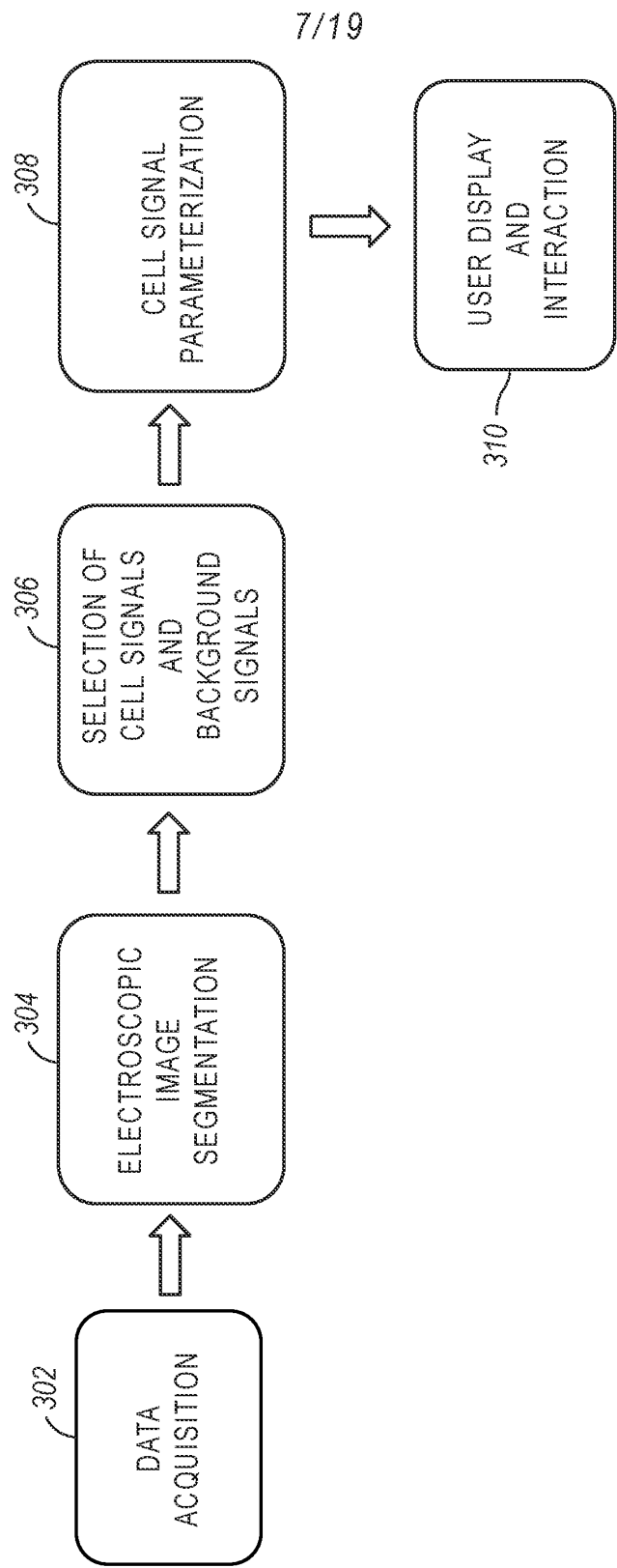


FIG. 3

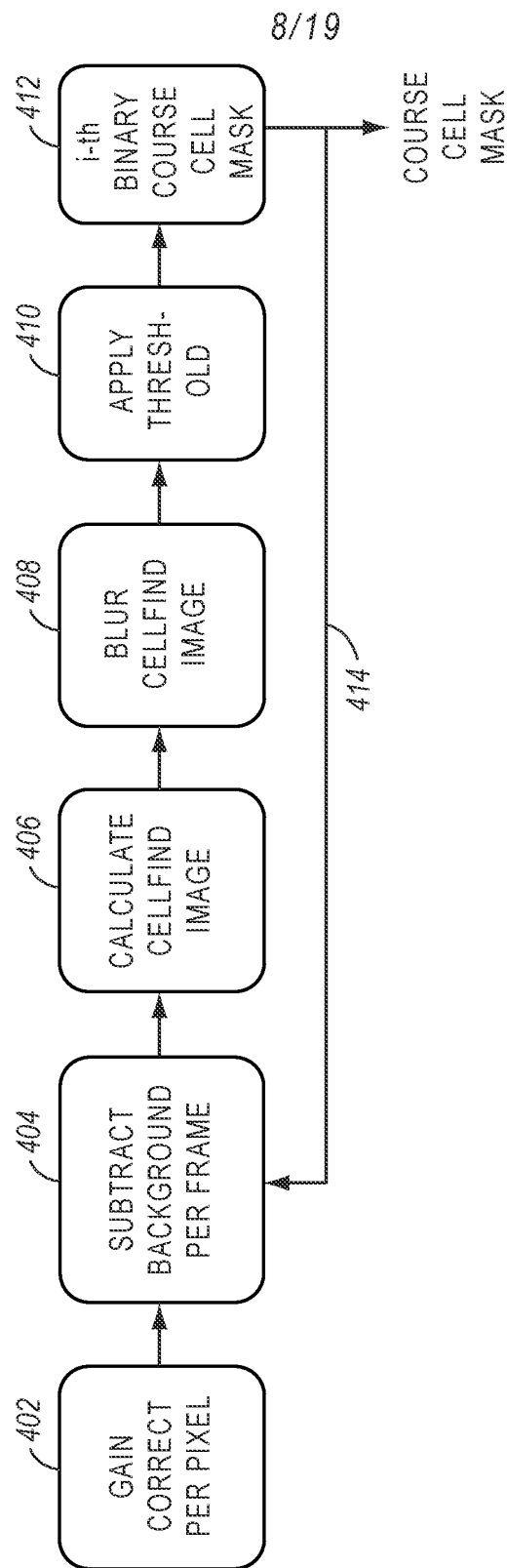


FIG. 4A

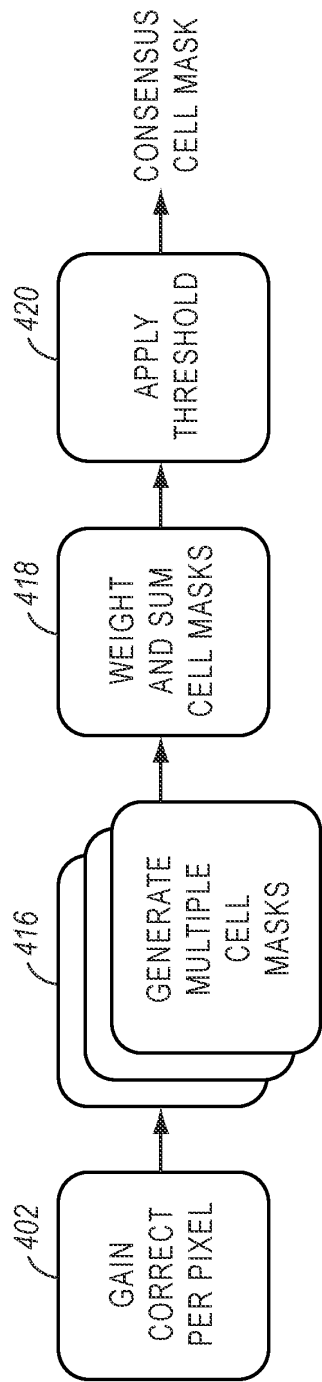


FIG. 4B

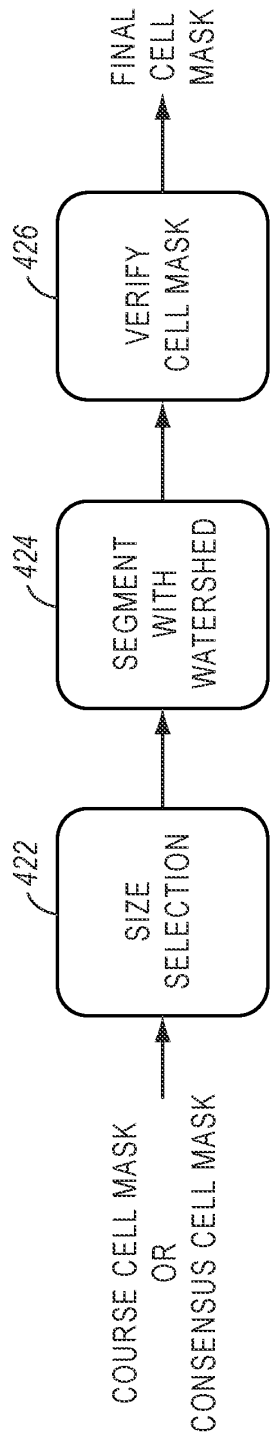


FIG. 4C

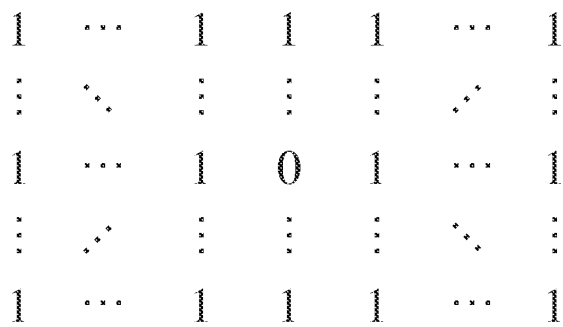


FIG. 5

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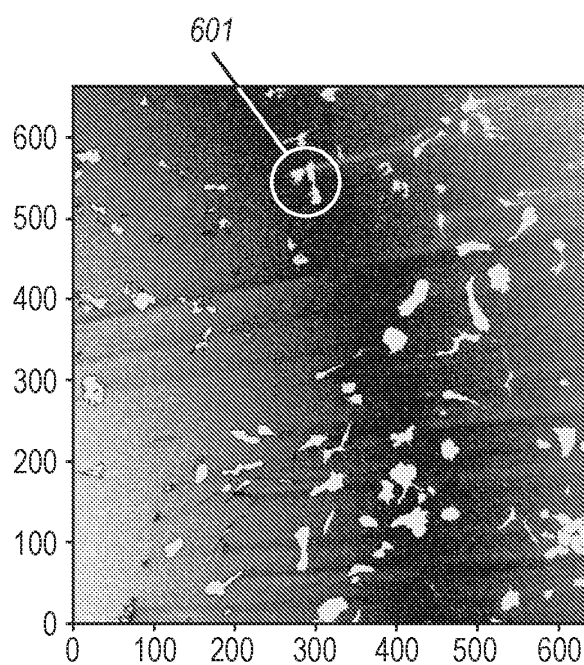


FIG. 6A

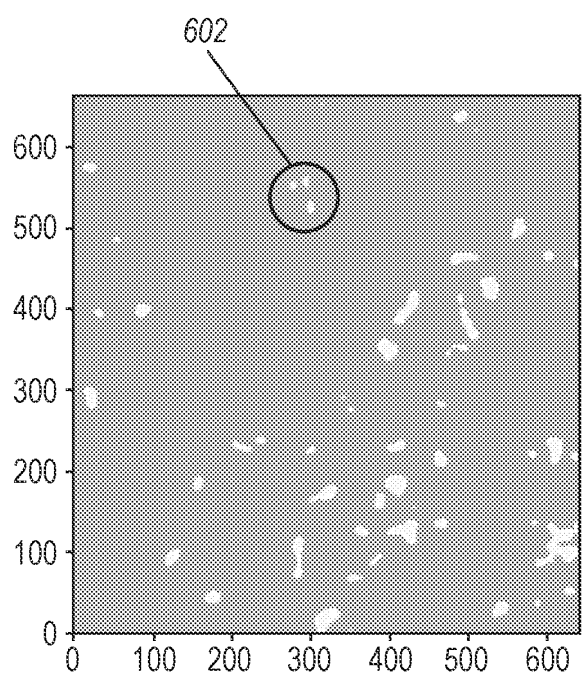


FIG. 6B

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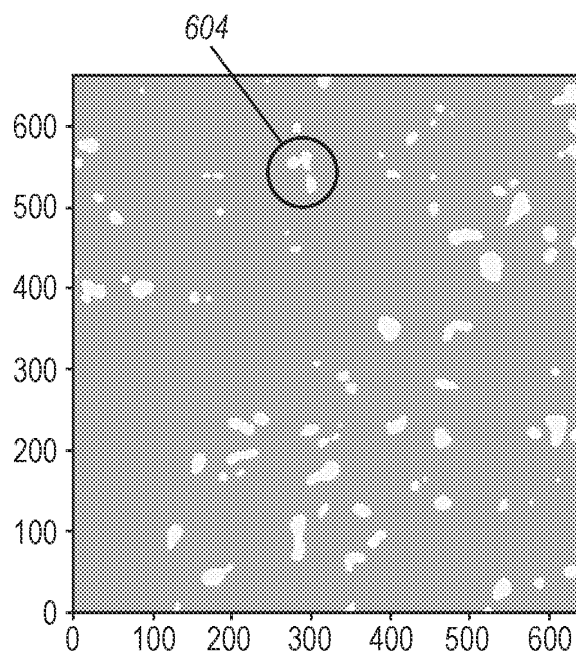


FIG. 6C

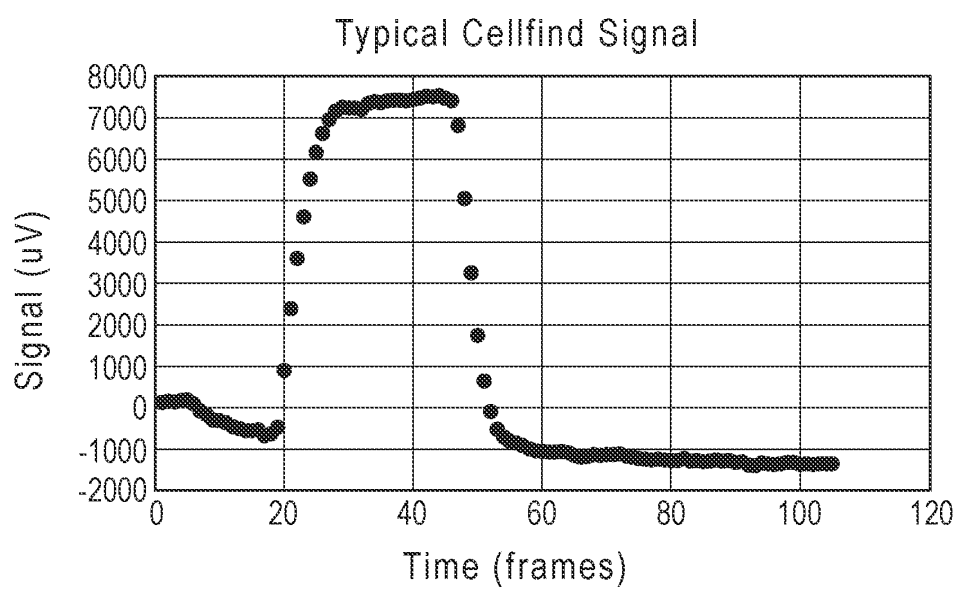


FIG. 6D

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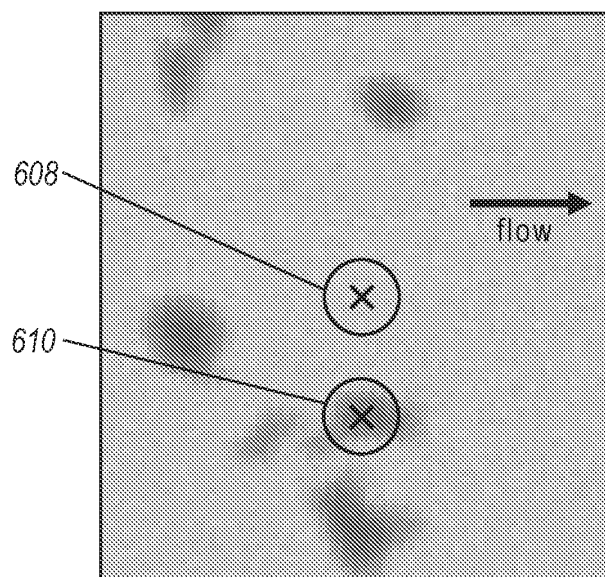


FIG. 6E

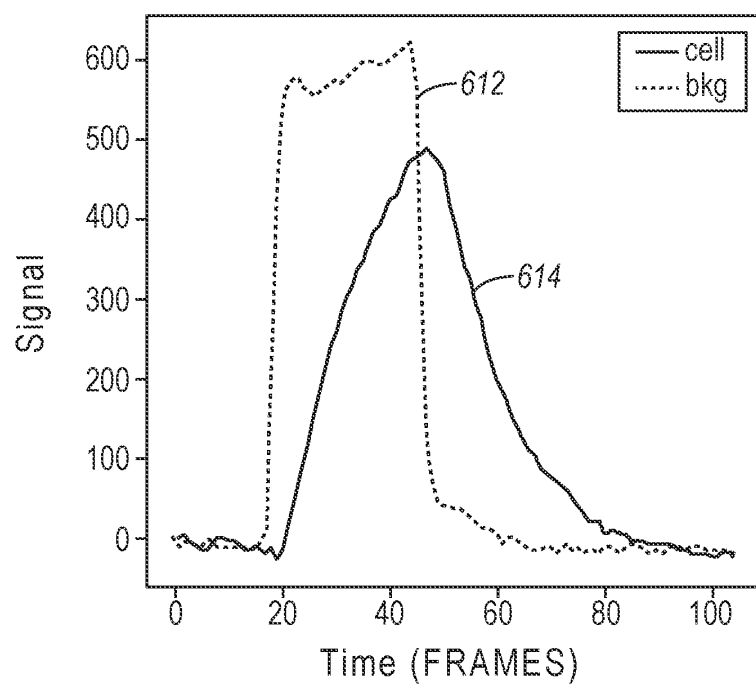


FIG. 6F

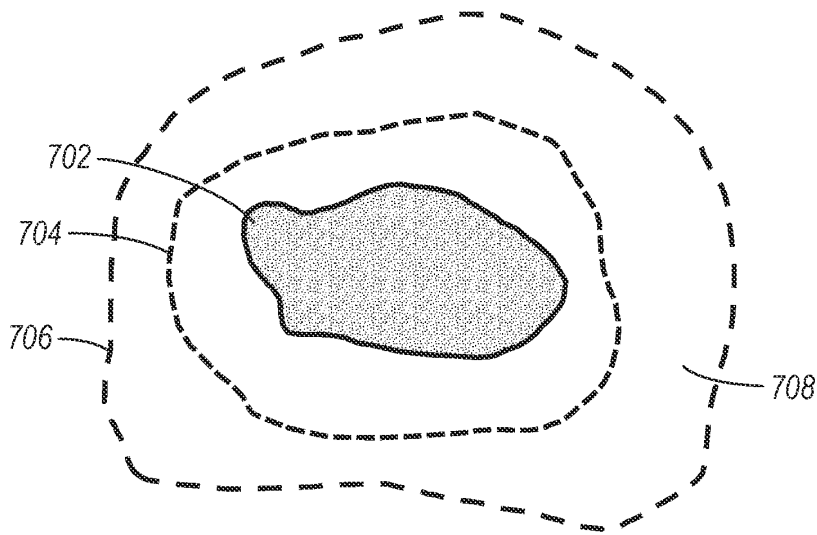


FIG. 7

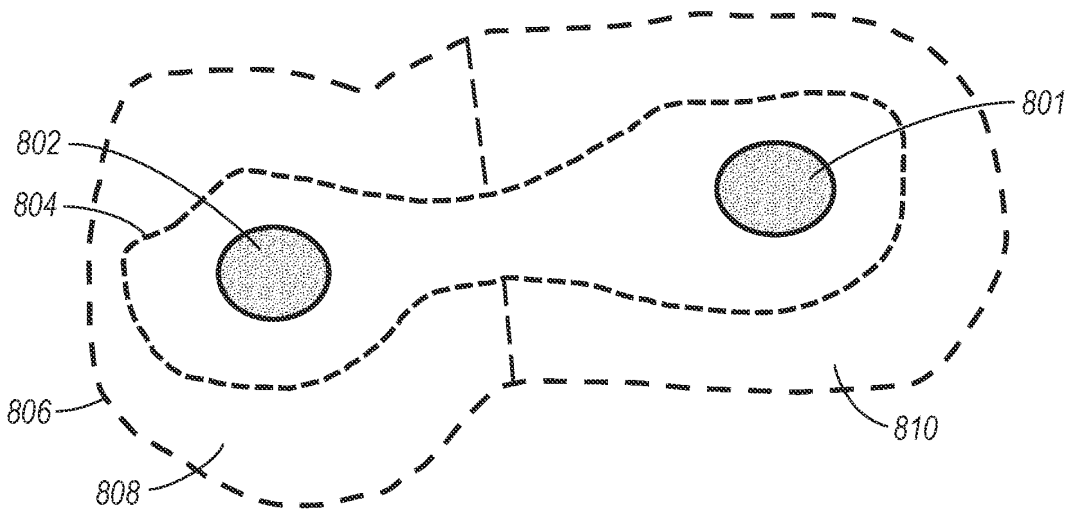


FIG. 8

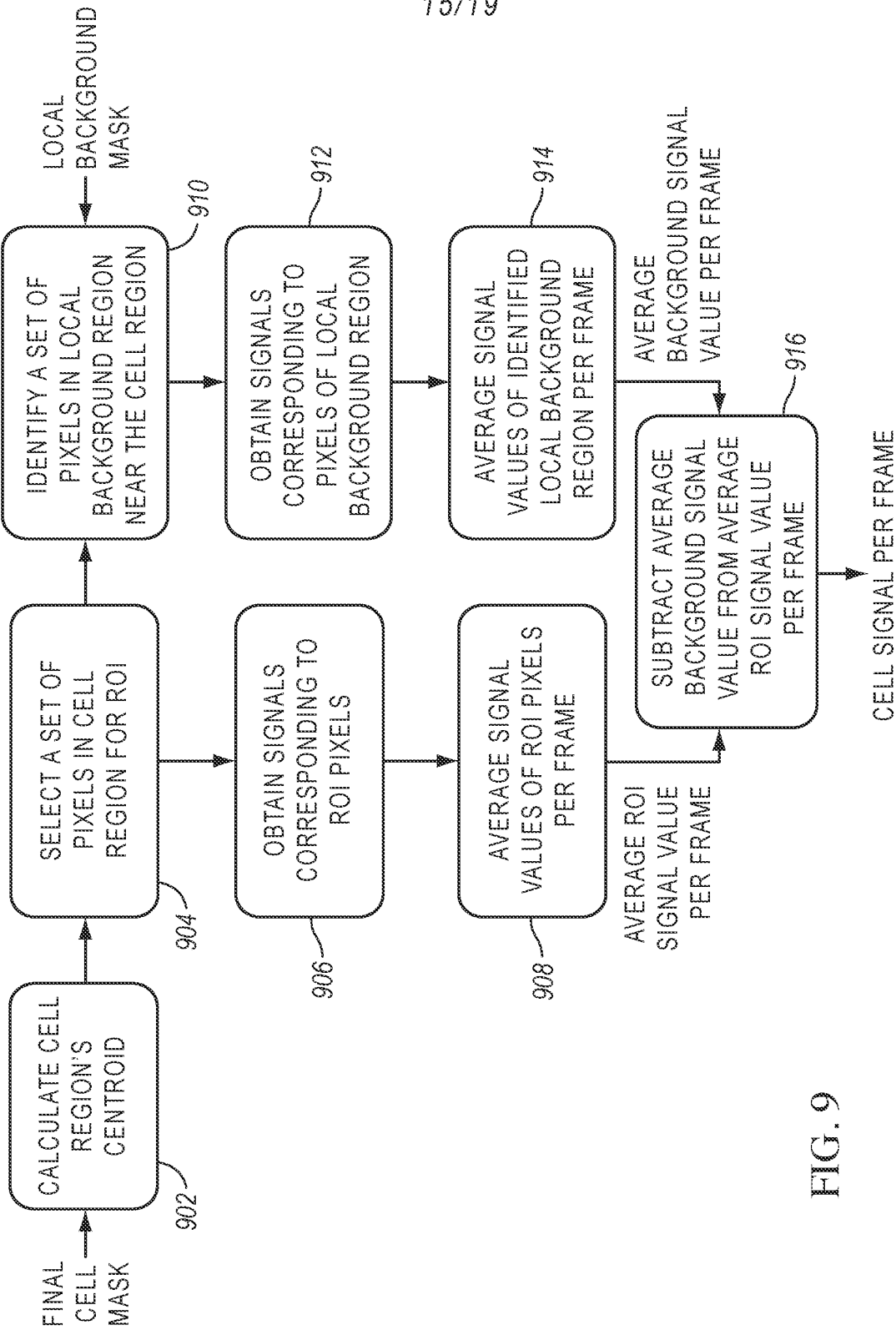


FIG. 9

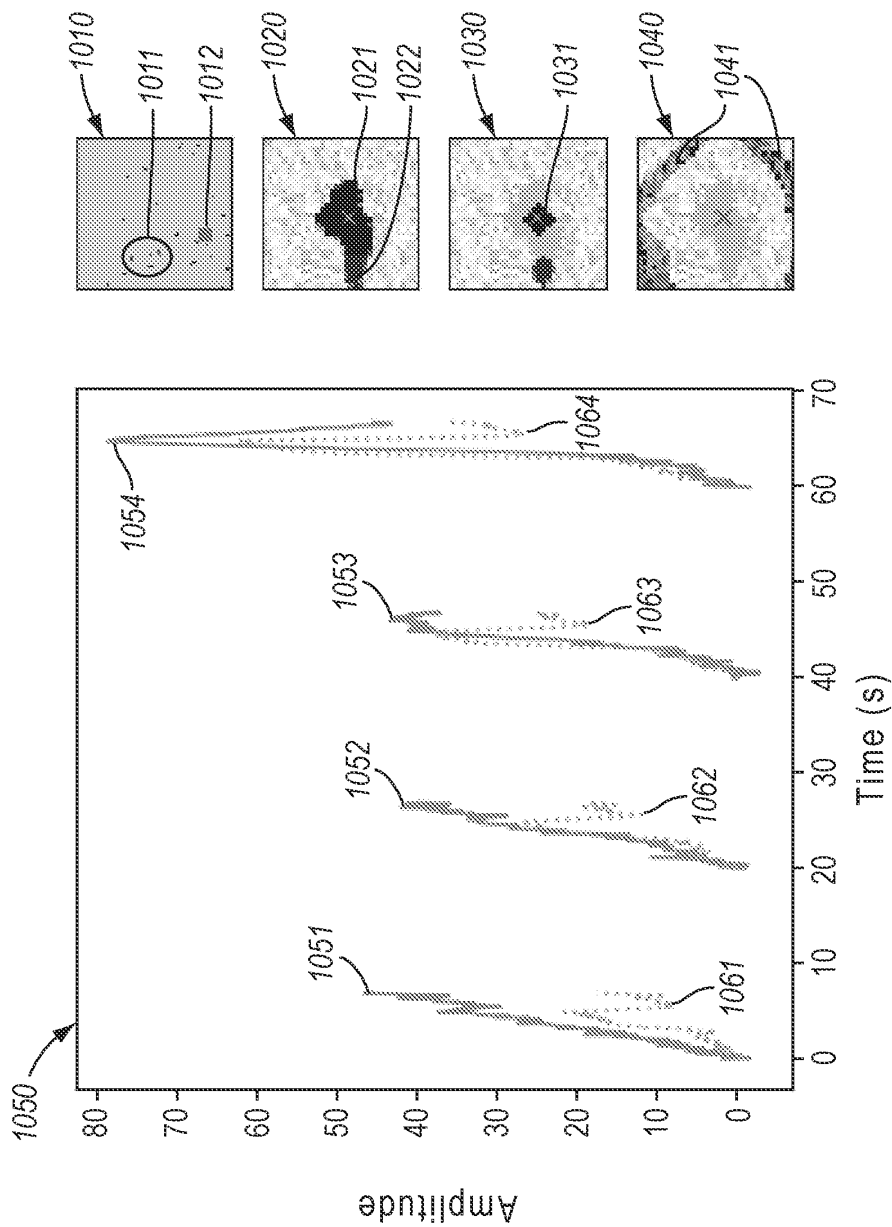


FIG. 10

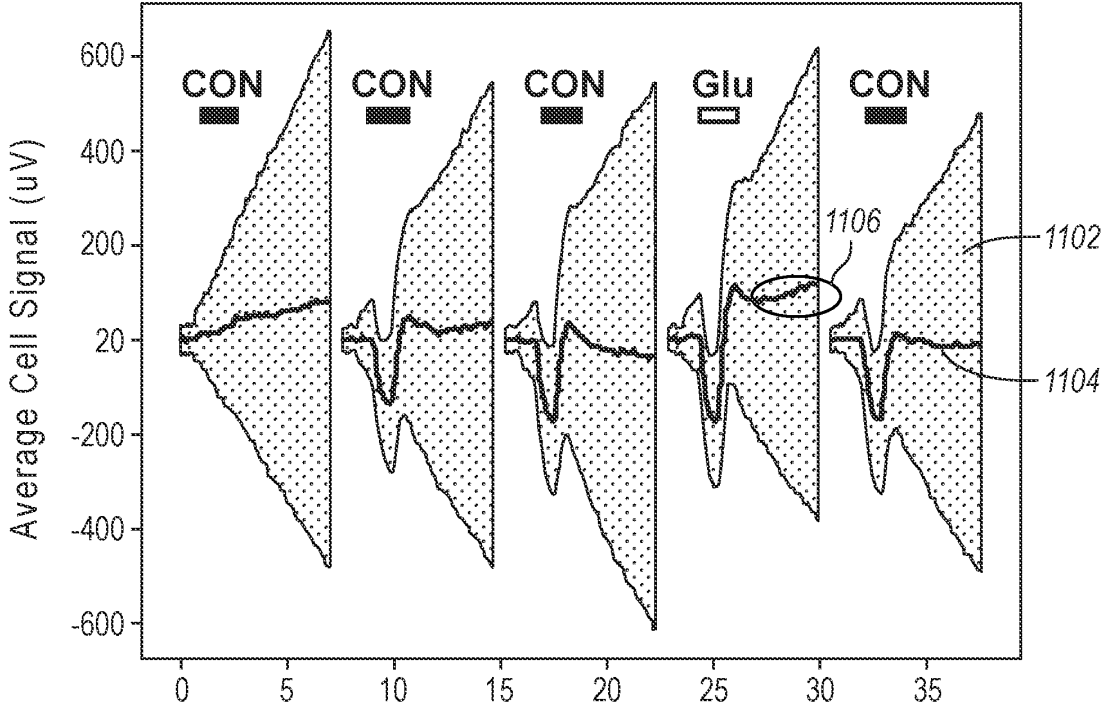


FIG. 11A

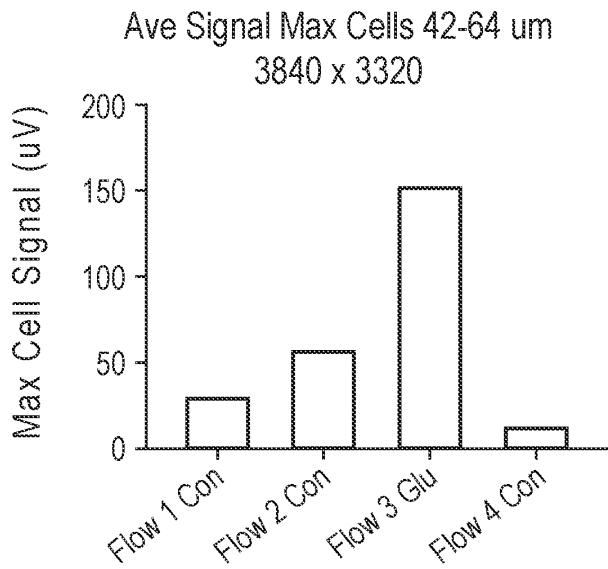


FIG. 11B

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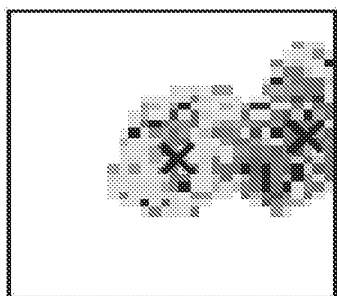


FIG. 12A

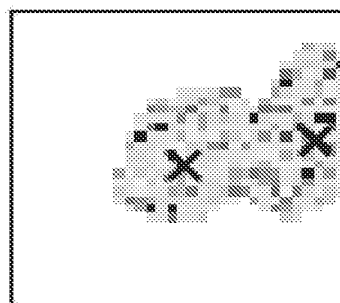


FIG. 12B

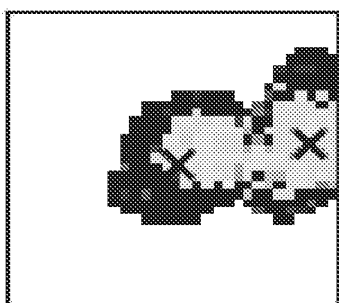


FIG. 12C

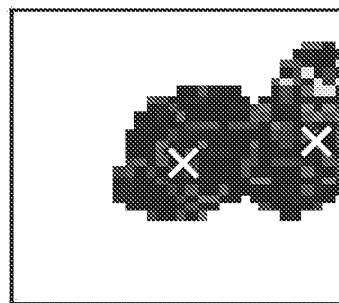
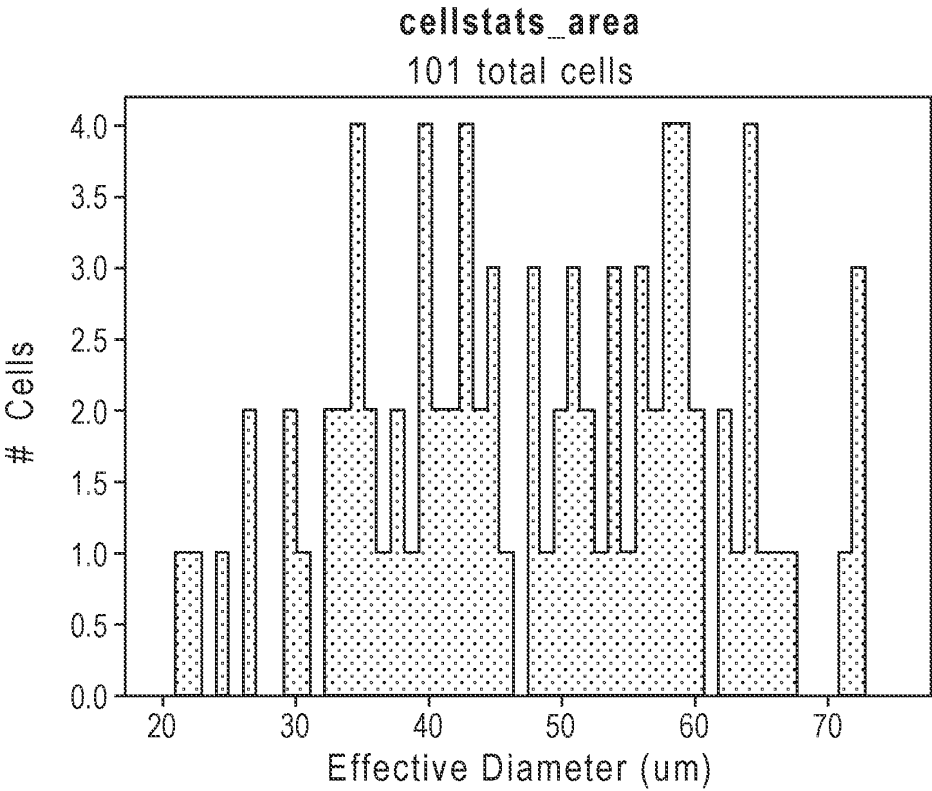


FIG. 12D

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q1:	39.447061670528335
std:	17.891138882090125
q3:	62.71958757023551
q2:	51.00735405469602
min:	14.54735755124041
max:	97.0109037119222
count:	101
iqr:	23.272525899707176
mode:	34.76851851851852
mean:	51.942336929881996
# of Cells:	101

FIG. 13