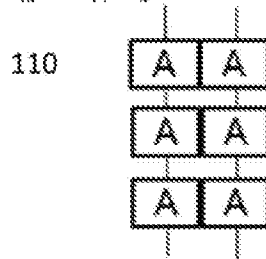


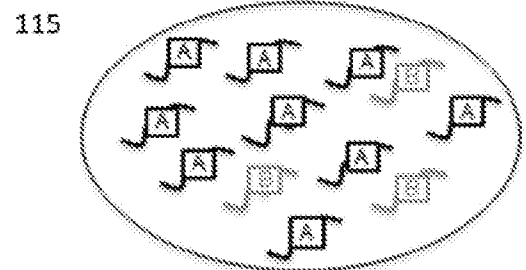
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Maternal homozygous sites

(genotyping maternal buffy coat)

**Maternal plasma DNA**

(Massively parallel sequencing)



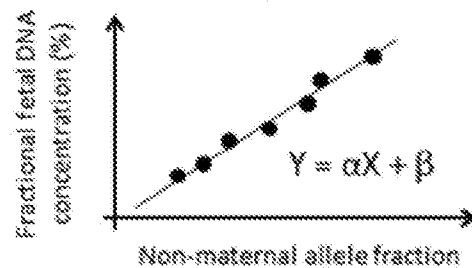
120

Mapping reads and tallying allelic counts
on maternal homozygous sites

130

Non-maternal allele fraction: $\frac{\sum B}{\sum(A+B)} \times 100\%$

140



Building recalibration curve

FIG. 1

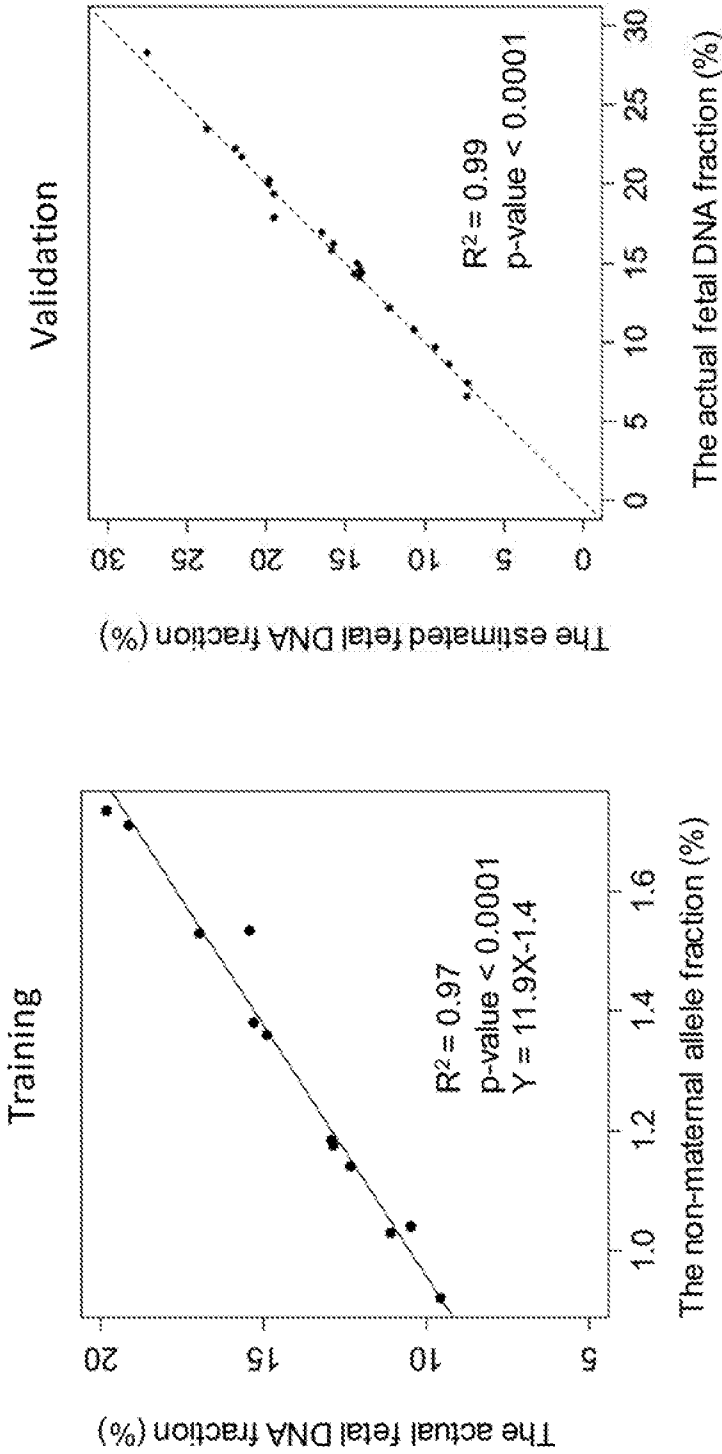
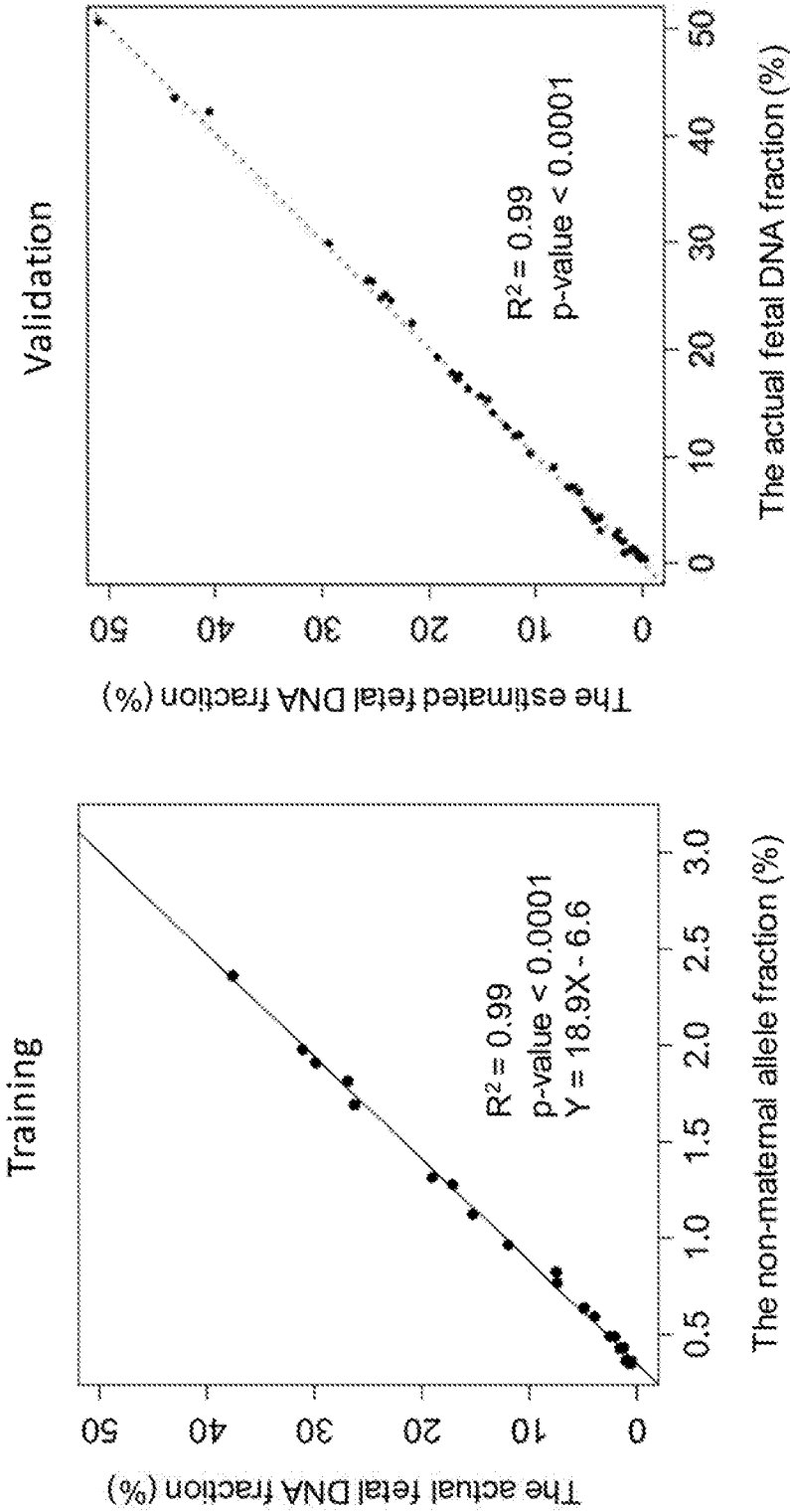
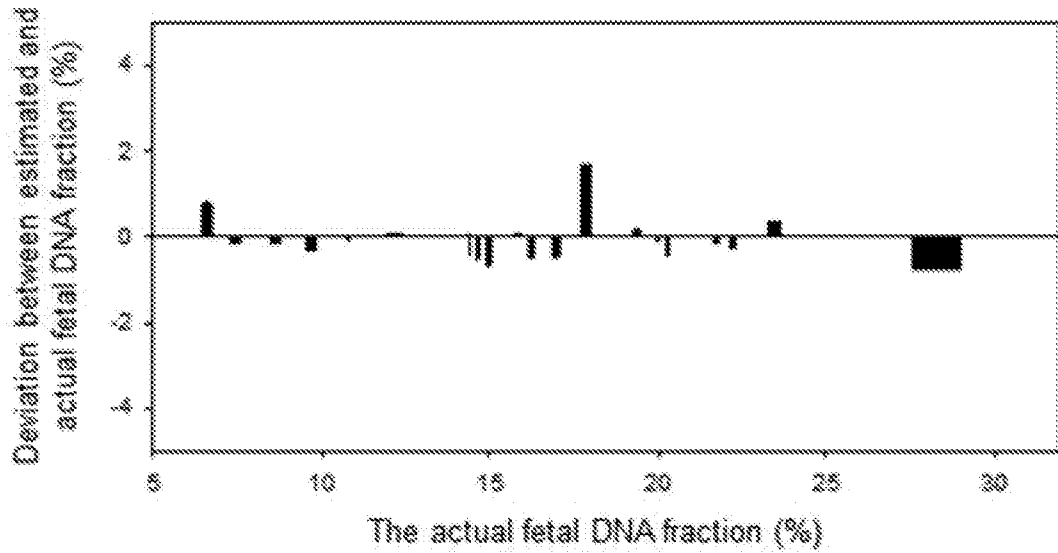
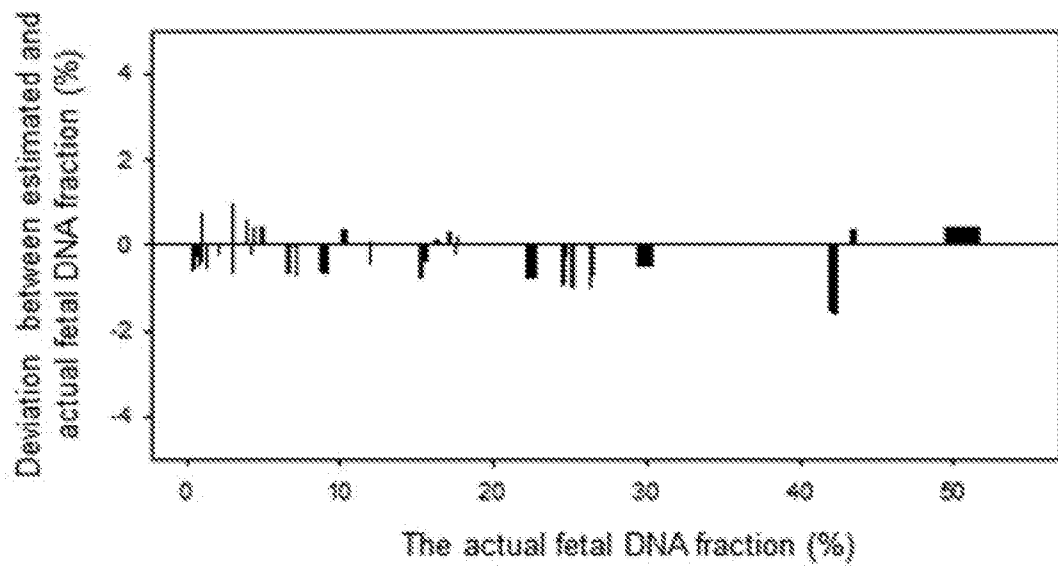


FIG. 2B

FIG. 2A



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**FIG. 4A****FIG. 4B**

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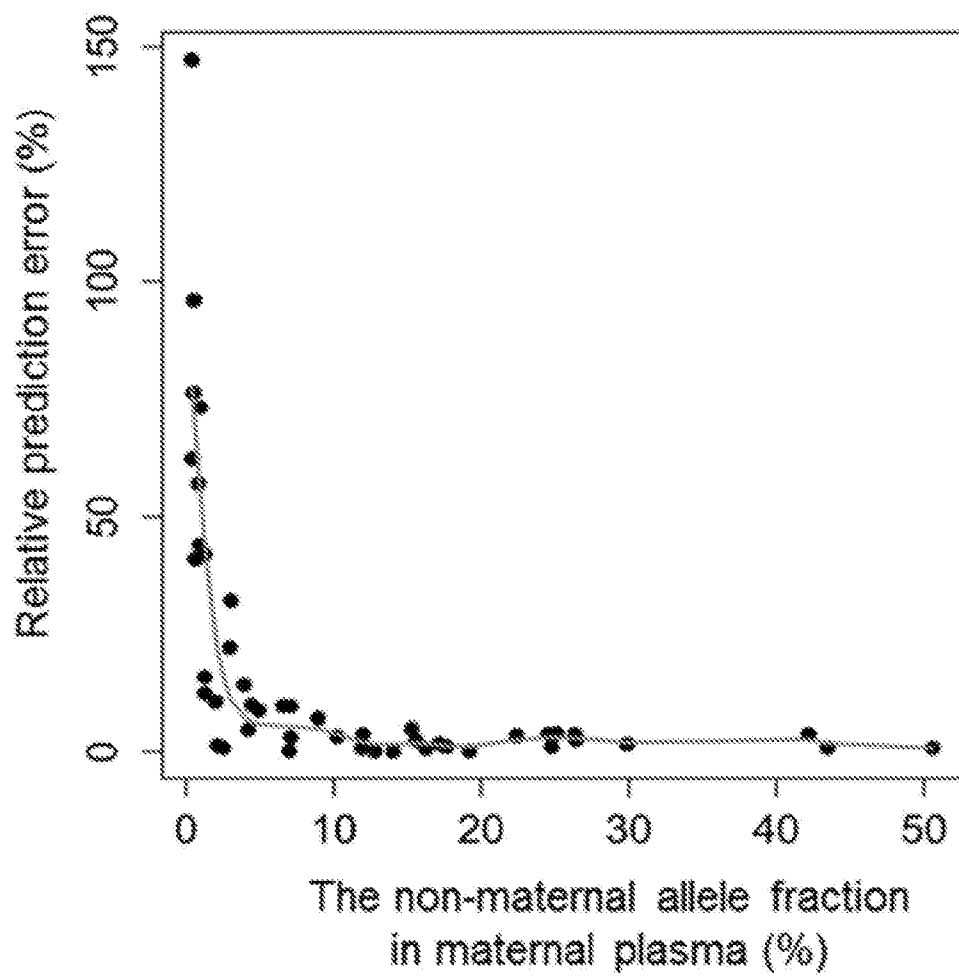


FIG. 5

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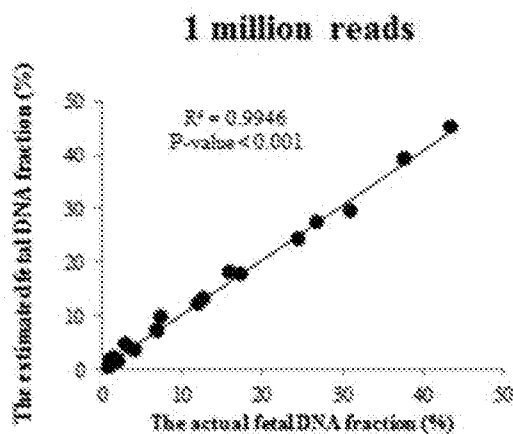


FIG. 6A

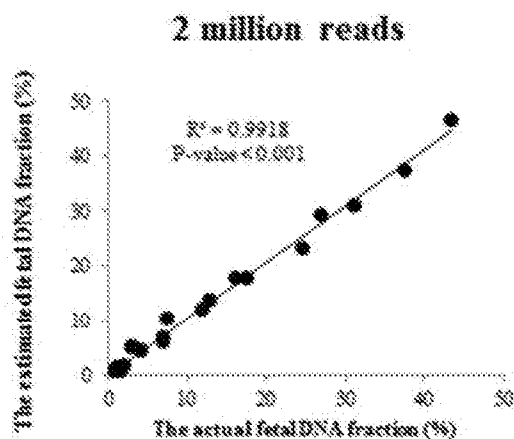


FIG. 6B

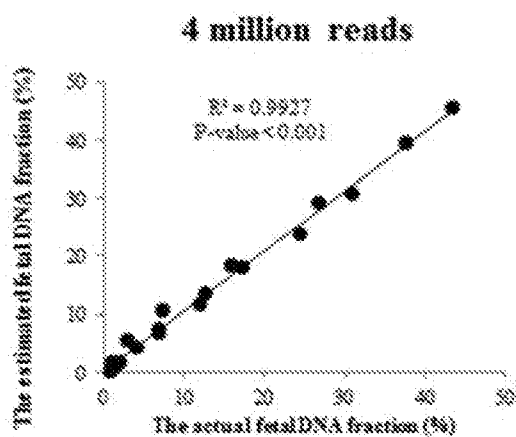


FIG. 6C

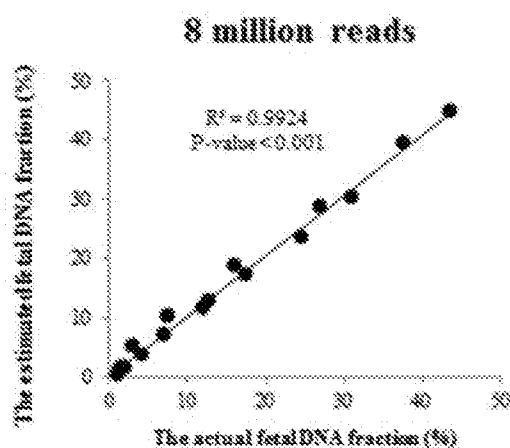


FIG. 6D

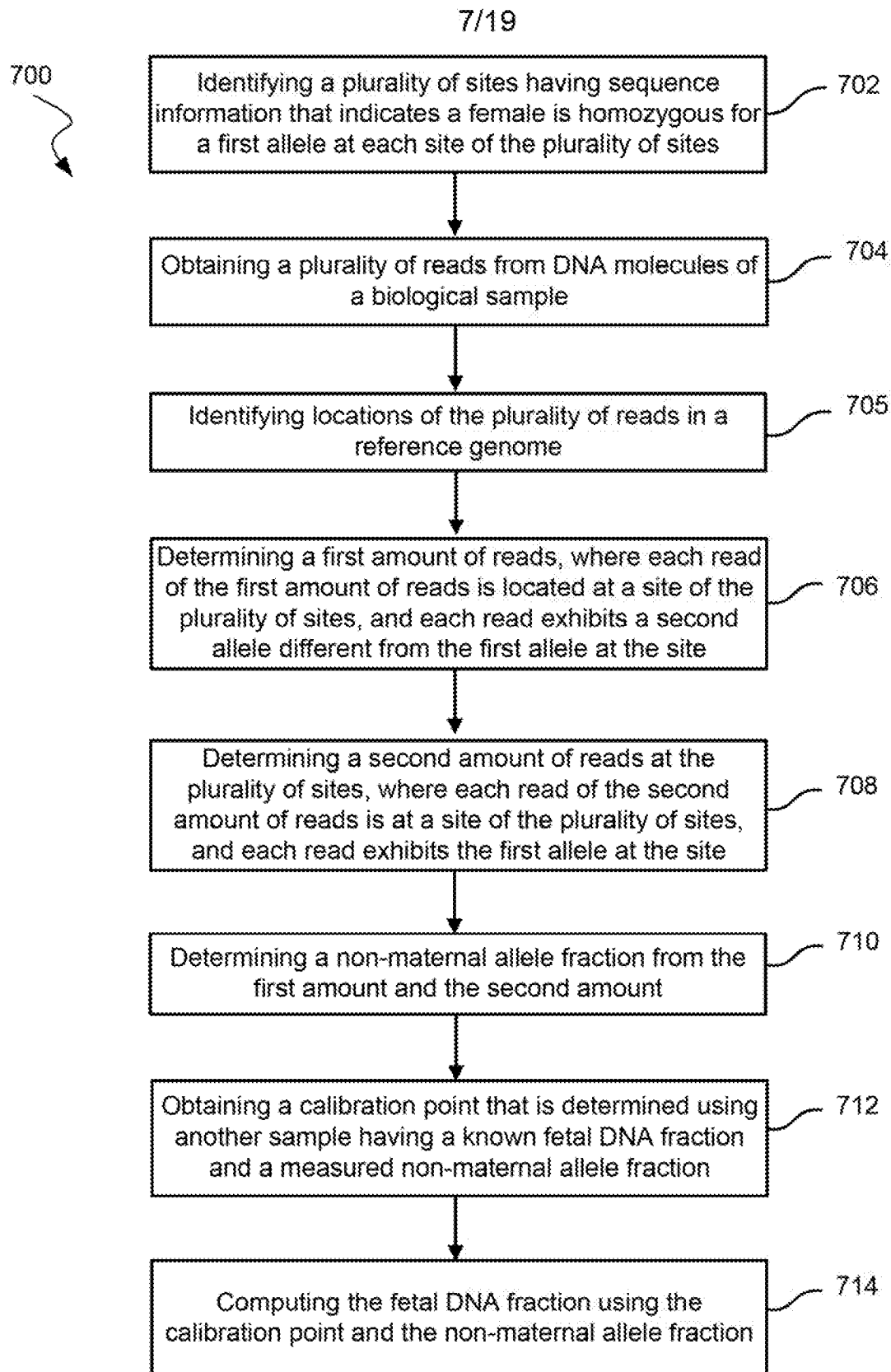


FIG. 7

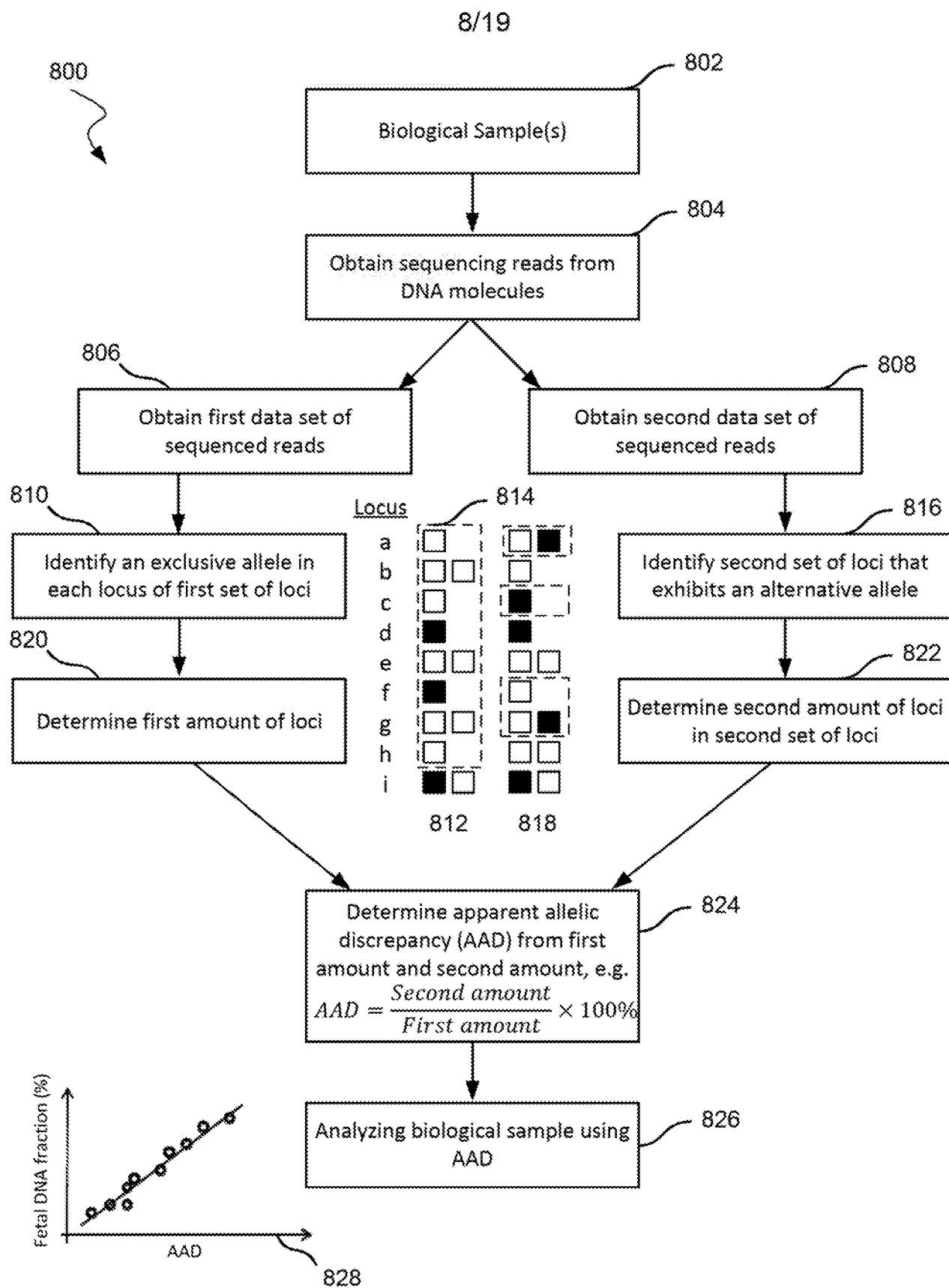
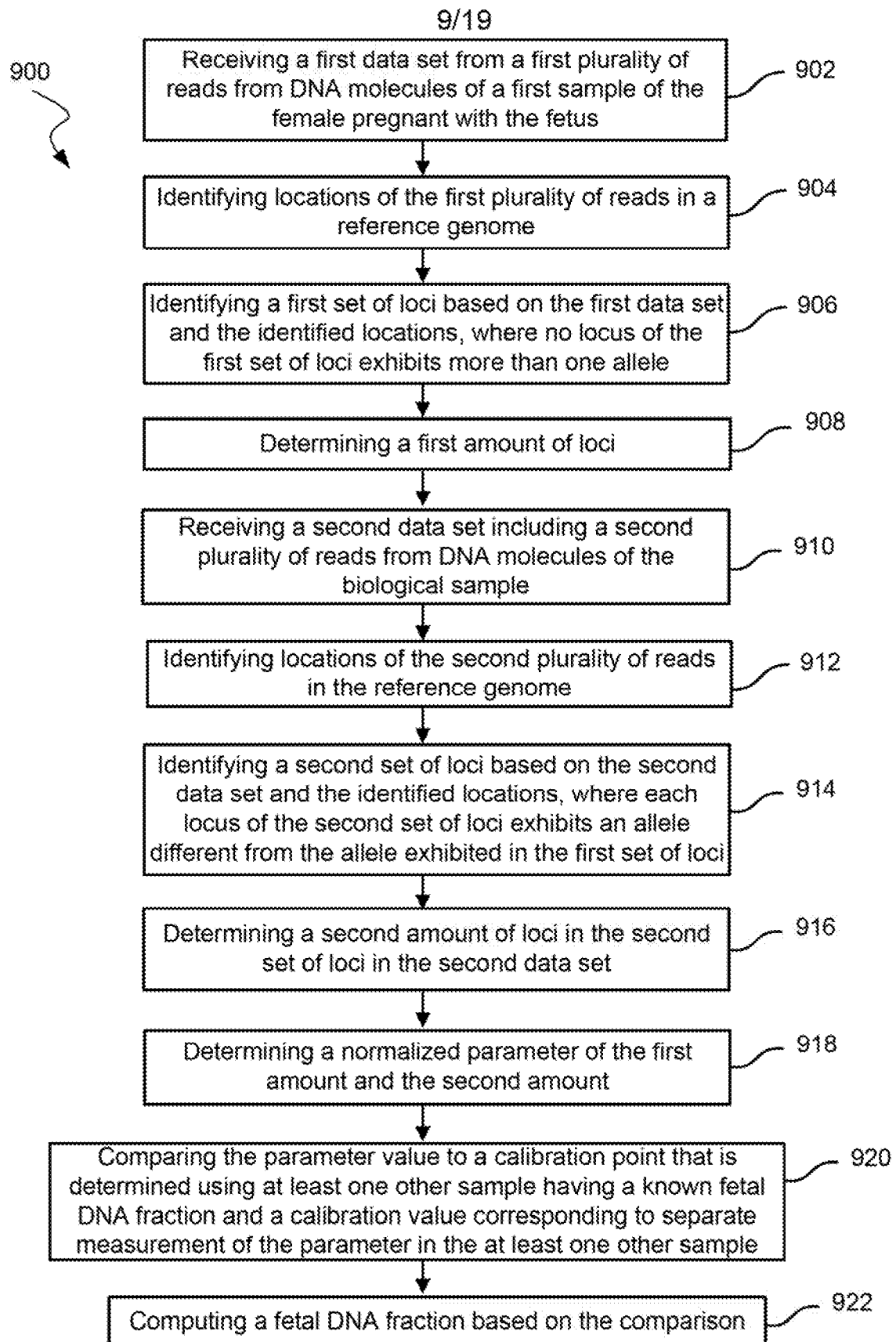


FIG. 8



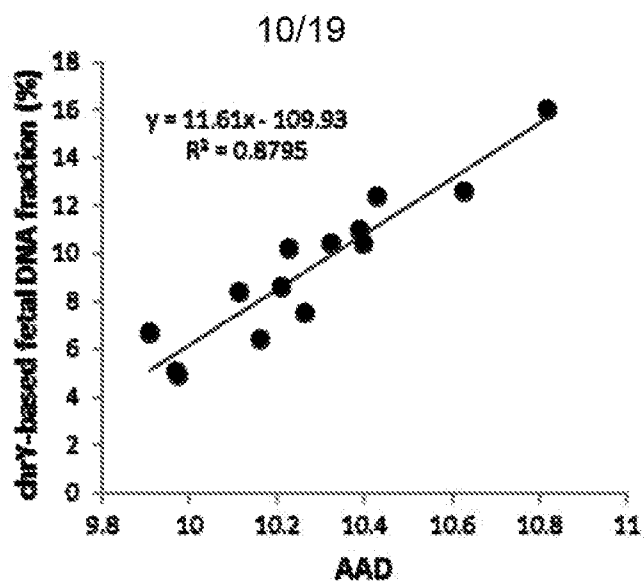


FIG. 10A

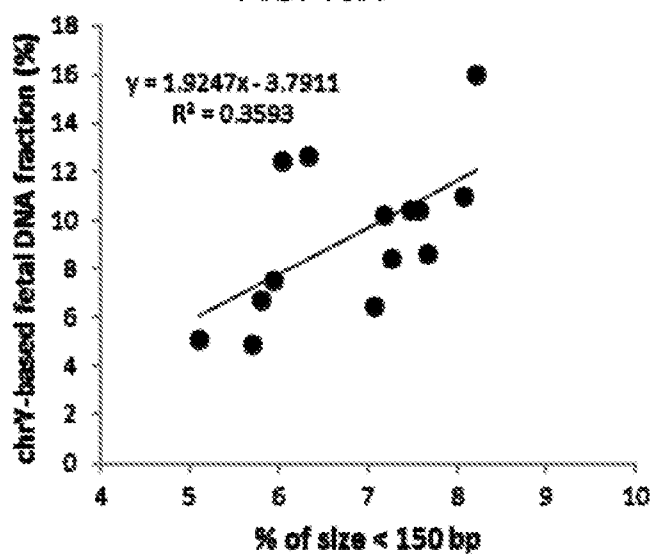


FIG. 10B

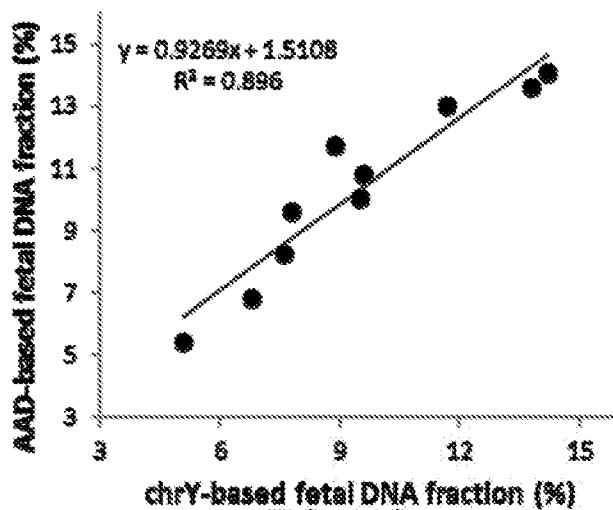


FIG. 10C

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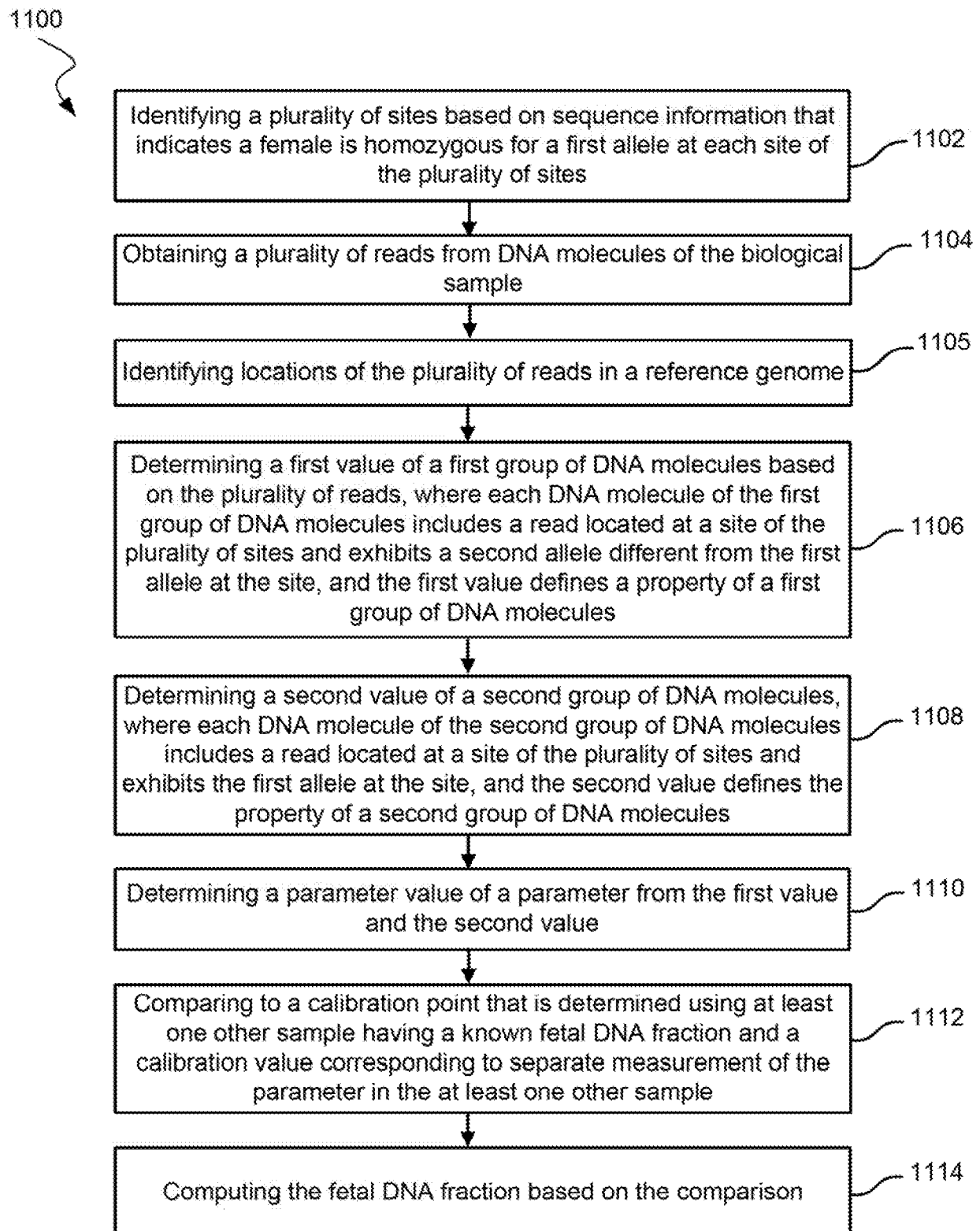
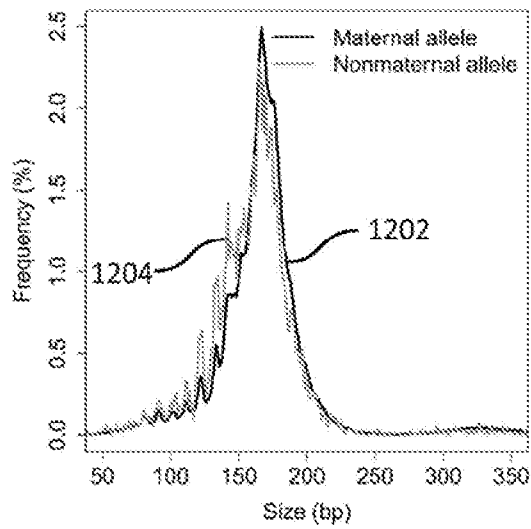
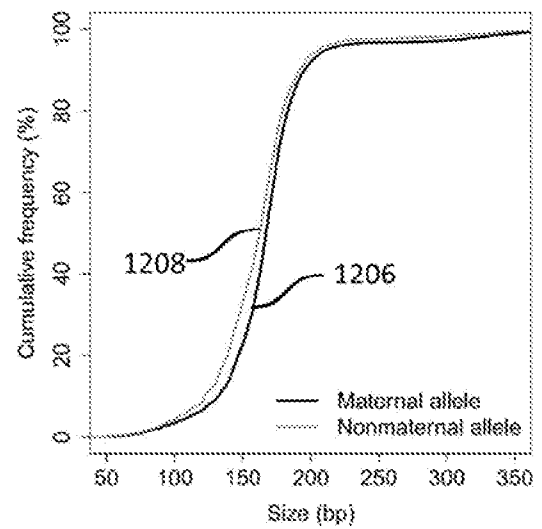
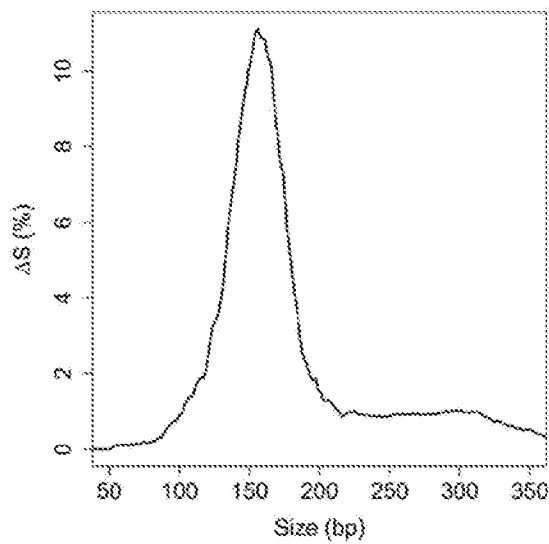
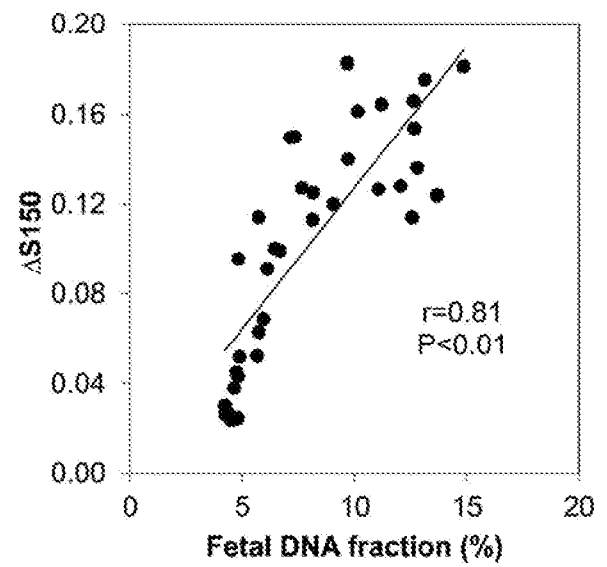


FIG. 11

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**FIG. 12A****FIG. 12B****FIG. 12C****FIG. 12D**

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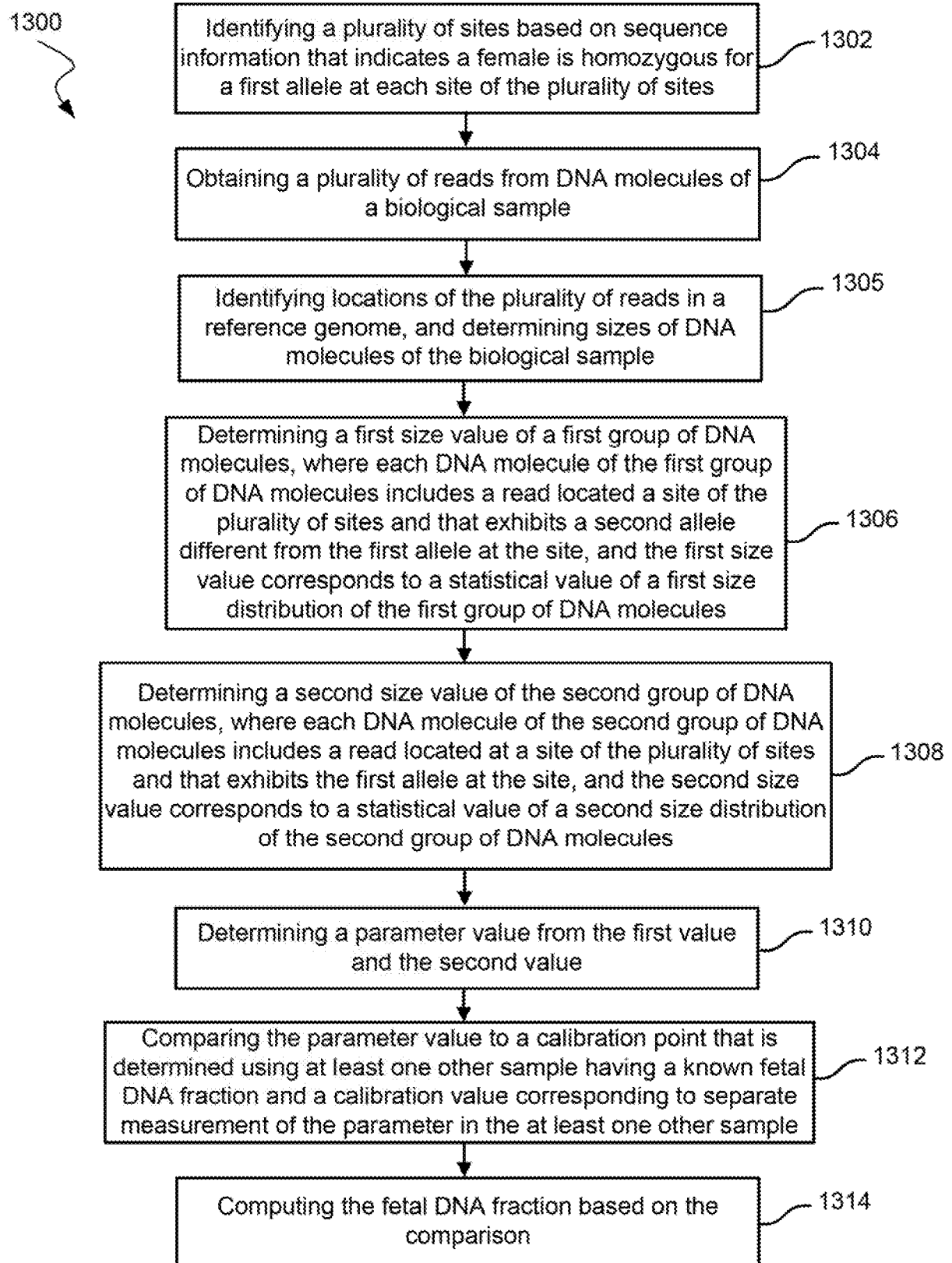


FIG. 13

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	Size-based fetal DNA fraction (%)	AAD-based fetal DNA fraction (%)	Absolute Difference
Monozygotic twins	13	14	1
Monozygotic twins	9	8	1
Monozygotic twins	17	19	2
Dizygotic twins	10	18	8
Dizygotic twins	15	19	4
Dizygotic twins	10	15	5

FIG. 14

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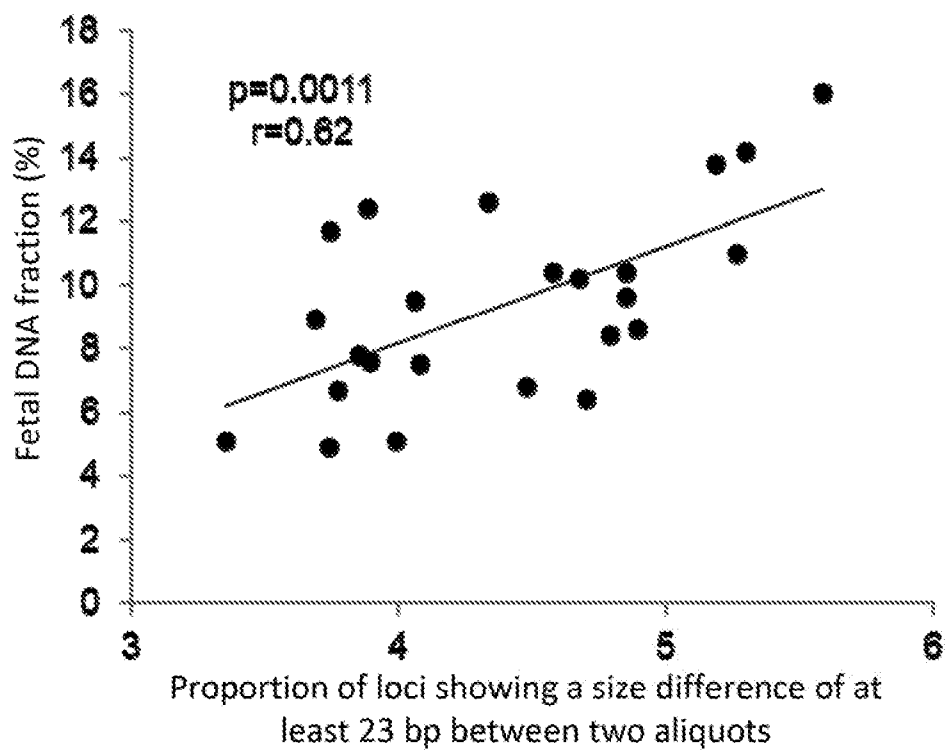


FIG. 15

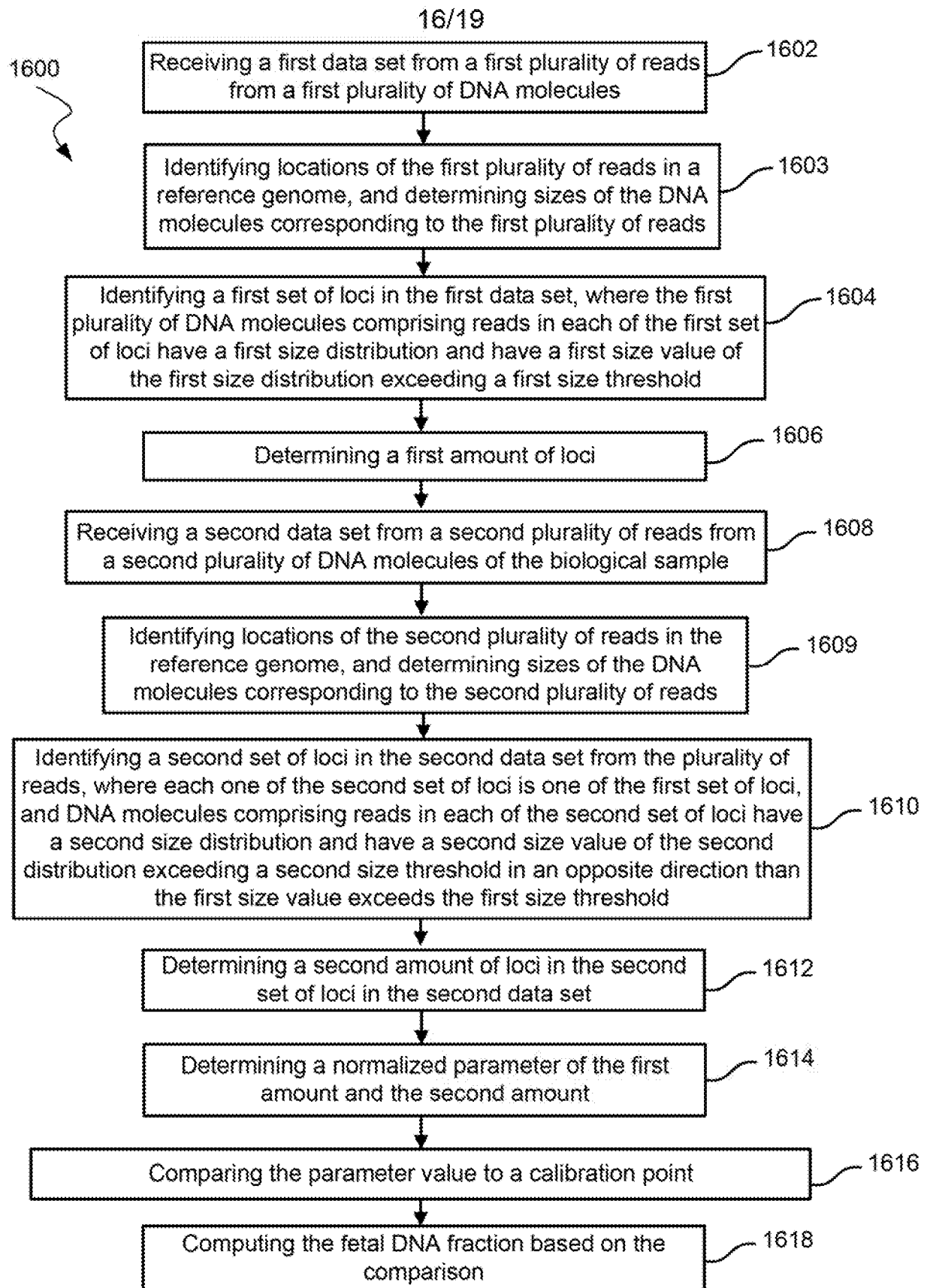


FIG. 16

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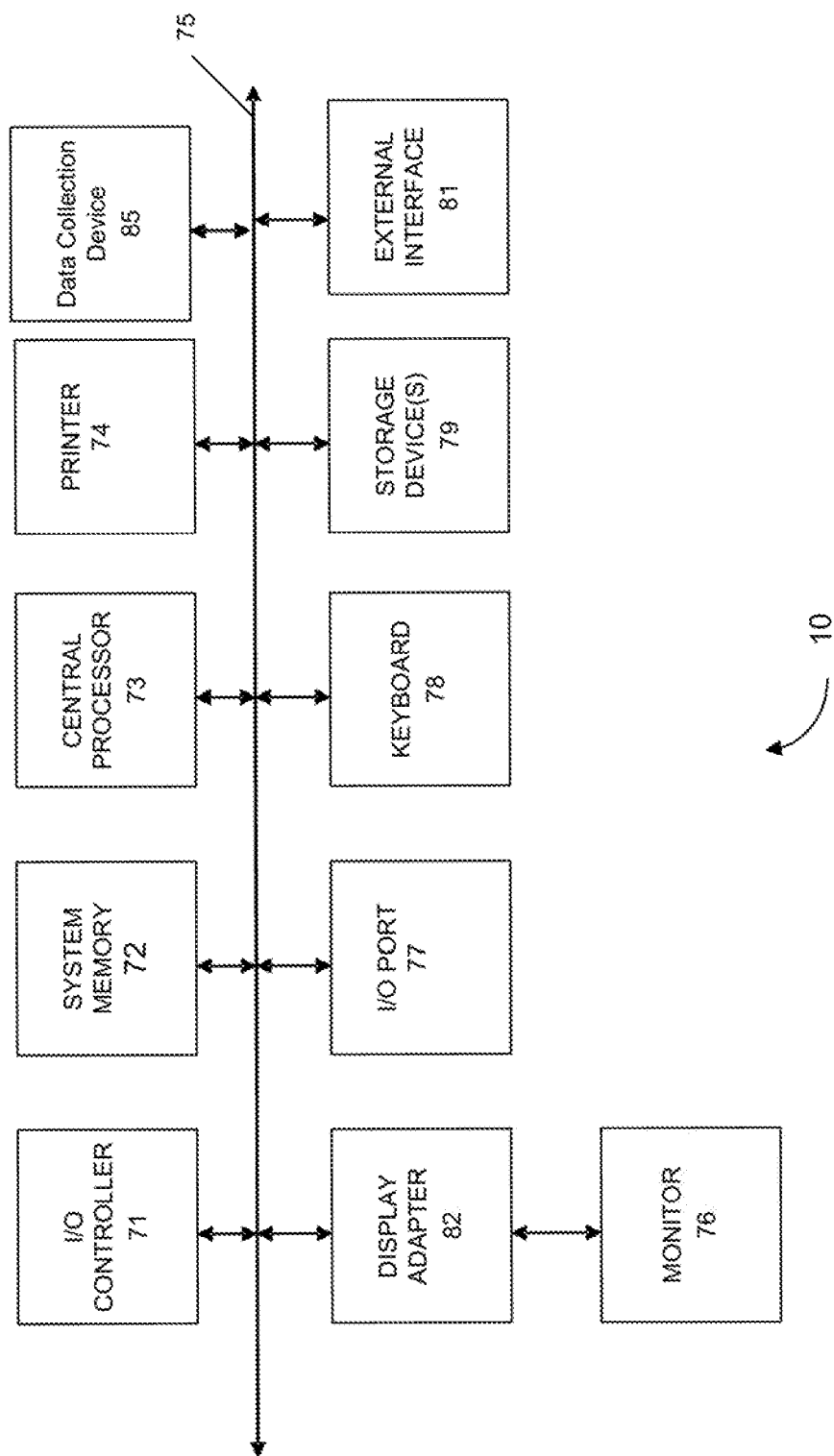


FIG. 17

1800

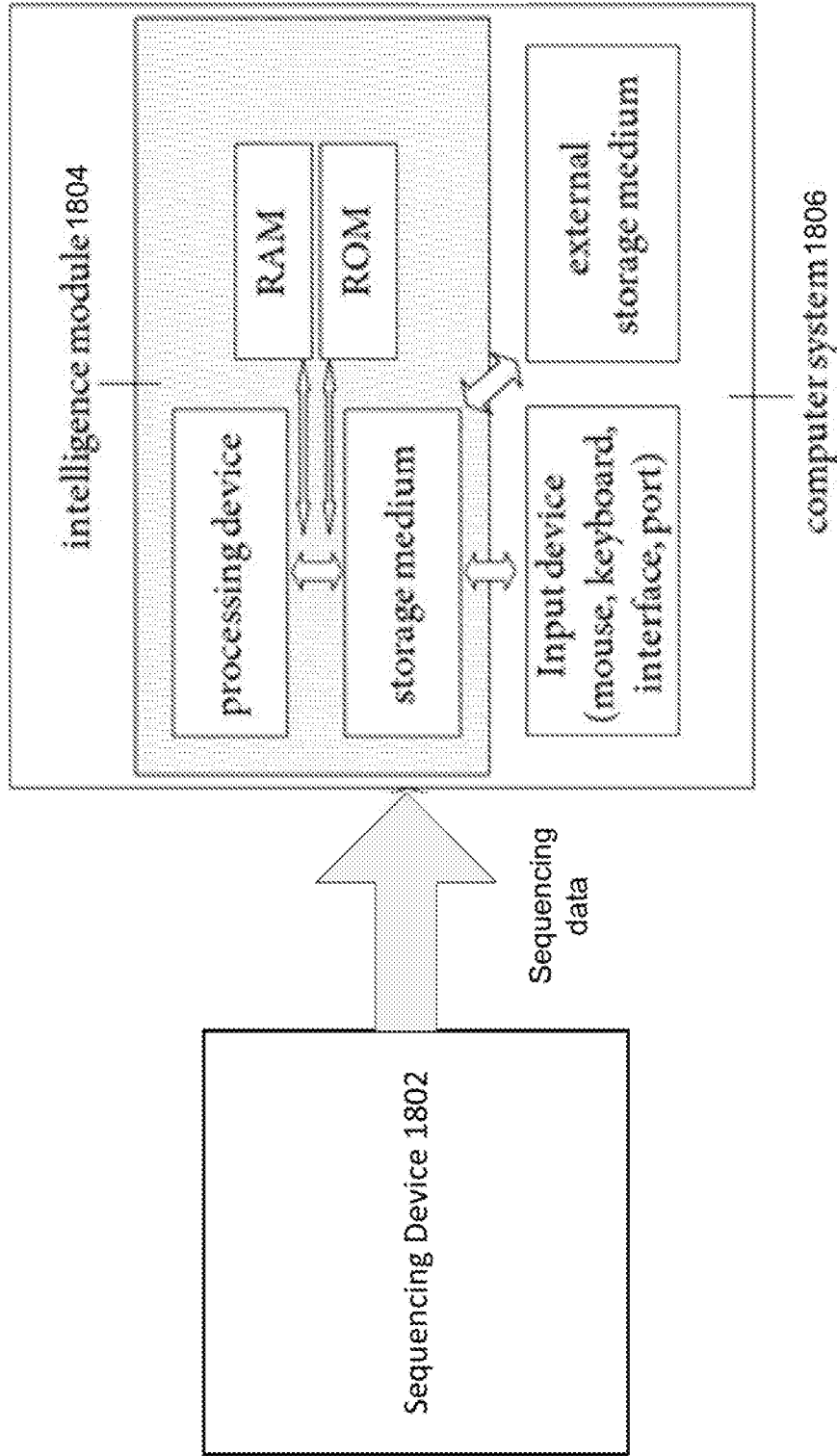
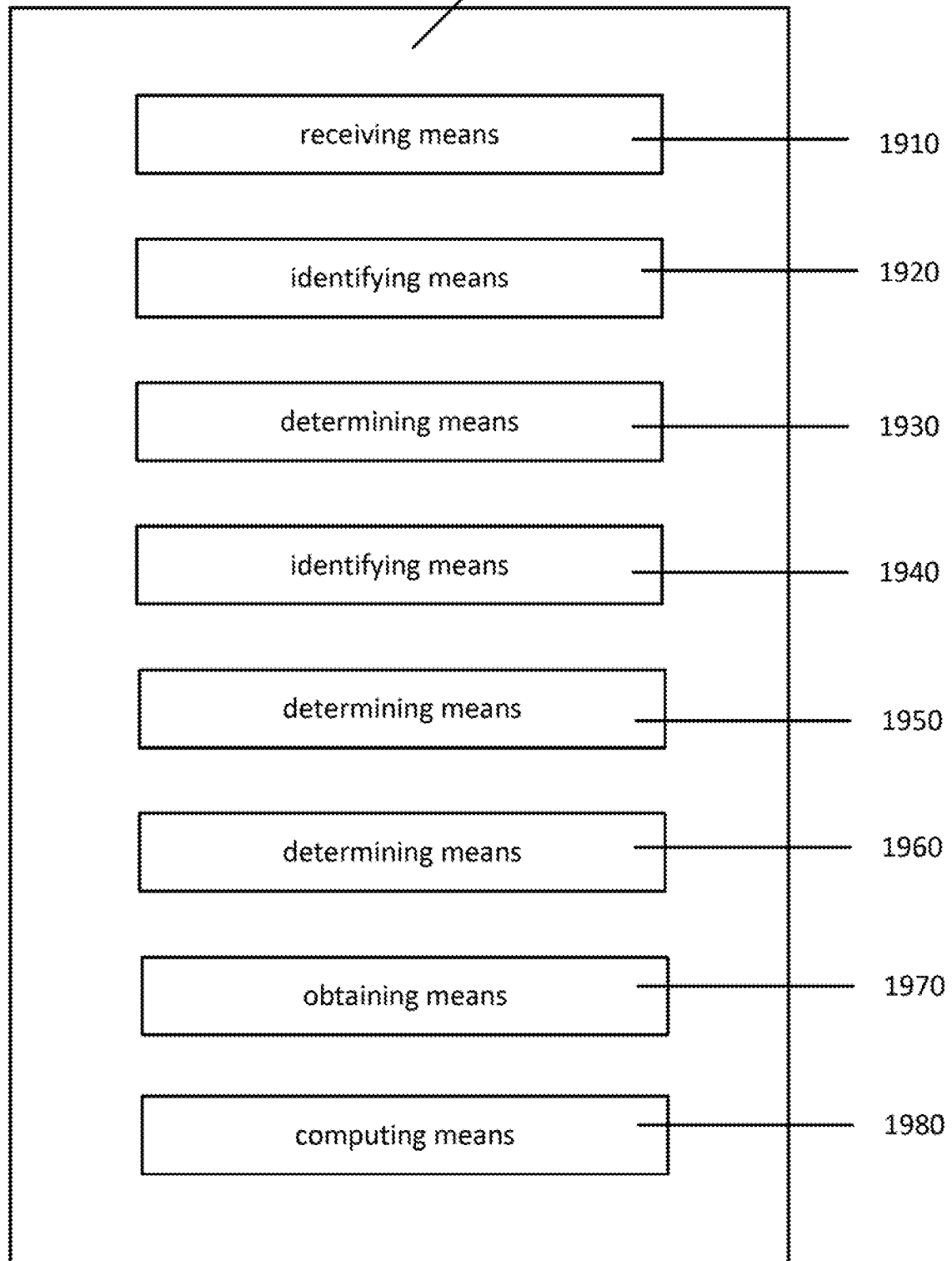


FIG. 18

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Computer system 1900

**FIG. 19**