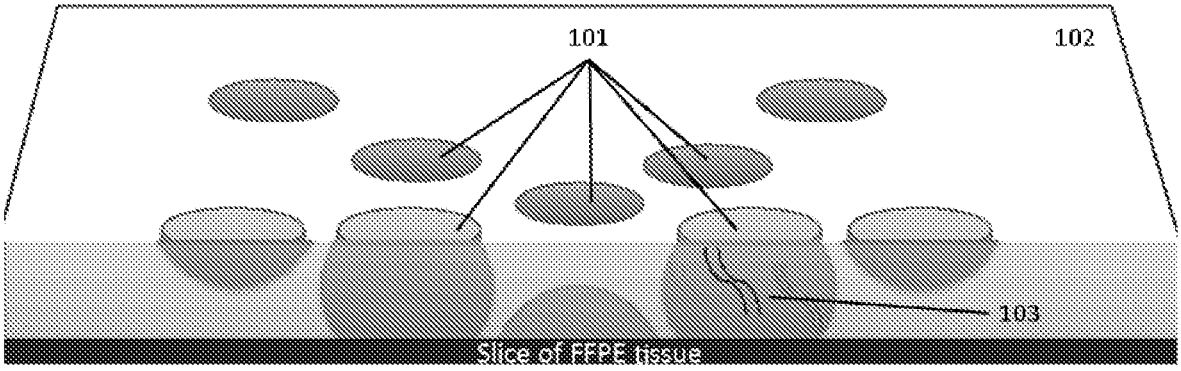



FIG. 1A

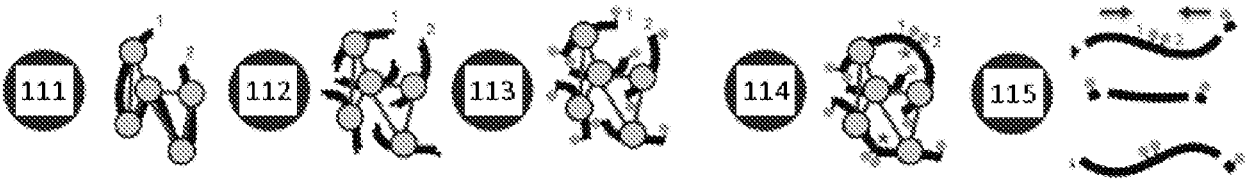



FIG. 1B

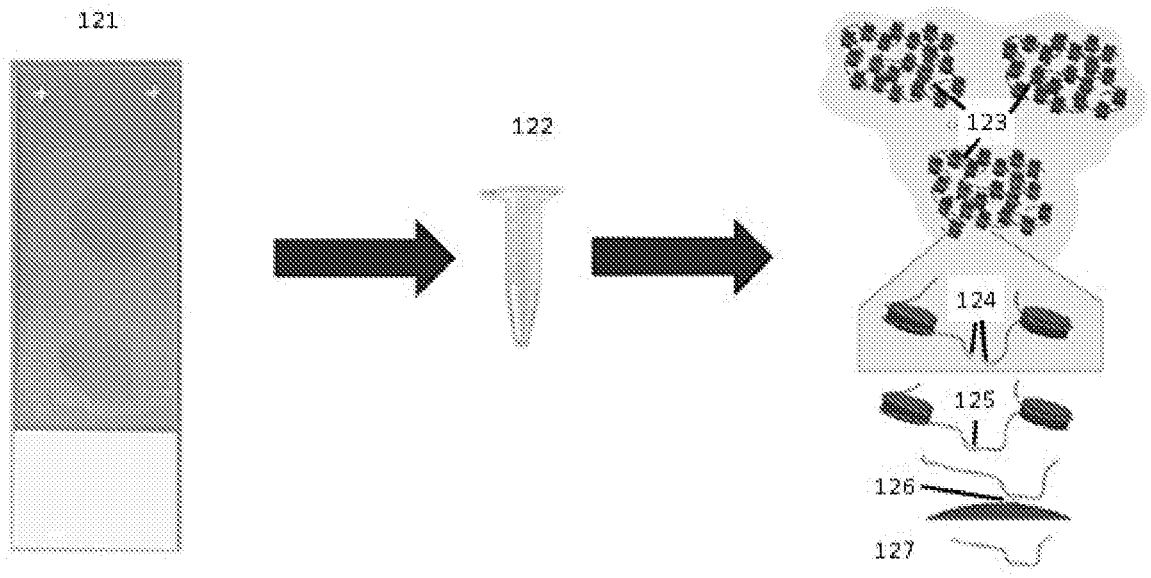



FIG. 1C

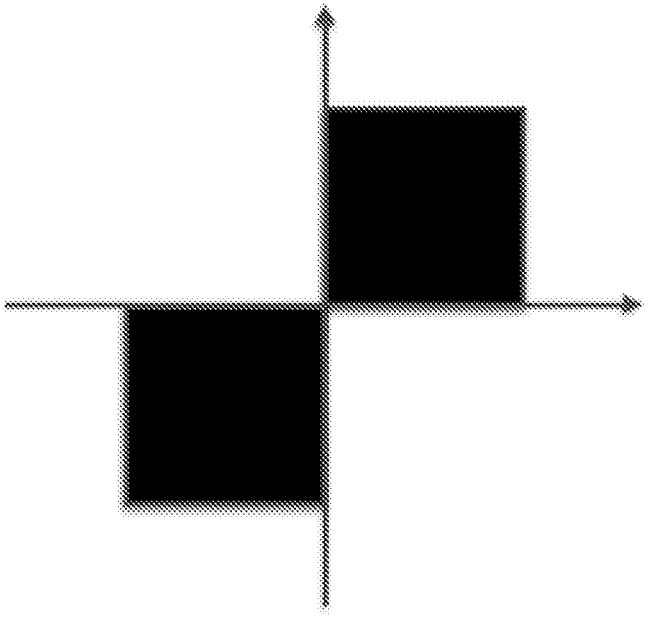


FIG. 2A

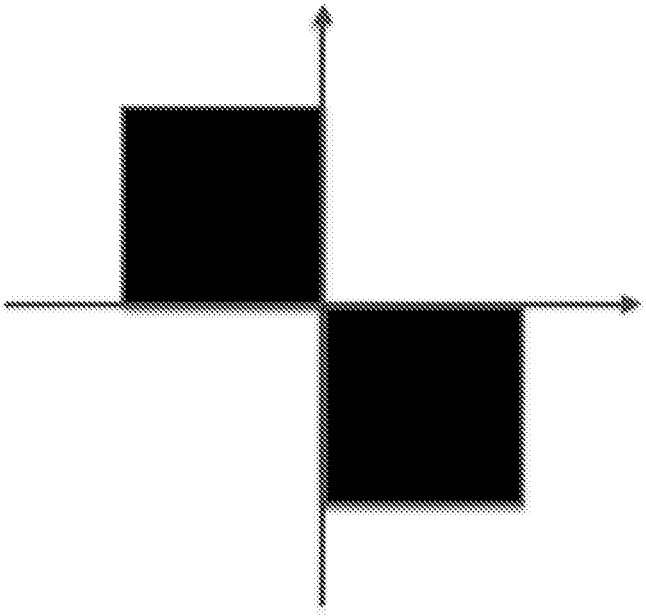


FIG. 2B

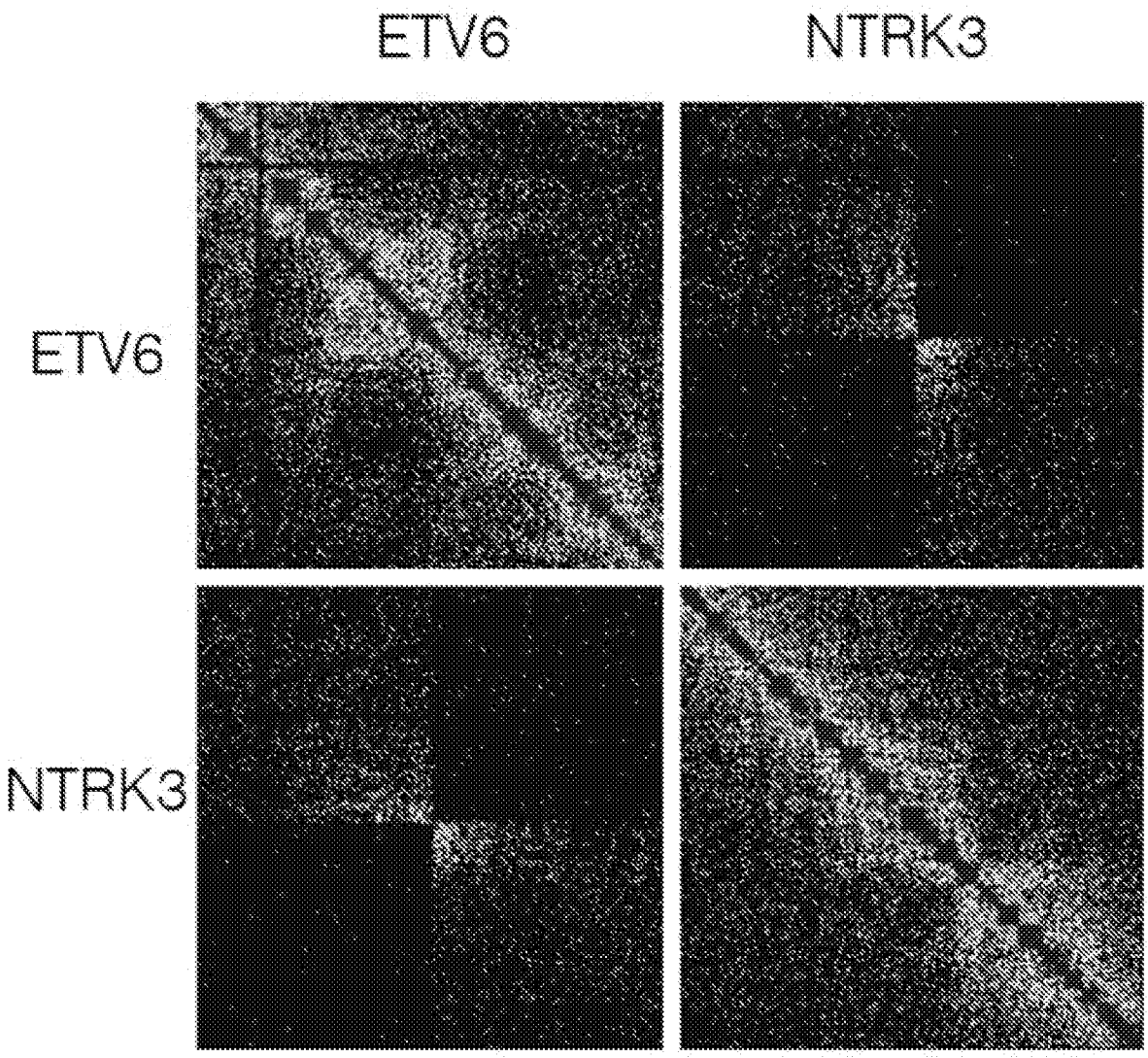



FIG. 3

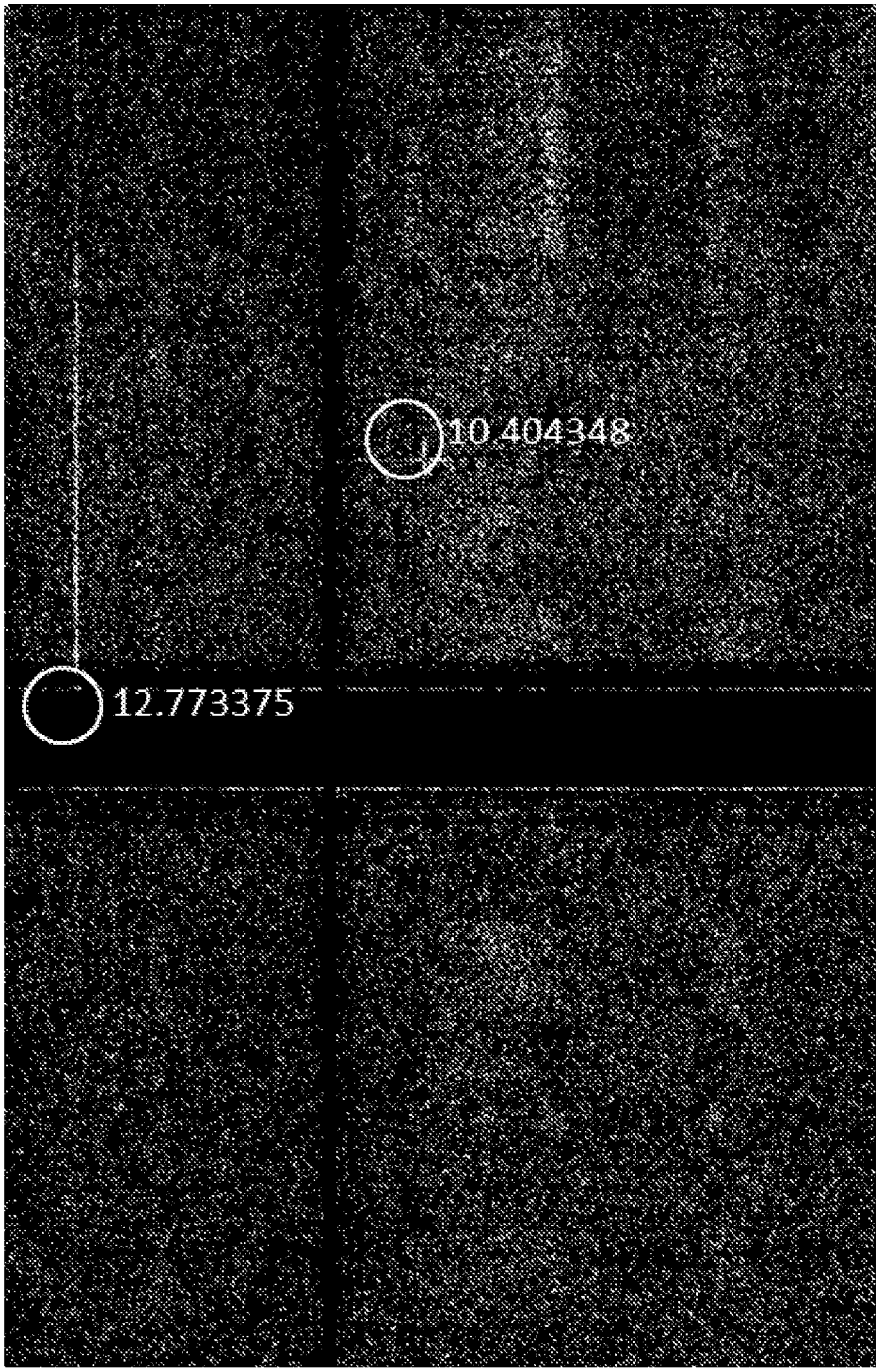



FIG. 4A

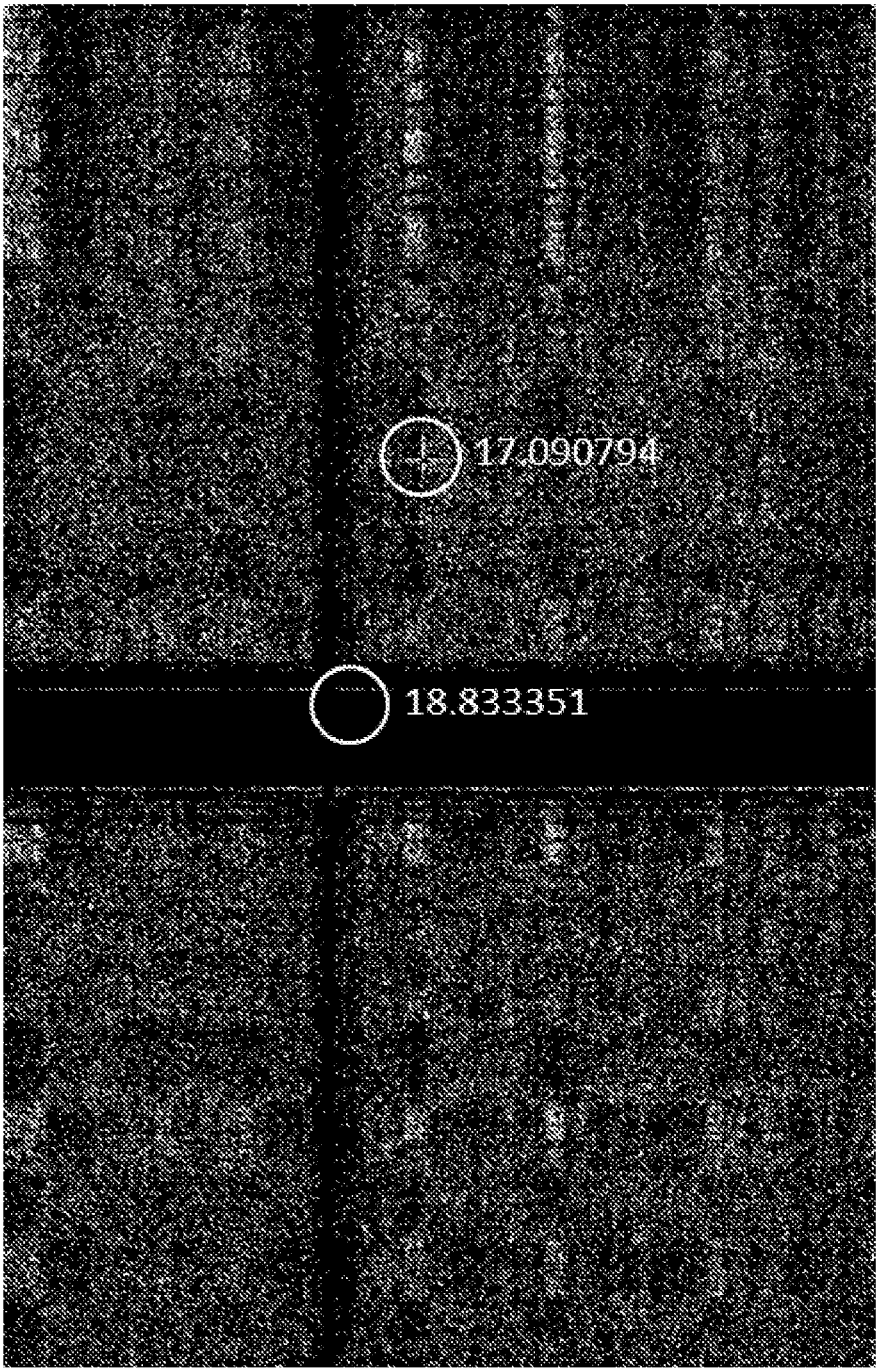



FIG. 4B

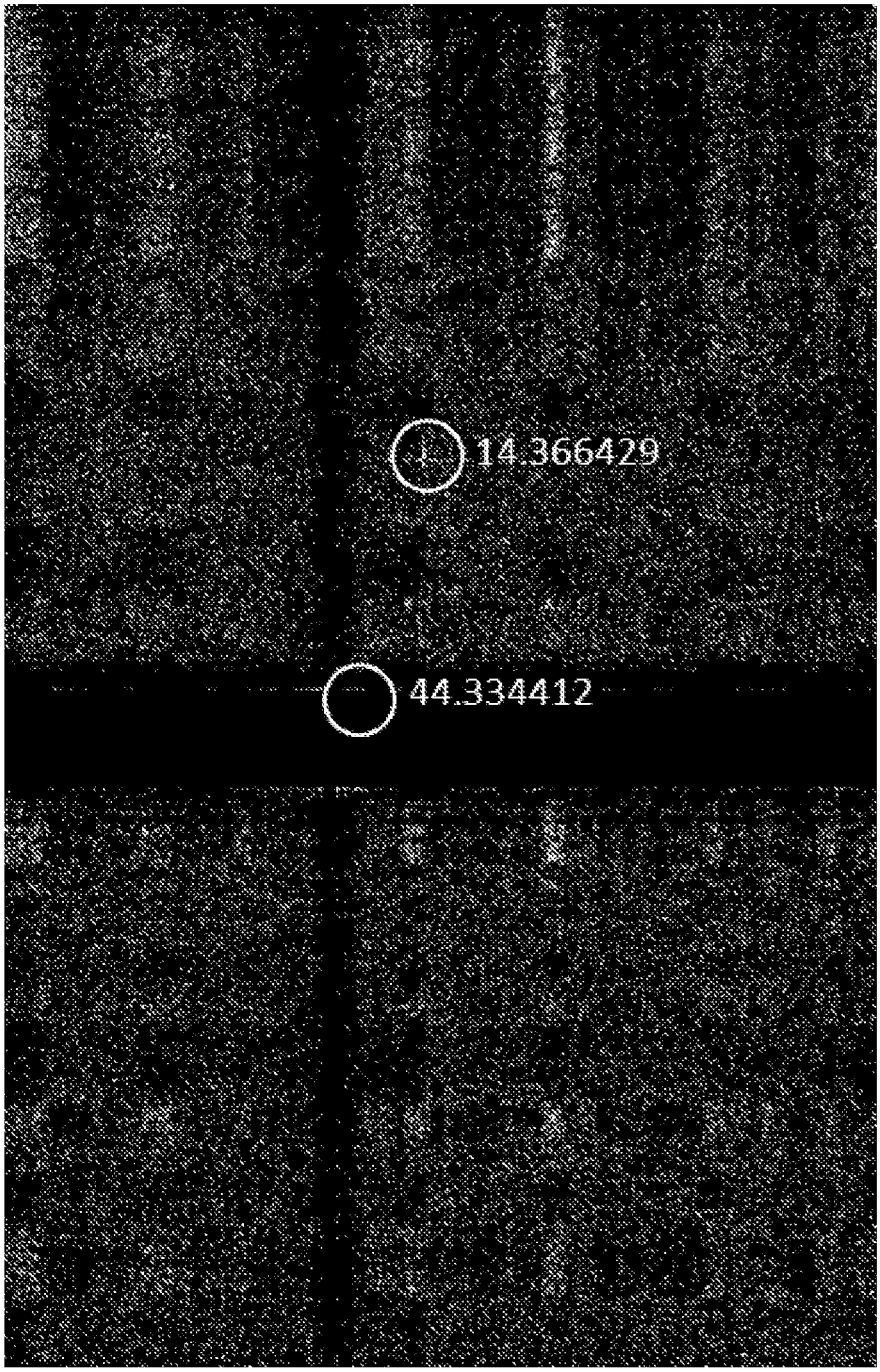



FIG. 4C

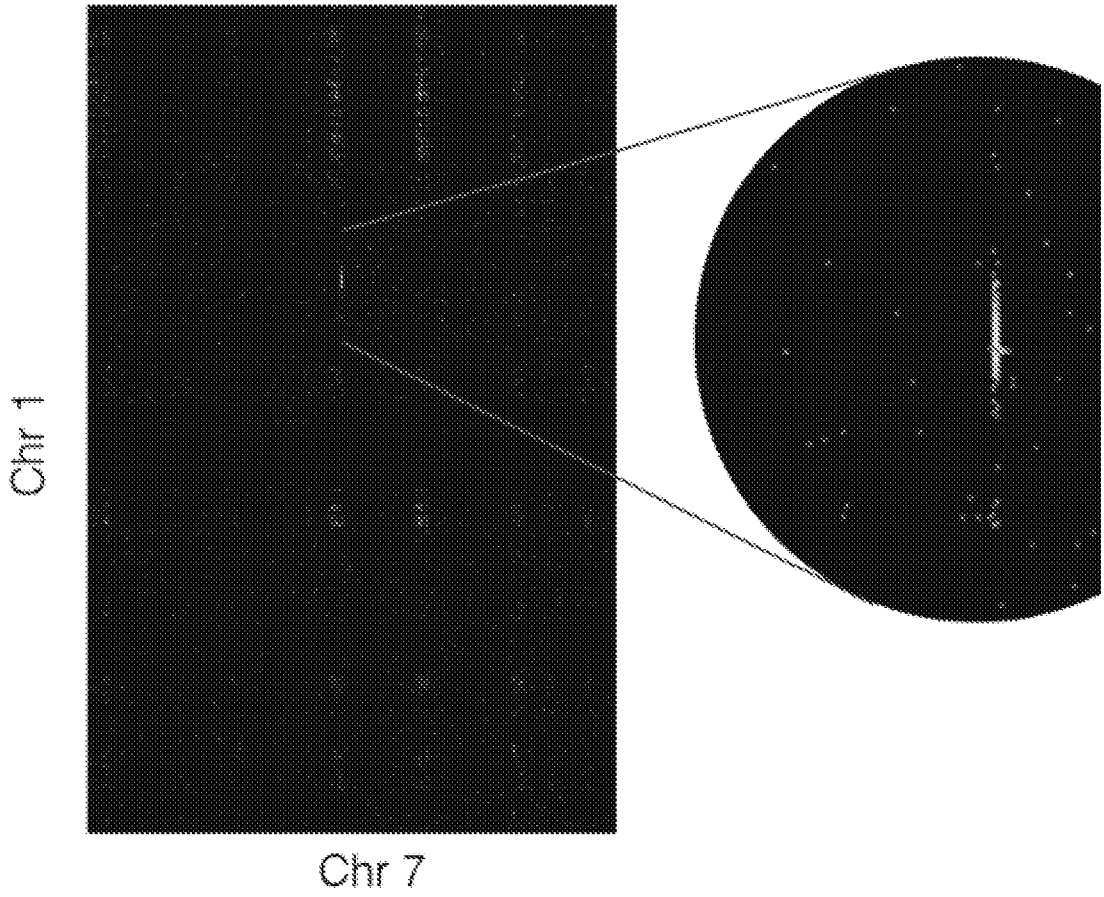



**FIG. 5A**

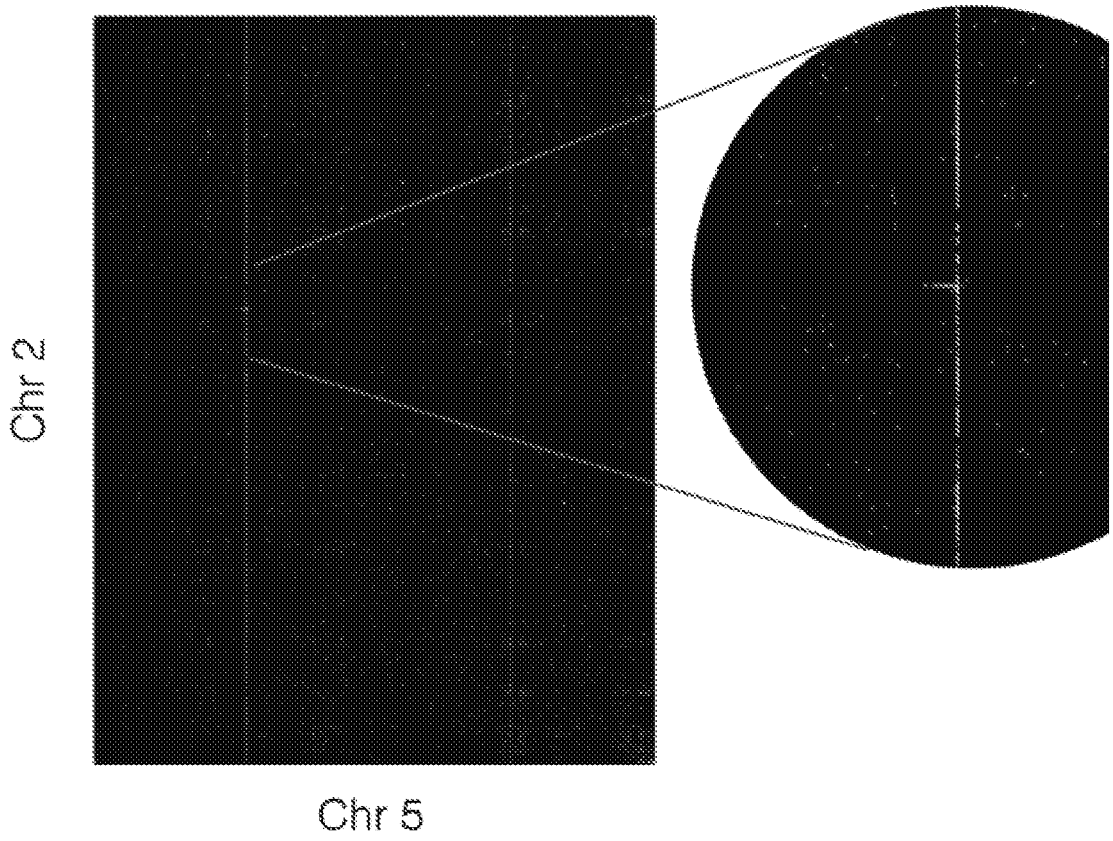



**FIG. 5B**

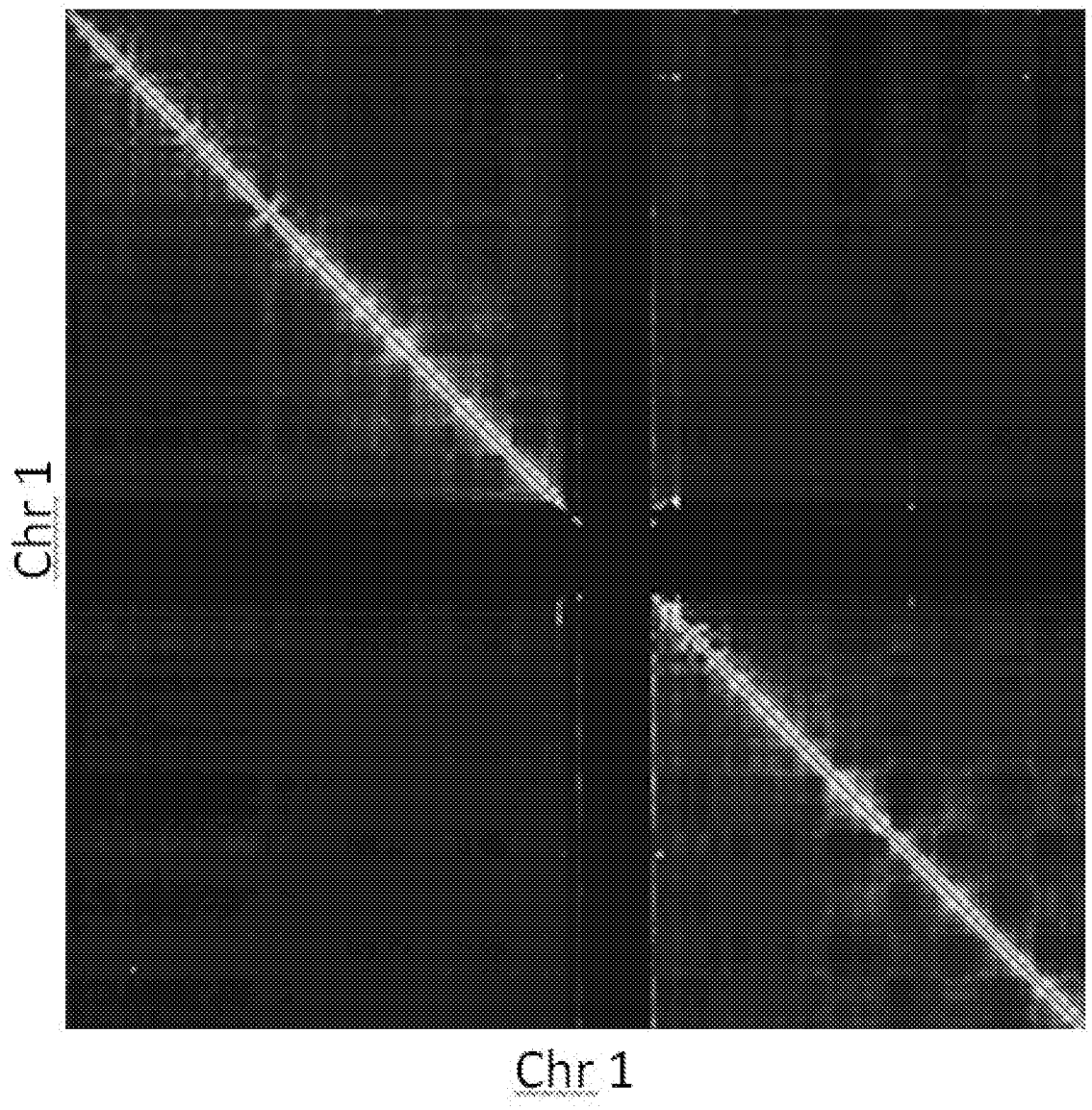



FIG. 5C

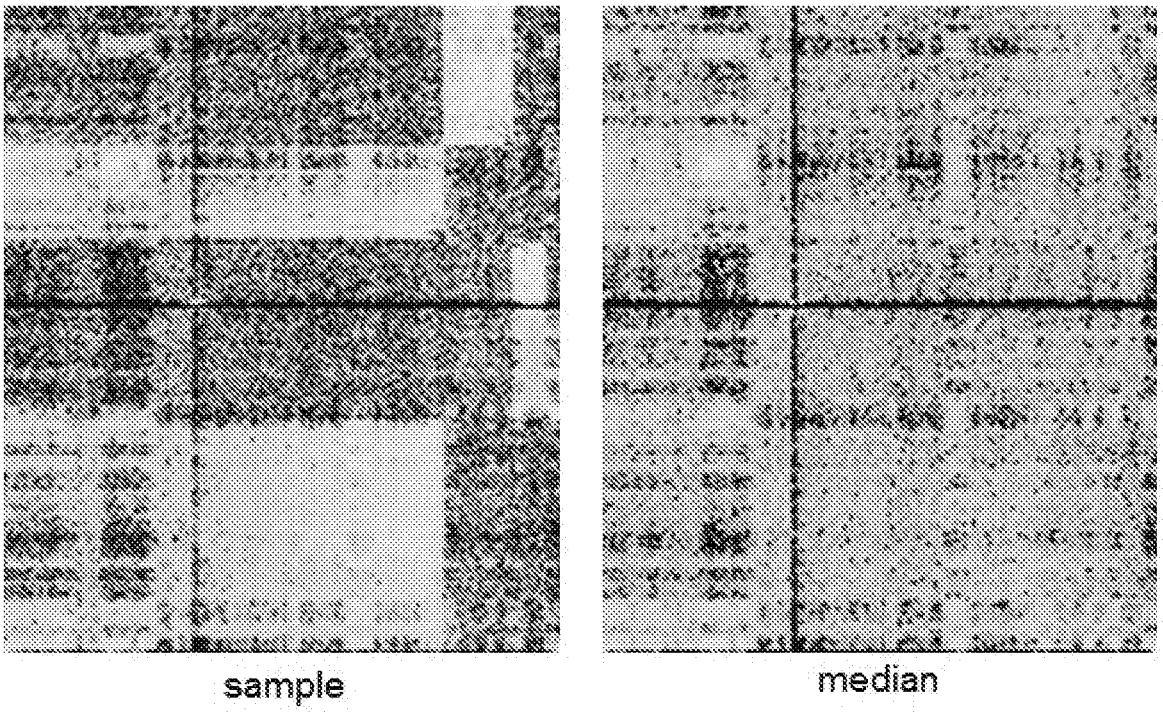



FIG. 6A

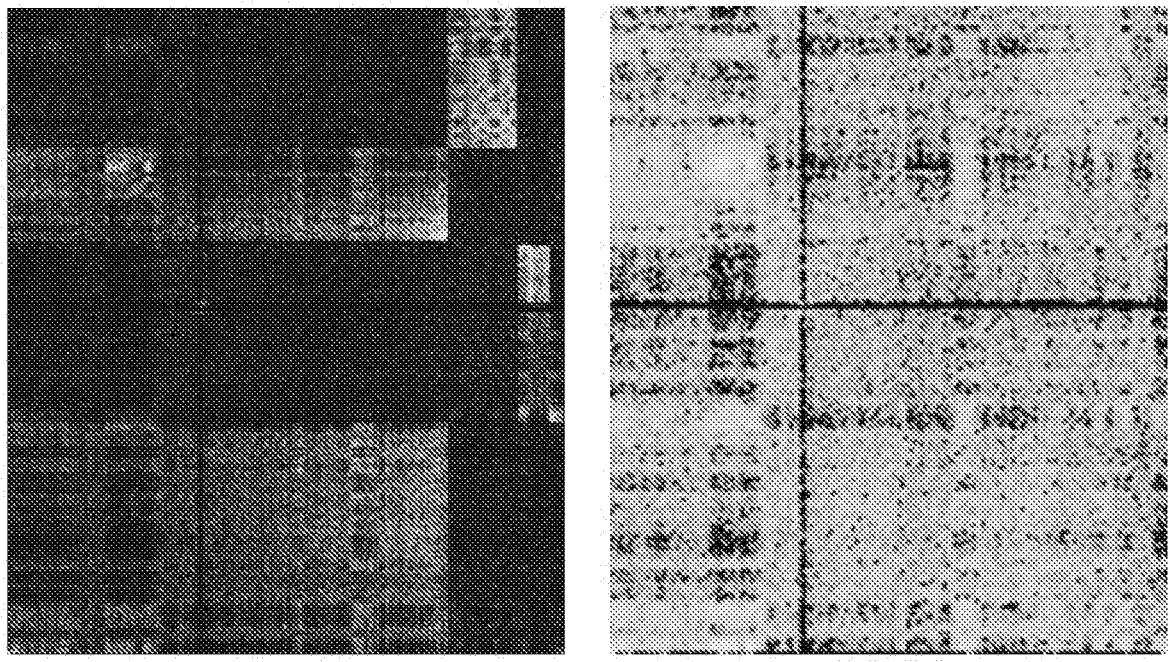



FIG. 6B

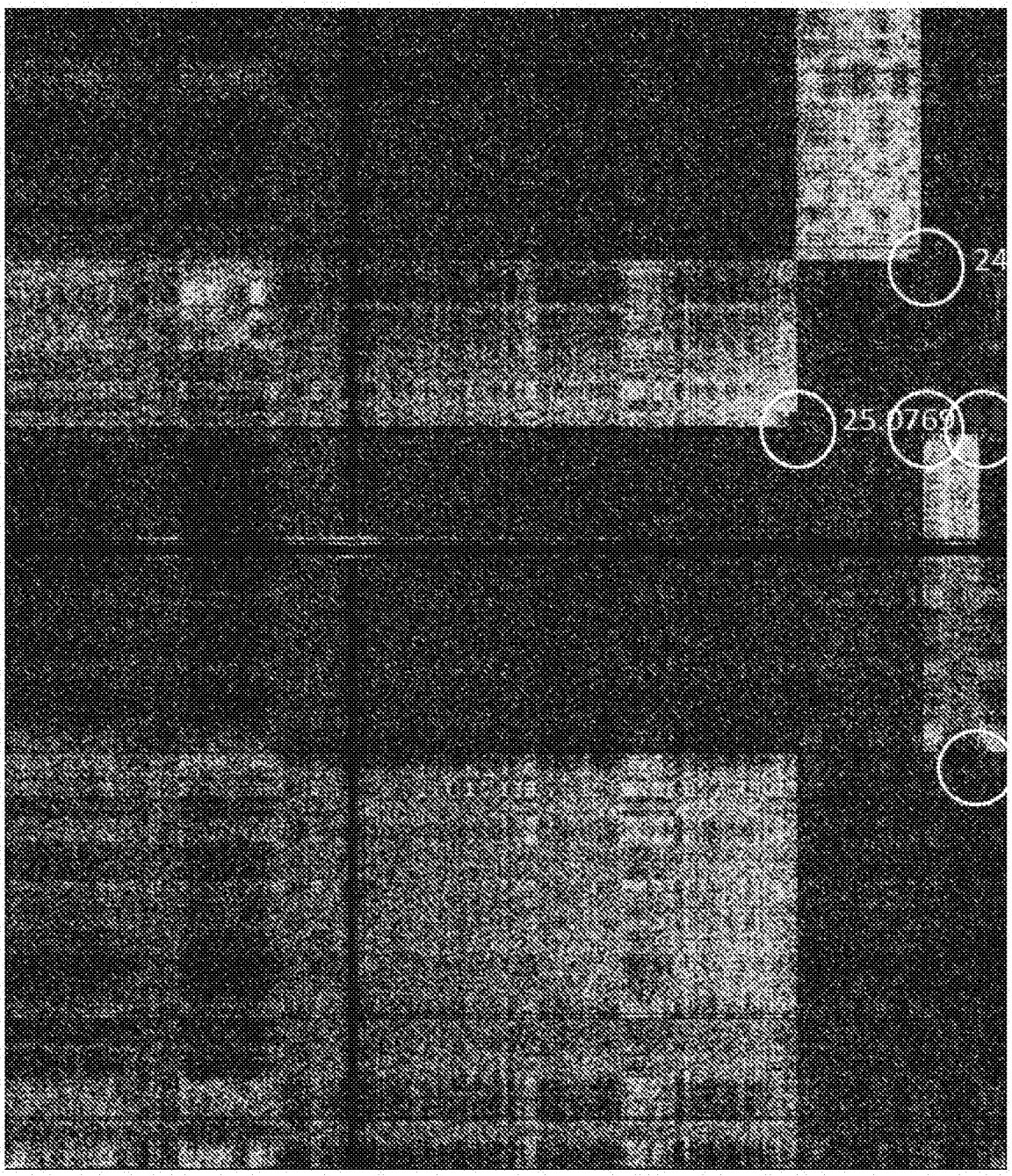



FIG. 7

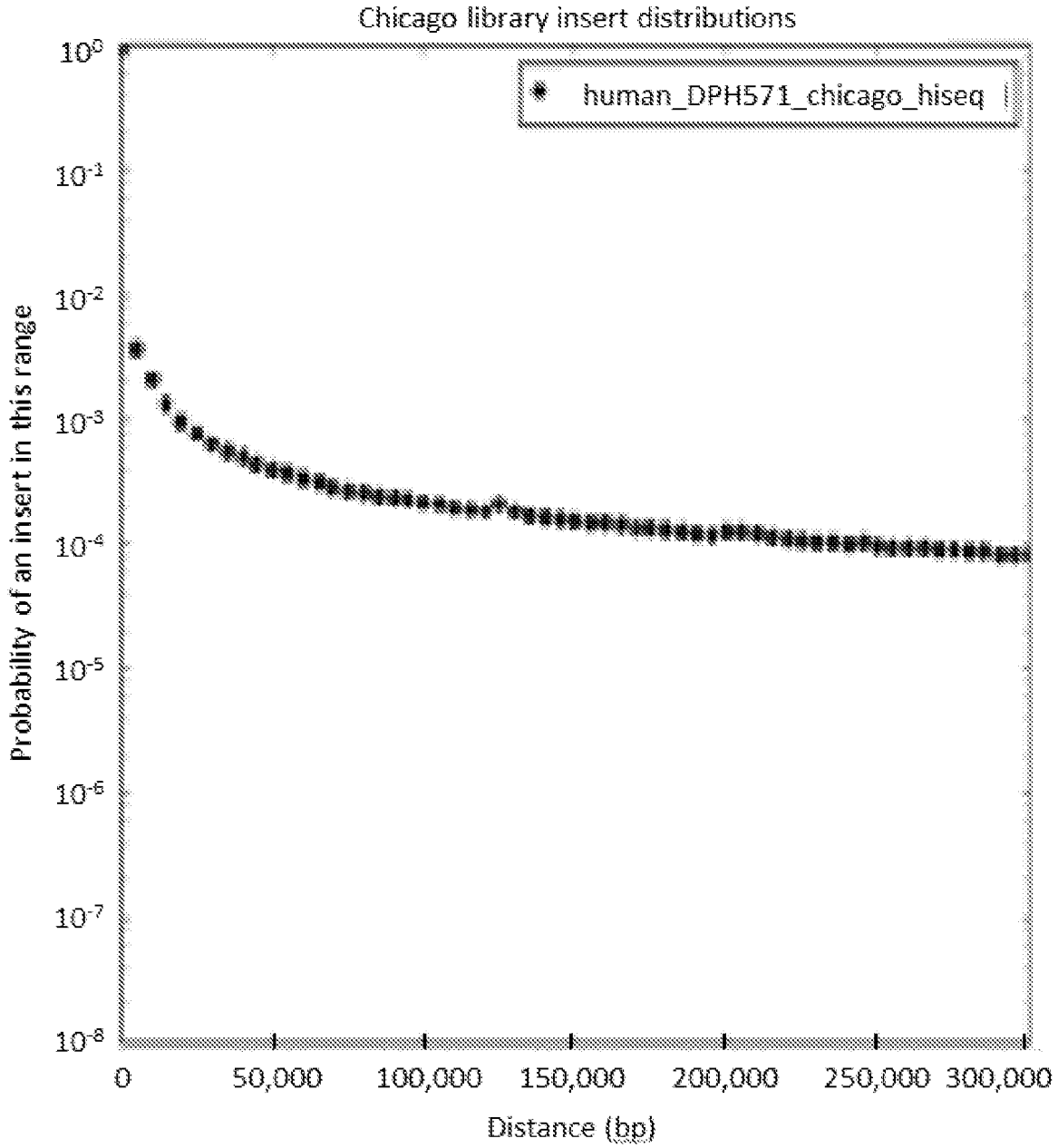

Chicago library insert distributions
human_DPH571_chicago_hiseq
Probability of an insert in this range
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-8
0
50,000
100,000
150,000
200,000
250,000
300,000
Distance (bp)

**FIG. 8A**

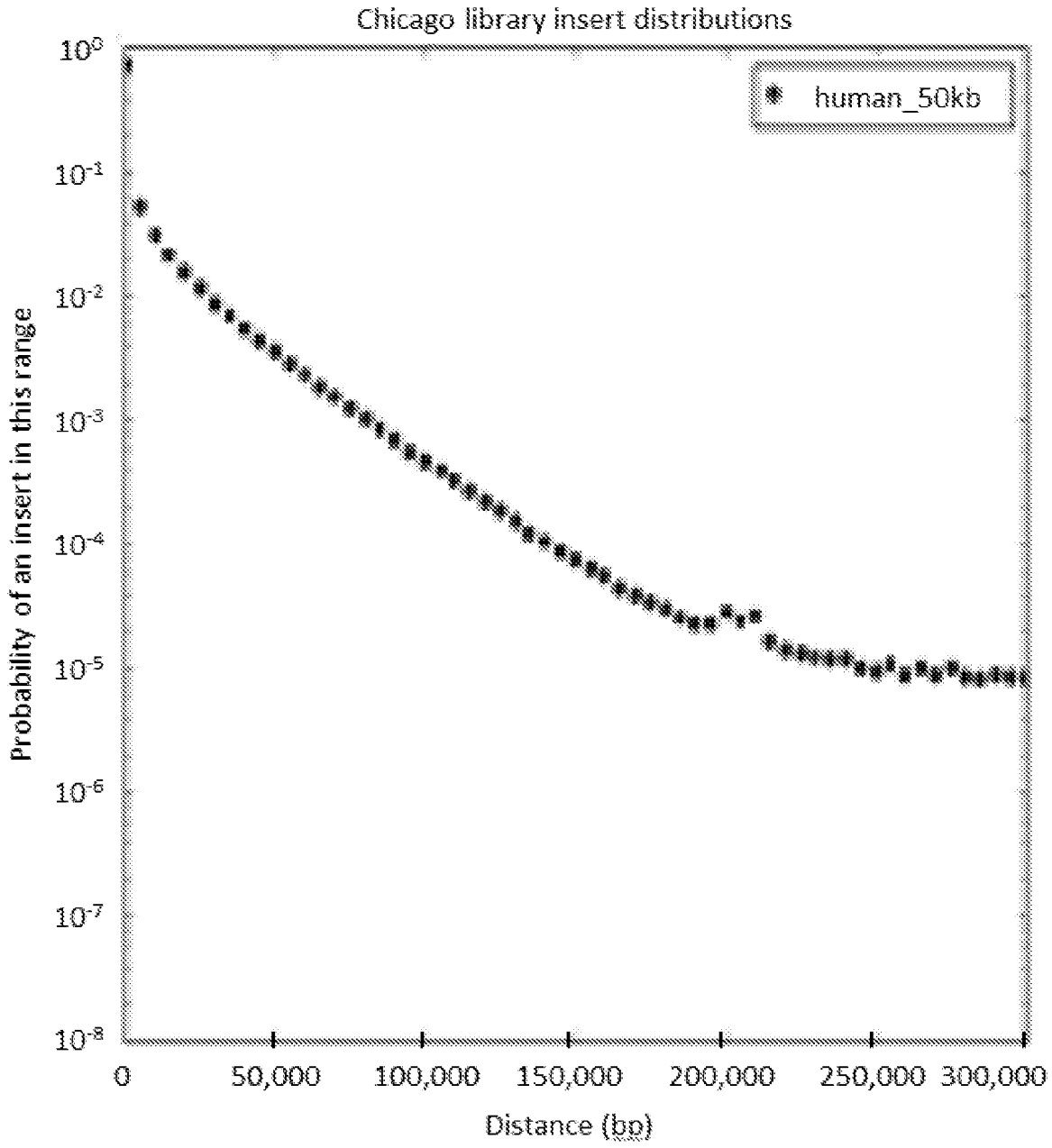

Chicago library insert distributions
human_50kb
Probability of an insert in this range
$10^{0}$
$10^{-1}$
$10^{-2}$
$10^{-3}$
$10^{-4}$
$10^{-5}$
$10^{-6}$
$10^{-7}$
$10^{-8}$
0
50,000
100,000
150,000
200,000
250,000
300,000
Distance (bp)

**FIG. 8B**

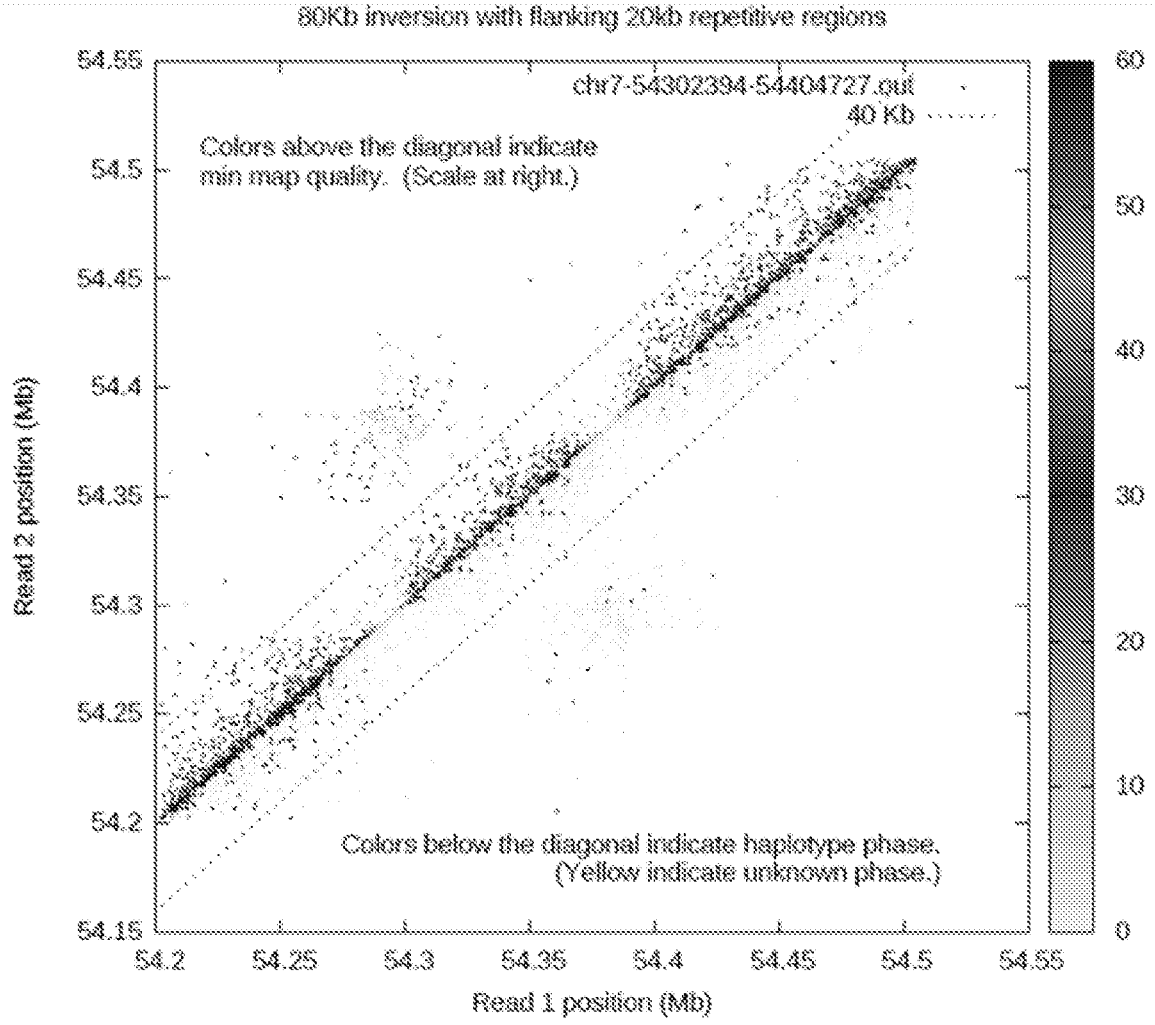

80Kb inversion with flanking 20kb repetitive regions
chr7-54302394-54404727.out
40 Kb
Colors above the diagonal indicate
min map quality. (Scale at right.)
Colors below the diagonal indicate haplotype phase.
(Yellow indicate unknown phase.)
Read 2 position (Mb)
Read 1 position (Mb)
54.55
54.5
54.45
54.4
54.35
54.3
54.25
54.2
54.15
60
50
40
30
20
10
0

**FIG. 9A**

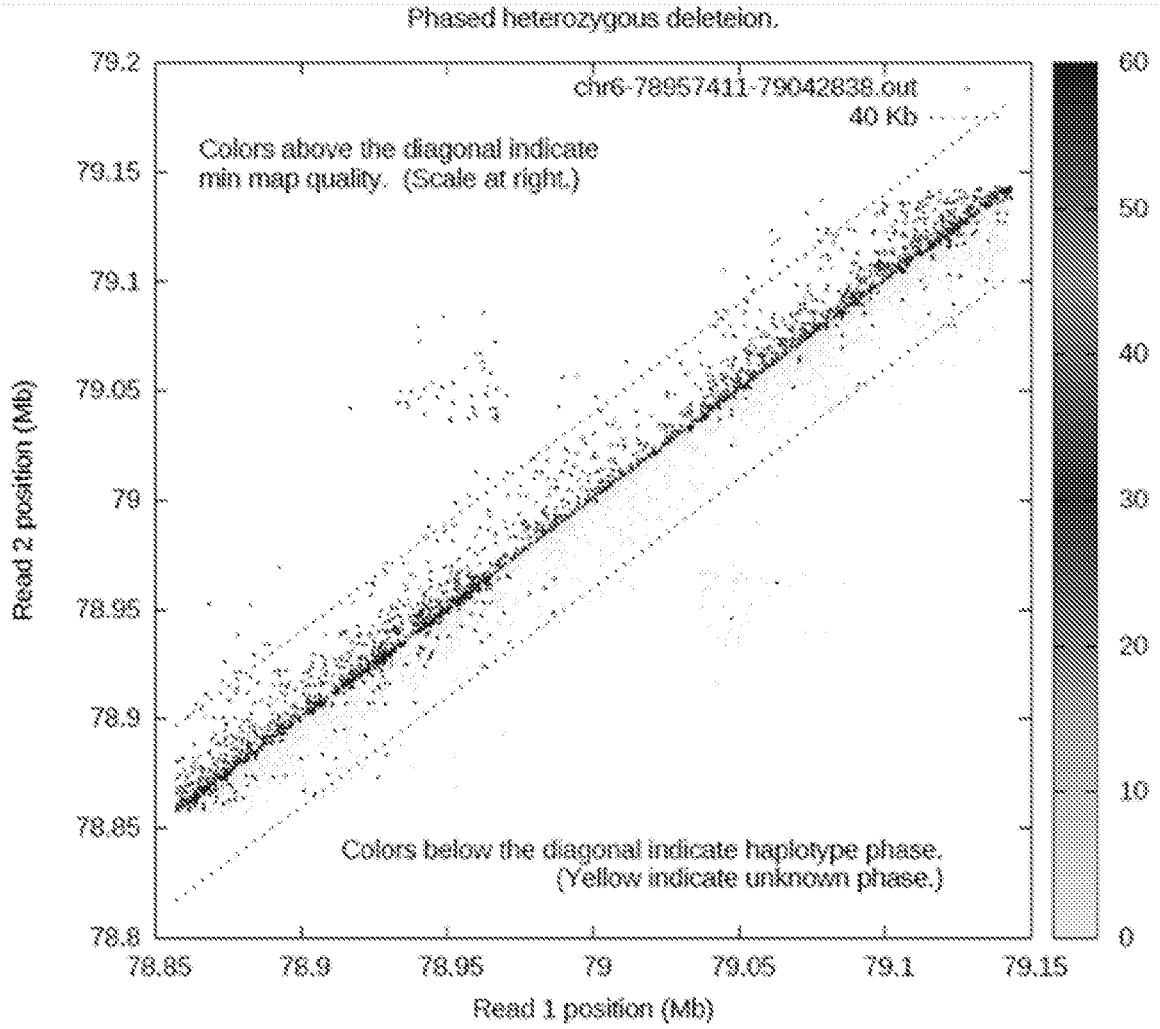

Phased heterozygous deletion.
chr6-78957411-79042638.out
40 Kb
Colors above the diagonal indicate
min map quality. (Scale at right.)
Colors below the diagonal indicate haplotype phase.
(Yellow indicate unknown phase.)
Read 2 position (Mb)
Read 1 position (Mb)
79.2
79.15
79.1
79.05
79
78.95
78.9
78.85
78.8
78.85
78.9
78.95
79
79.05
79.1
79.15
60
50
40
30
20
10
0

**FIG. 9B**

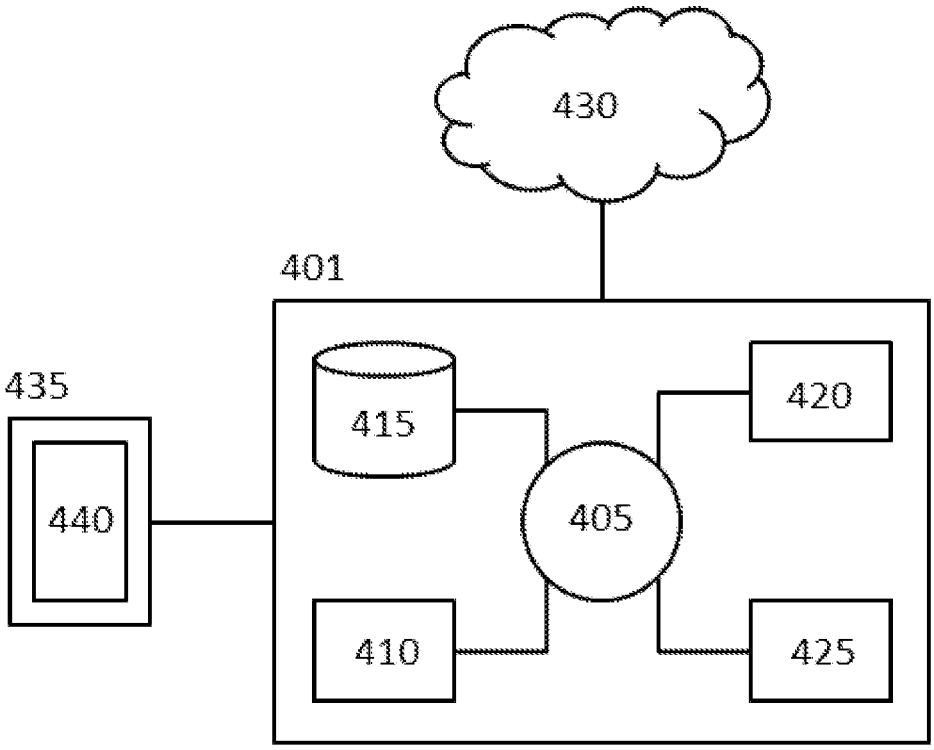



FIG. 10




FIG. 11A

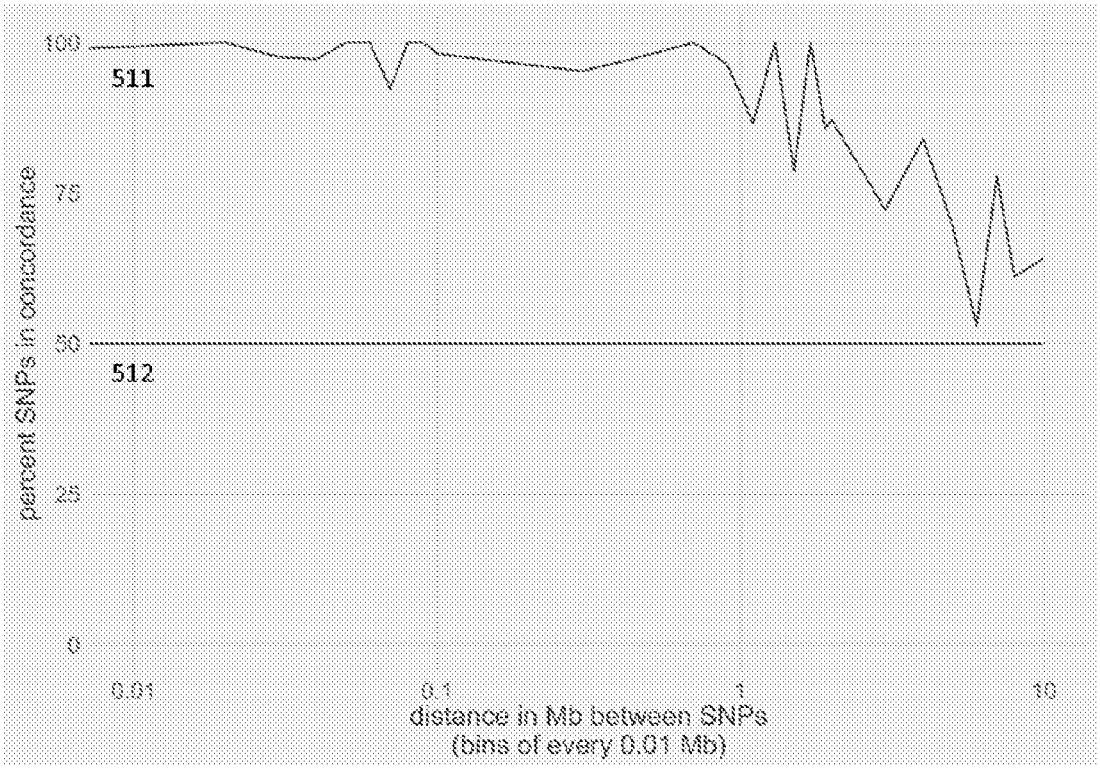



FIG. 11B

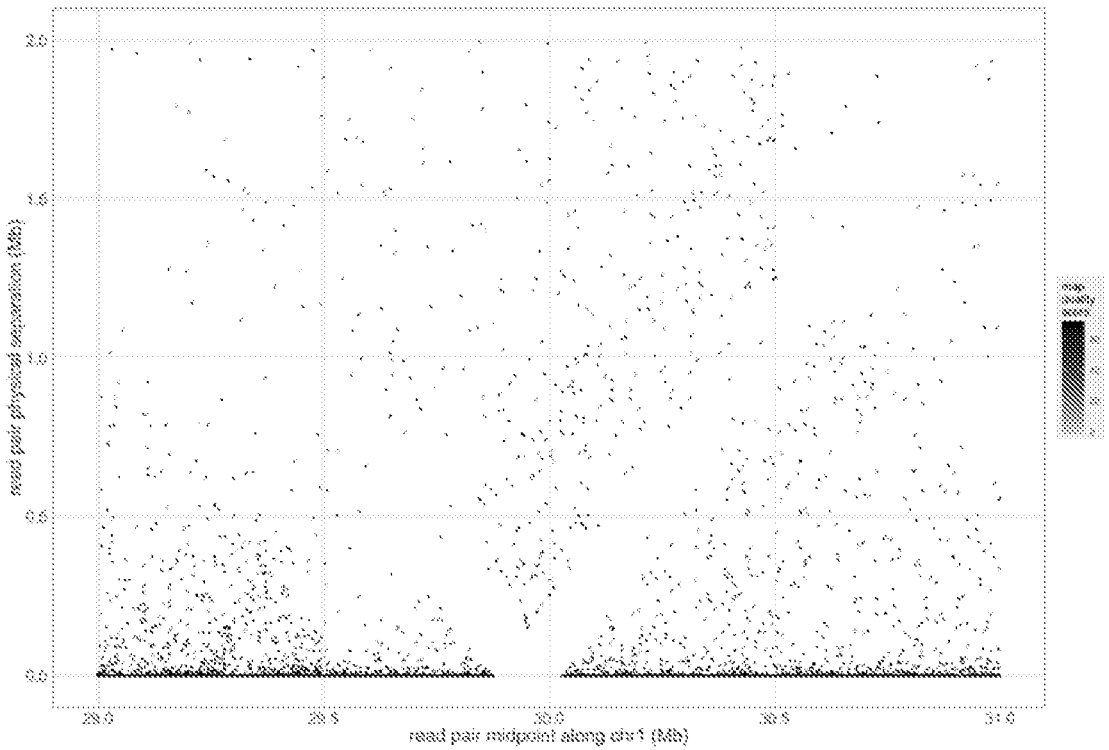



FIG. 11C

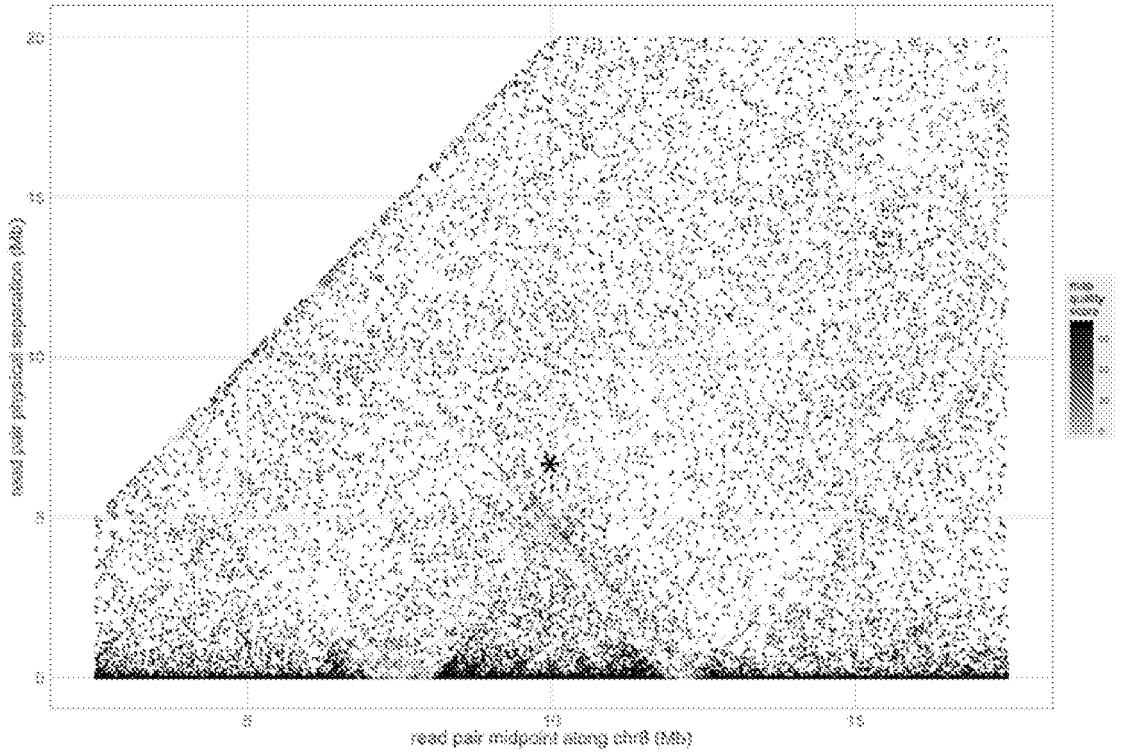



FIG. 11D