

FIGURE 1

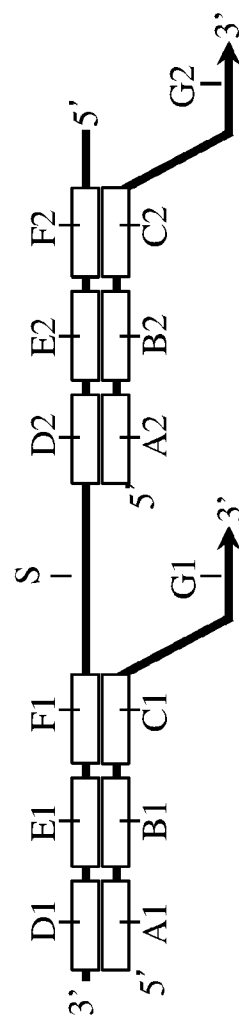


FIGURE 2

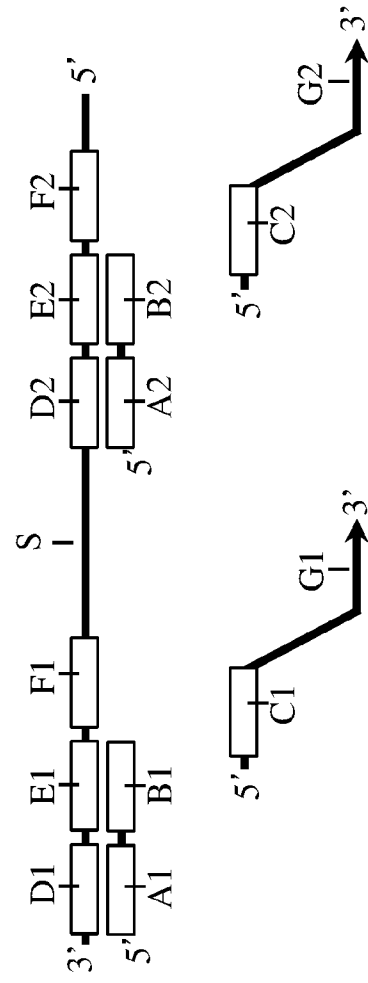


FIGURE 3

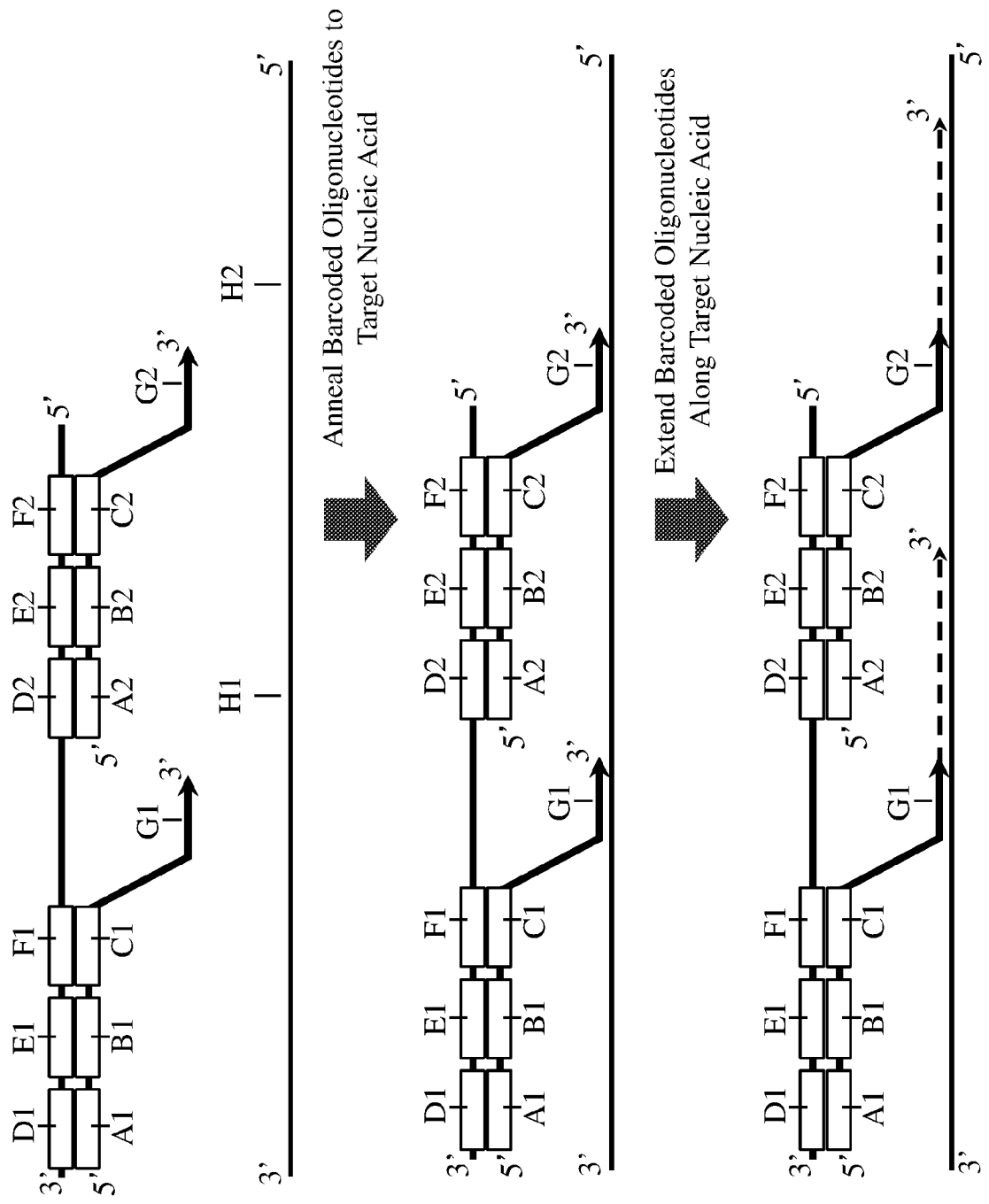


FIGURE 4

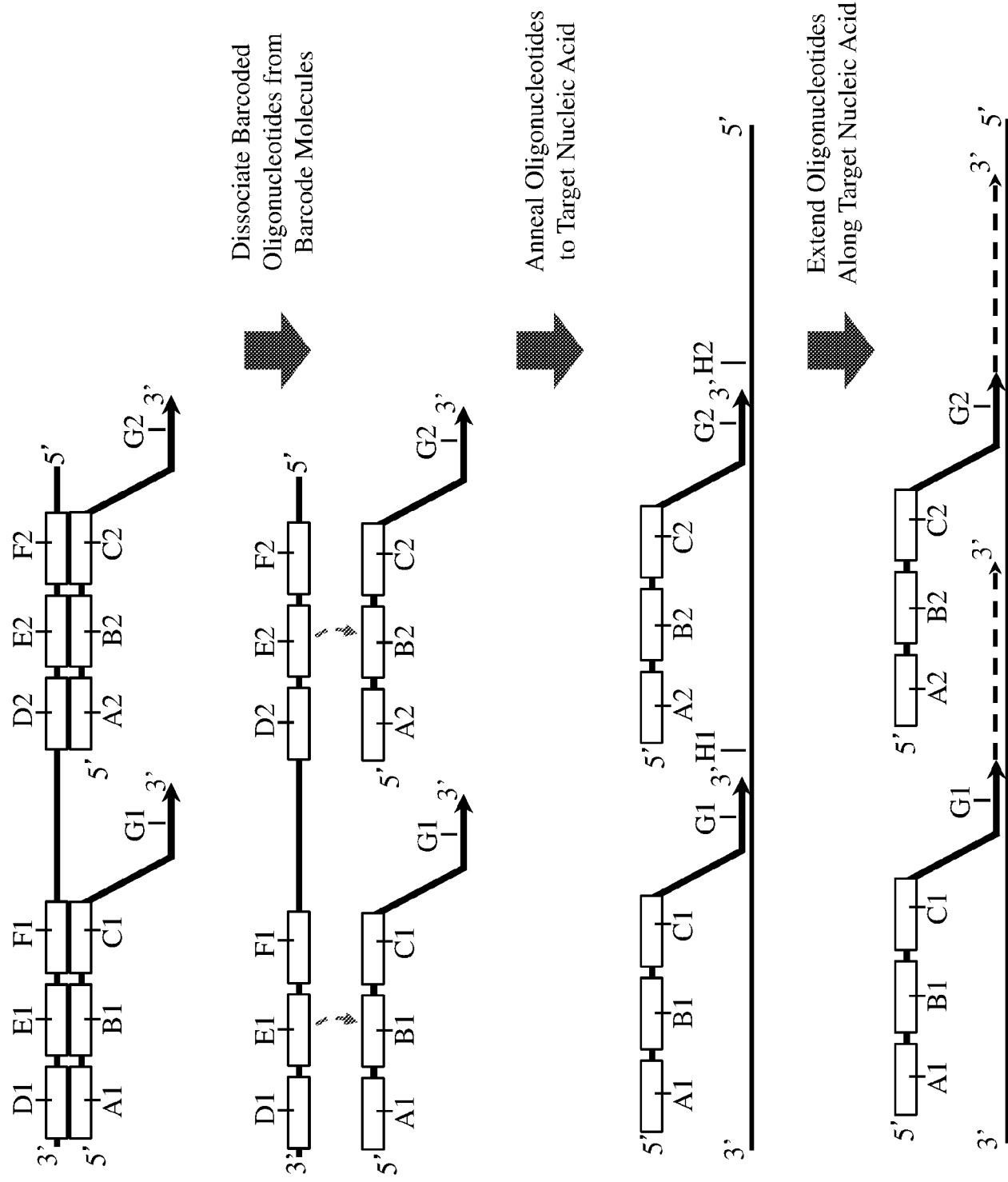


FIGURE 5

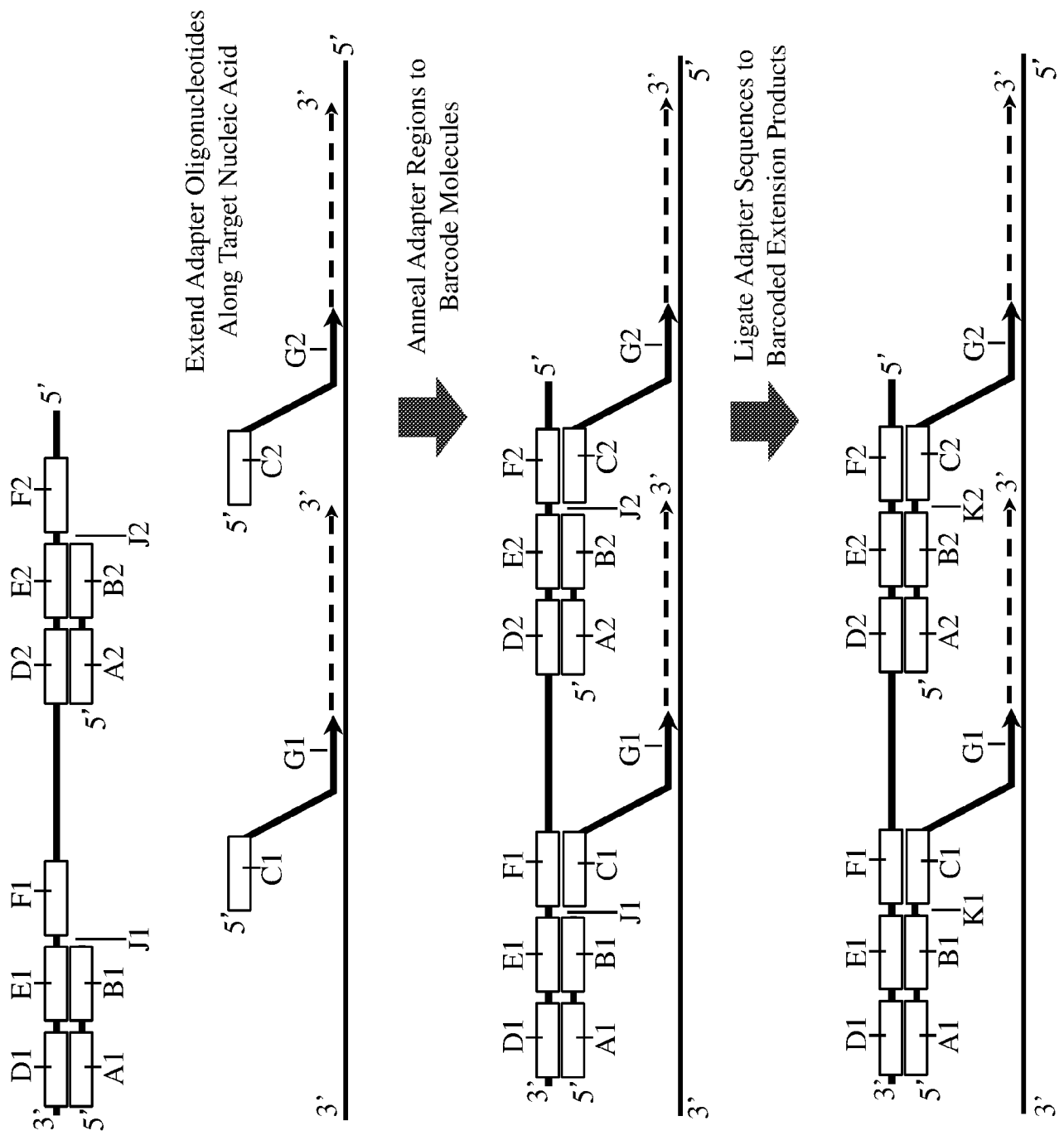
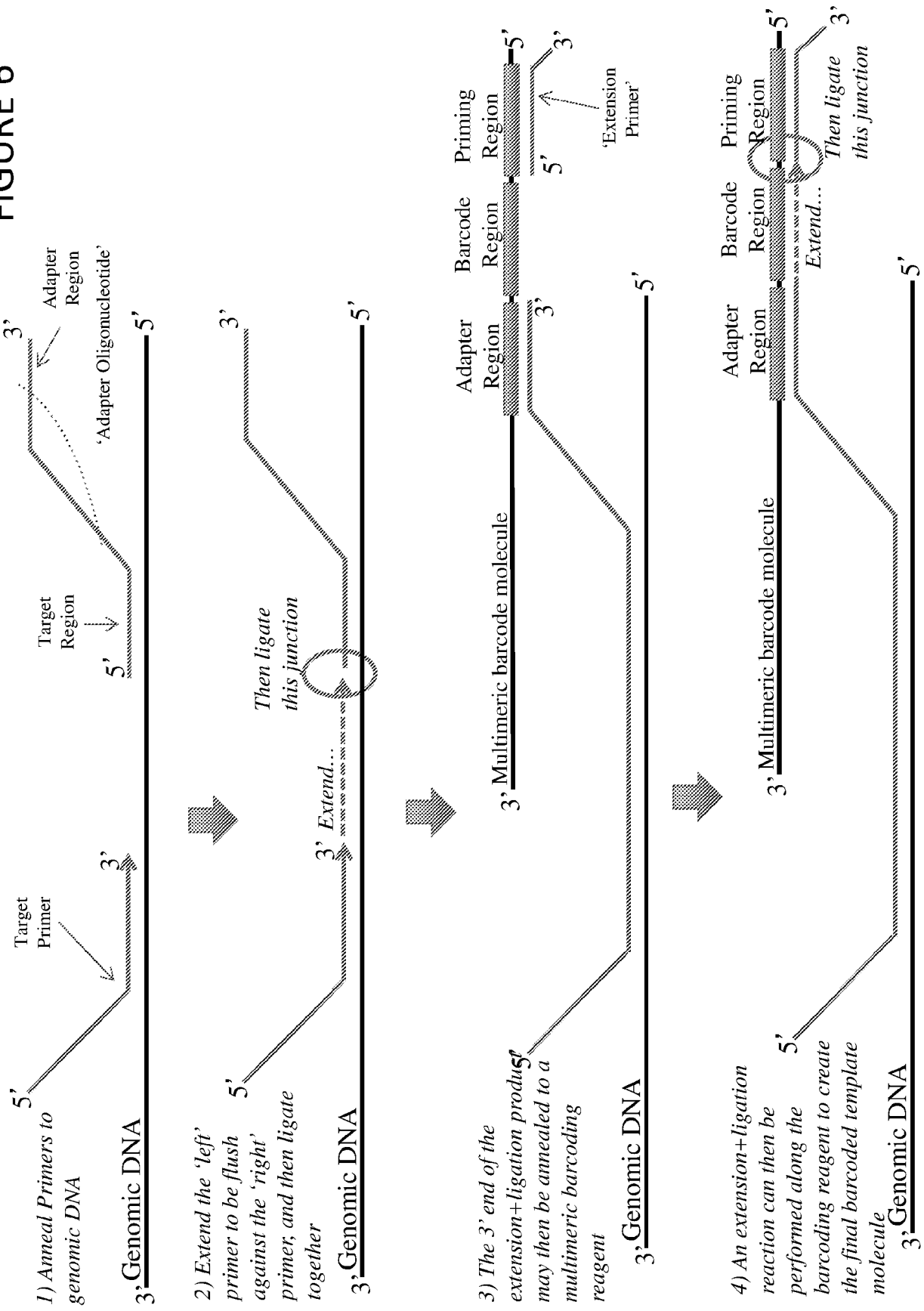
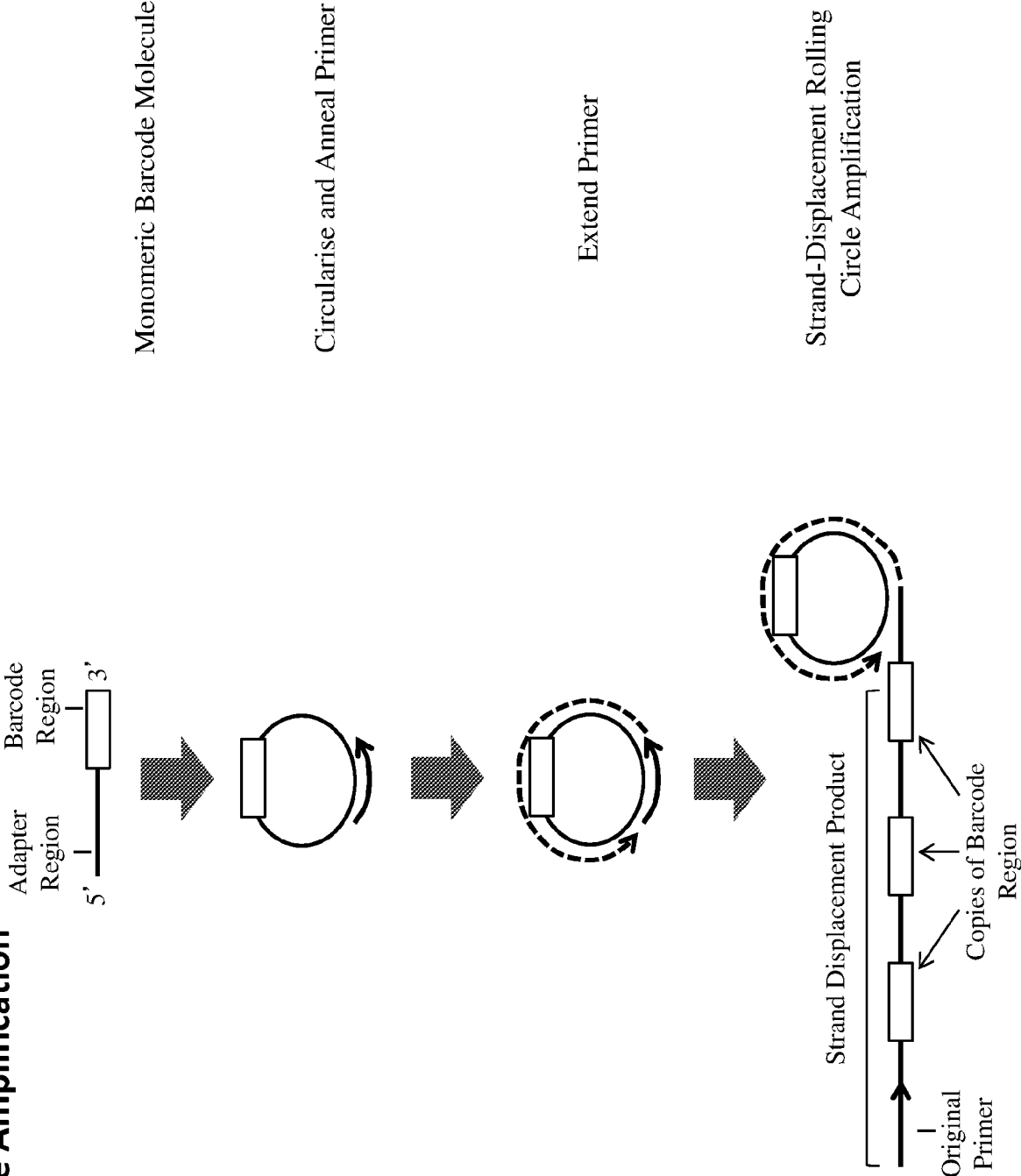


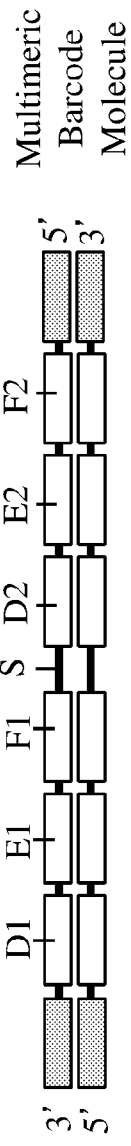
FIGURE 6



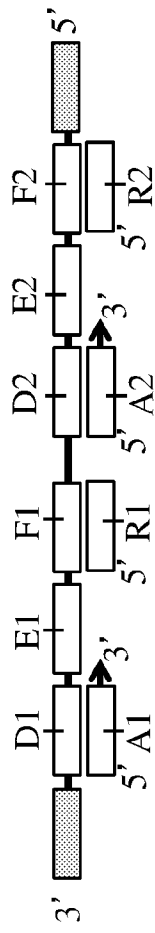
Rolling Circle Amplification

FIGURE 7

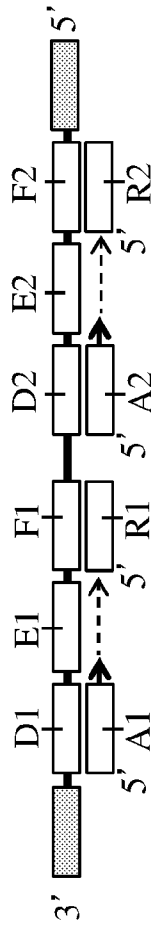




Denature Barcode Molecules,
and Anneal Extension and
Blocking Primers



Primer Extension



Remove Blocking Primers

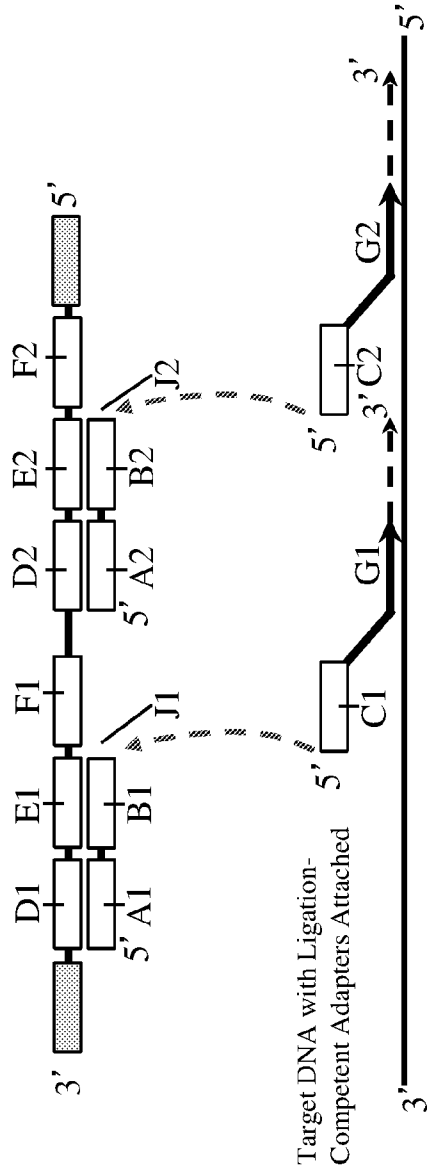
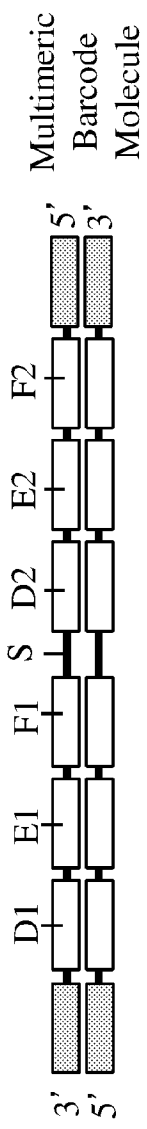
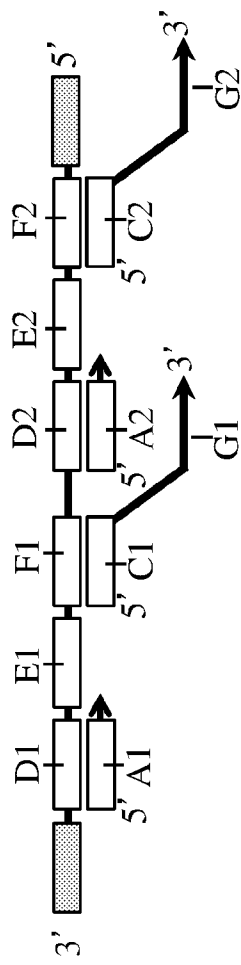


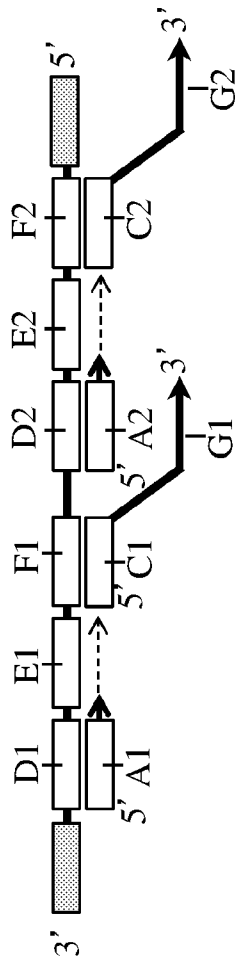
FIGURE 8



Denature and Anneal Extension
and Adapter Oligonucleotides



Primer Extend



Ligate Adapter Oligonucleotides
to Extension Products

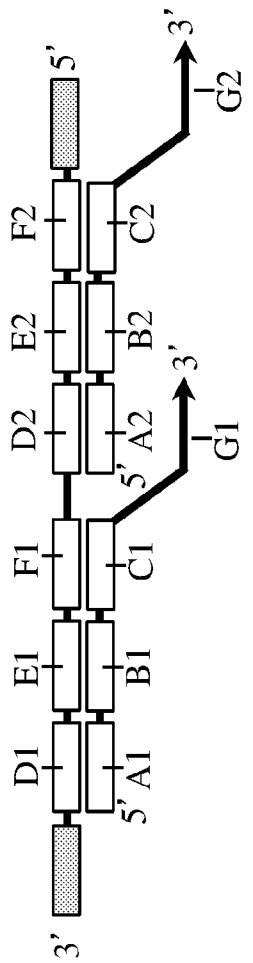


FIGURE 9

FIGURE 10

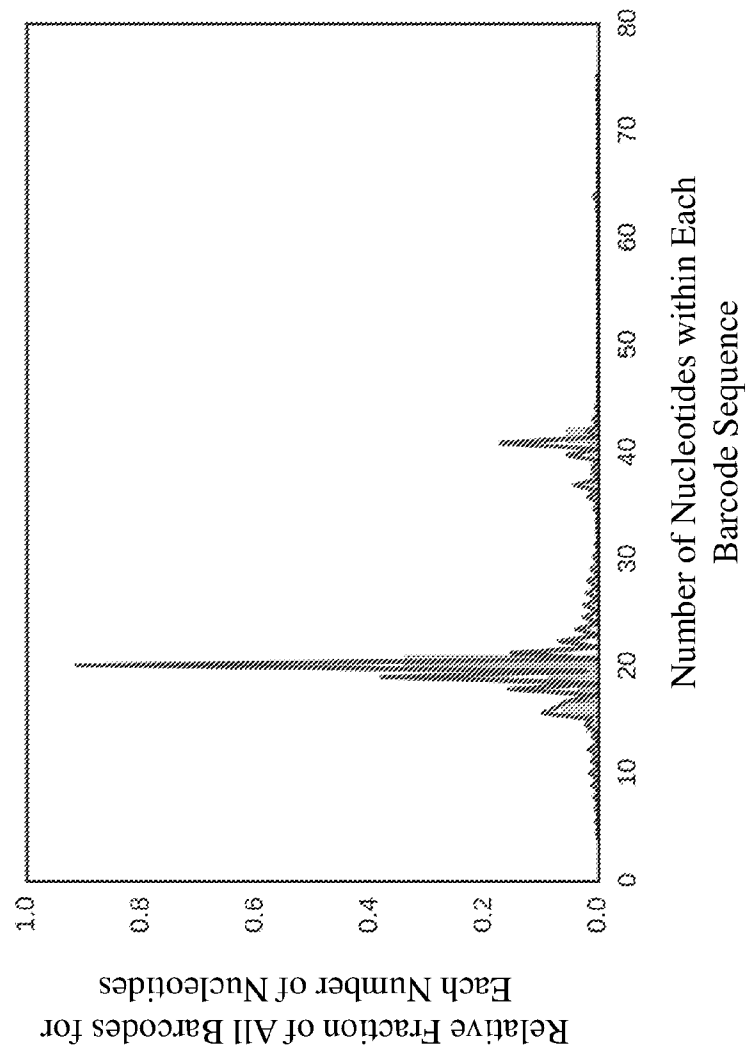


FIGURE 11

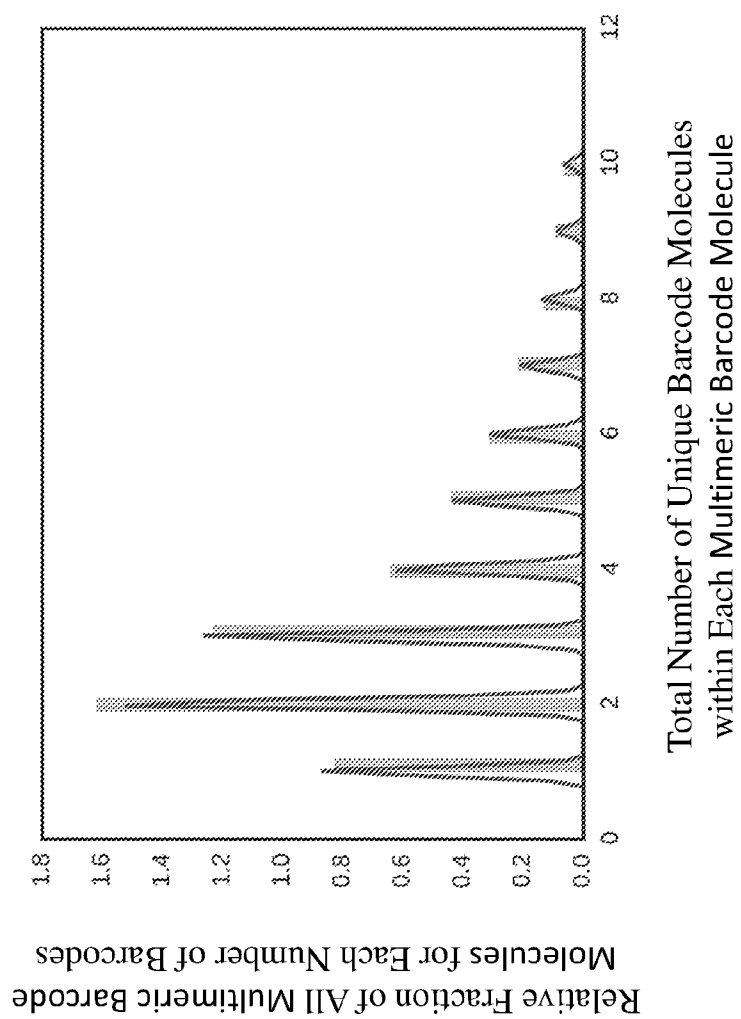


FIGURE 12

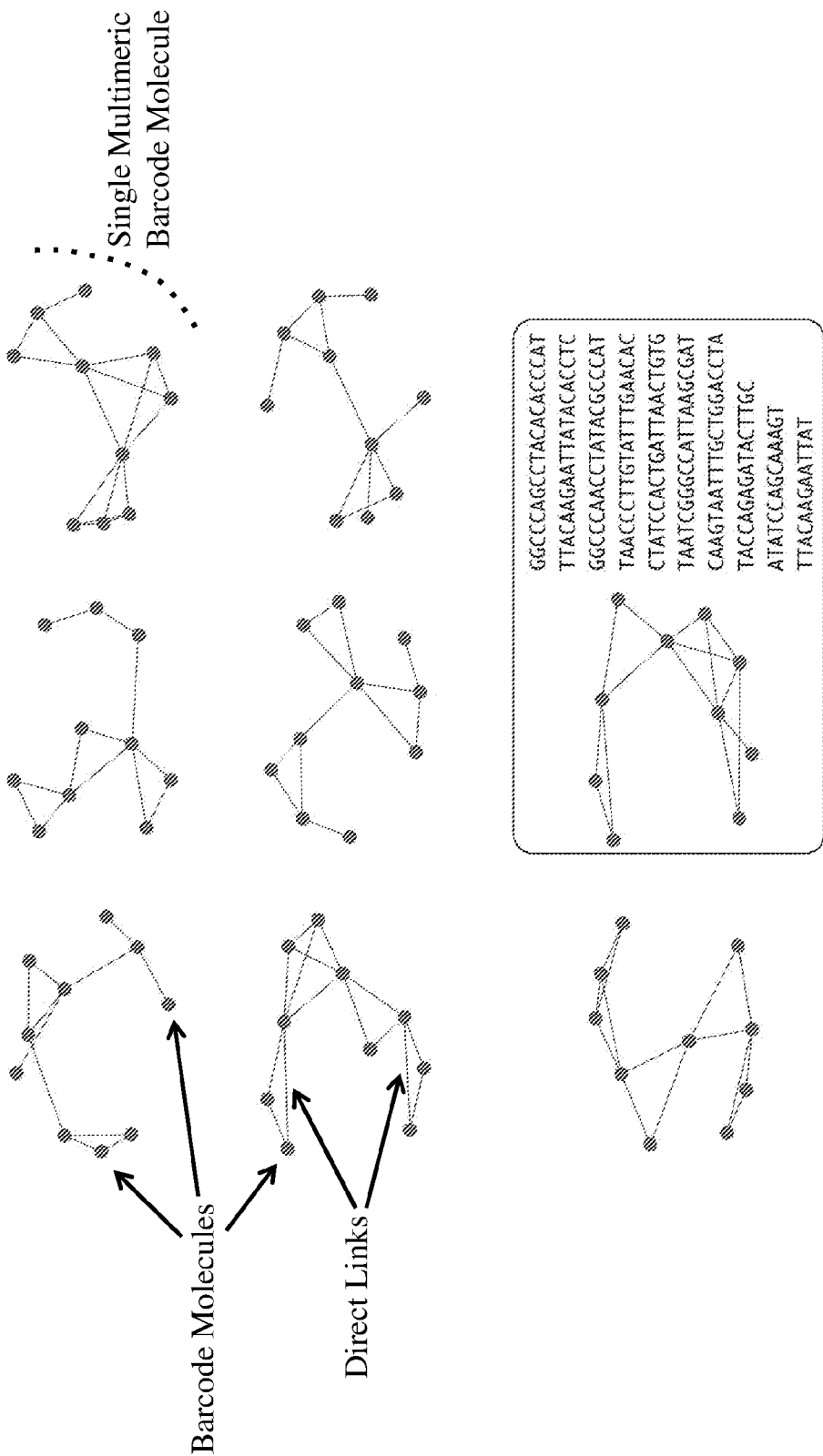
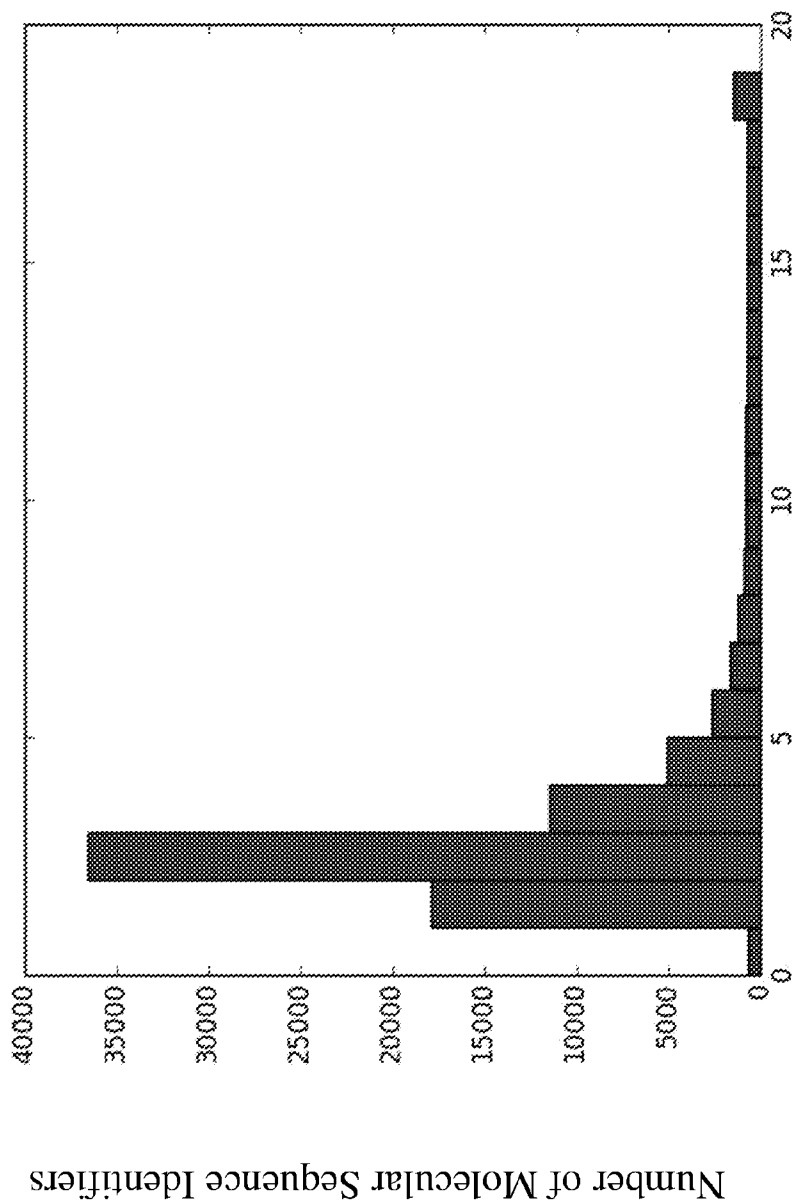
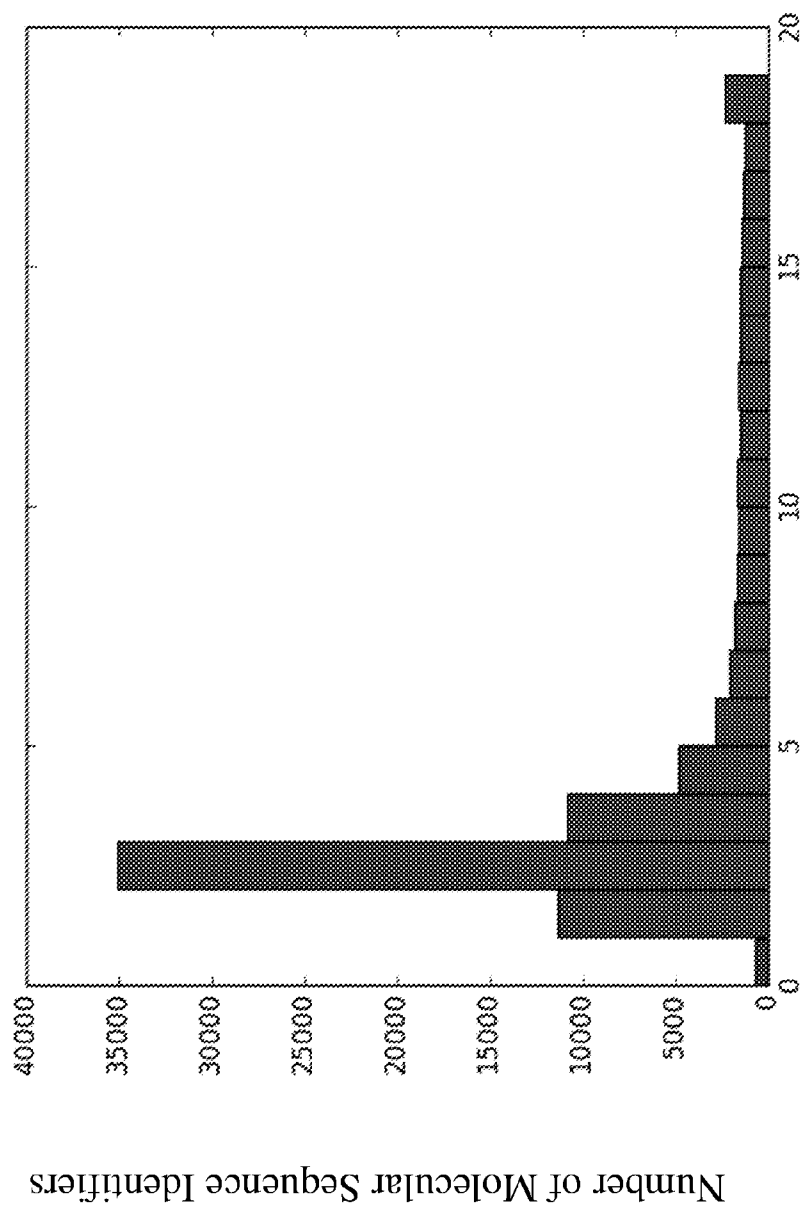


FIGURE 13



Number of Unique Barcodes per Molecular Sequence Identifier

FIGURE 14



Number of Unique Barcodes per Molecular Sequence Identifier

FIGURE 15

	Annealed to Genomic DNA Overnight	Annealed to Genomic DNA Overnight; Barcoding Reagents Denatured First	Annealed to Genomic DNA for 3 Hours	Annealed to Genomic DNA for 3 Hours; Barcoding Reagents Denatured First
HLA-A_Exon2	153	62	103	50
HLA-A_Exon3	2548	341	818	106
HLA-A_Exon4	489	235	400	108
DQB1_Exon2	557	627	285	635
DQB1_Exon3	2186	1614	1085	221
BRCA1_US1	1771	941	1047	544
BRCA1_SNP7	2524	1261	90	43
BRCA1_SNP6	731	537	245	339
BRCA1_SNP1	10033	5787	2905	1813
BRCA1_DS1	4	103	5	0
BRCA_AMP6	81	69	37	24
BRCA_AMP7	731	391	40	472

On-Target Fraction:

81
%

76
%

82
%

70
%

FIGURE 16

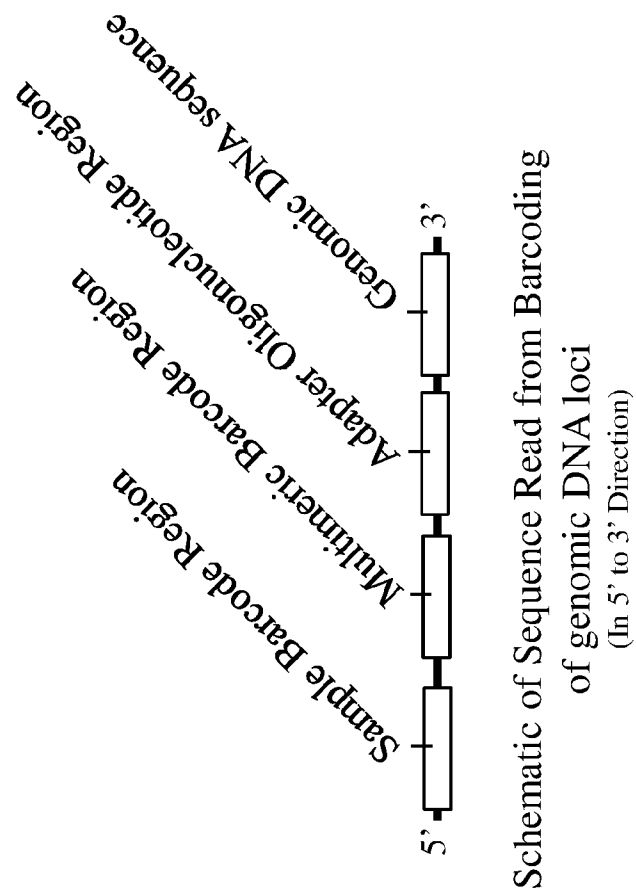


FIGURE 17

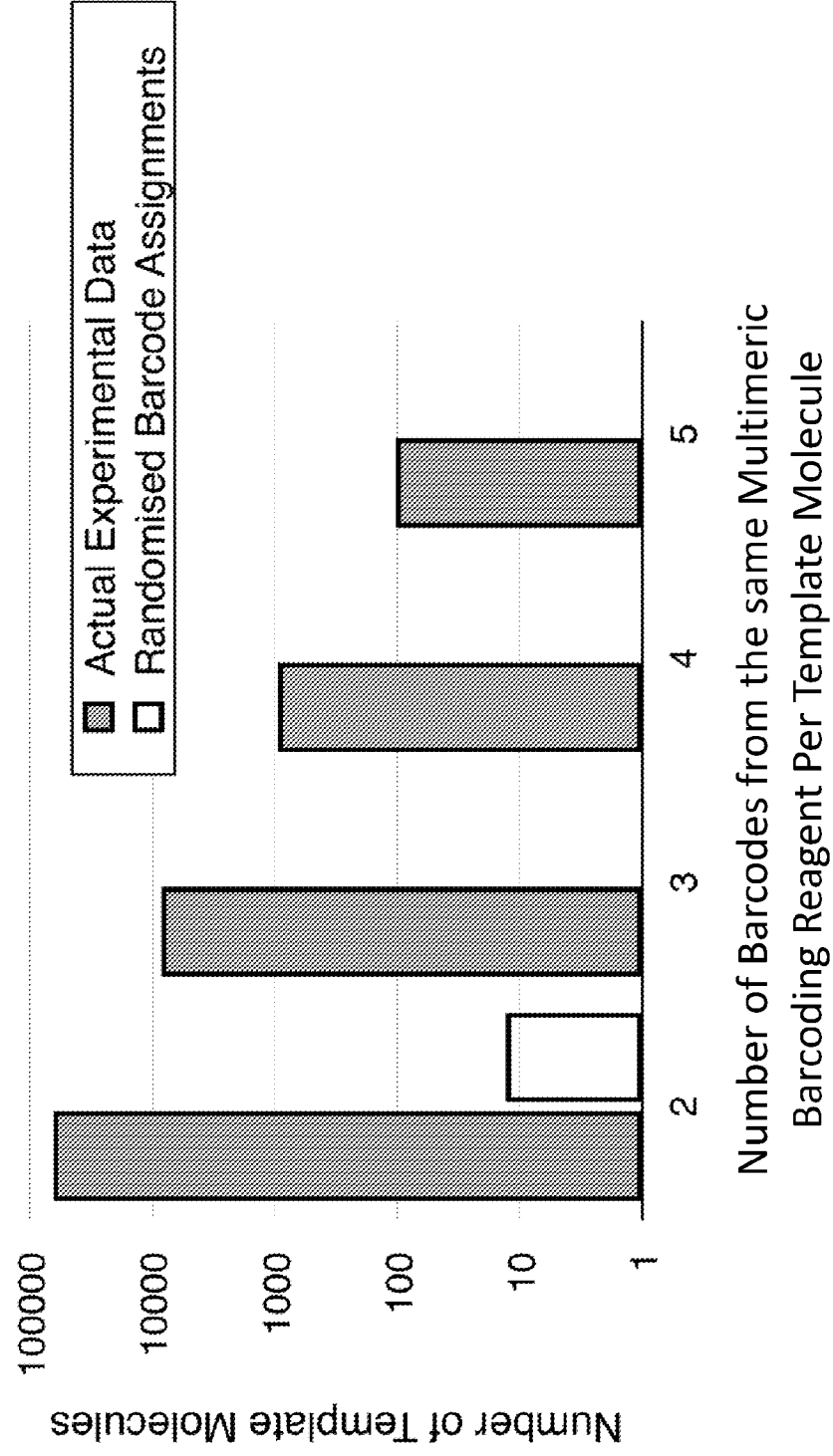
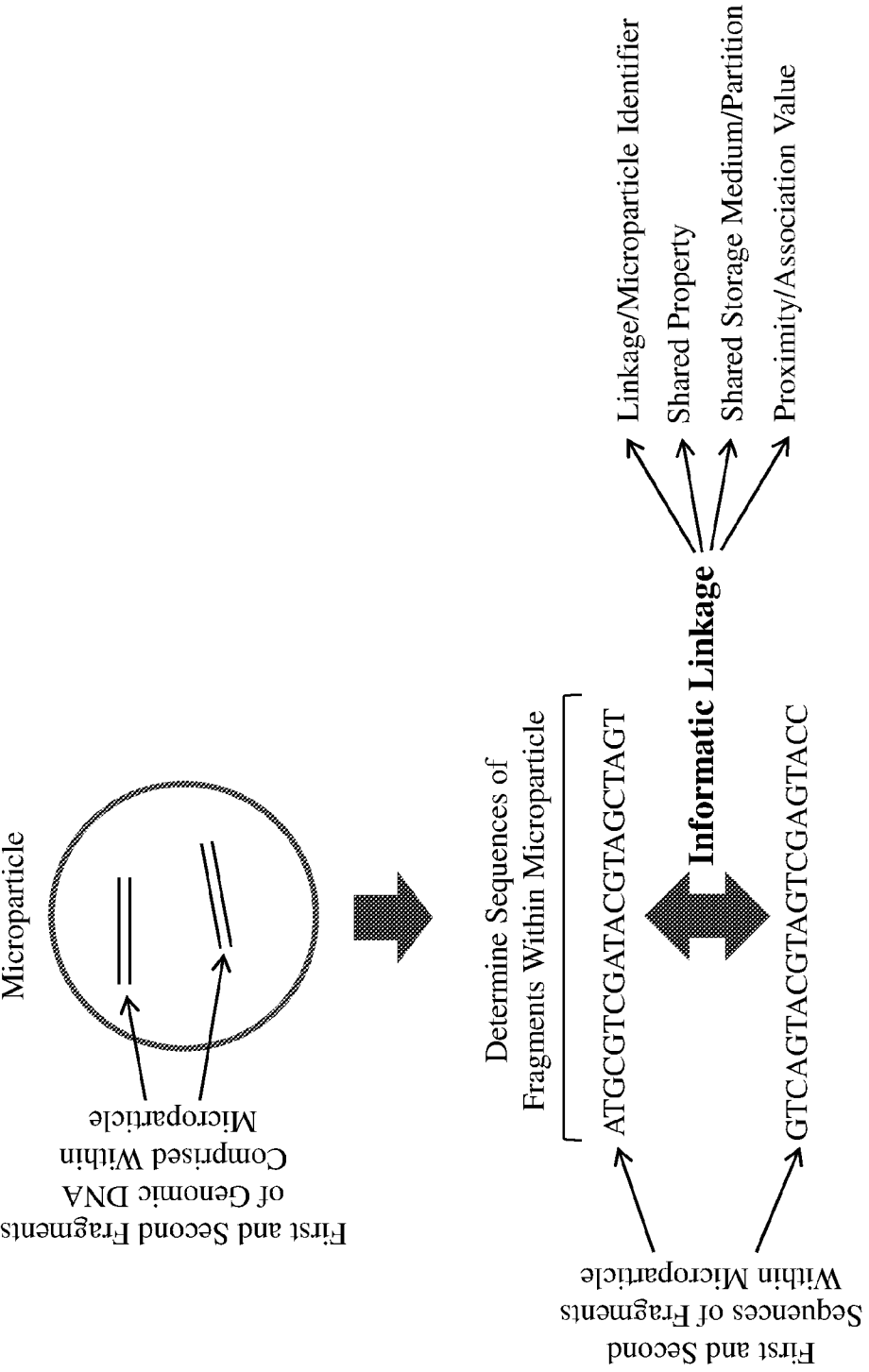
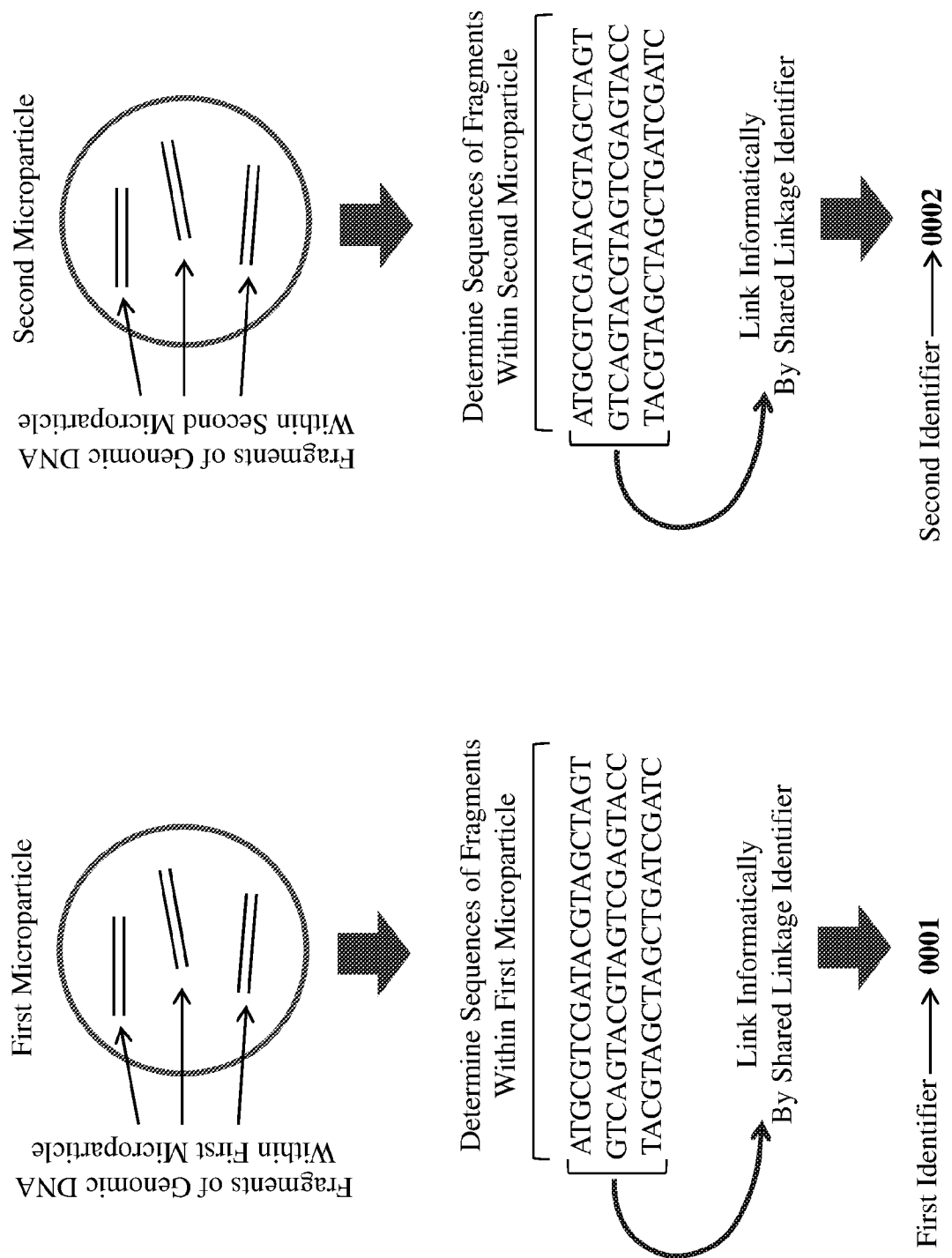


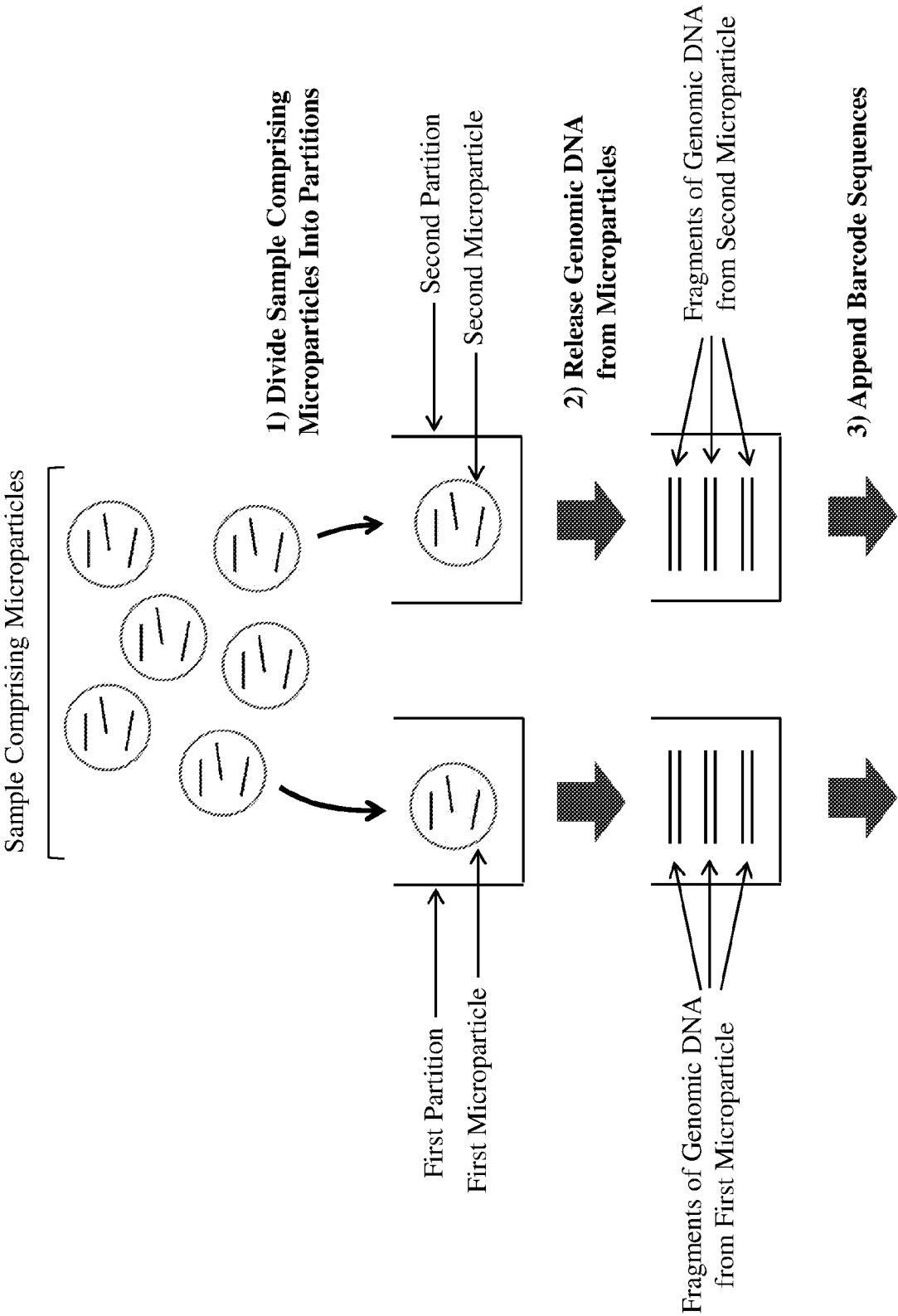
FIGURE 18

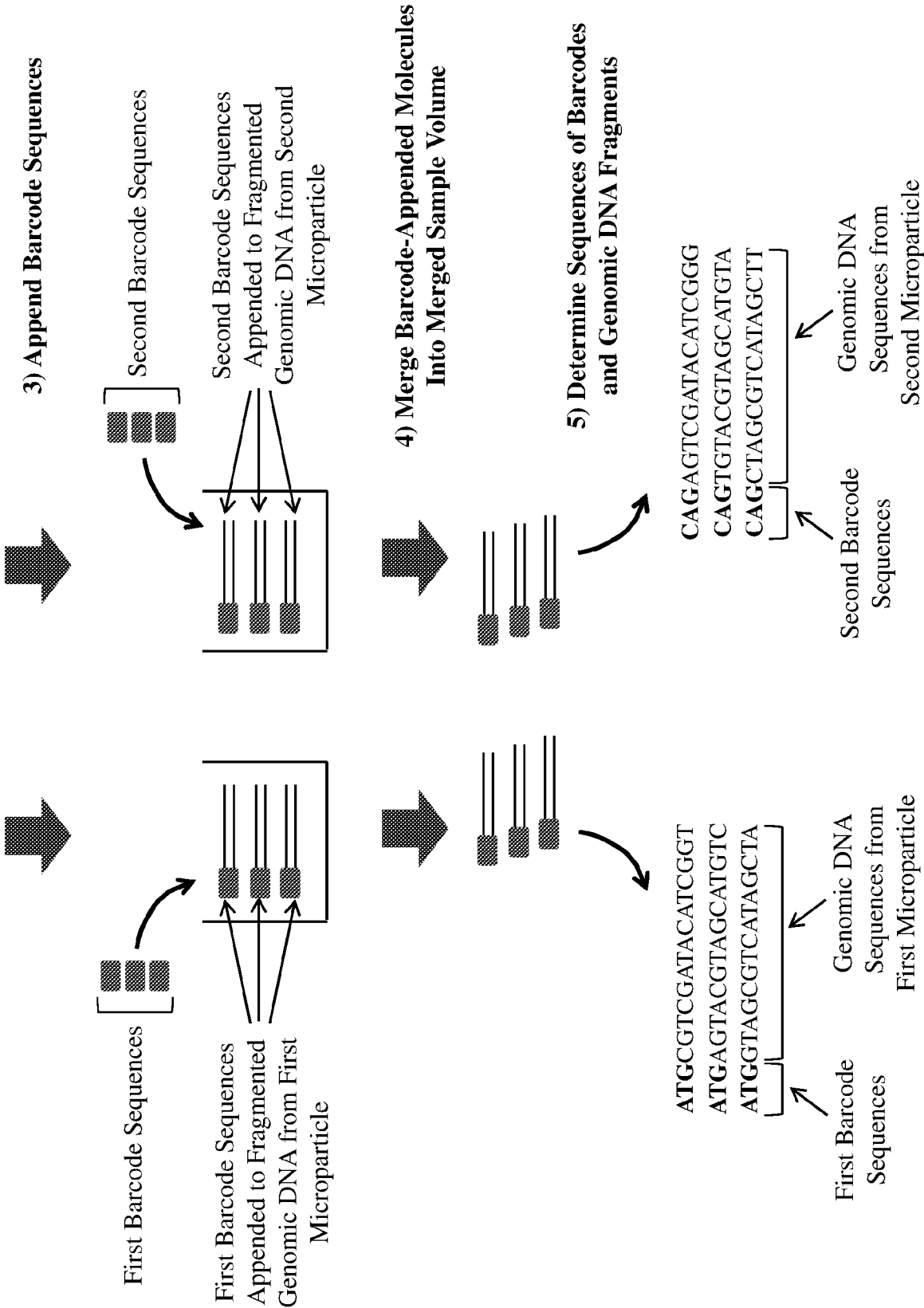
Overall Features linking



Informatic Linkage by Shared Identifiers **FIGURE 19**

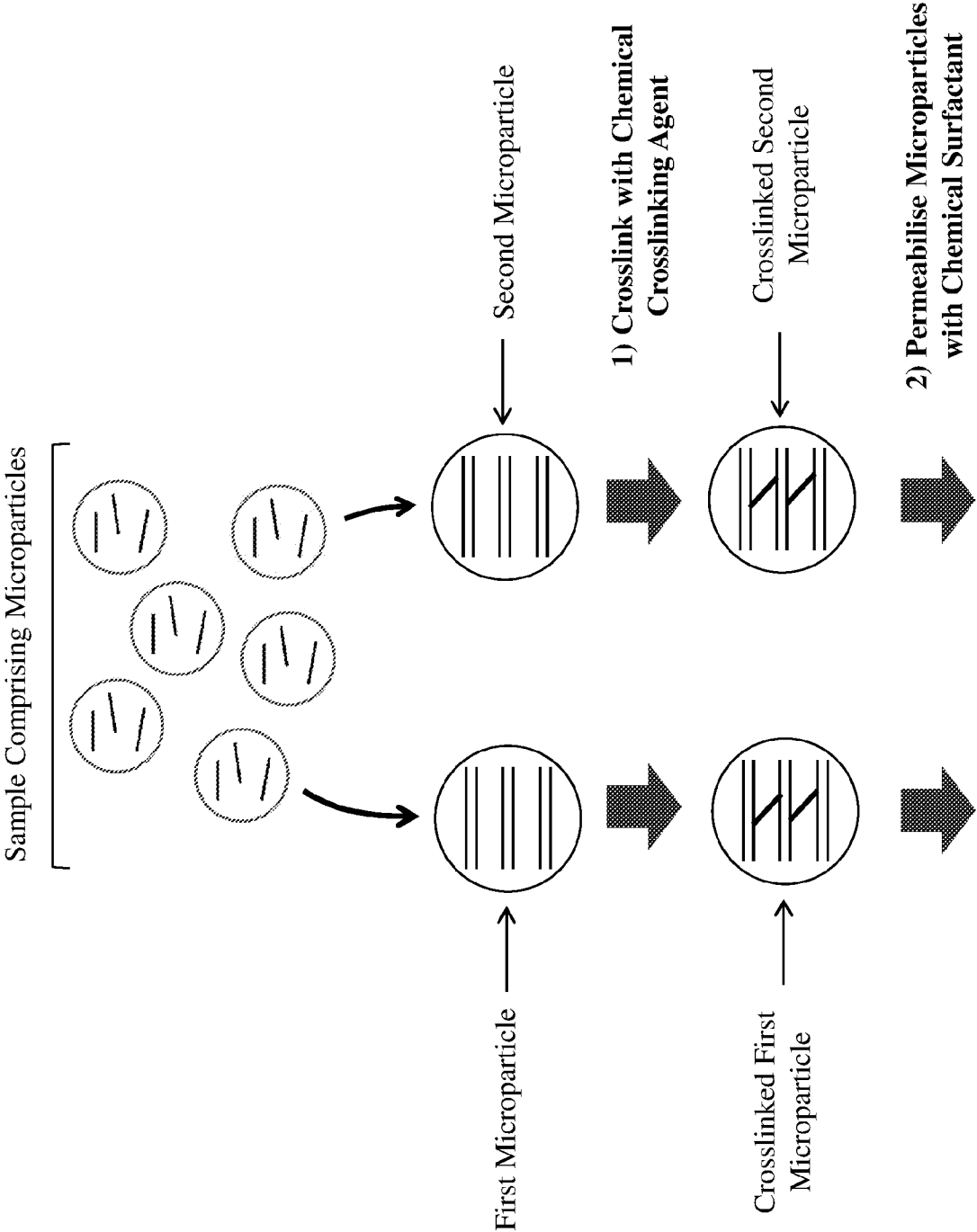






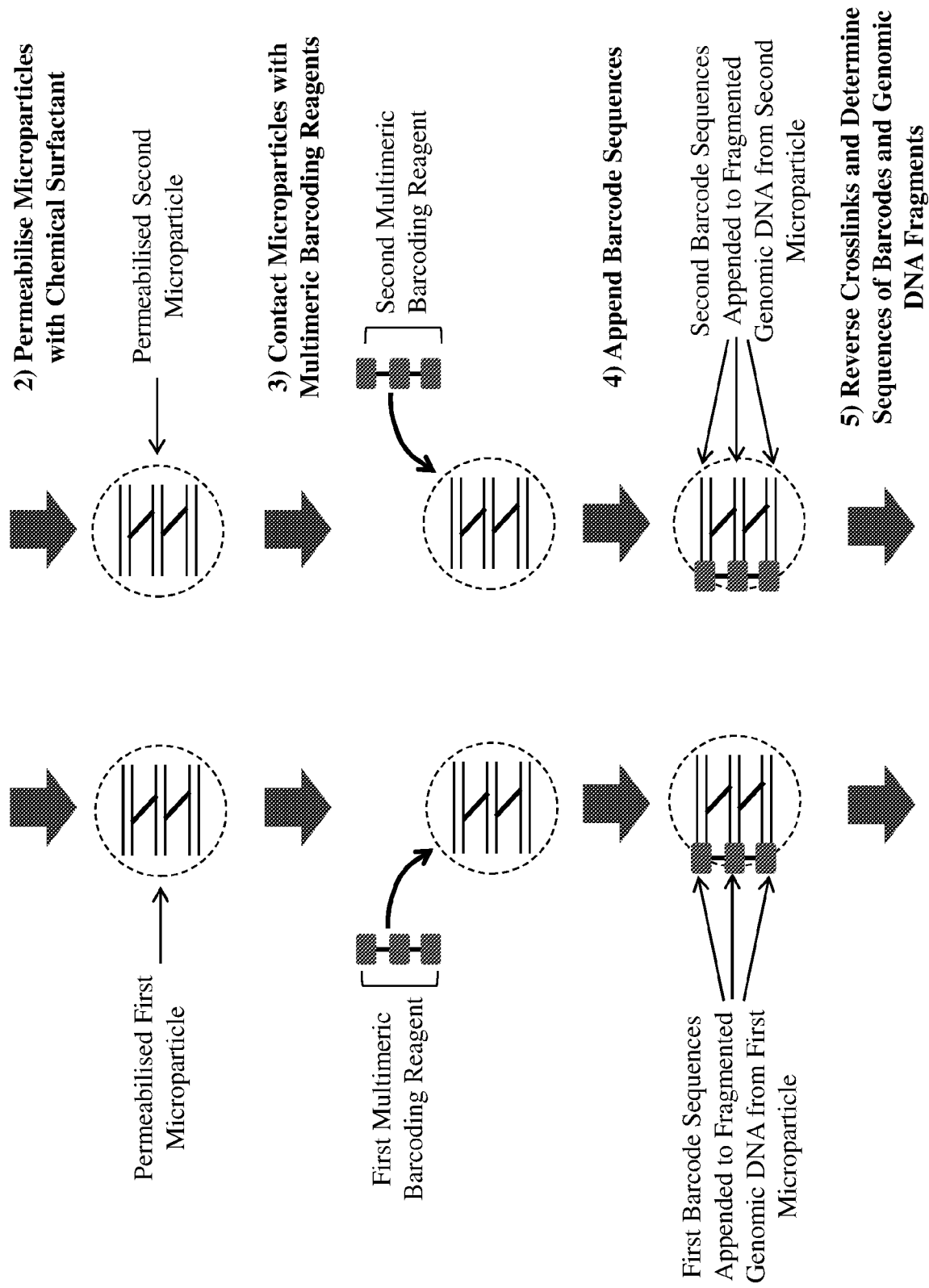
Multimeric Barcoding Reagent Approach

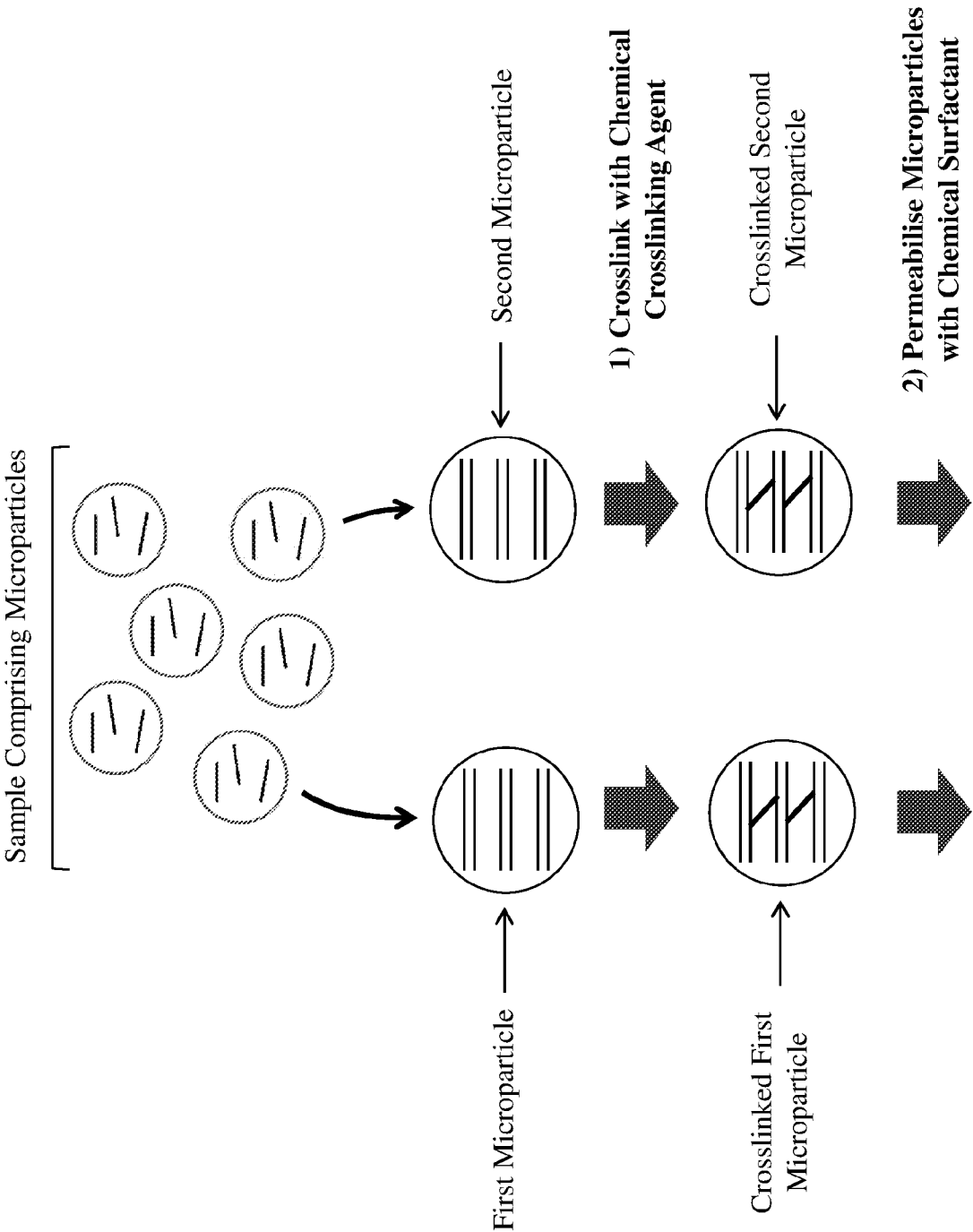
FIGURE 21



Multimeric Barcoding Reagent Approach

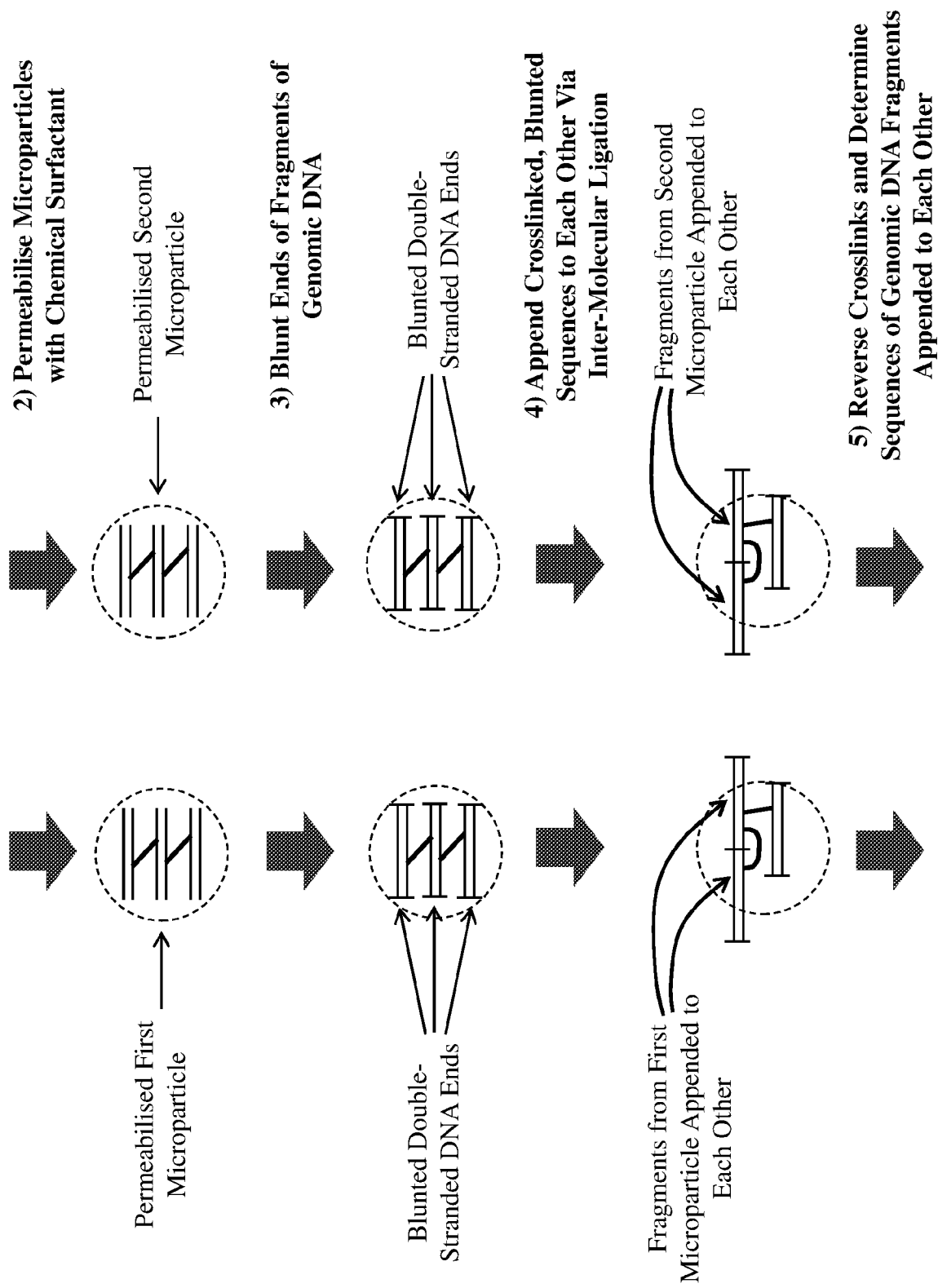
FIGURE 21





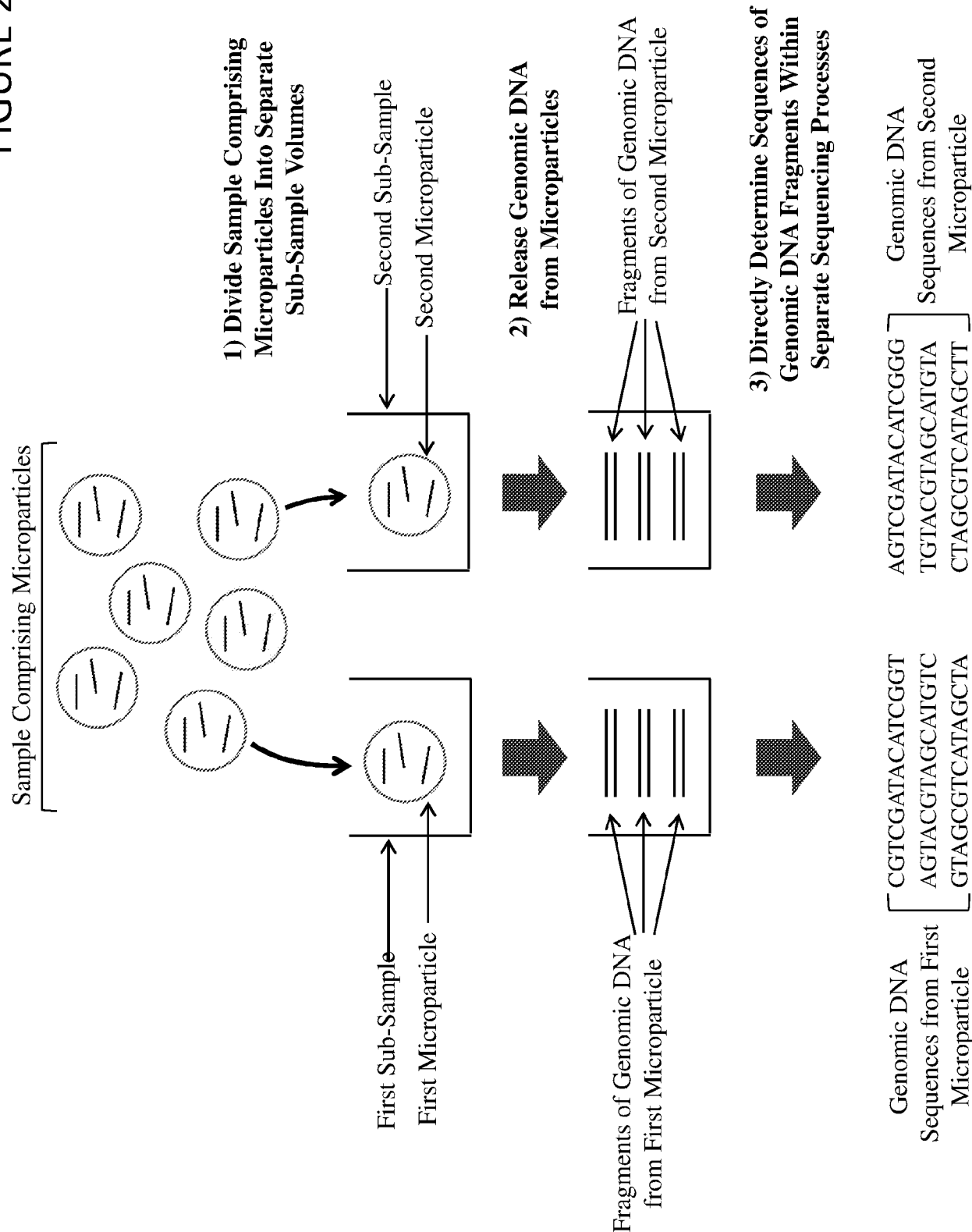
Appending/Inter-Molecular Ligation Approach

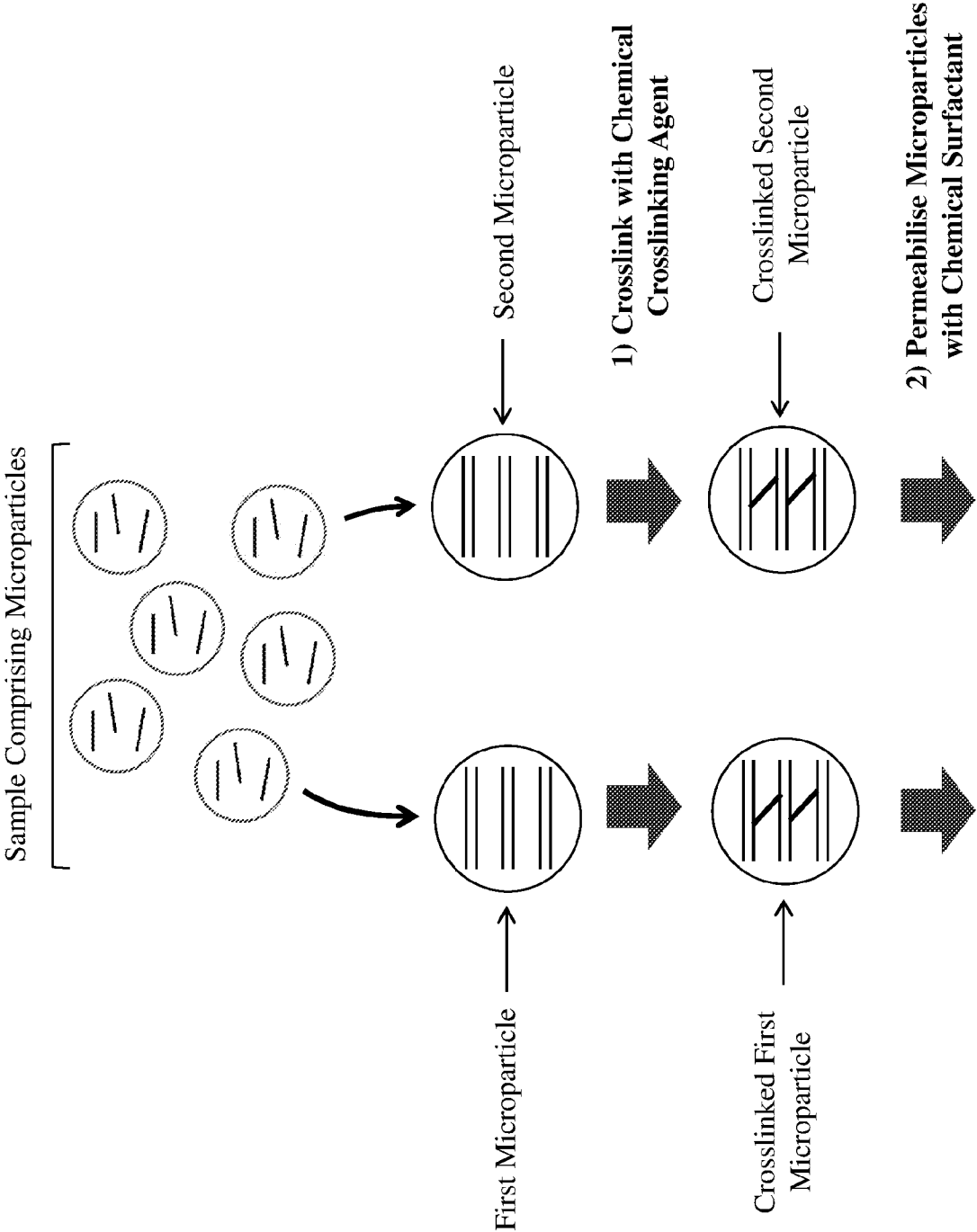
FIGURE 22

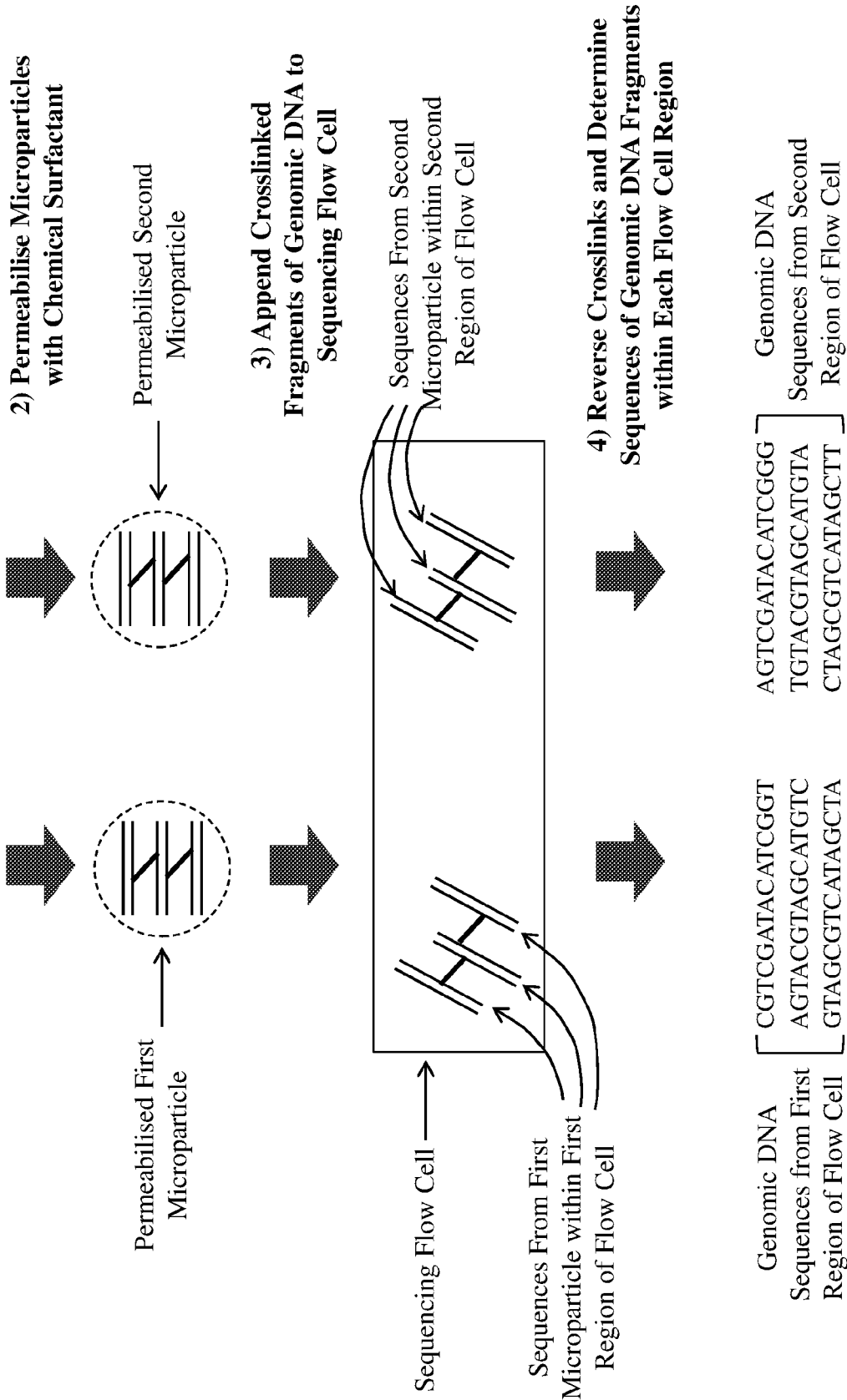


Separate Sequencing Approach

FIGURE 23

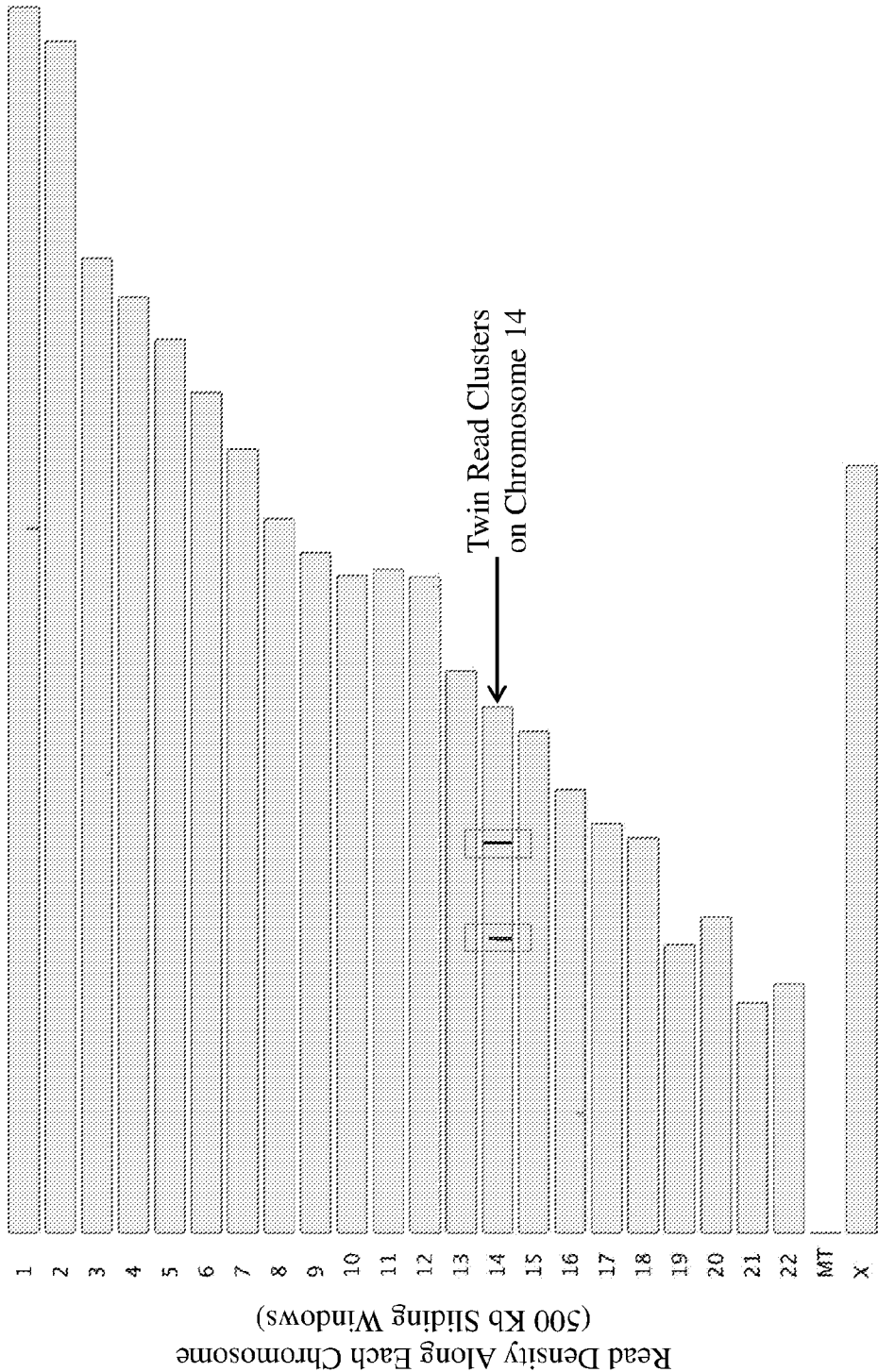






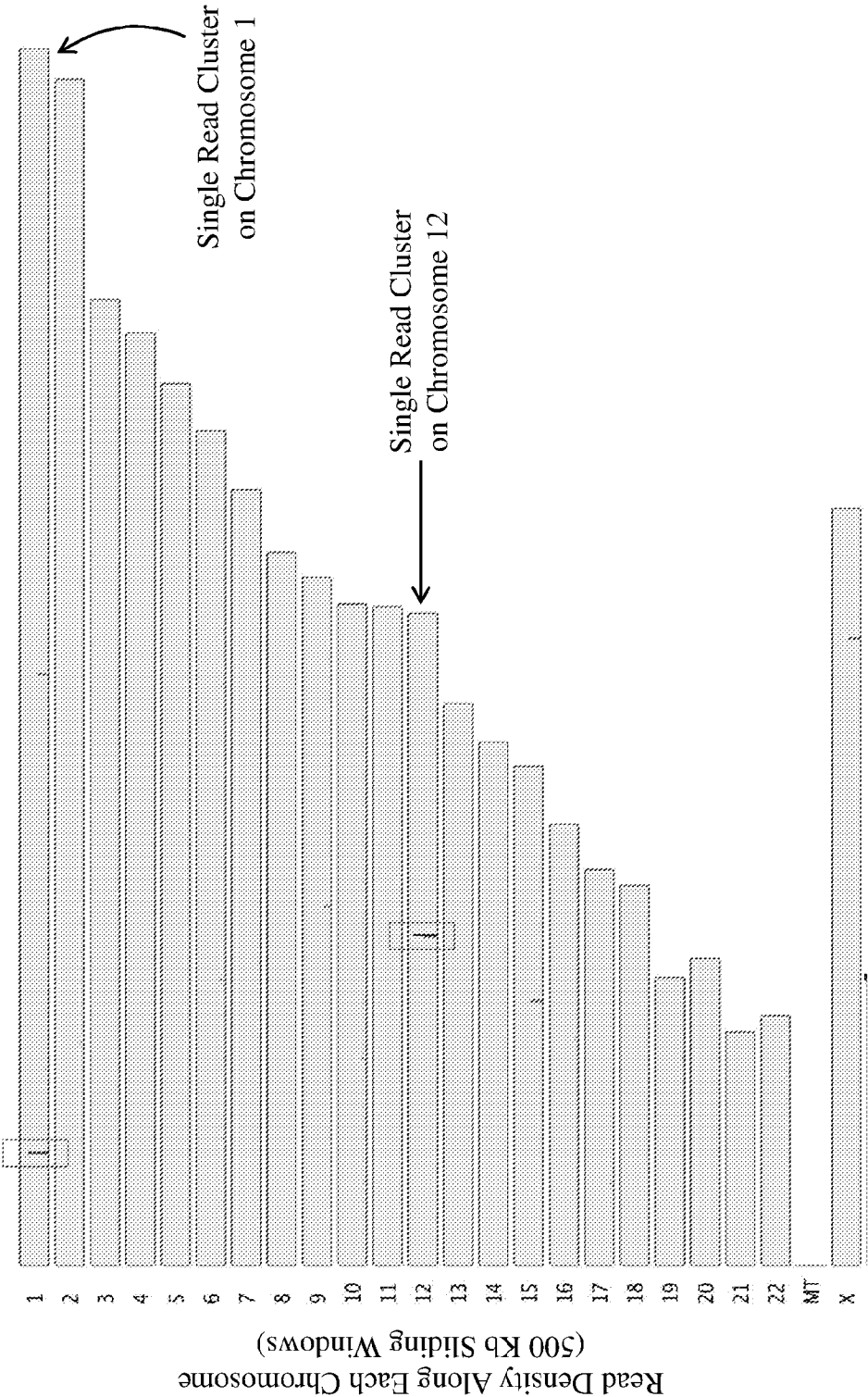
Linked Sequences from Circulating Microparticle – Variant A

FIGURE 25



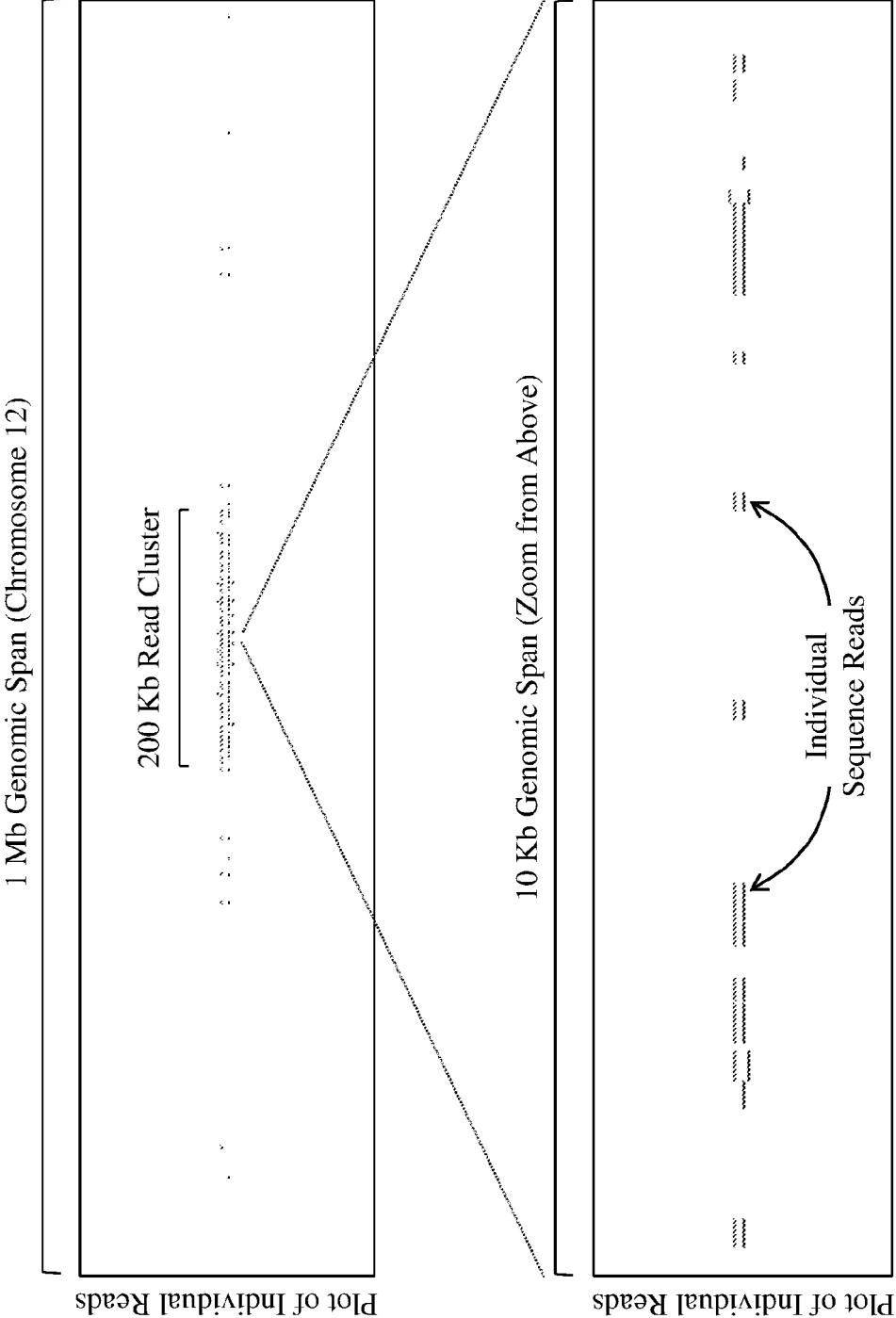
Linked Sequences from Circulating Microparticle – Variant B

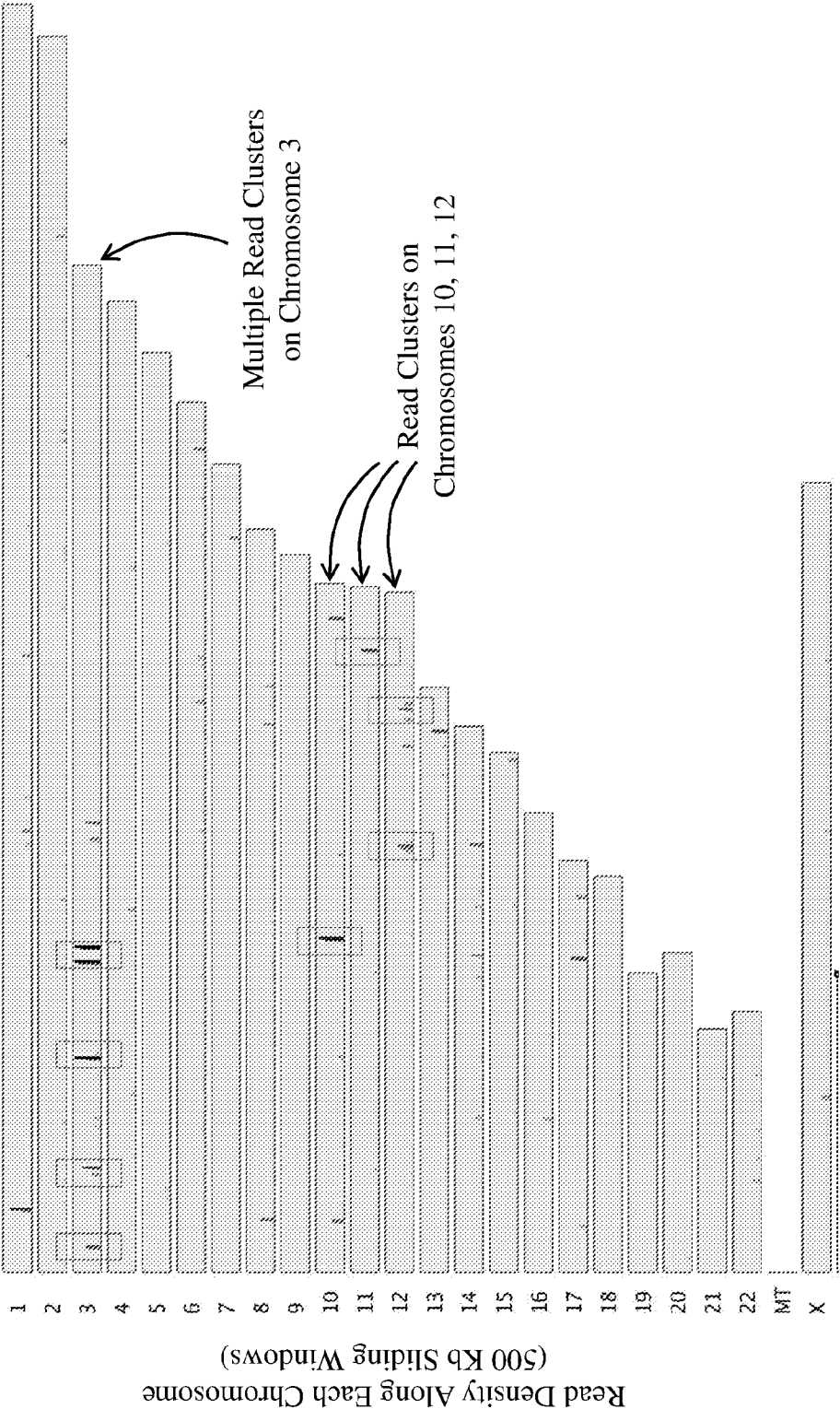
FIGURE 26



Linked Sequences from Circulating Microparticle
Individual Read Cluster (Method Variant B)

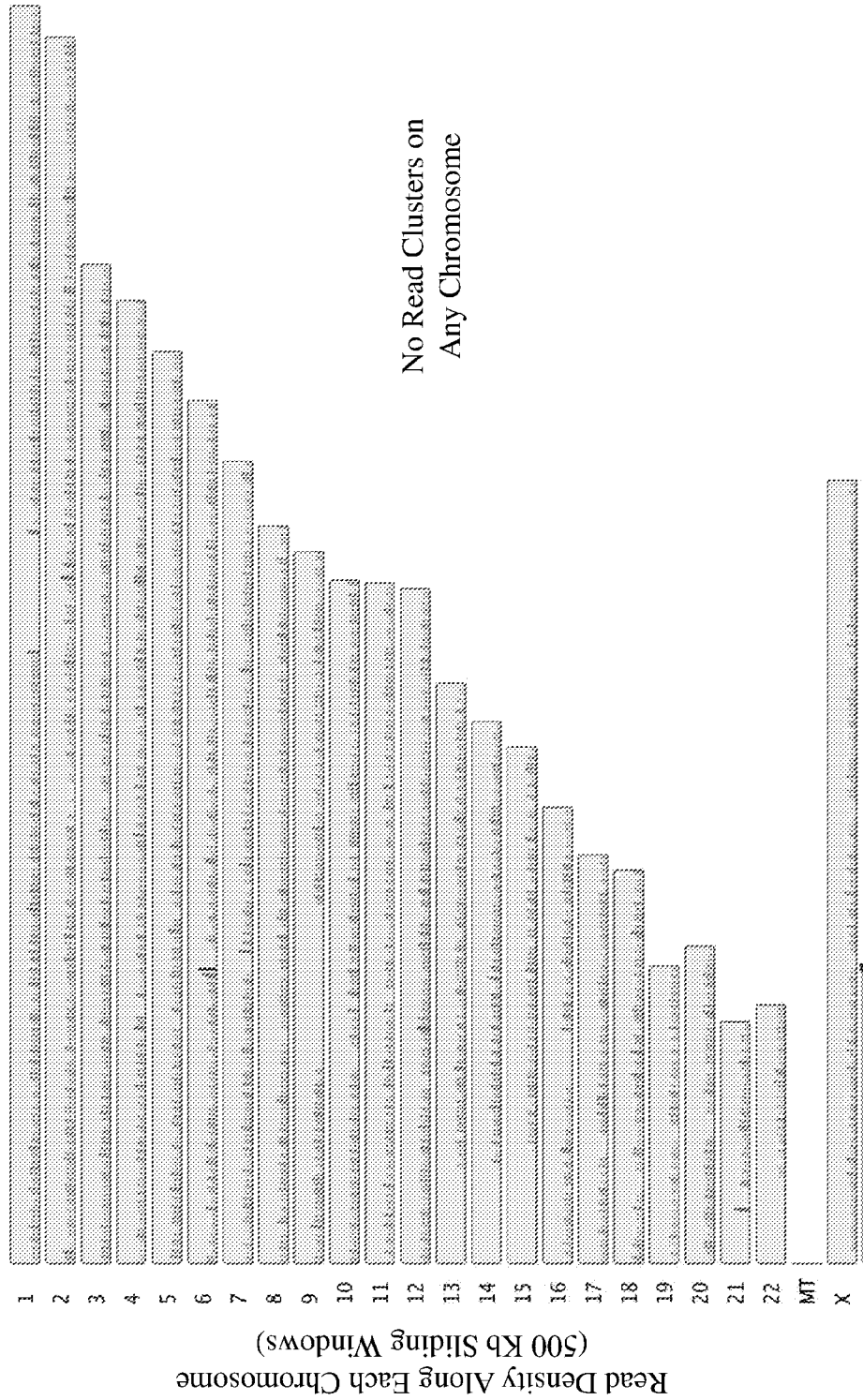
FIGURE 27





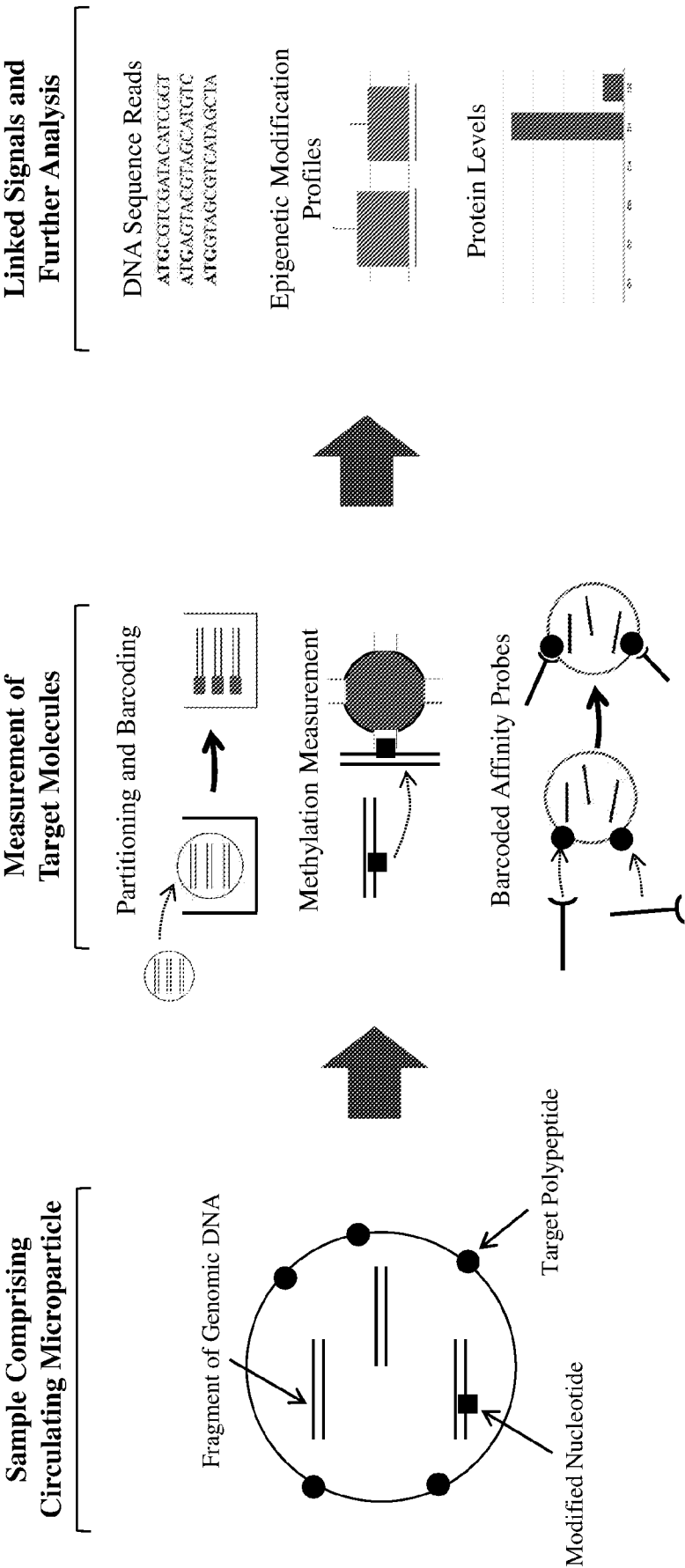
Linked Sequences from Circulating Microparticle – Negative Control
(Purified, Unlinked Sequences)

FIGURE 29



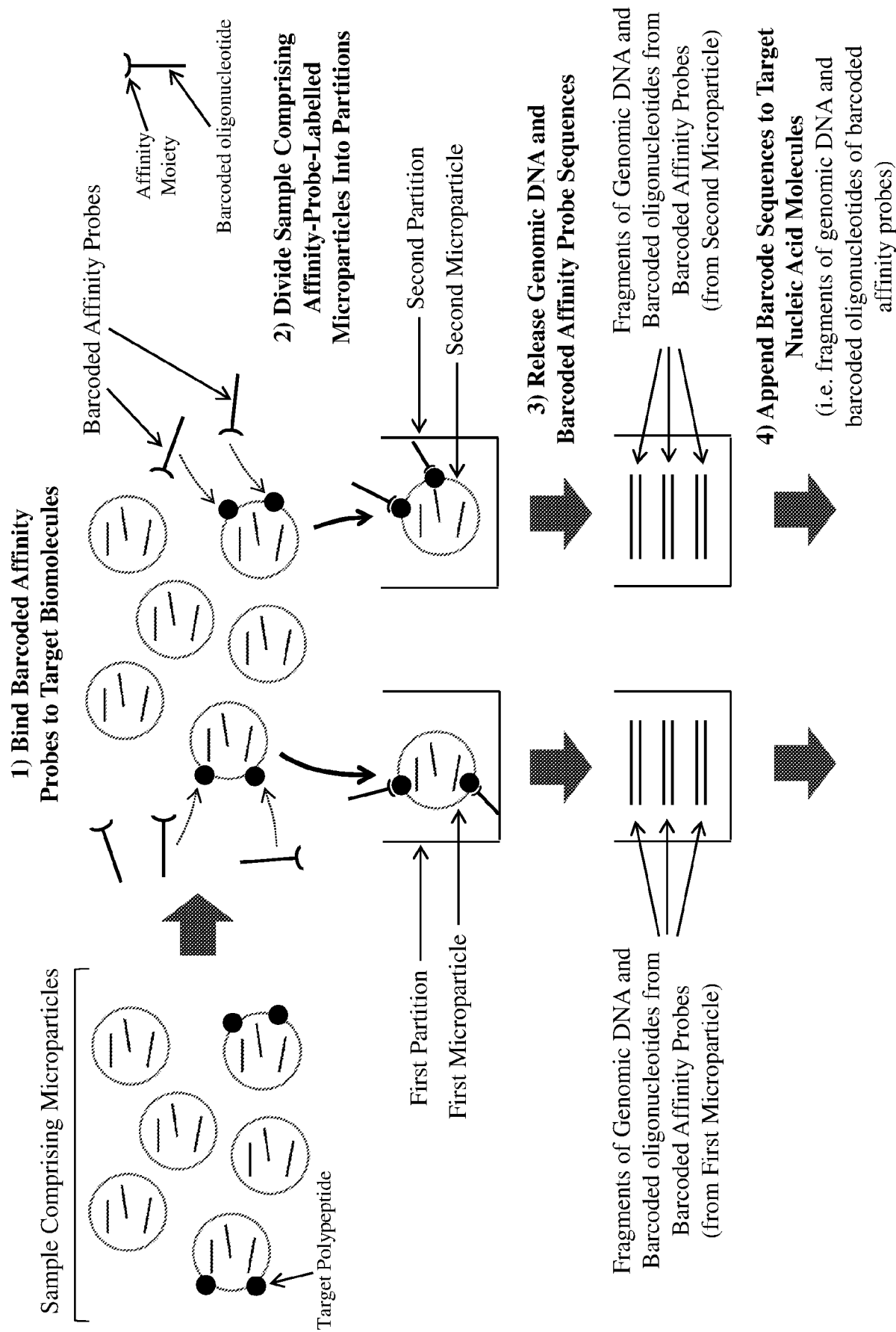
Multi-parametric measurement of target molecules in a single circulating microparticle

FIGURE 30

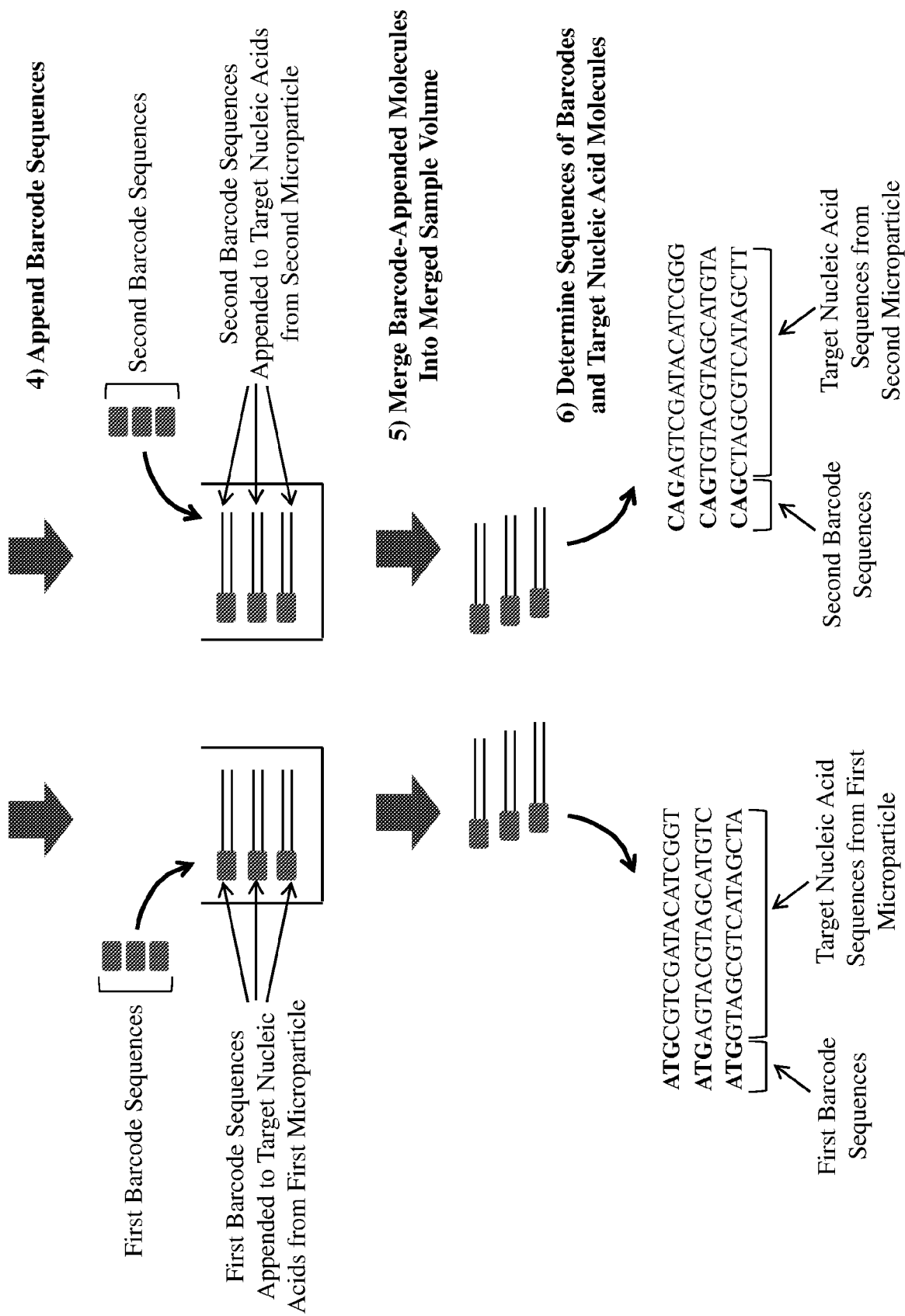


Measurement with Barcoded Affinity Probes (Example with partitioning)

FIGURE 31

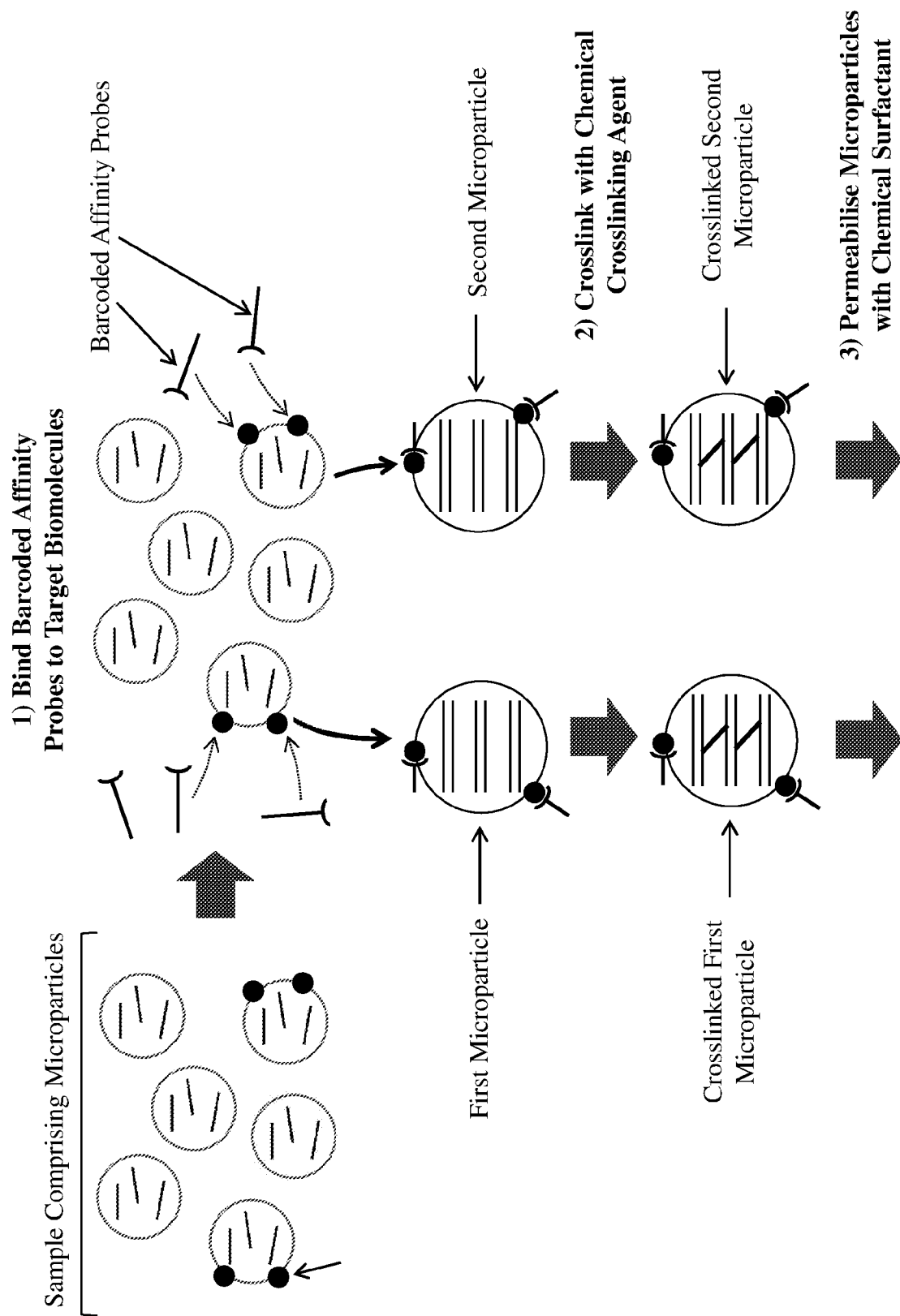


Measurement with Barcoded Affinity Probes (Example with partitioning) **FIGURE 31**



Measurement with Barcoded Affinity Probes (Example with Multimeric Barcoding Reagents)

FIGURE 32



Measurement with Barcoded Affinity Probes (Example with Multimeric Barcoding Reagents)

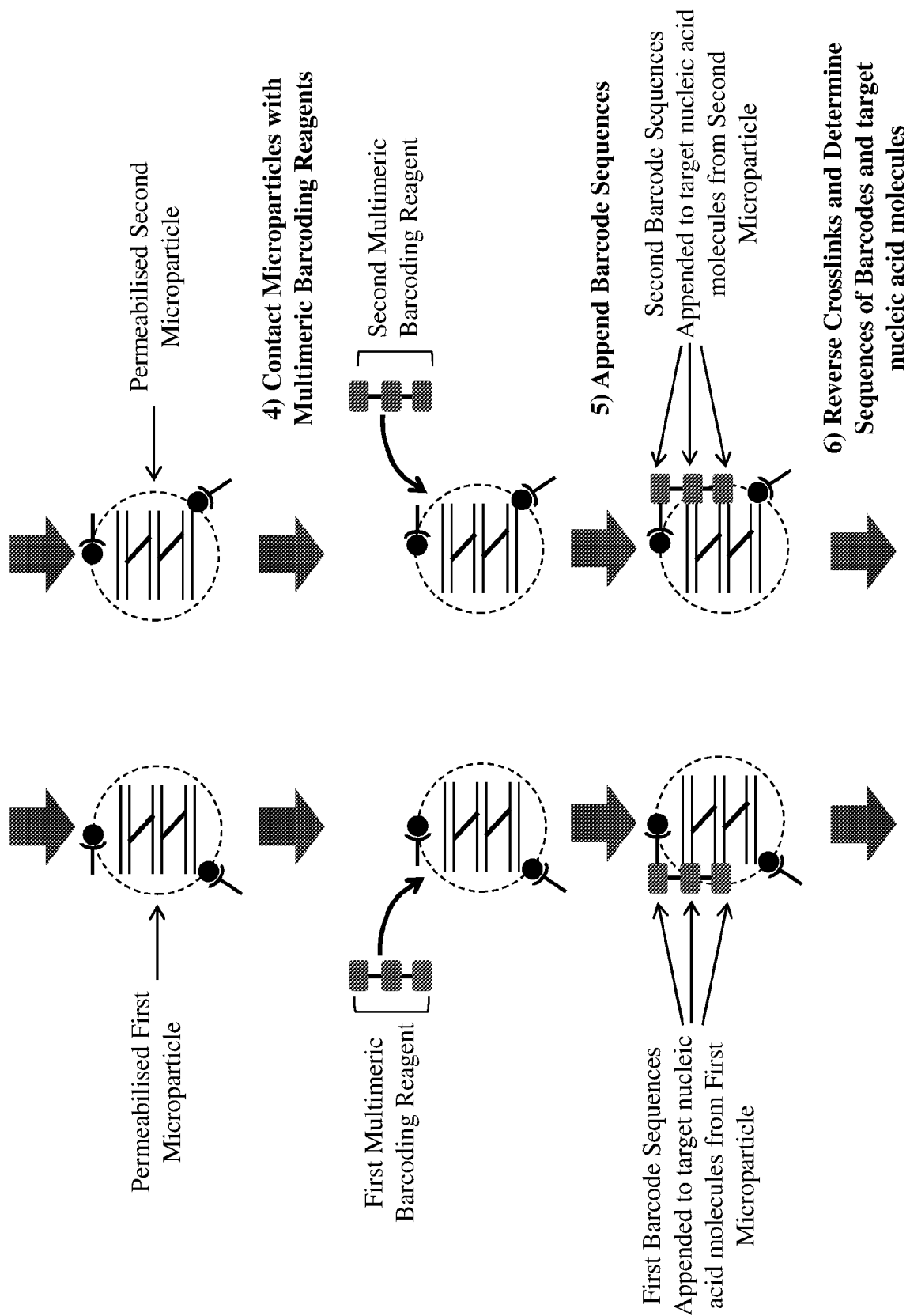
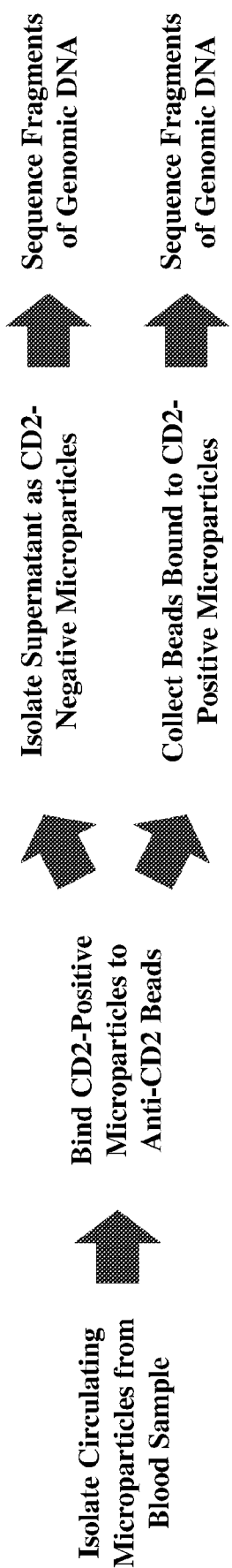


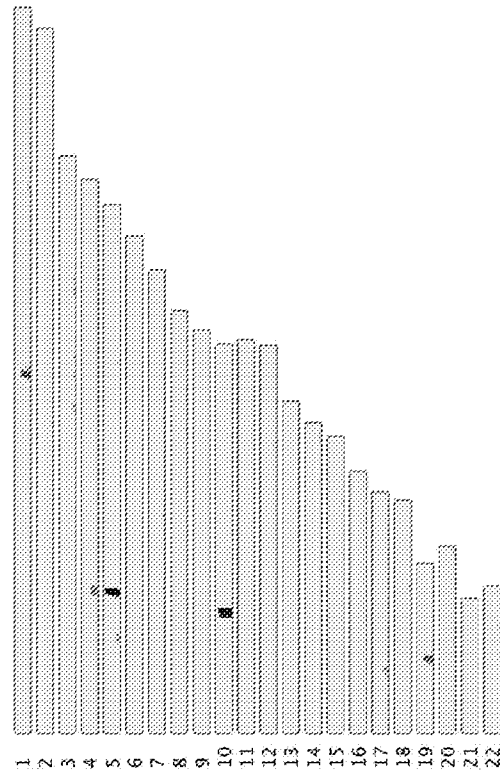
FIGURE 32

Measurement of Target Polypeptide and Fragments of Genomic DNA

FIGURE 33

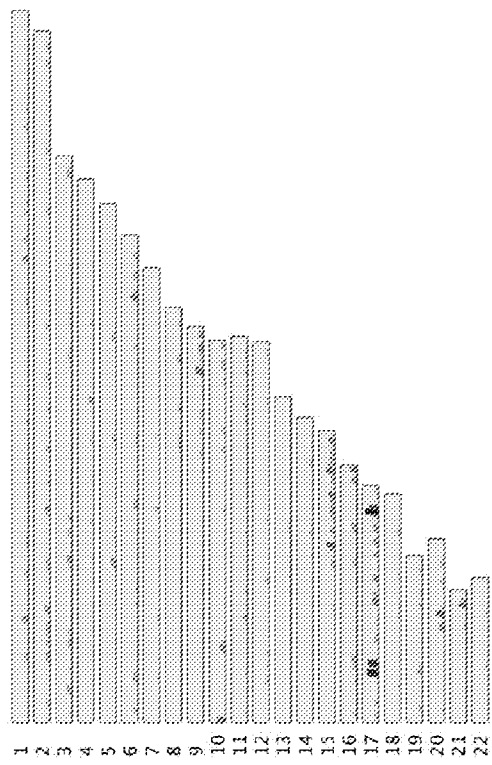


CD2 – Positive Microparticle



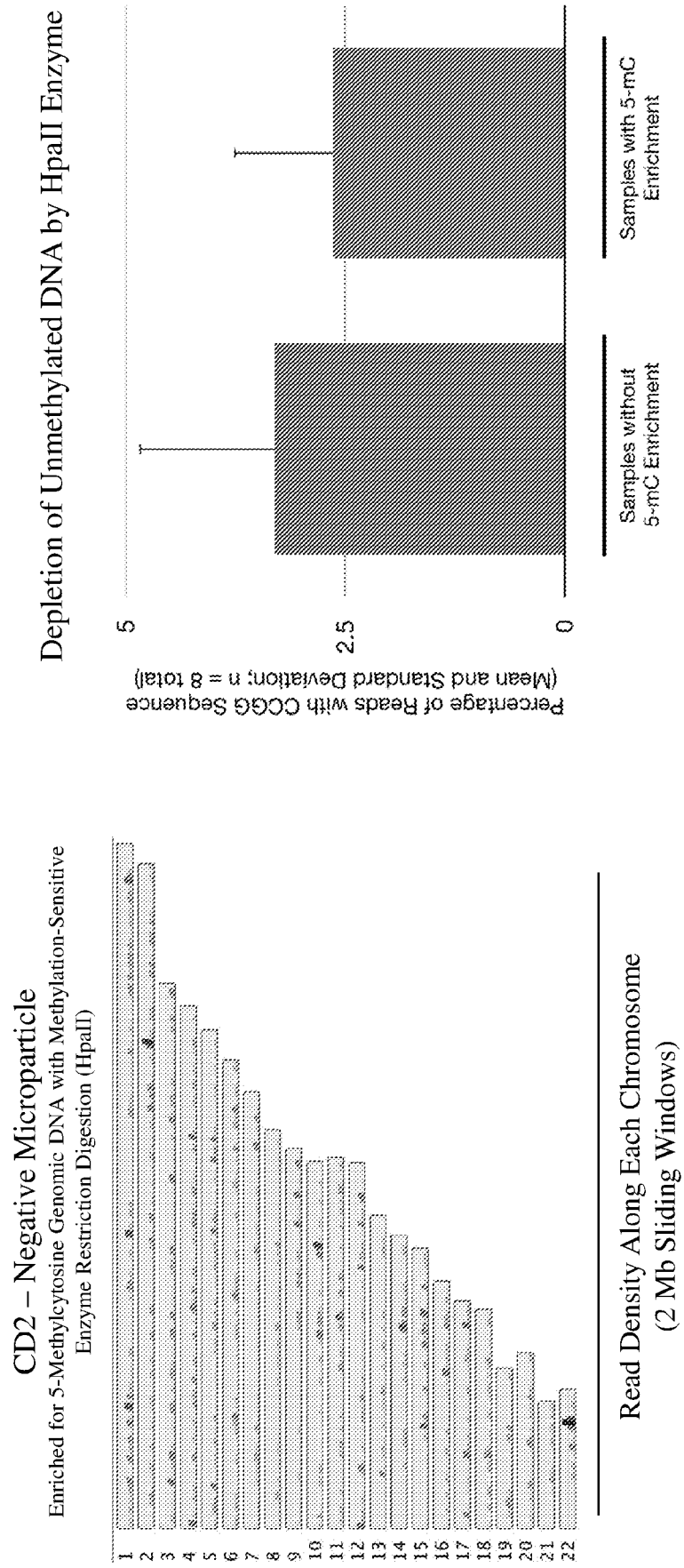
Read Density Along Each Chromosome
(2 Mb Sliding Windows)

CD2 – Negative Microparticle



Read Density Along Each Chromosome
(2 Mb Sliding Windows)

Measurement of Cytosine-Modified (5-mC) DNA and Target Polypeptide FIGURE 34

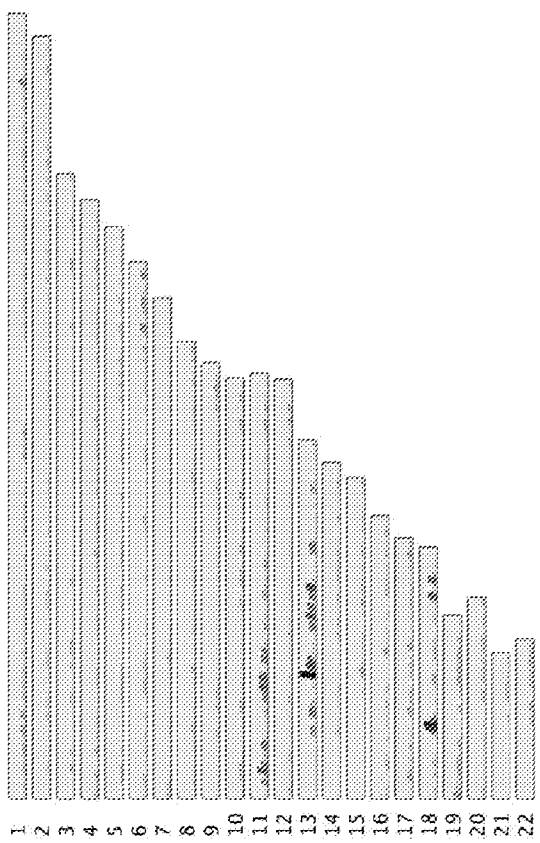


Measurement of Target Polypeptide with Barcoded Affinity Probe

FIGURE 35



CD2 – Negative Microparticle
Labelled and Measured with Barcoded Affinity Probe for PMCA
(Plasma Membrane Calcium ATPase) Protein



Read Density Along Each Chromosome
(2 Mb Sliding Windows)

Measurement of PMCA with Barcoded Affinity Probe Sequences

