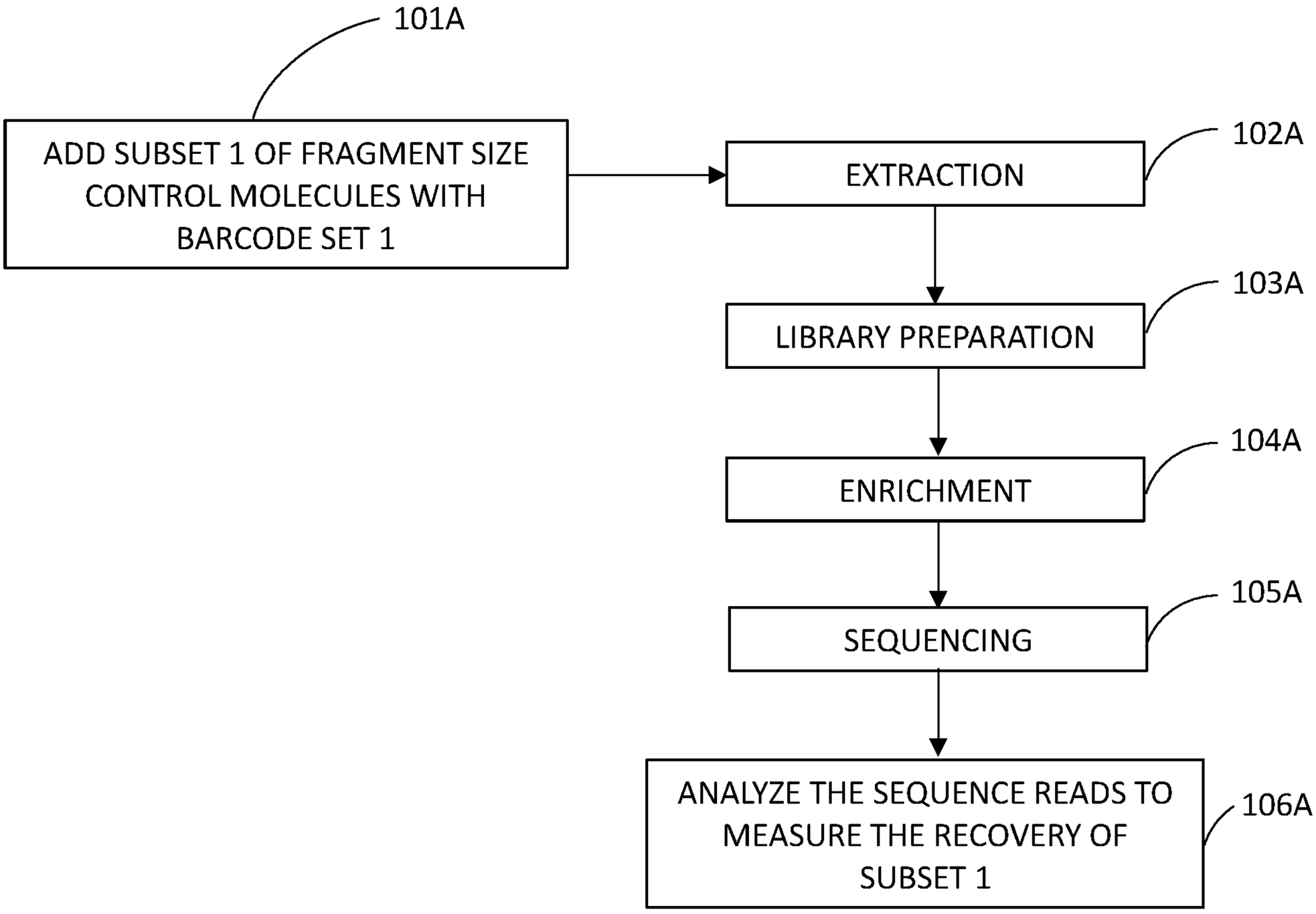
101A
ADD SUBSET 1 OF FRAGMENT SIZE CONTROL MOLECULES WITH BARCODE SET 1
EXTRACTION
102A
LIBRARY PREPARATION
103A
ENRICHMENT
104A
SEQUENCING
105A
ANALYZE THE SEQUENCE READS TO MEASURE THE RECOVERY OF SUBSET 1
106A

FIG. 1A

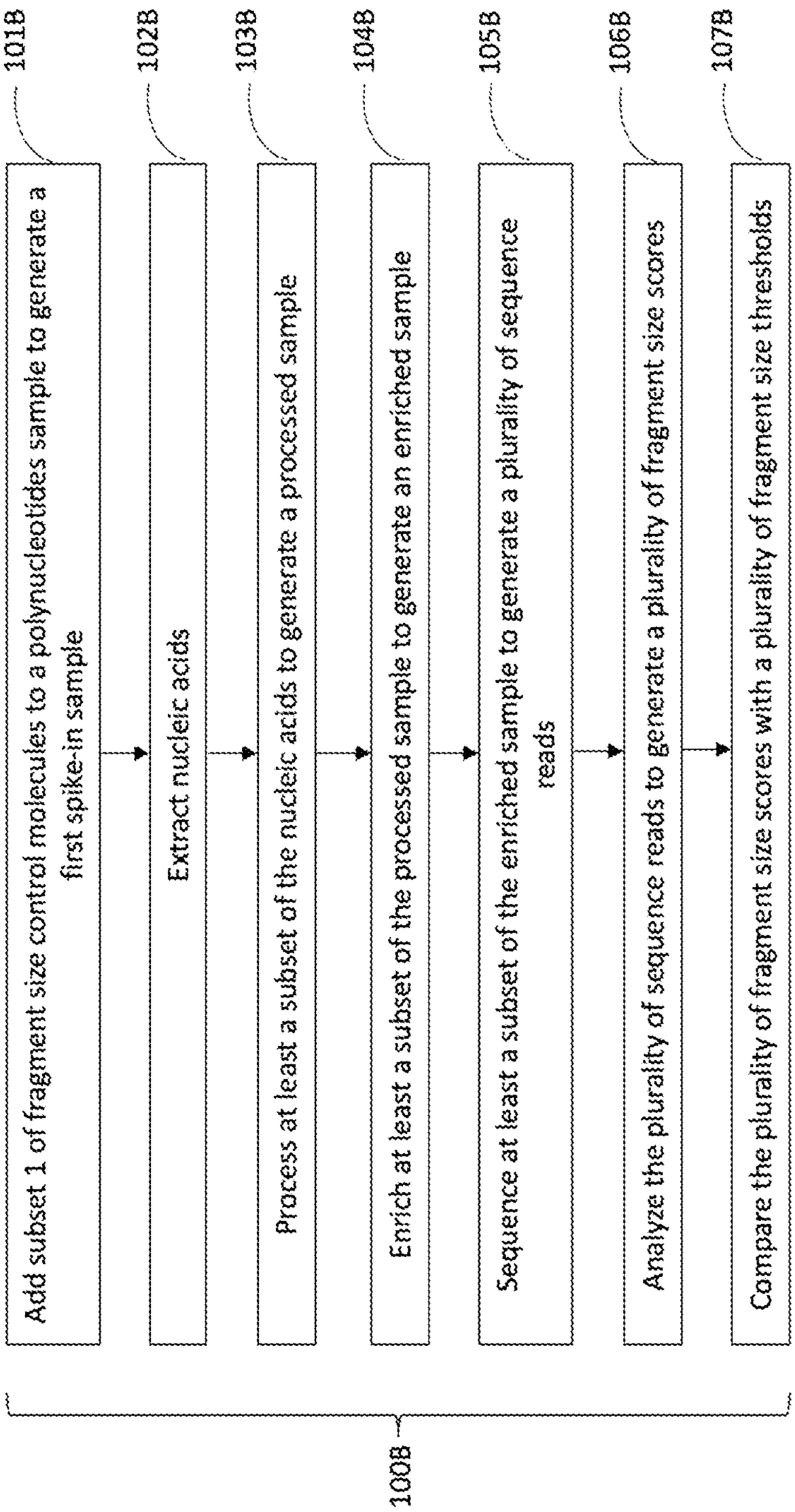
1008
Add subset 1 of fragment size control molecules to a polynucleotides sample to generate a first spike-in sample
1018
Extract nucleic acids
1028
Process at least a subset of the nucleic acids to generate a processed sample
1038
Enrich at least a subset of the processed sample to generate an enriched sample
1048
Sequence at least a subset of the enriched sample to generate a plurality of sequence reads
1058
Analyze the plurality of sequence reads to generate a plurality of fragment size scores
1068
Compare the plurality of fragment size scores with a plurality of fragment size thresholds
1078

FIG. 1B

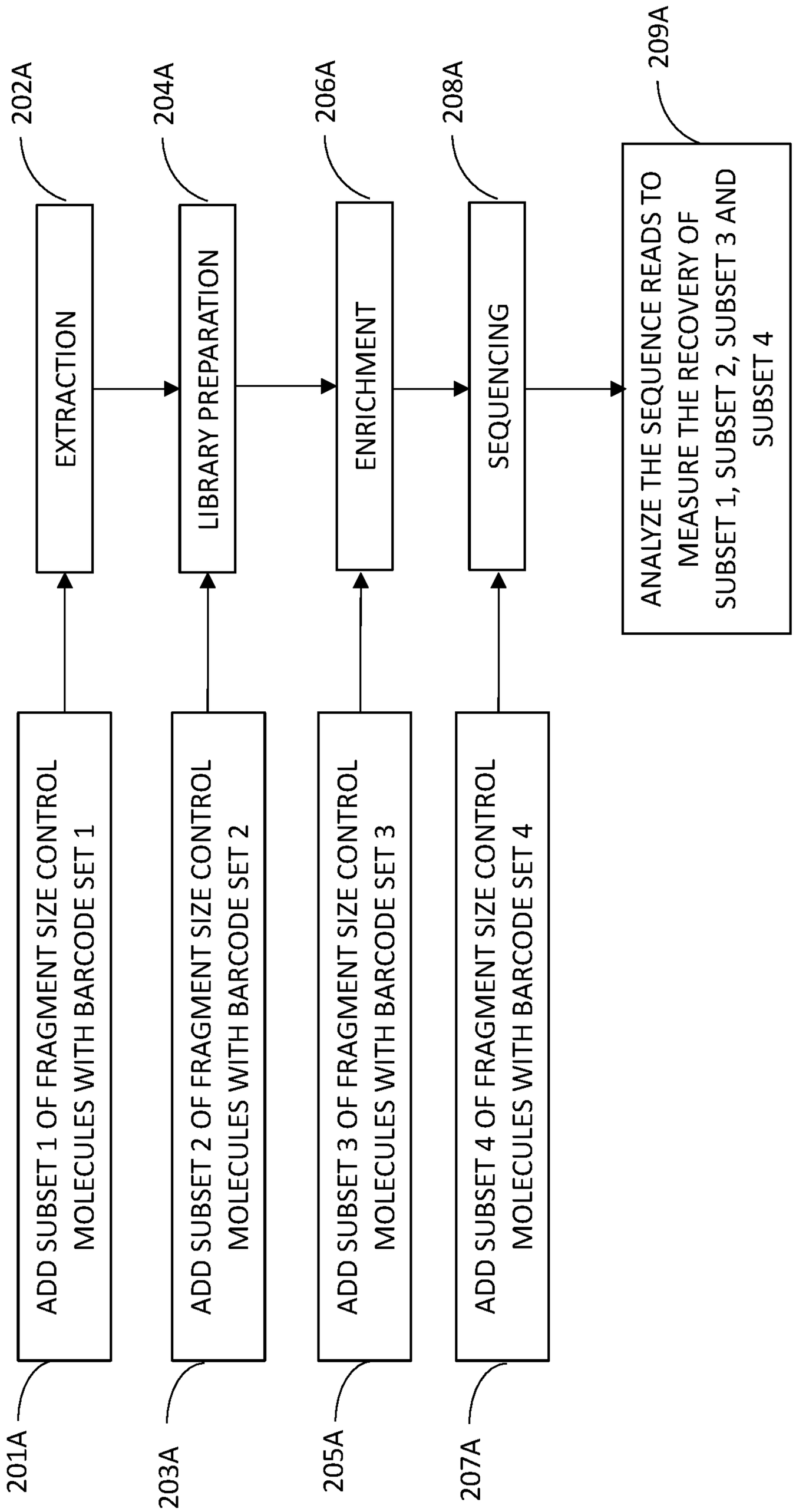
201A
ADD SUBSET 1 OF FRAGMENT SIZE CONTROL MOLECULES WITH BARCODE SET 1
203A
ADD SUBSET 2 OF FRAGMENT SIZE CONTROL MOLECULES WITH BARCODE SET 2
205A
ADD SUBSET 3 OF FRAGMENT SIZE CONTROL MOLECULES WITH BARCODE SET 3
207A
ADD SUBSET 4 OF FRAGMENT SIZE CONTROL MOLECULES WITH BARCODE SET 4
EXTRACTION
LIBRARY PREPARATION
ENRICHMENT
SEQUENCING
ANALYZE THE SEQUENCE READS TO MEASURE THE RECOVERY OF SUBSET 1, SUBSET 2, SUBSET 3 AND SUBSET 4
209A

FIG. 2A

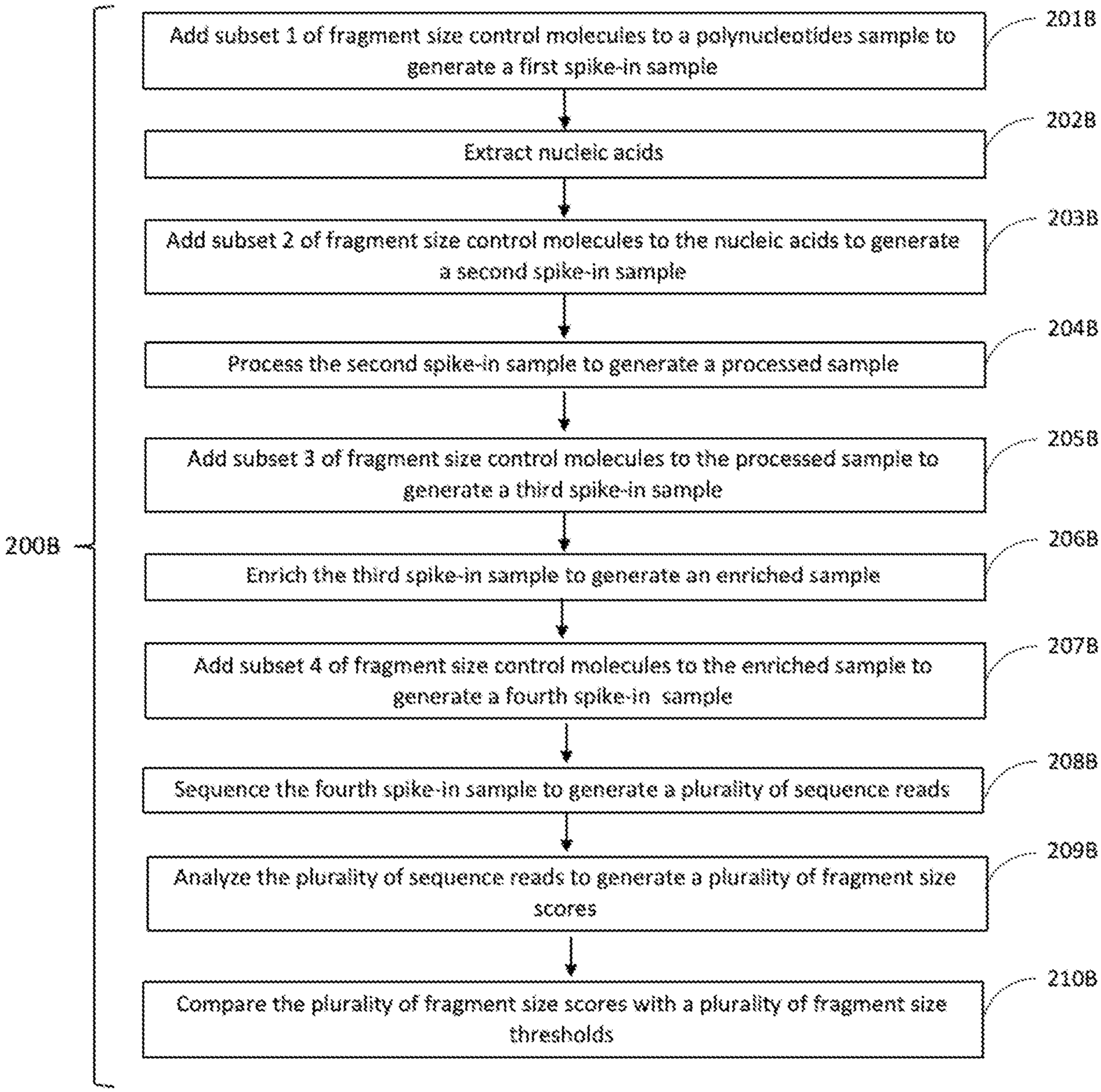
2008
Add subset 1 of fragment size control molecules to a polynucleotides sample to generate a first spike-in sample
2018
Extract nucleic acids
2028
Add subset 2 of fragment size control molecules to the nucleic acids to generate a second spike-in sample
2038
Process the second spike-in sample to generate a processed sample
2048
Add subset 3 of fragment size control molecules to the processed sample to generate a third spike-in sample
2058
Enrich the third spike-in sample to generate an enriched sample
2068
Add subset 4 of fragment size control molecules to the enriched sample to generate a fourth spike-in sample
2078
Sequence the fourth spike-in sample to generate a plurality of sequence reads
2088
Analyze the plurality of sequence reads to generate a plurality of fragment size scores
2098
Compare the plurality of fragment size scores with a plurality of fragment size thresholds
2108

FIG. 2B

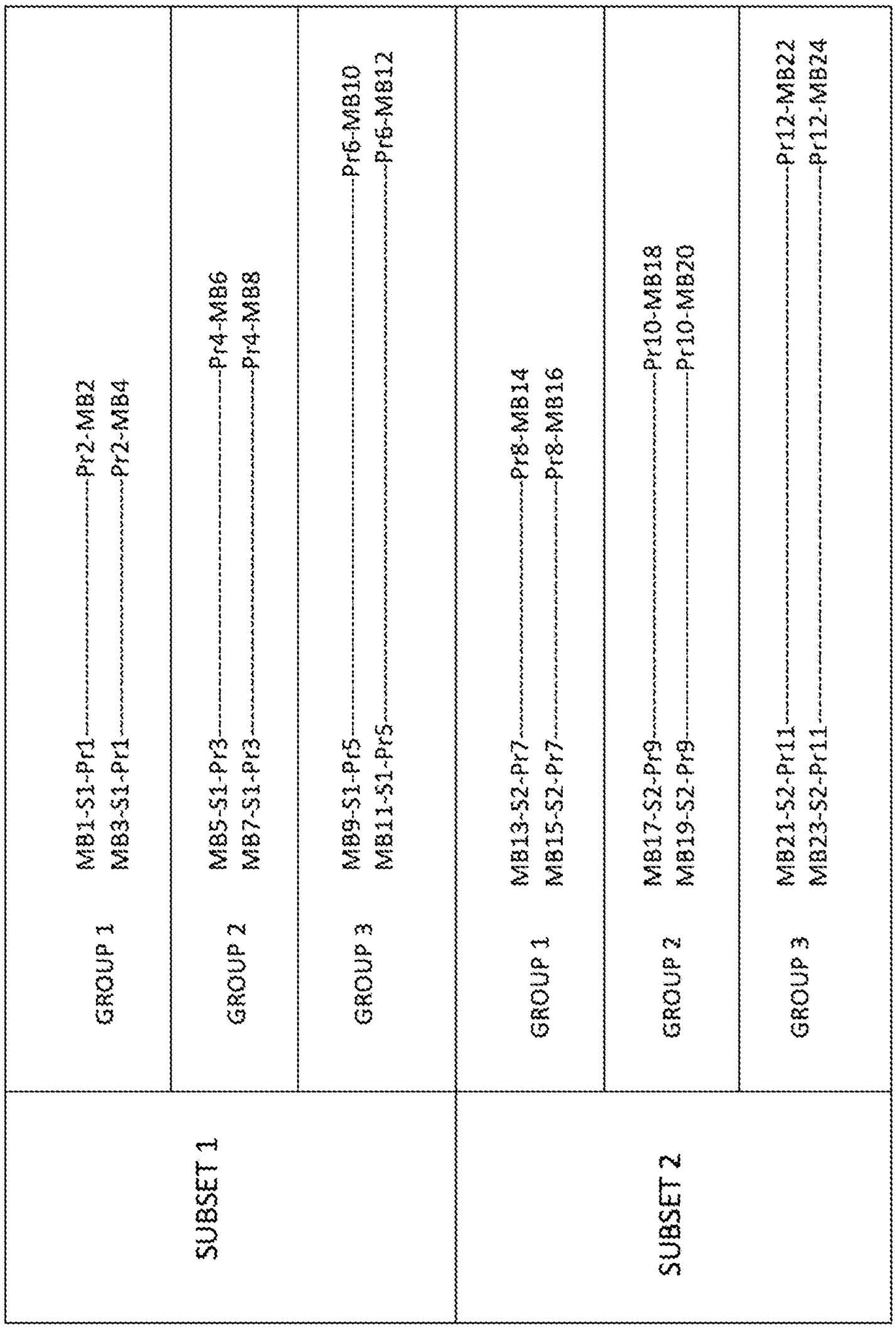
SUBSET 1
GROUP 1
MB1-S1-Pr1----------Pr2-MB2
MB3-S1-Pr1----------Pr2-MB4
GROUP 2
MB5-S1-Pr3----------Pr4-MB6
MB7-S1-Pr3----------Pr4-MB8
GROUP 3
MB9-S1-Pr5----------Pr6-MB10
MB11-S1-Pr5----------Pr6-MB12
SUBSET 2
GROUP 1
MB13-S2-Pr7----------Pr8-MB14
MB15-S2-Pr7----------Pr8-MB16
GROUP 2
MB17-S2-Pr9----------Pr10-MB18
MB19-S2-Pr9----------Pr10-MB20
GROUP 3
MB21-S2-Pr11----------Pr12-MB22
MB23-S2-Pr11----------Pr12-MB24

FIG. 3

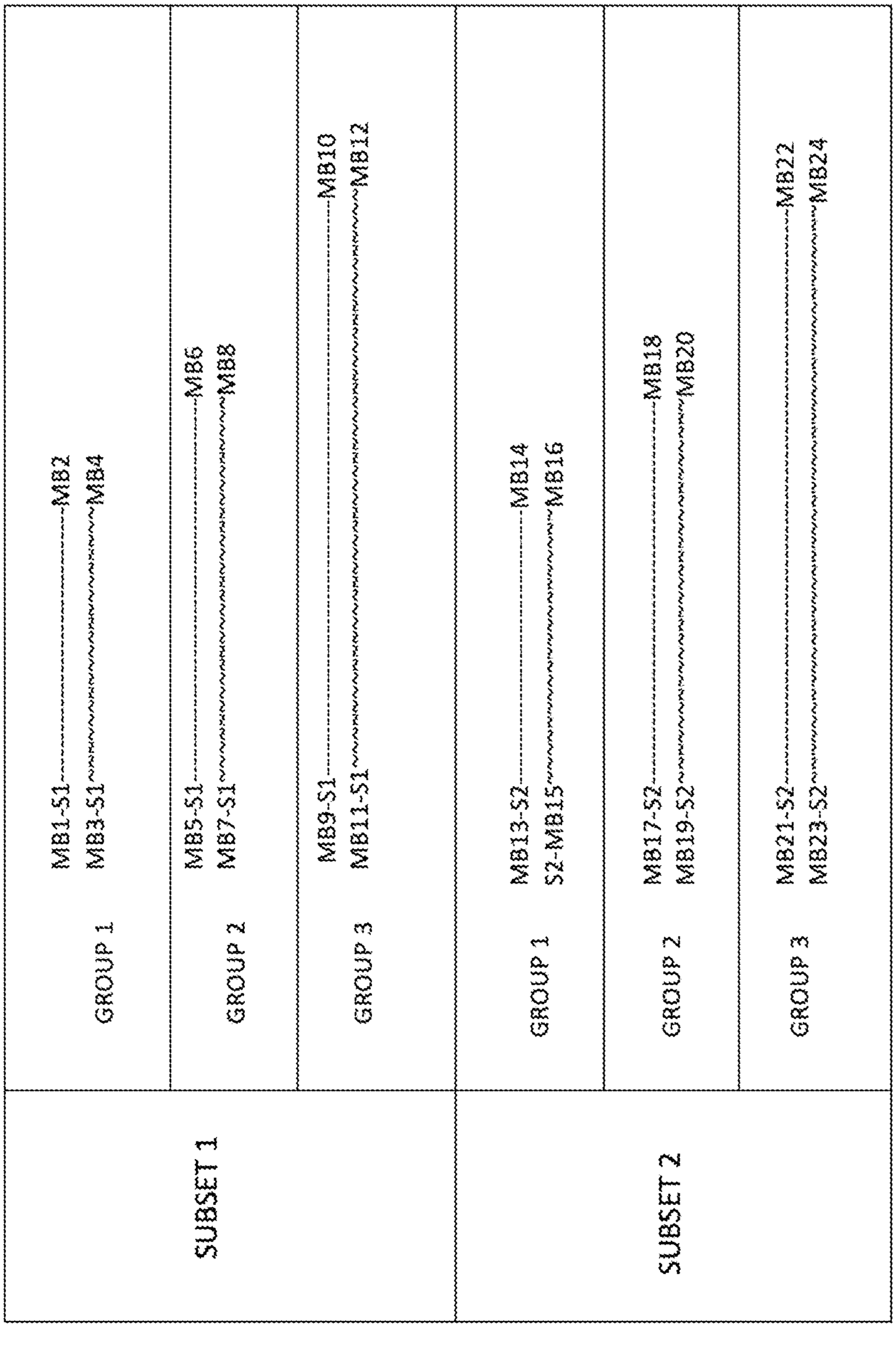
SUBSET 1
GROUP 1
MB1-S1
MB3-S1
MB2
MB4
GROUP 2
MB5-S1
MB7-S1
MB6
MB8
GROUP 3
MB9-S1
MB11-S1
MB10
MB12
SUBSET 2
GROUP 1
MB13-S2
S2-MB15
MB14
MB16
GROUP 2
MB17-S2
MB19-S2
MB18
MB20
GROUP 3
MB21-S2
MB23-S2
MB22
MB24

FIG. 4

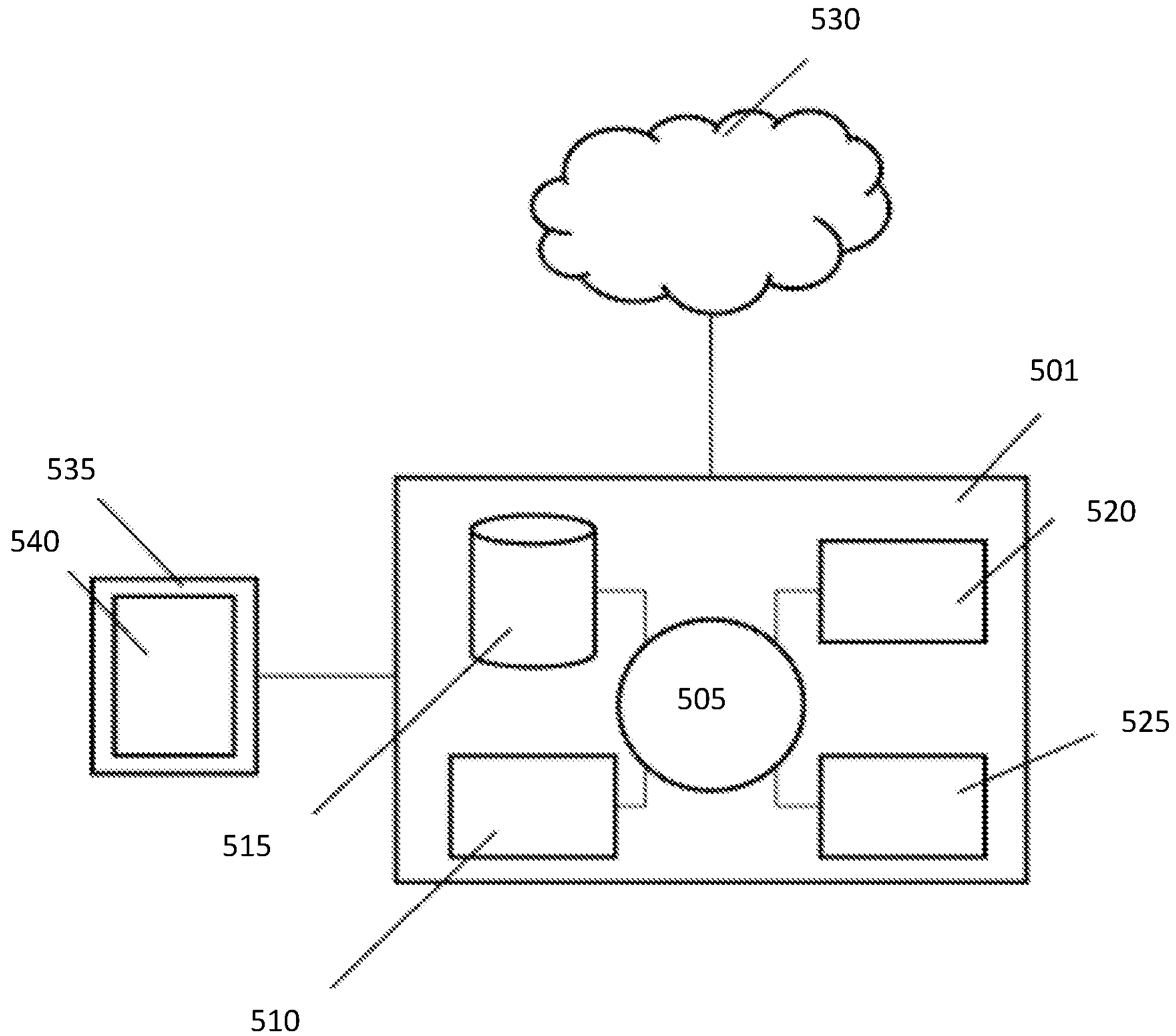

FIG. 5