

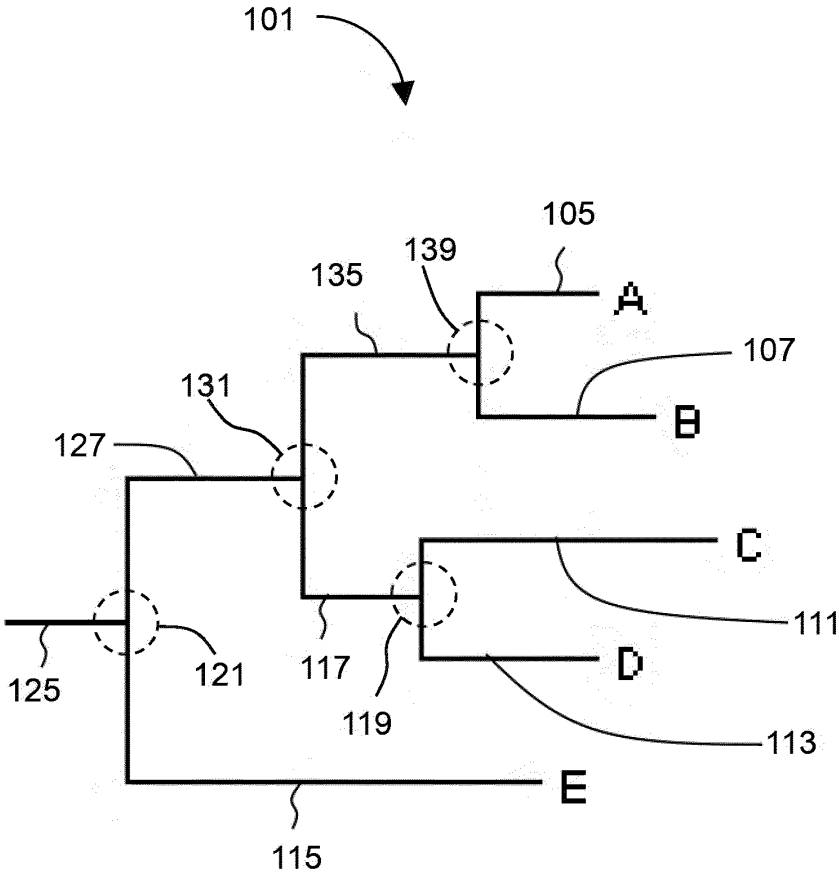
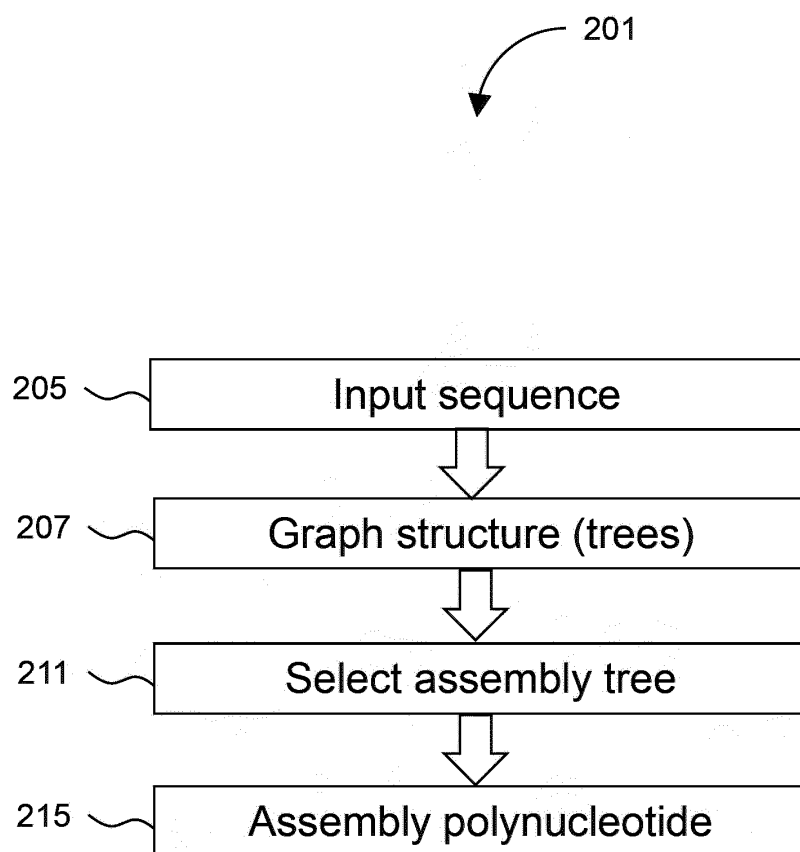


FIG. 1

**FIG. 2**

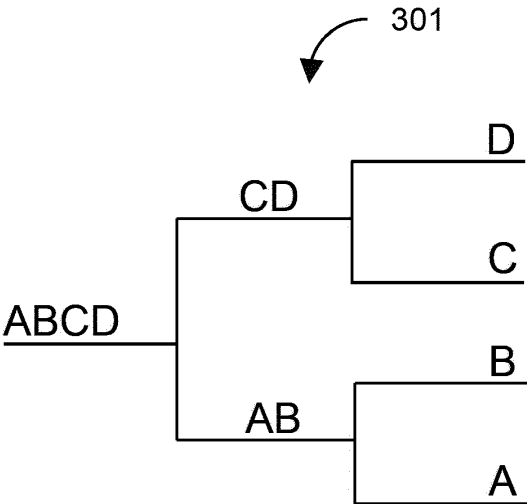


FIG. 3

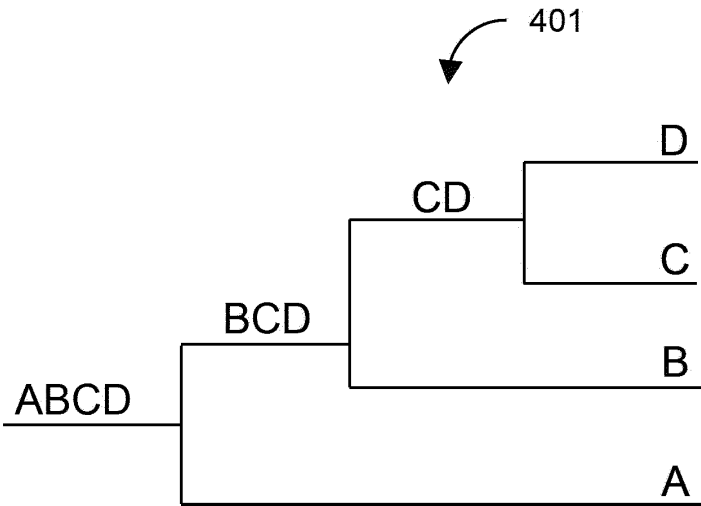


FIG. 4

501



	A	B	C	D
A	0	1	1	1
B	1	0	1	1
C	1	0	0	1
D	0	1	0	0.2

Probability that 3' end of i will ligate to 5' end of j

FIG. 5

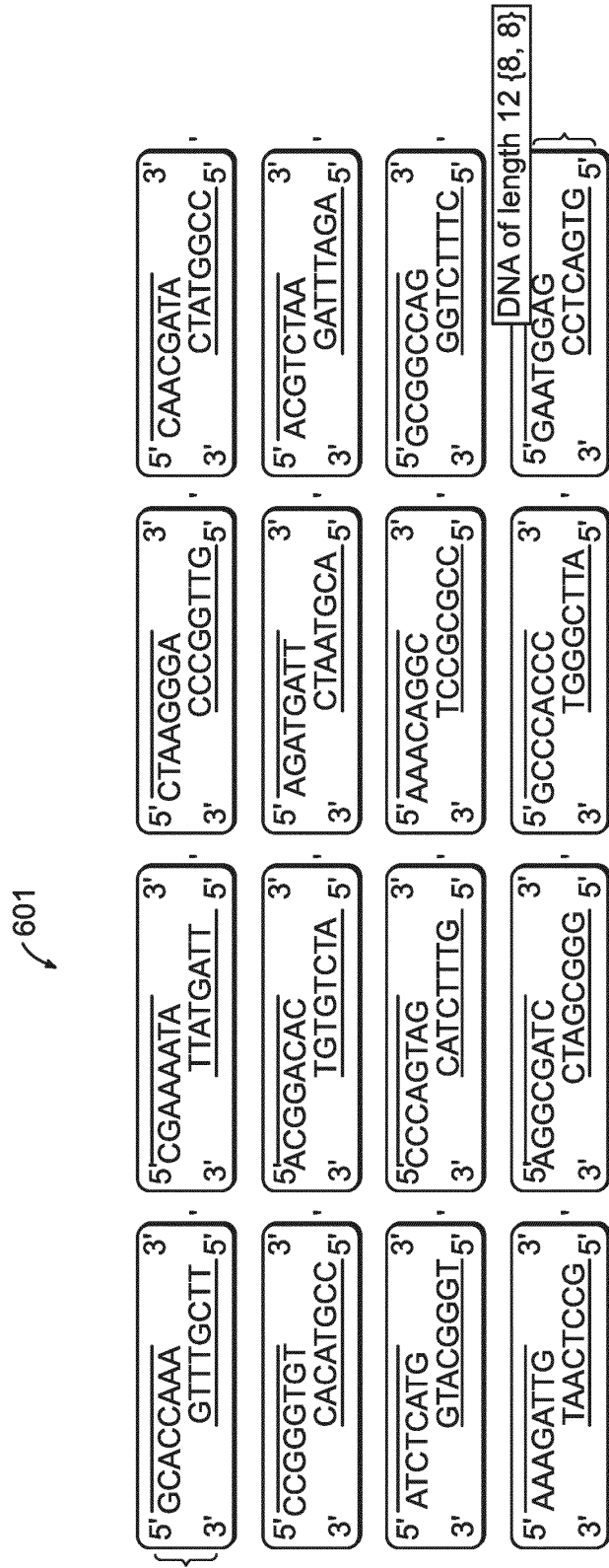


FIG. 6

FIG. 7

701

		Ligation Matrix																
		GCAC	TTCG	CGAA	TTAG	CTAA	GTTG	CAAC	CCGG	CCGG	CCGT	ACGG	ATCT	AGAT	ACGT	ACGT	AGAT	ATCT
1																		
2			1731															
3		1731																
4					334													
5				334														
6							3635											
7						3635												
8								4272	4272		93							
9								4272	4272		93							
10										2	3626							
11								93	93	3626					5	5		
12													2084				2084	
13													2084					2084
14											5				1744	1744		
15											5				1744	1744		
16													2084					2084
17														2084				2084
18										1								
19																		
20							6							1			1	
21						15												
22												58						
23							1	10	10	175					1	1		
24				1														
25										1								
26																		
27																		
28	69																	
29																		
30																		
31						1												
32	30																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

701

TGGG	CCCA	GTTT	AAAC	CCGC	GCGG	CTTT	AAAG	GCCT	AGGC	GGGC	GCCC	ATTC	GAAT	GTGA	
									69					30	GCAC
															TTCG
															CGAA
						1									TTAG
															CTAA
			15										1		GTTG
		6			1										CAAC
					10										CCGG
					10										CCGG
1					175		1								CCGT
				58											ACGG
															ATCT
		1													AGAT
					1										ACGT
					1										ACGT
		1													AGAT
															ATCT
	3626														TGGG
3626	2				1										CCCA
			2888												GTTT
		2888													AAAC
				2	3767										CCGC
	1			3767											GCGG
						1678									CTTT
						1678									AAAG
								3804	231						GCCT
								3804			5				AGGC
								231			3928				GGGC
									5	3928	4				GCCC
												2	2452		ATTC
												2452			GAAT
														4	GTGA
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	

FIG. 7 (CONT.)

SUBSTITUTE SHEET (RULE 26)

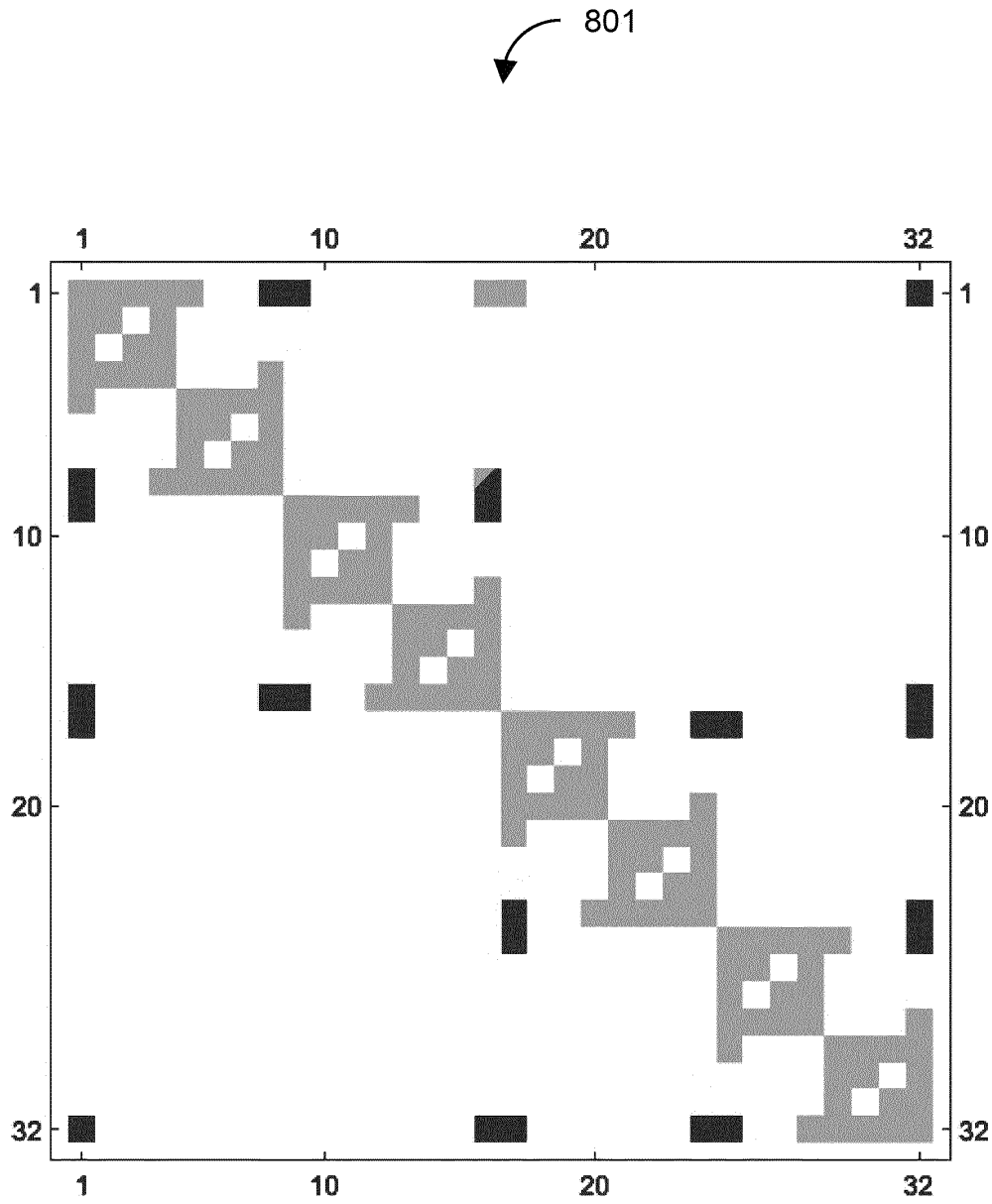


FIG. 8

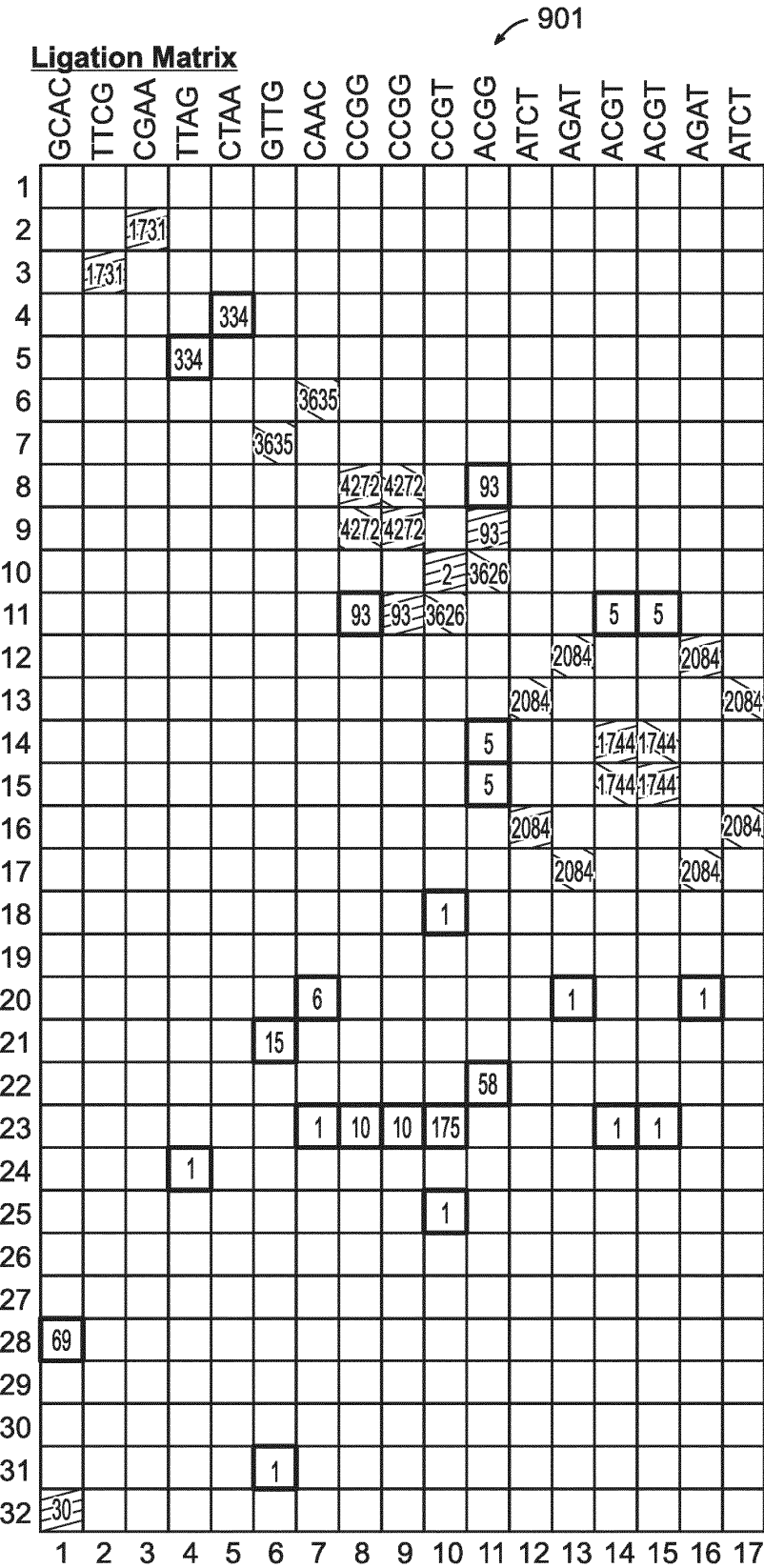


FIG. 9

901

TGGG	CCCA	GTTT	AAAC	CCGC	GCGG	CTTT	AAAG	GCCT	AGGC	GGGC	GCCC	ATTC	GAAT	GTGA	
									69					30	GCAC
															TTCG
						1									CGAA
															TTAG
															CTAA
			15										1		GTTG
		6			1										CAAC
					10										CCGG
					10										CCGG
1					175		1								CCGT
				58											ACGG
															ATCT
		1													AGAT
					1										ACGT
					1										ACGT
		1													AGAT
															ATCT
	3286														TGGG
3286	2				1										CCCA
			2888												GTTT
		2888													AAAC
				2	3767										CCGC
	1			3767											GCGG
						1678									CTTT
						1678									AAAG
									3804	231					GCCT
									3804			5			AGGC
									231			3928			GGGC
									5	3928	4				GCCC
												2	2452		ATTC
												2452			GAAT
														4	GTGA
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	

FIG. 9 (CONT.)

SUBSTITUTE SHEET (RULE 26)

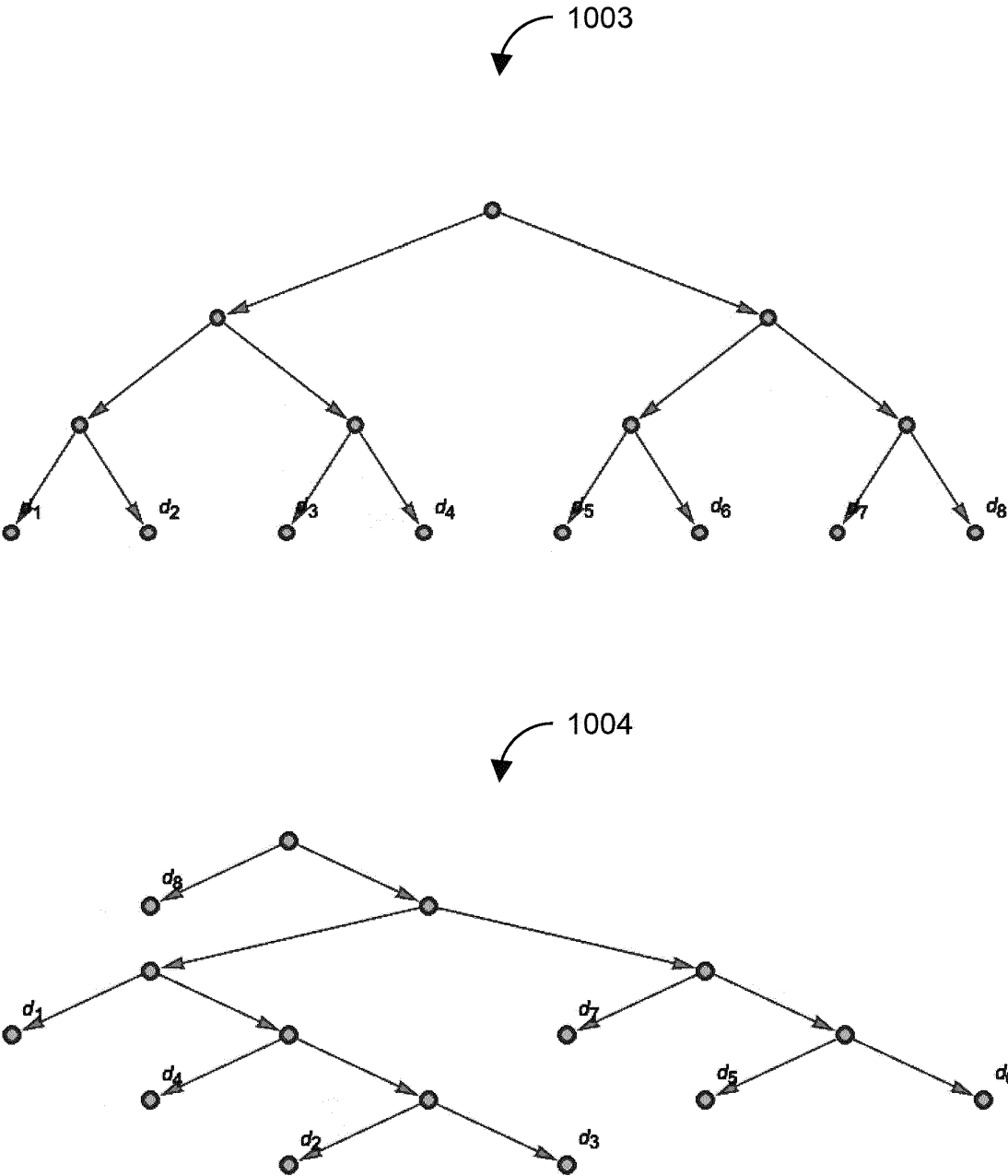


FIG. 10

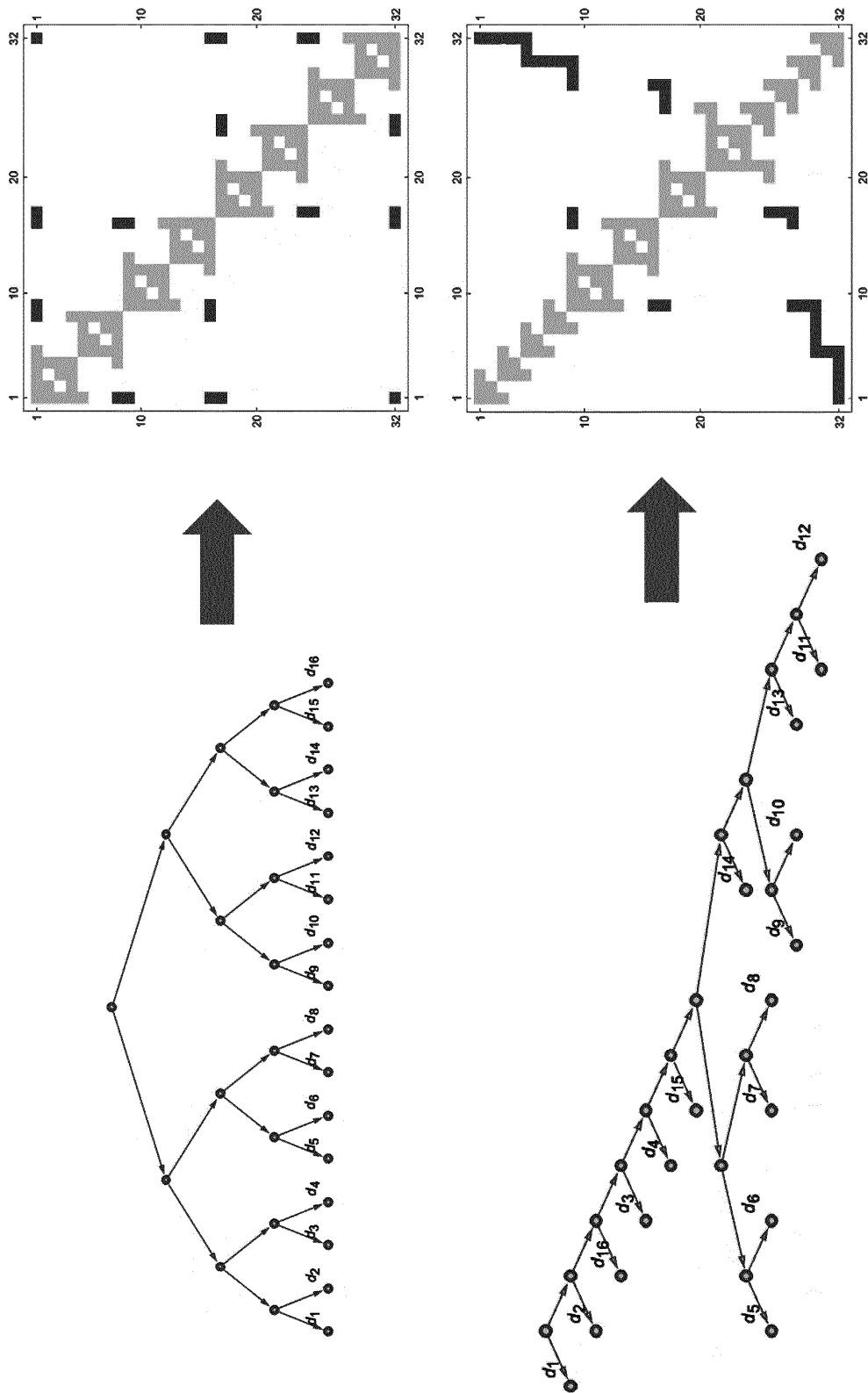


FIG. 11

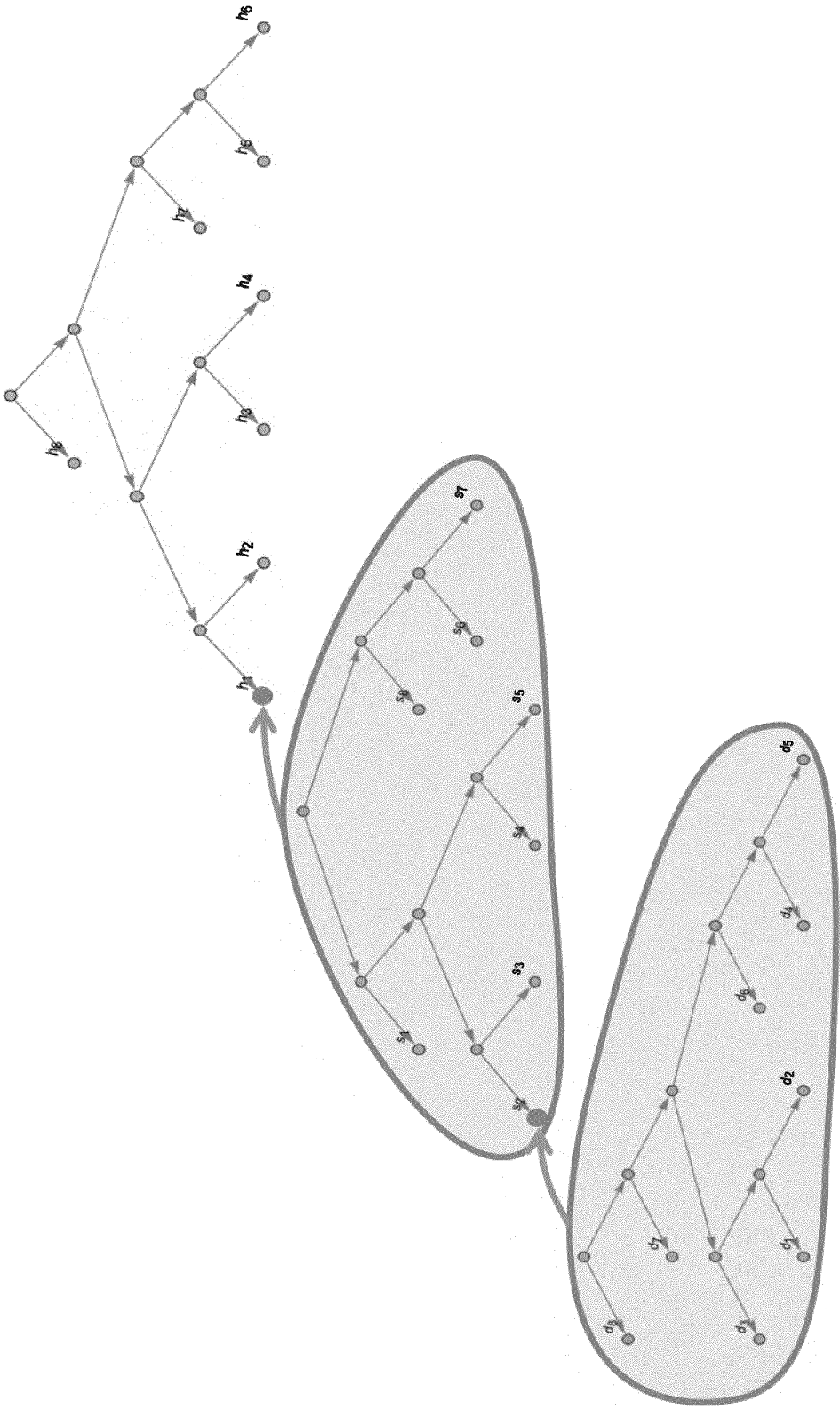


FIG. 12



FIG. 13

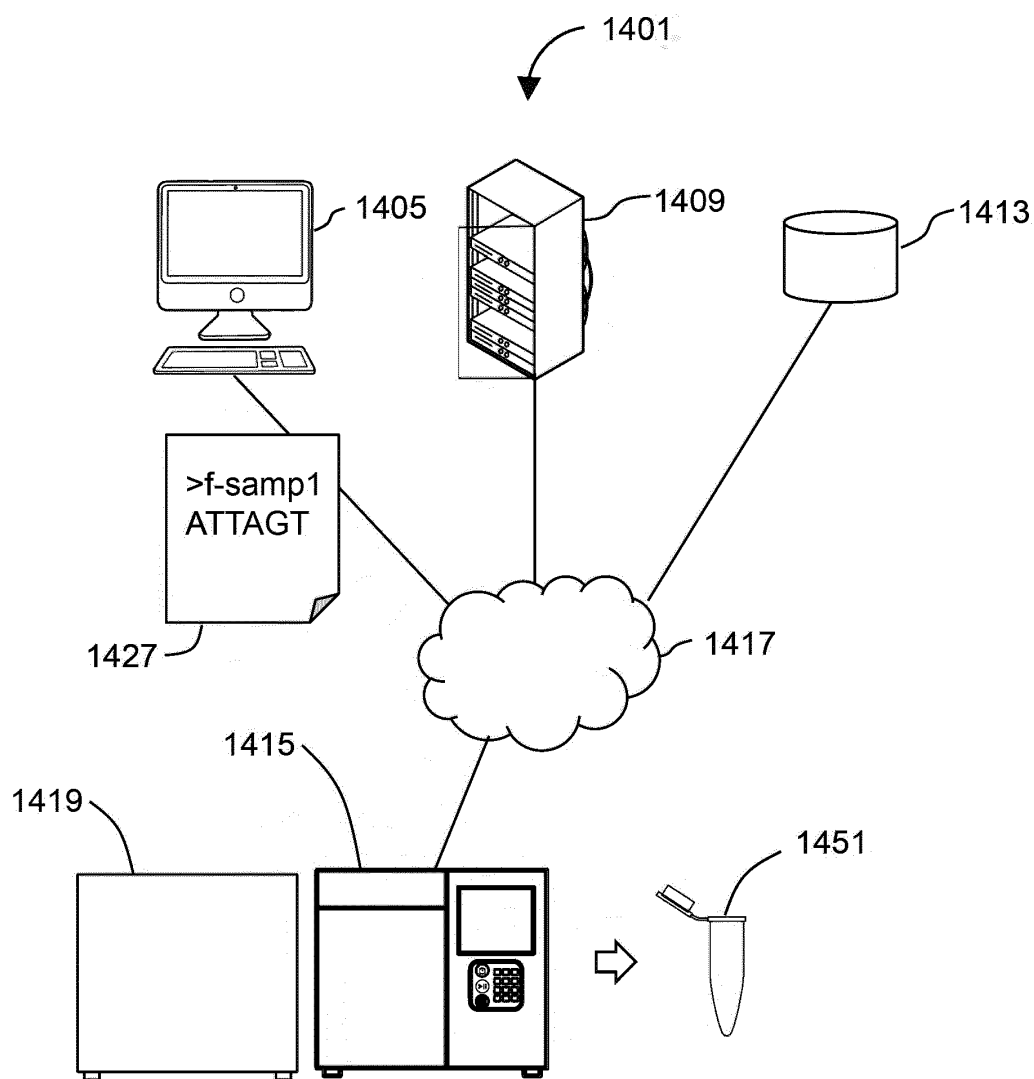


FIG. 14

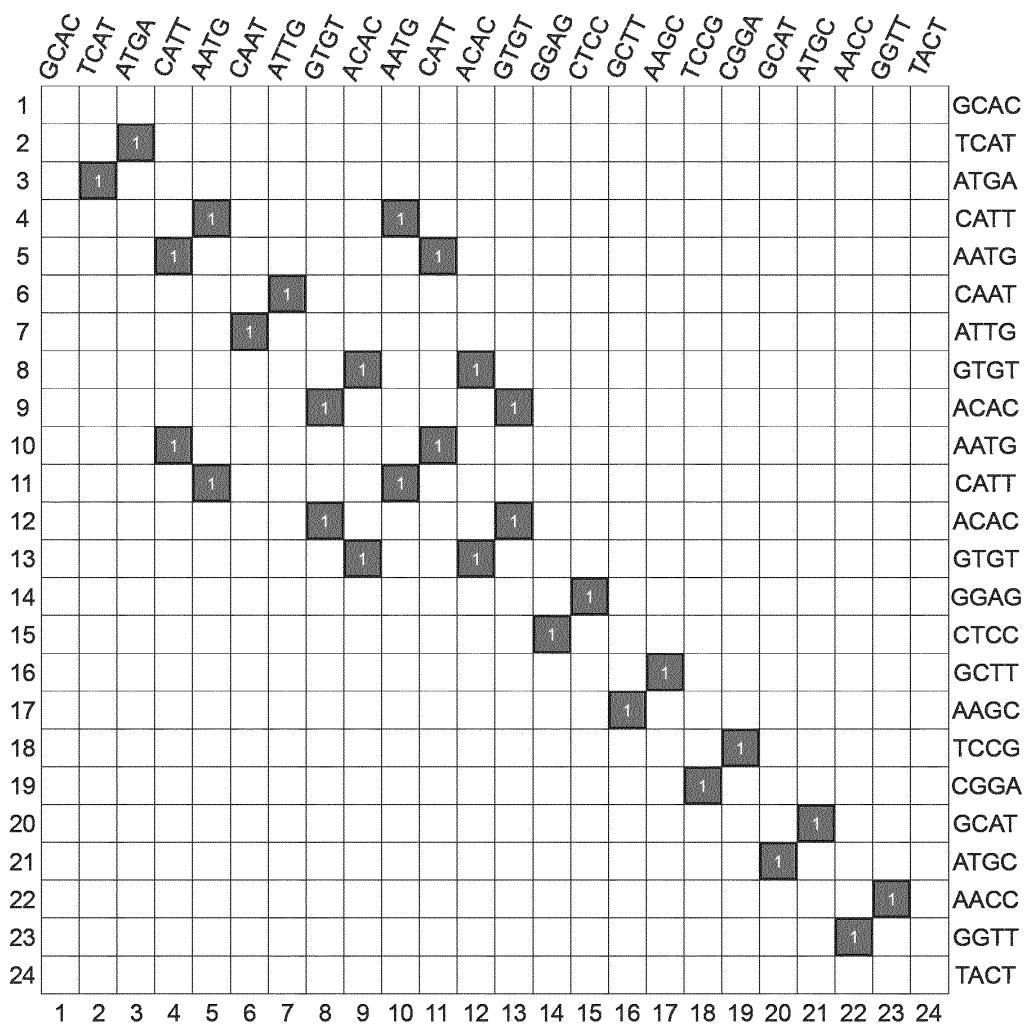
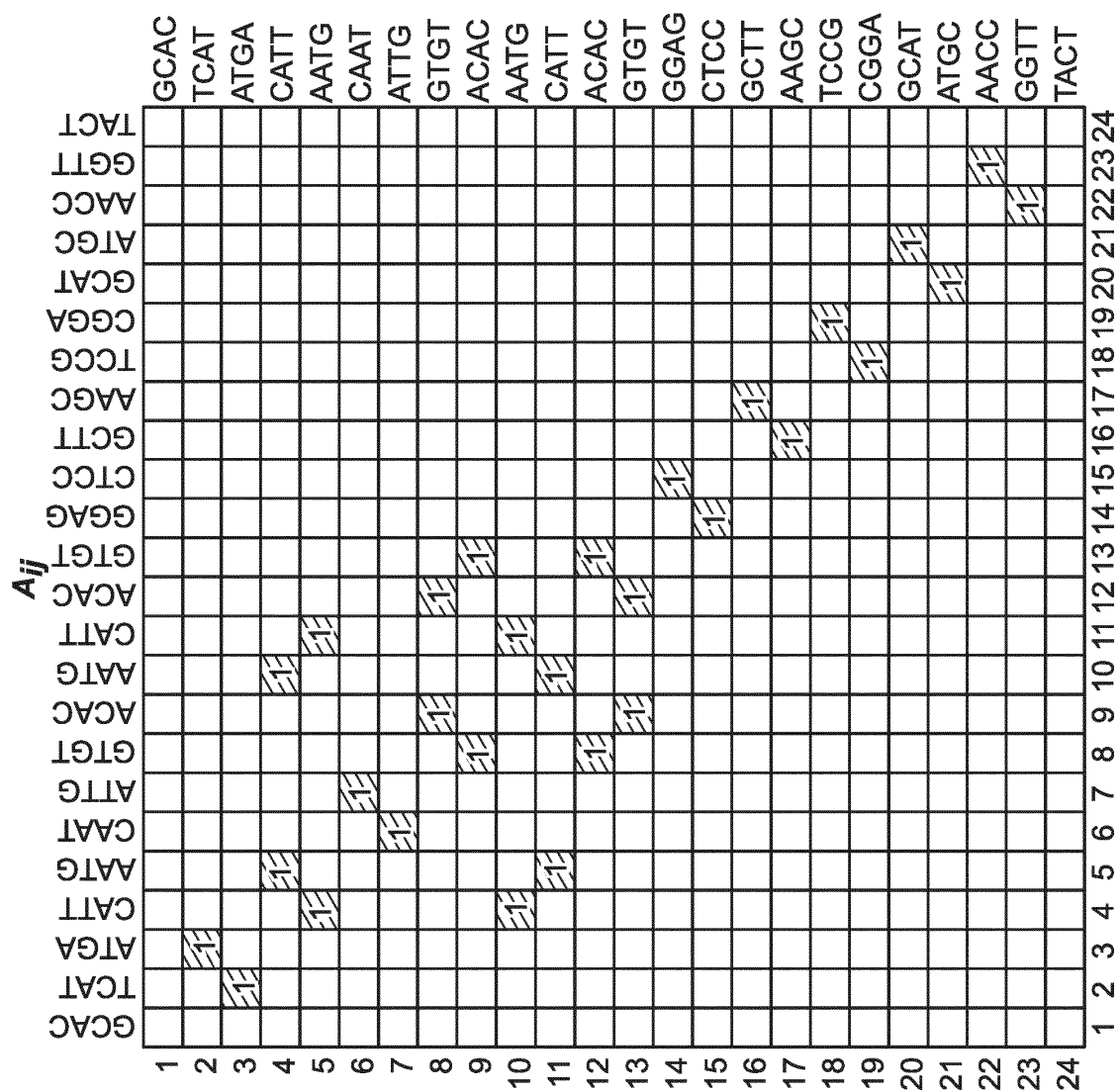


FIG. 15



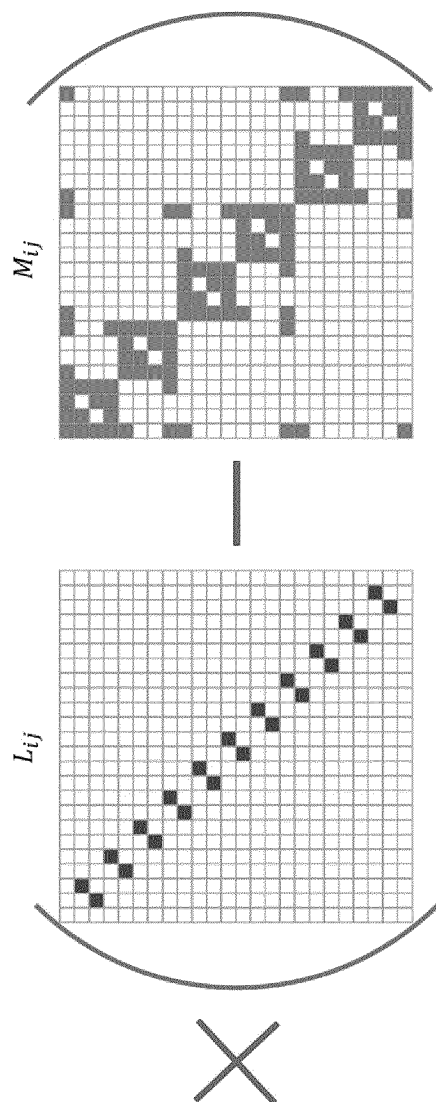


Fig. 16 (CONT.)

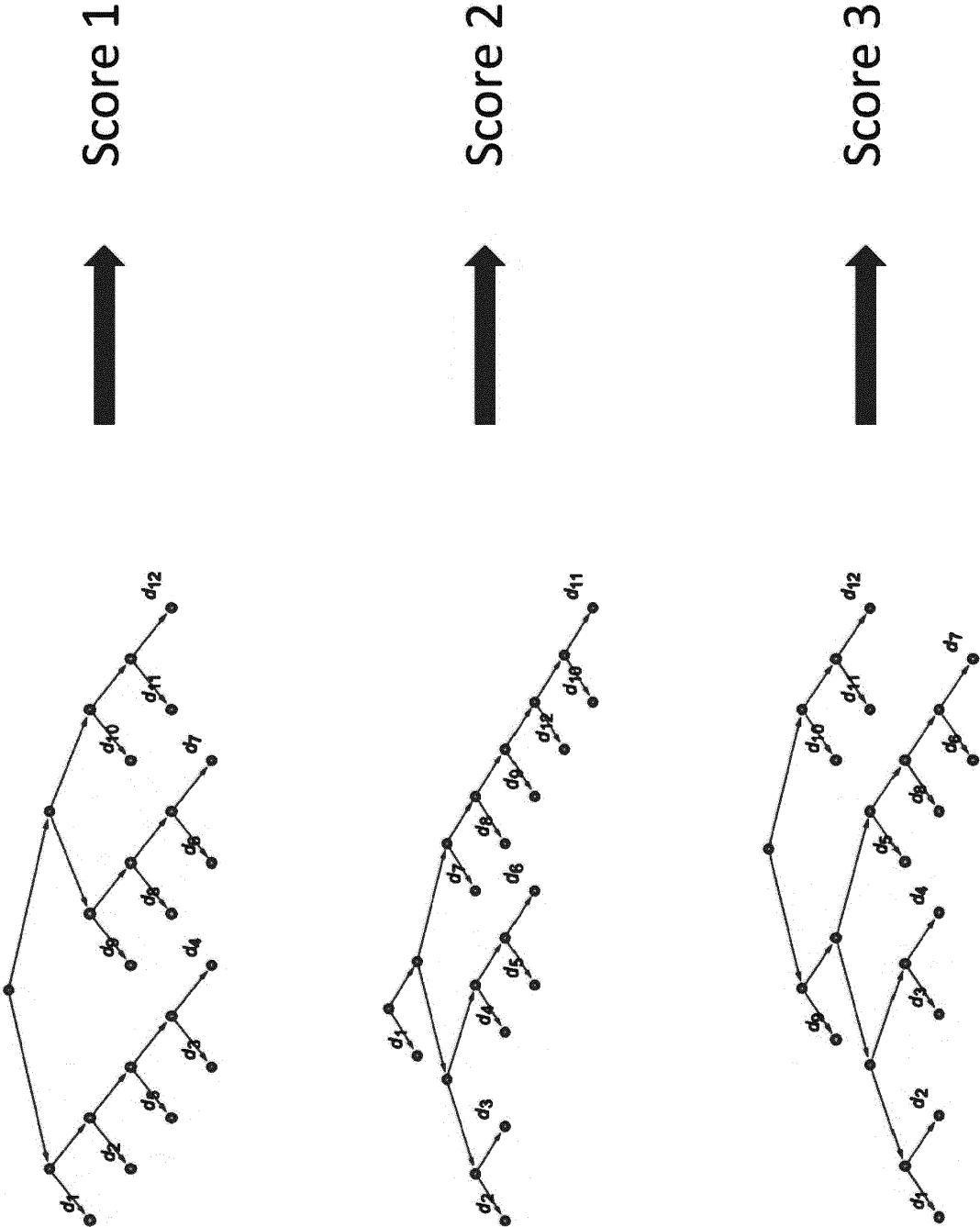


FIG. 17

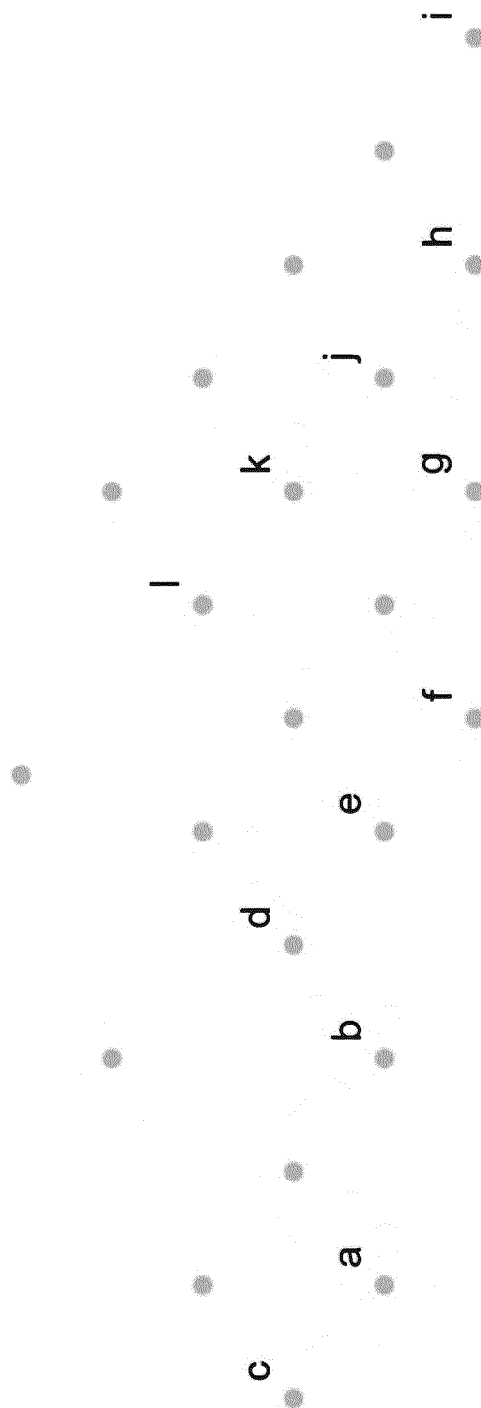


FIG. 18

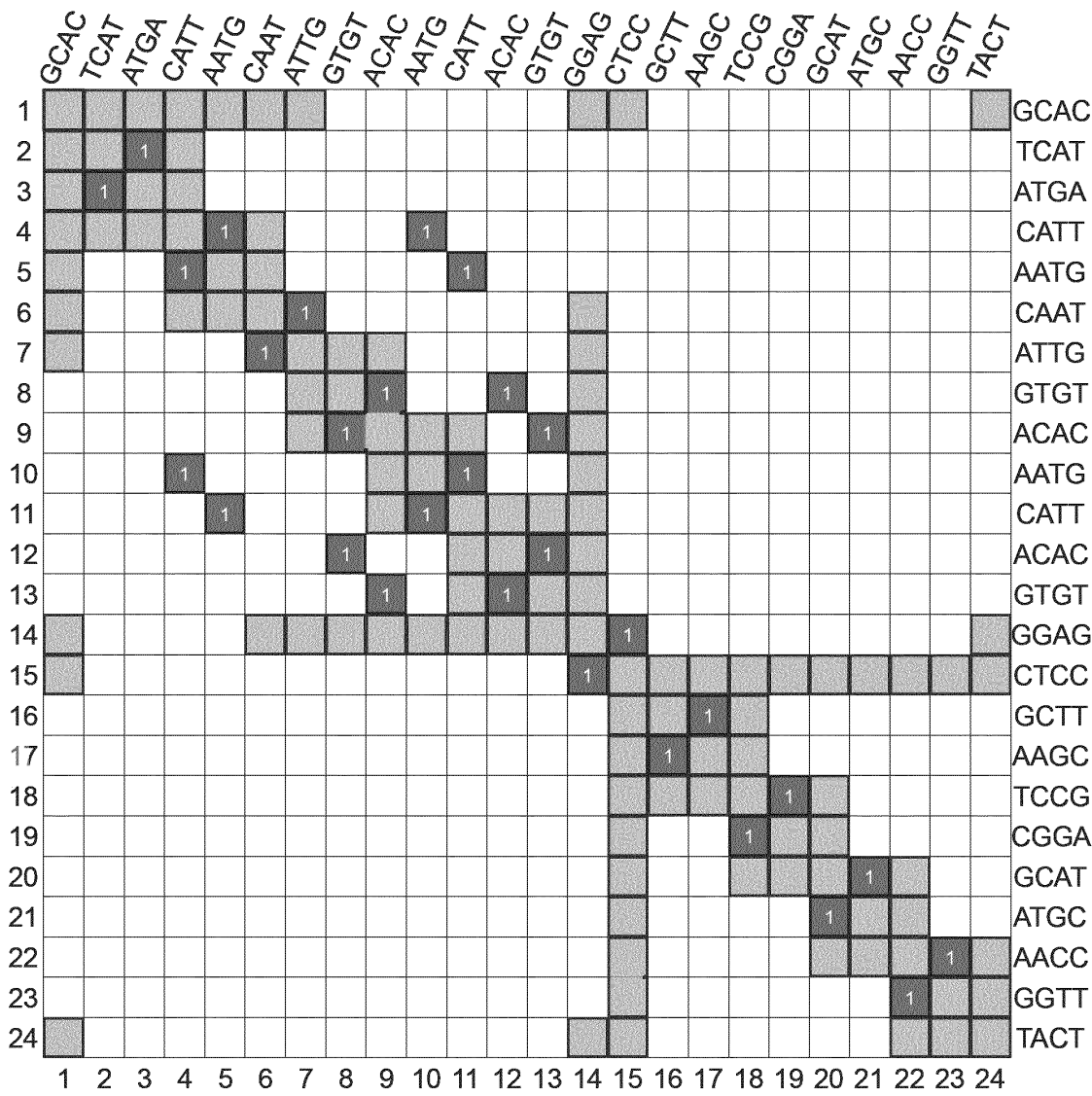


FIG. 19

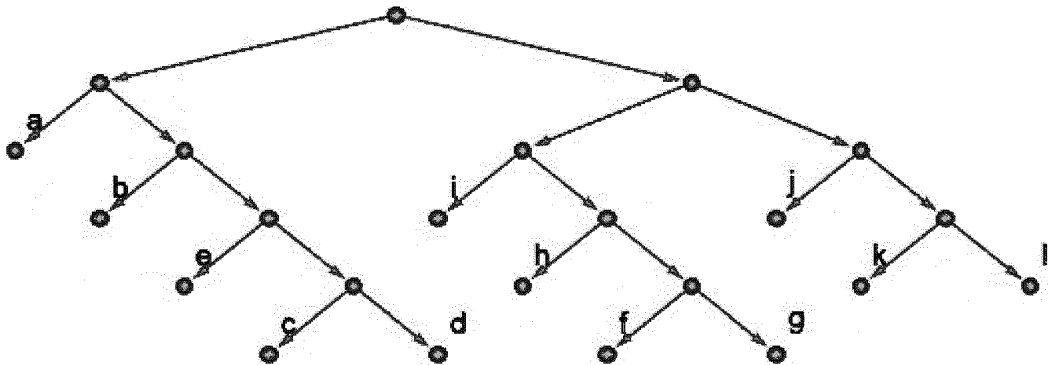


FIG. 20

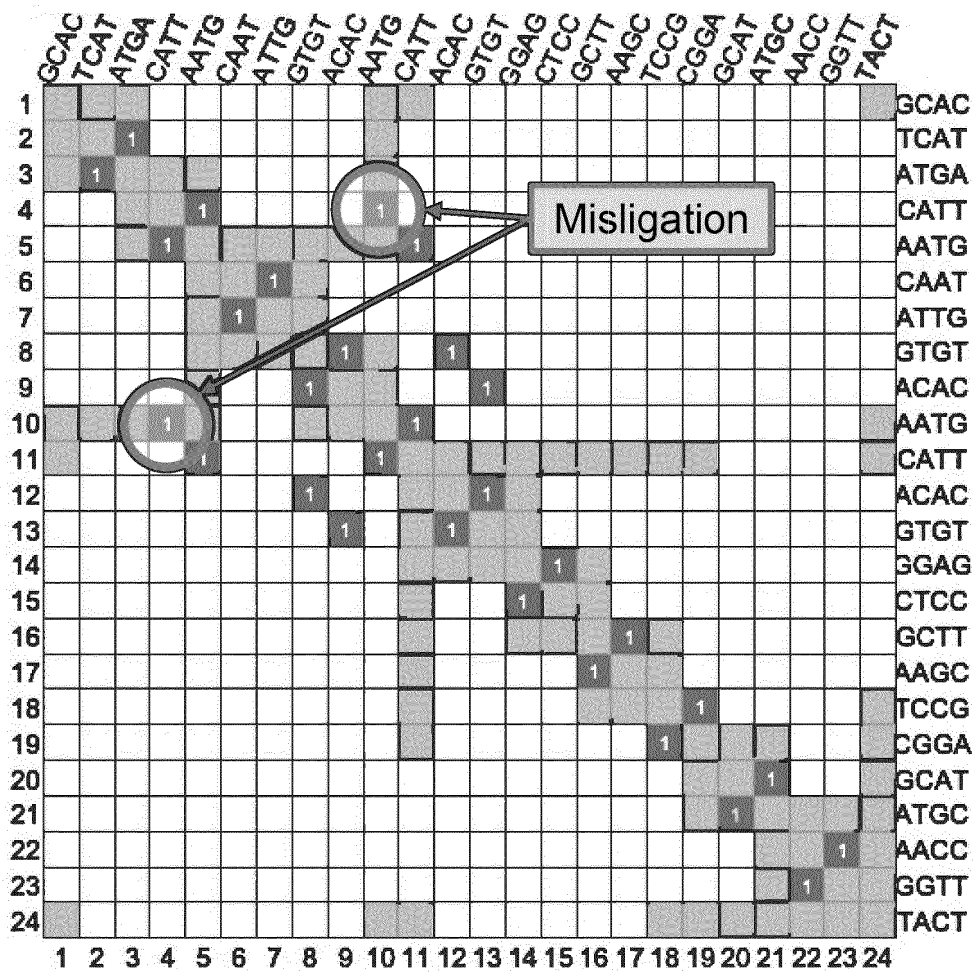


FIG. 21

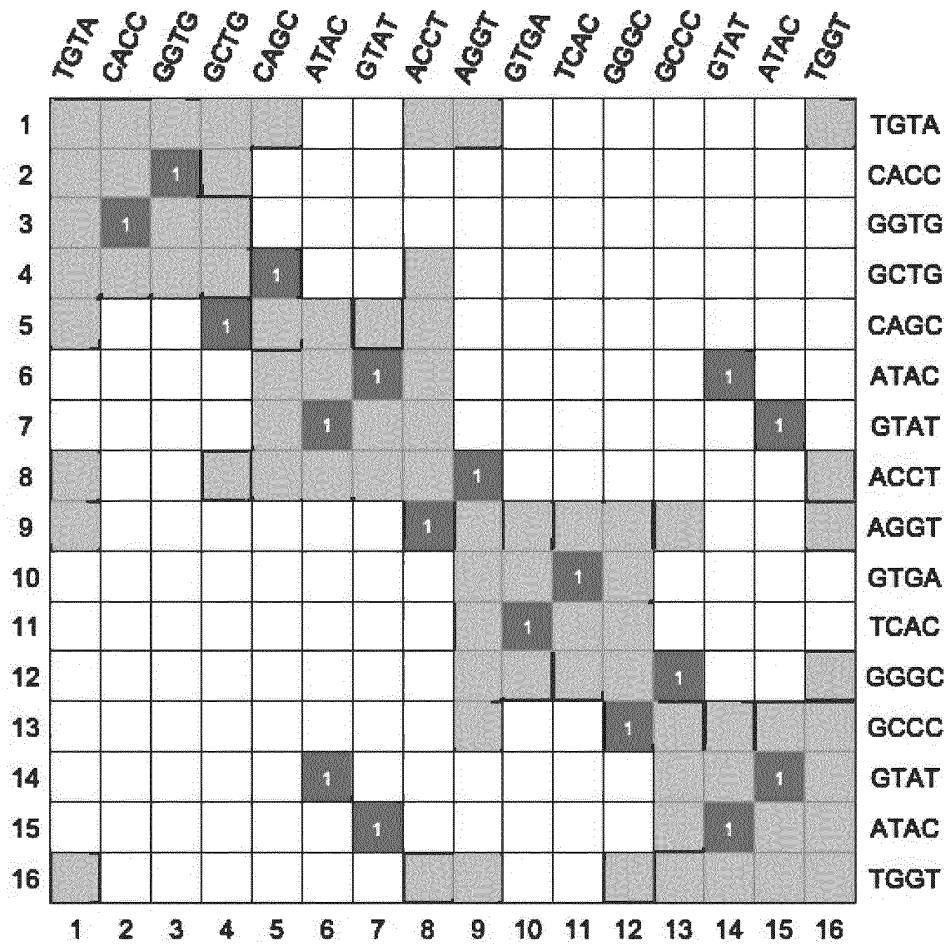


FIG. 22

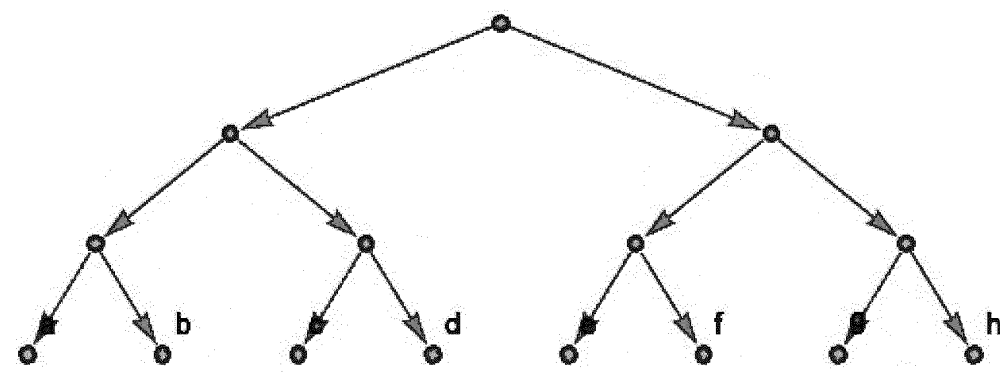


FIG. 23

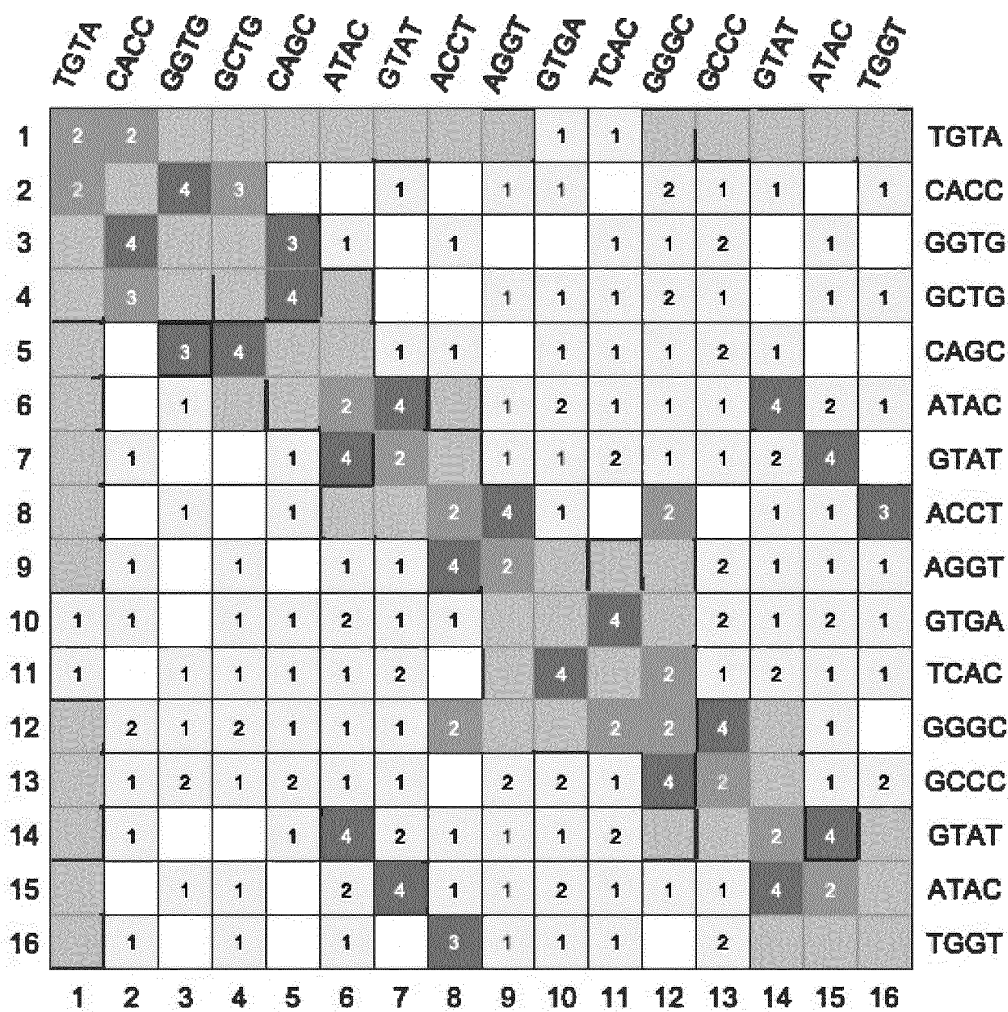


FIG. 24

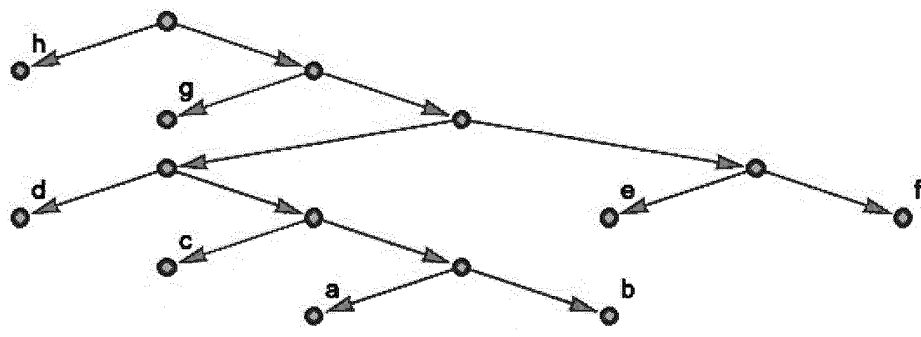
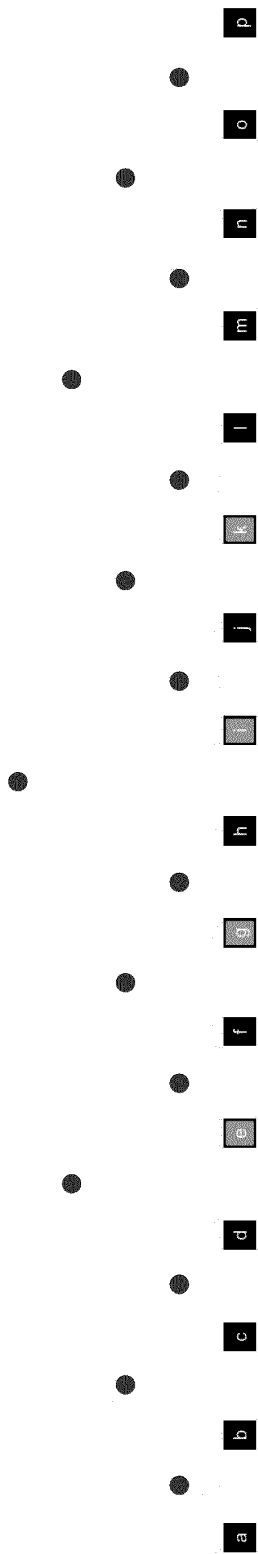
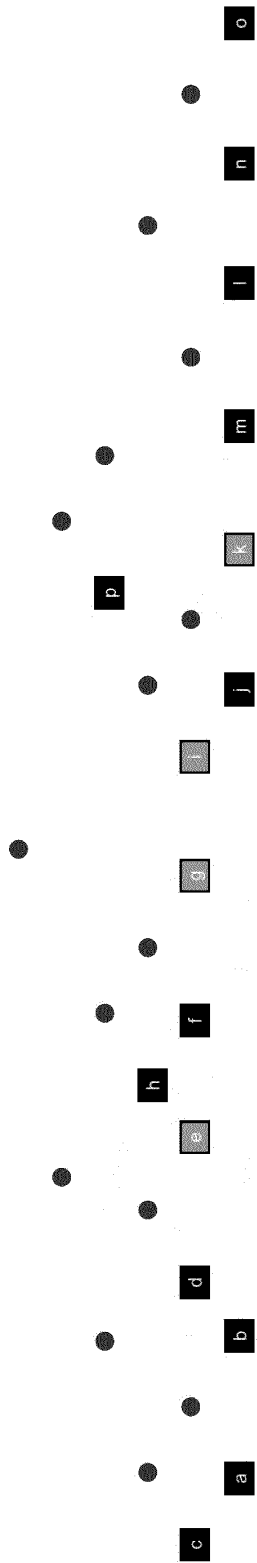


FIG. 25



Bracket representation = {{{{a, b}, {c, d}}, {{e, f}, {g, h}}}, {{{i, j}, {k, l}}, {{m, n}, {o, p}}}}

FIG. 28



Bracket representation = {{{{a, b}, c}, {d, e}}, {{f, g}, h}}, {{{i, j}, k}}, {{l, m}, {n, o}}, p}}

FIG. 29

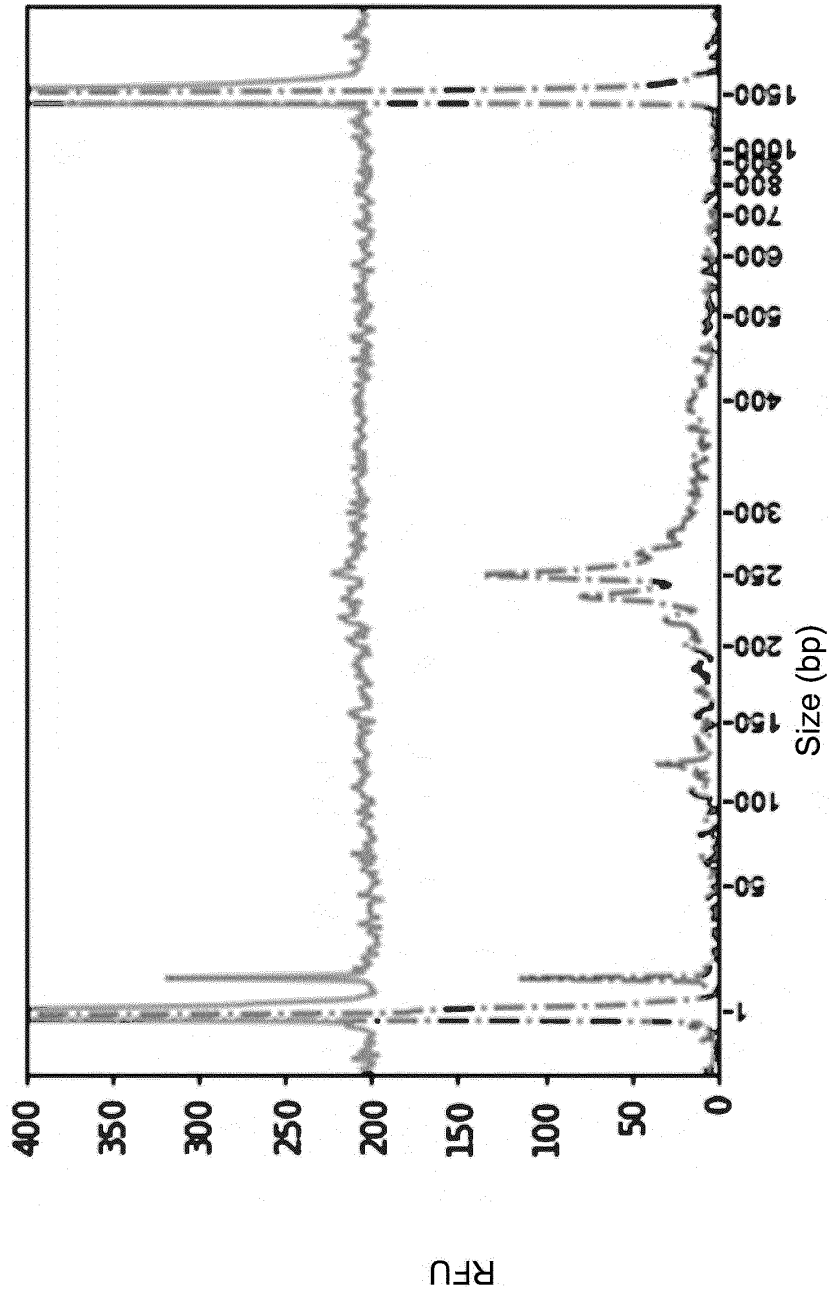
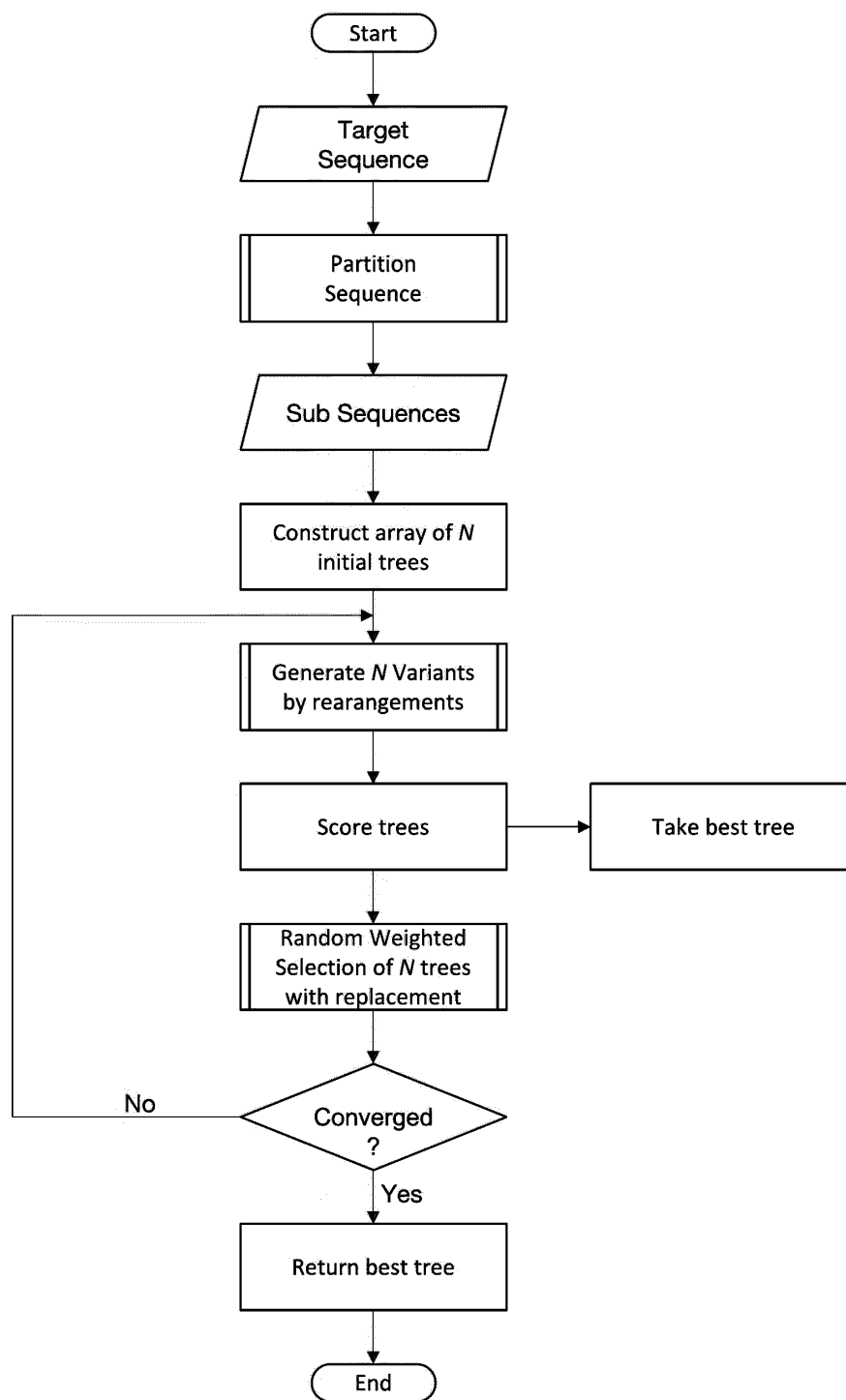
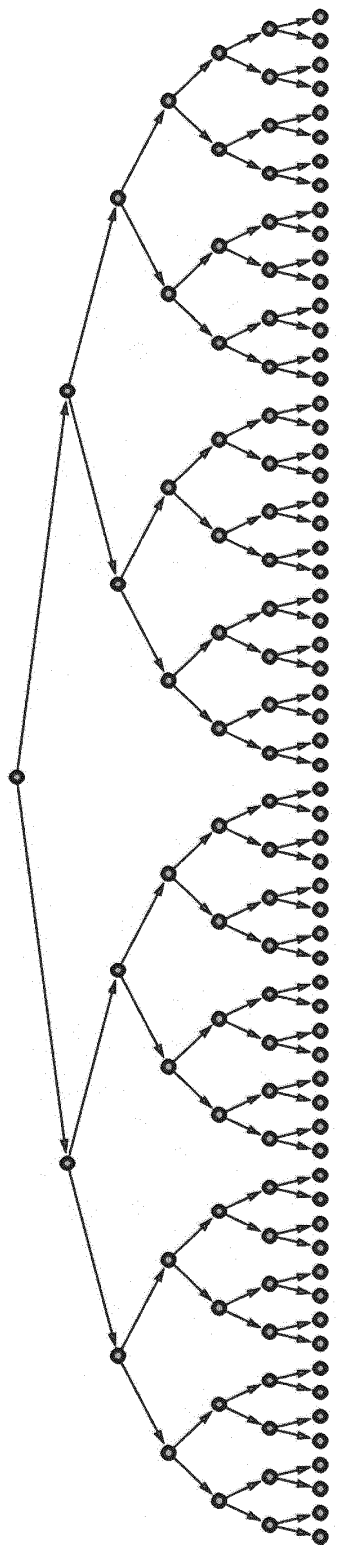


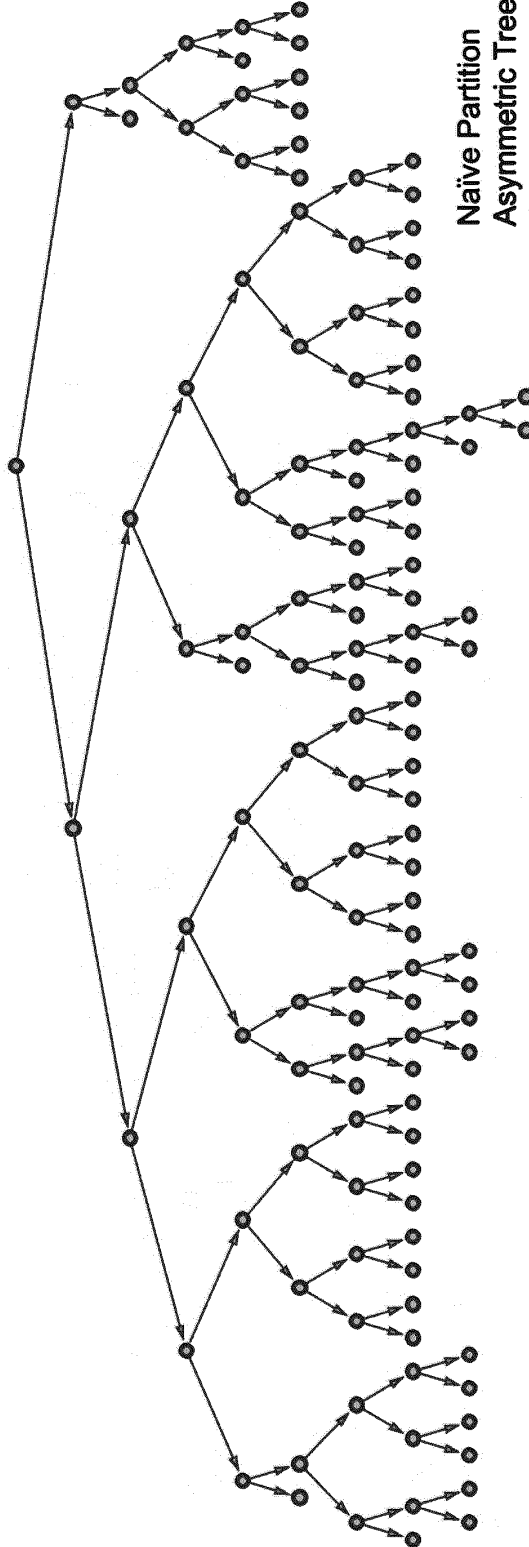
FIG. 30

**FIG. 31**



Naïve Partition
Symmetric Tree
Score = -8.65

FIG. 32



Naïve Partition
Asymmetric Tree
Score = -6.43

FIG. 33

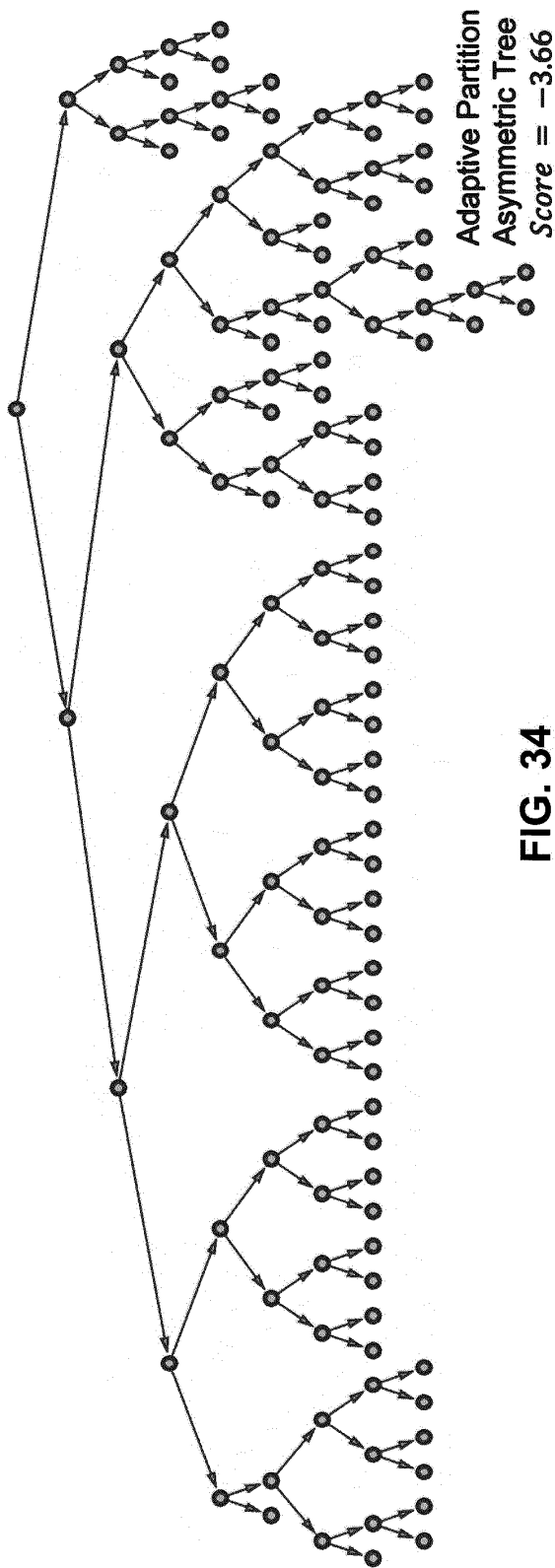
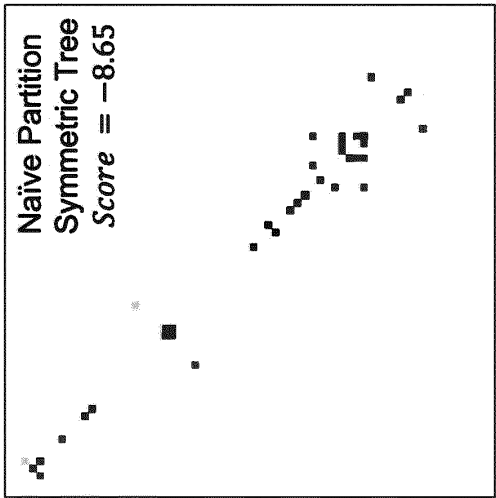
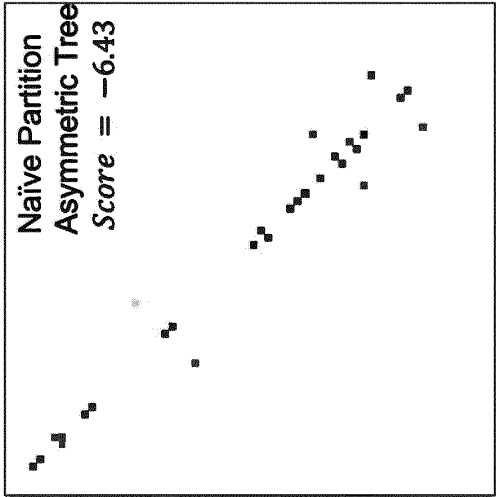
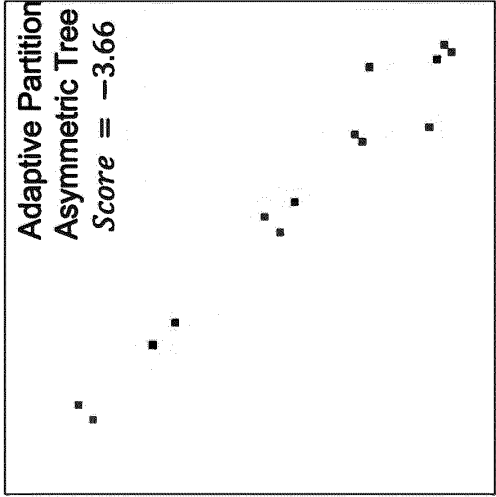


FIG. 34



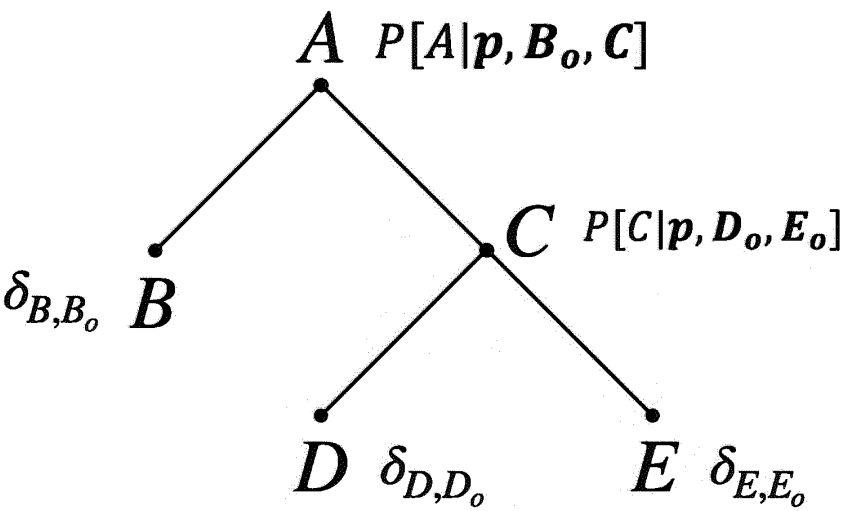


FIG. 36

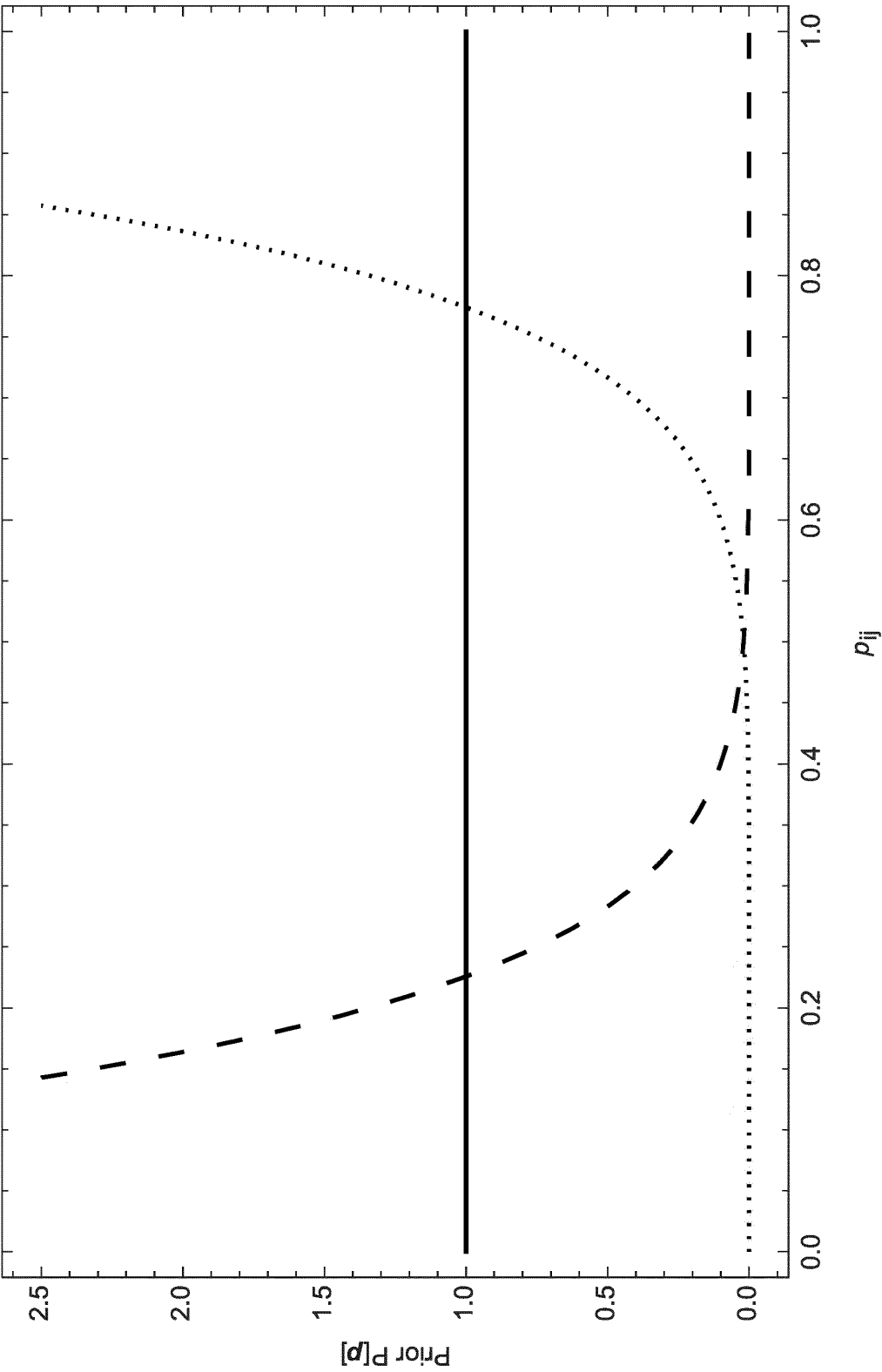


FIG. 37