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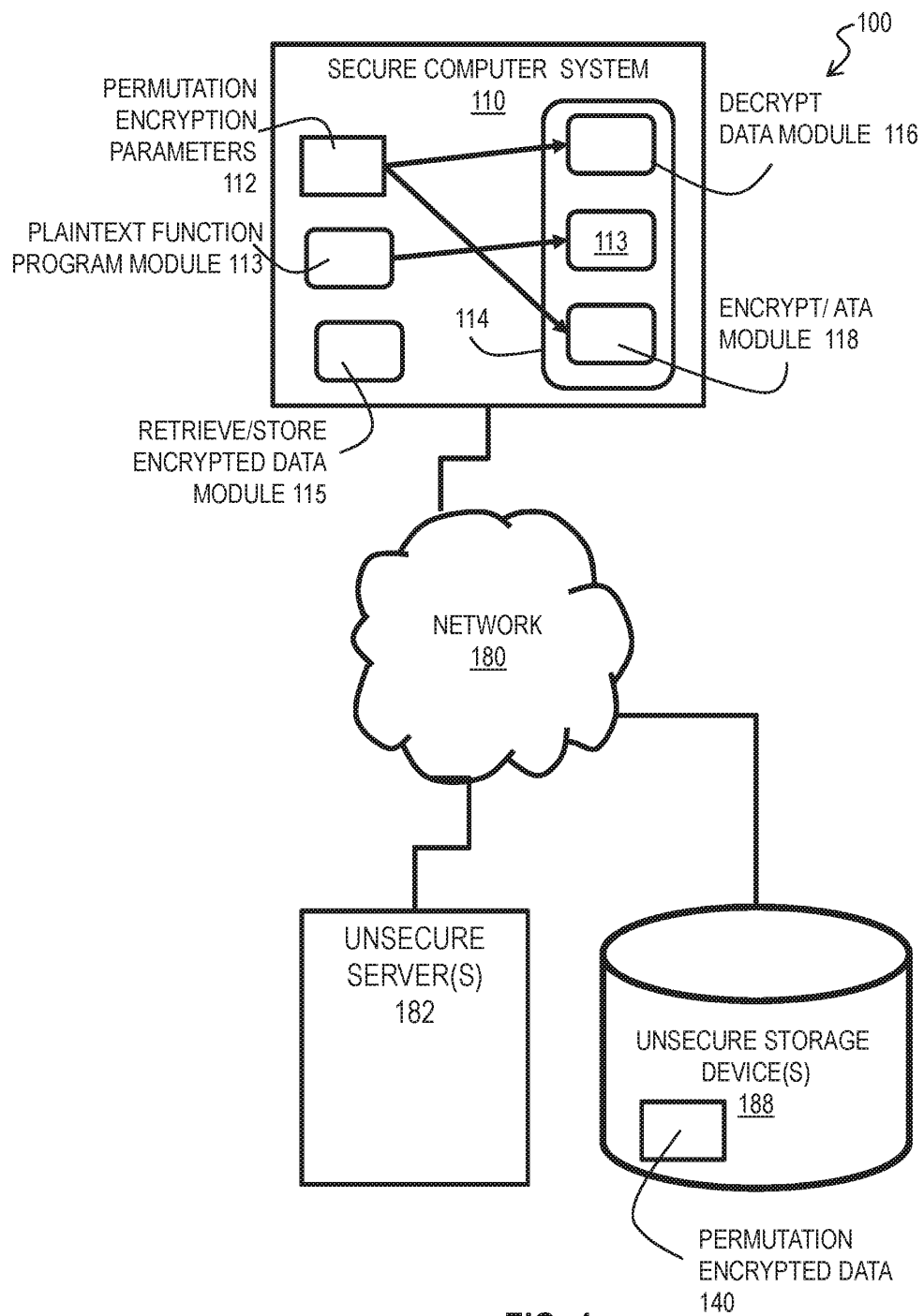


FIG. 1
(PRIOR ART)

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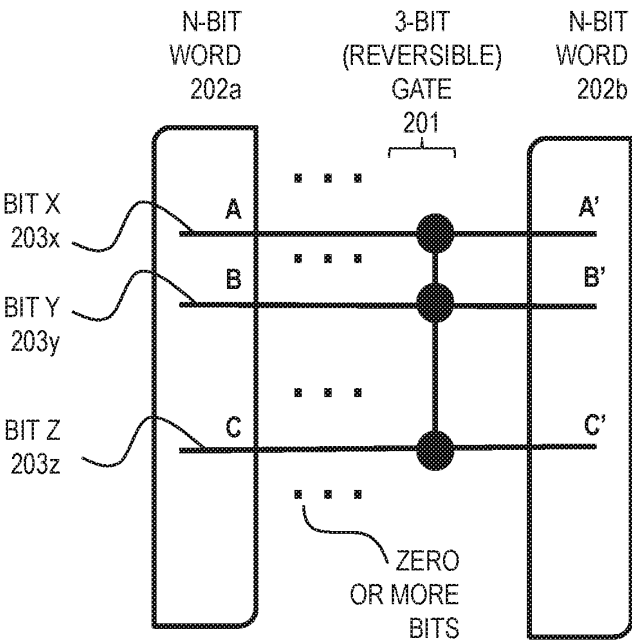


FIG. 2A

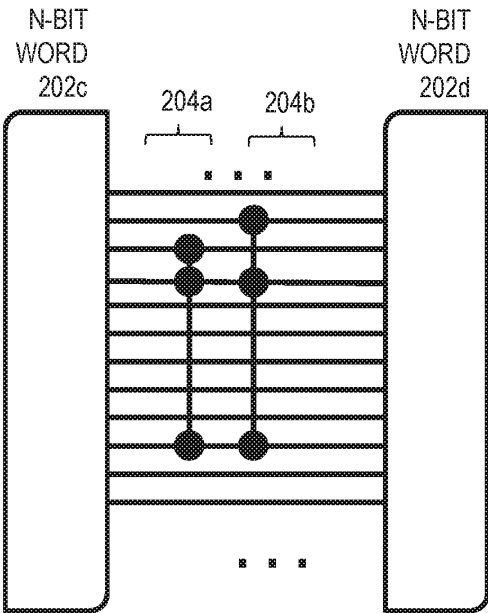


FIG. 2B

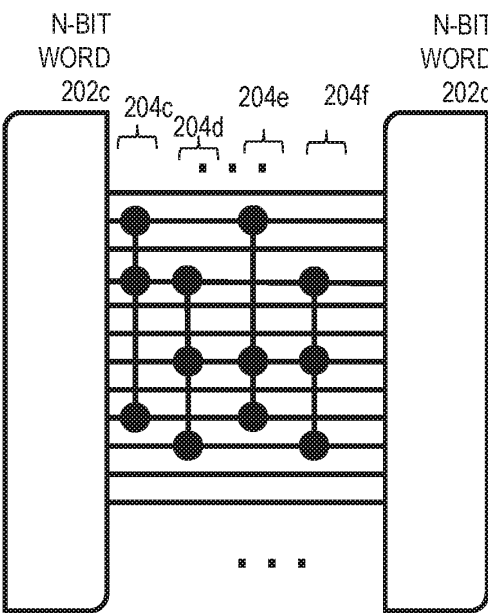


FIG. 2C

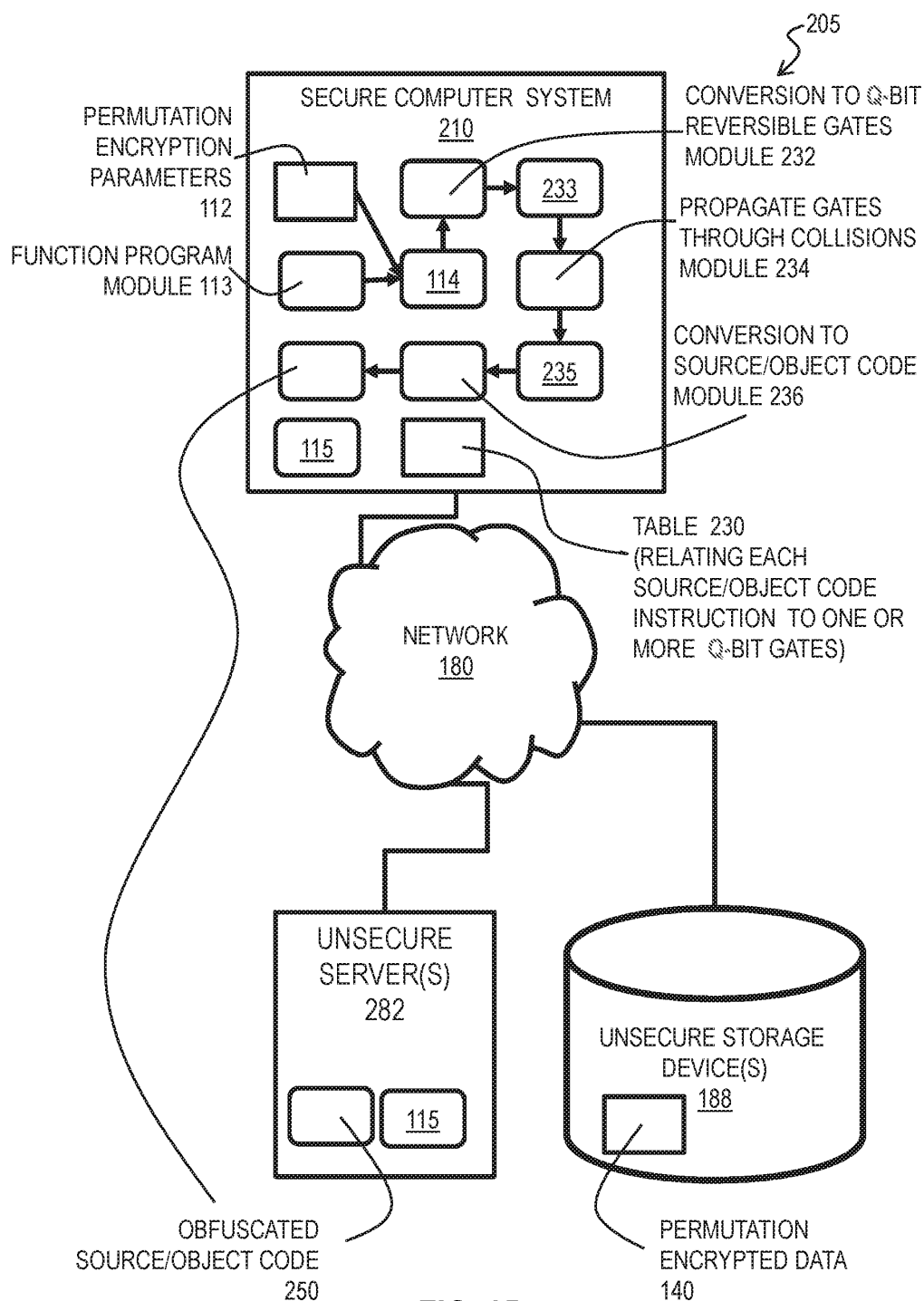


FIG. 2D

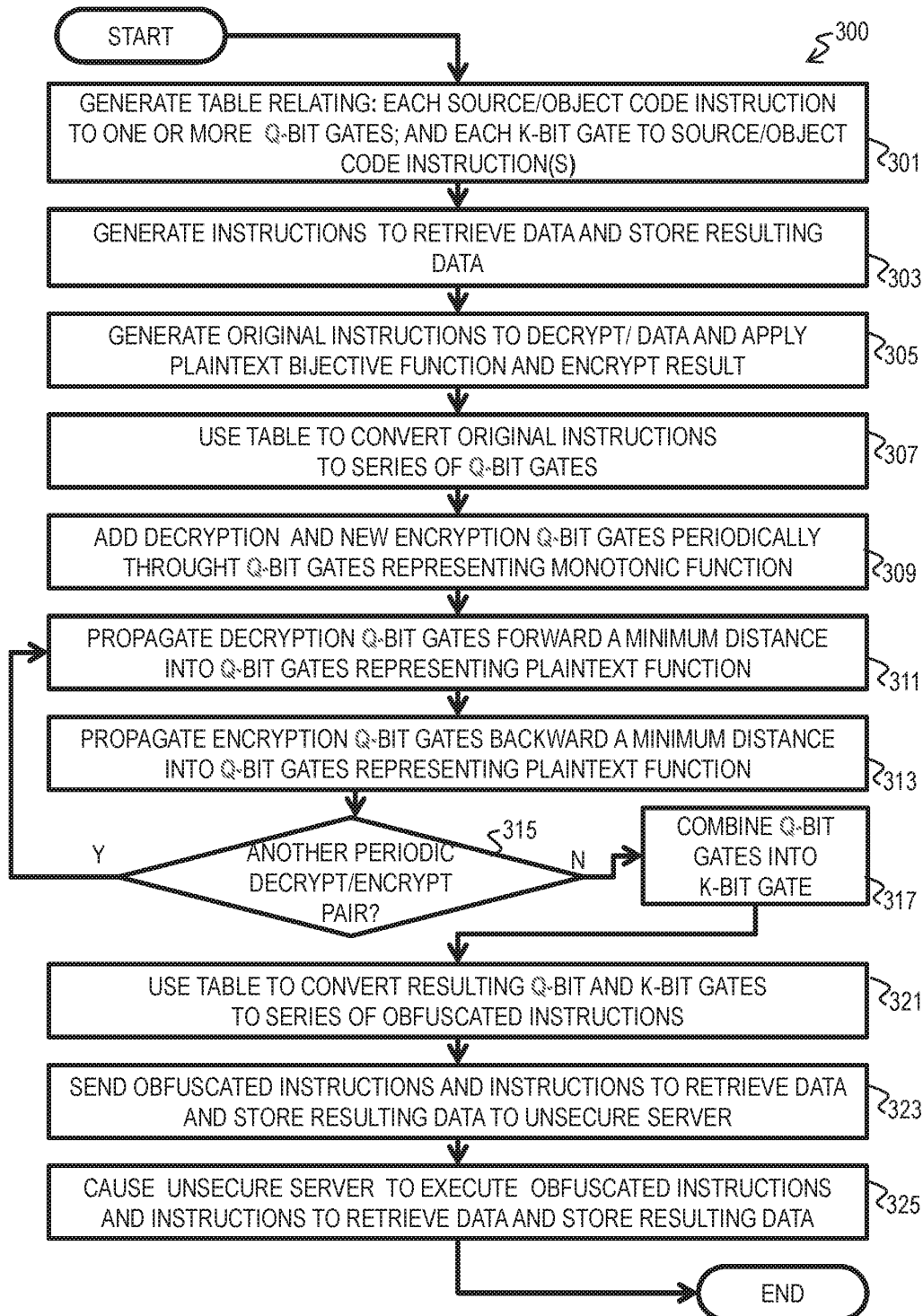


FIG. 3

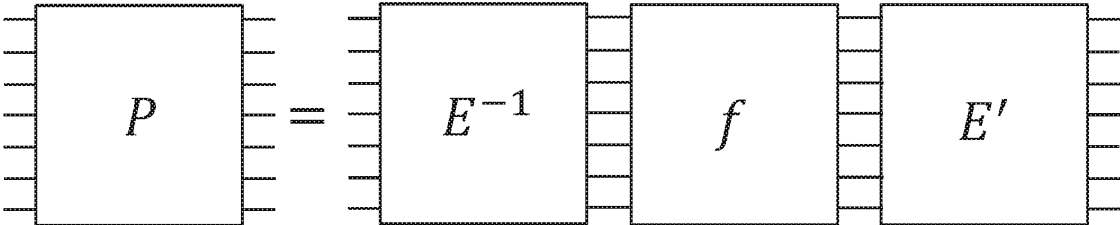


FIG. 4A

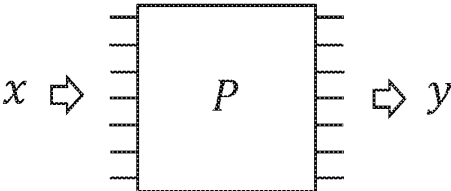


FIG. 4B

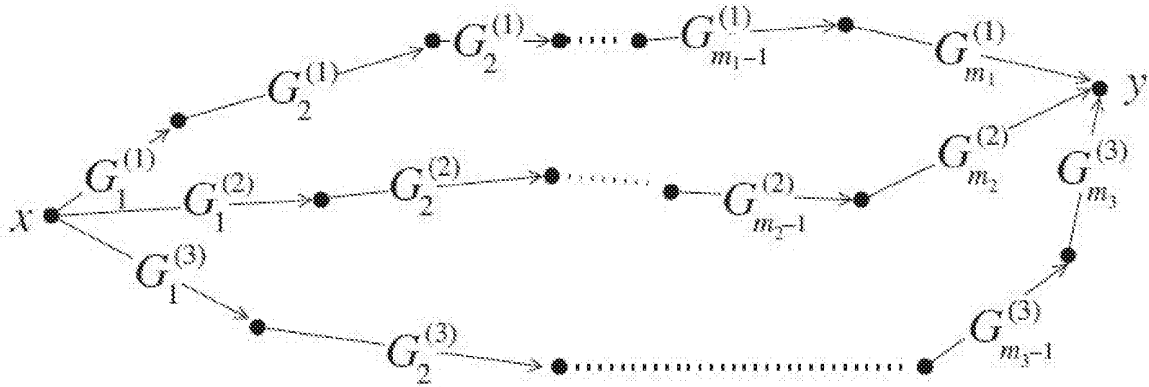


FIG. 4C

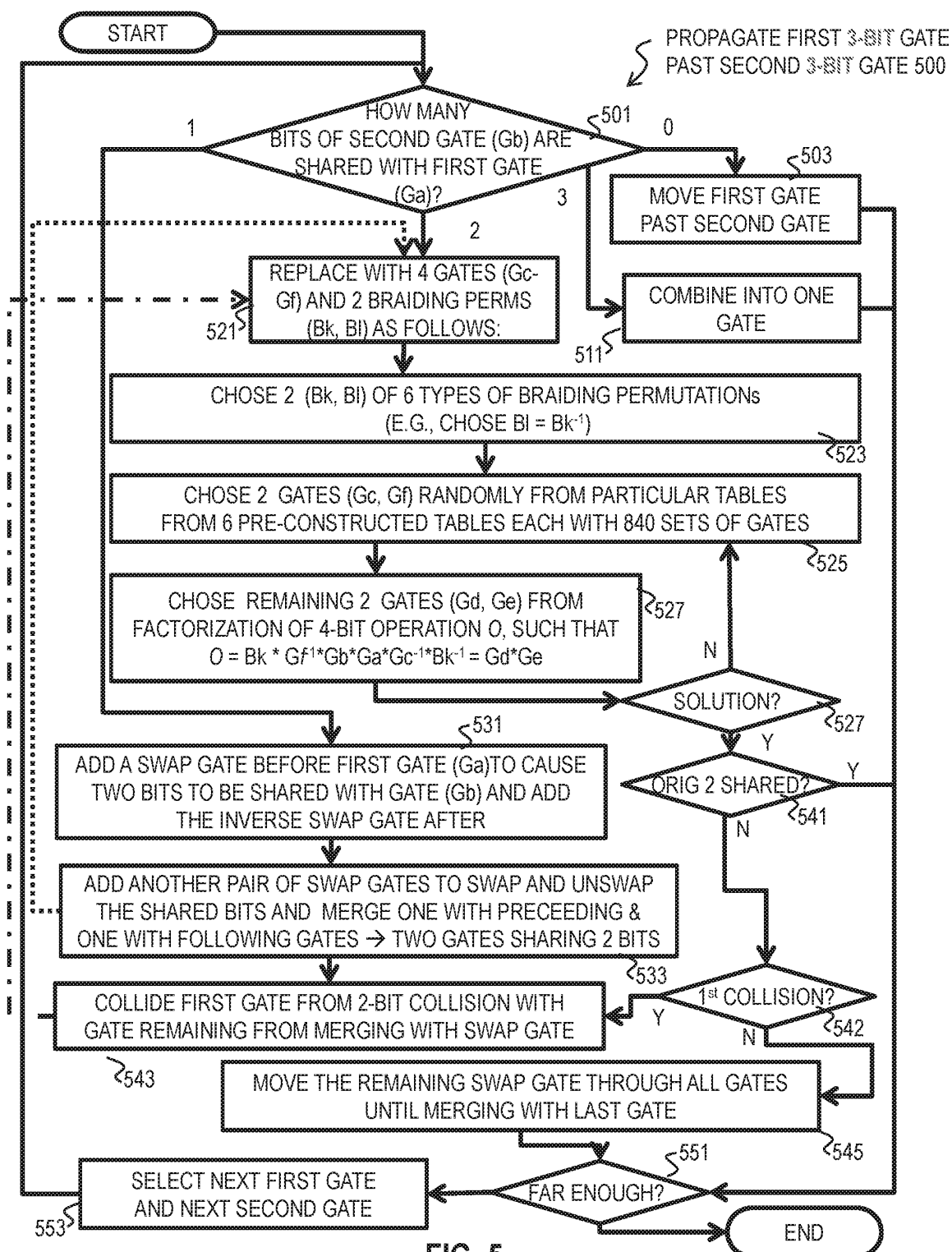


FIG. 5

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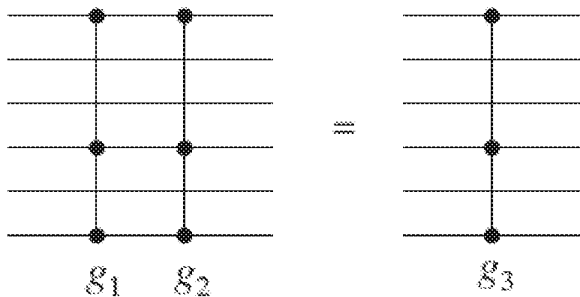


FIG. 6

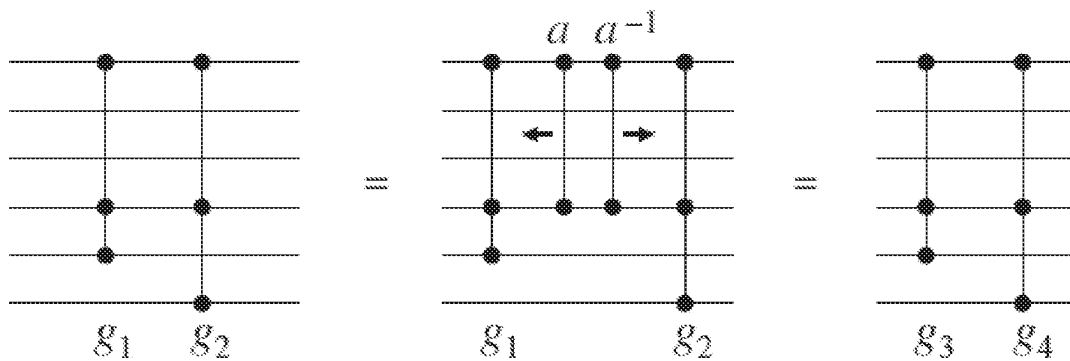


FIG. 7

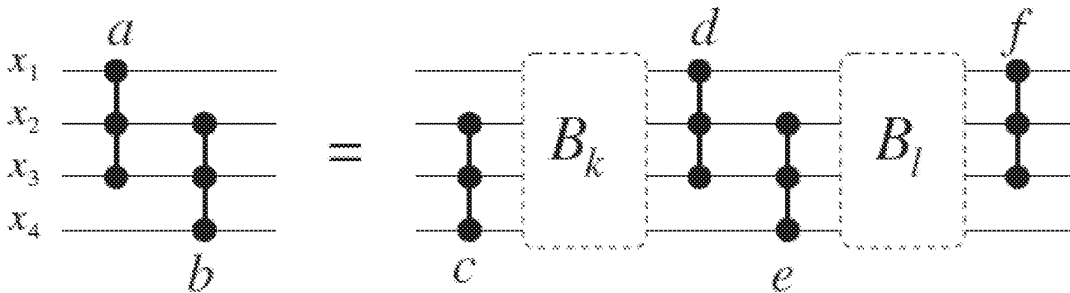


FIG. 8

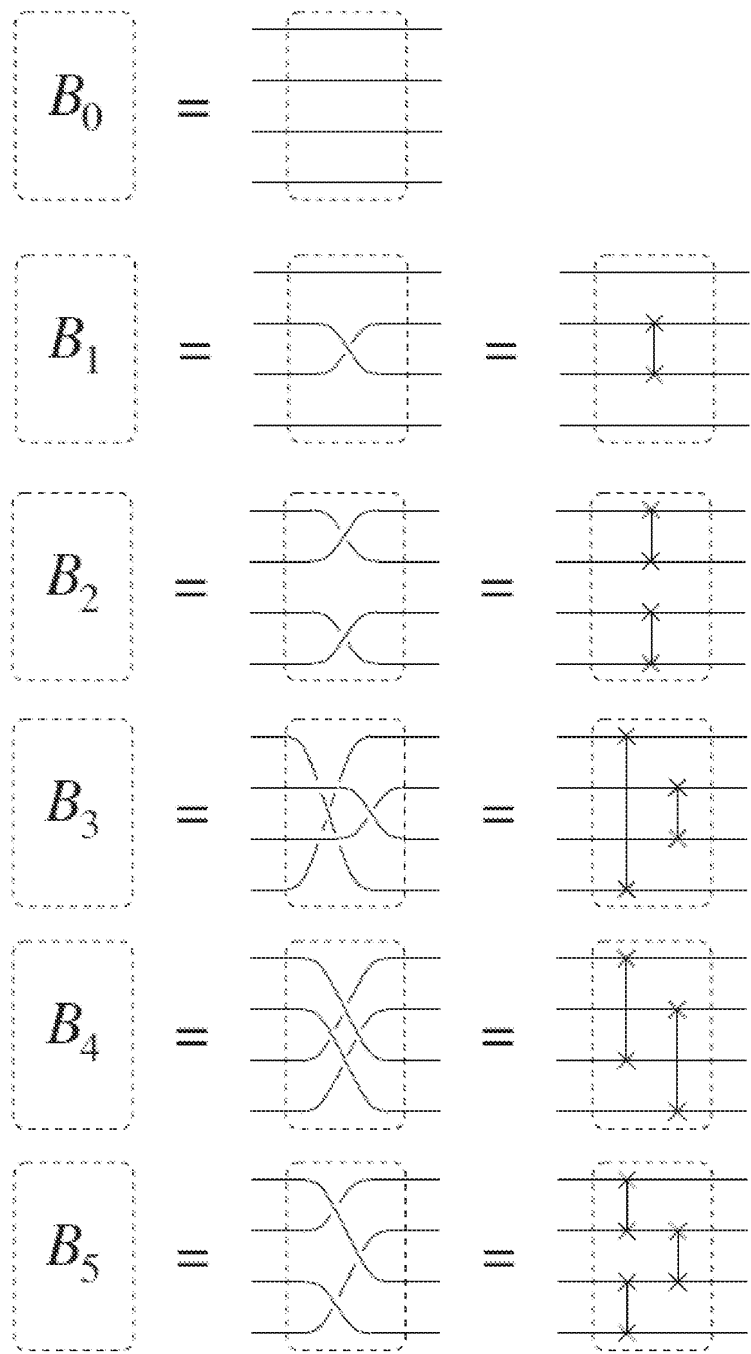


FIG. 9

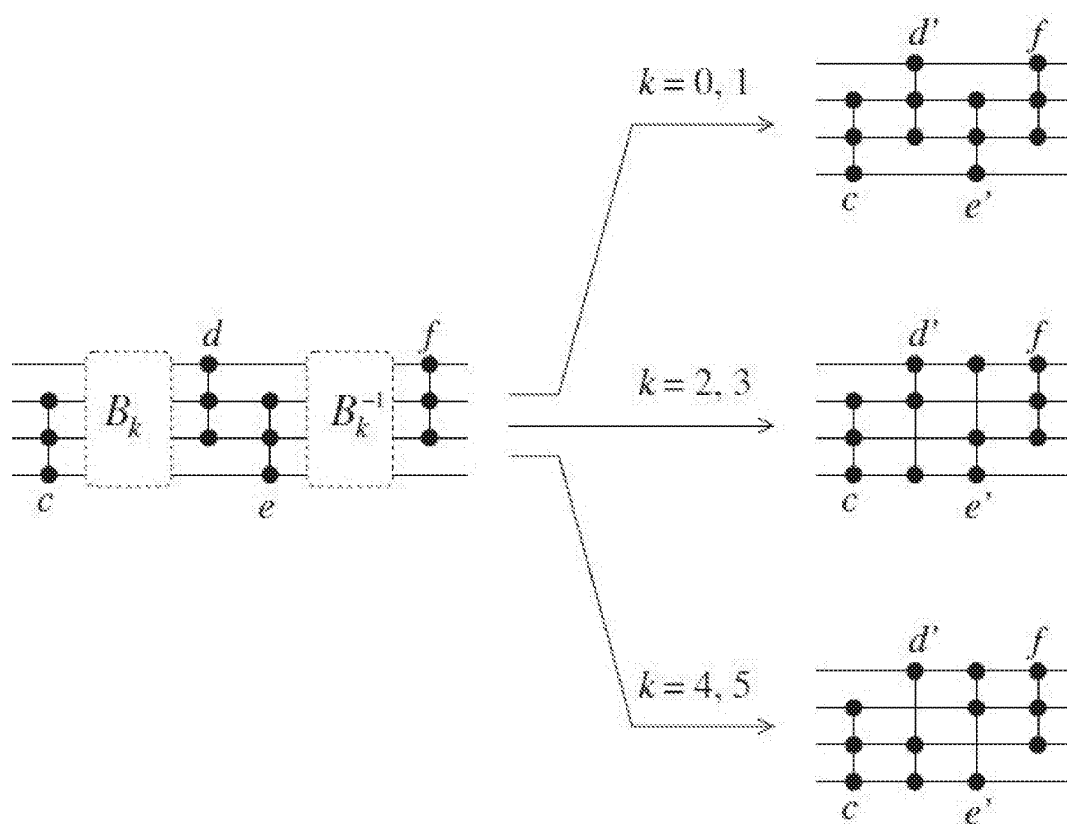


FIG. 10

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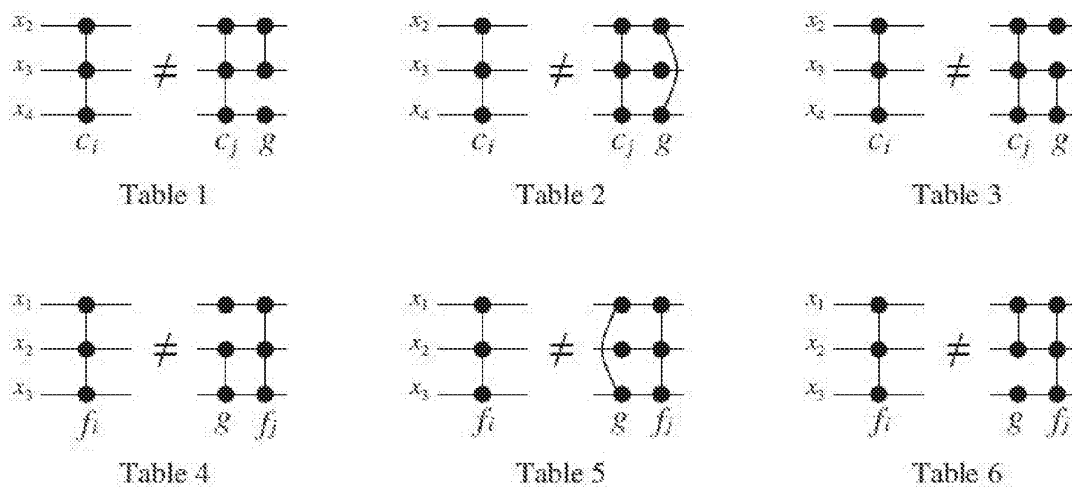


FIG. 11

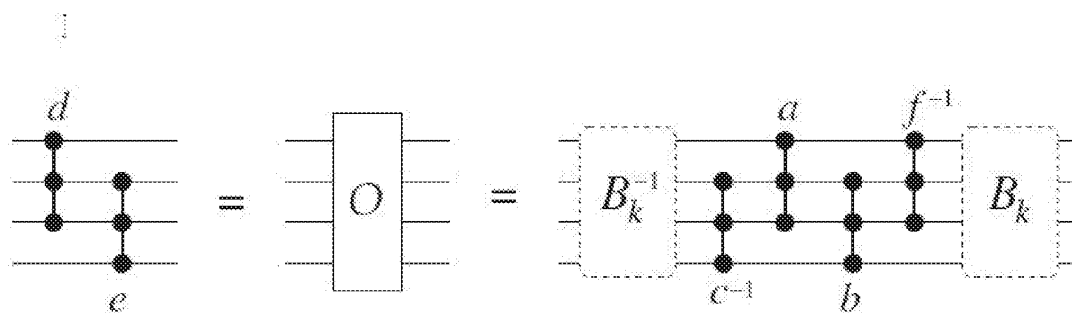


FIG. 12

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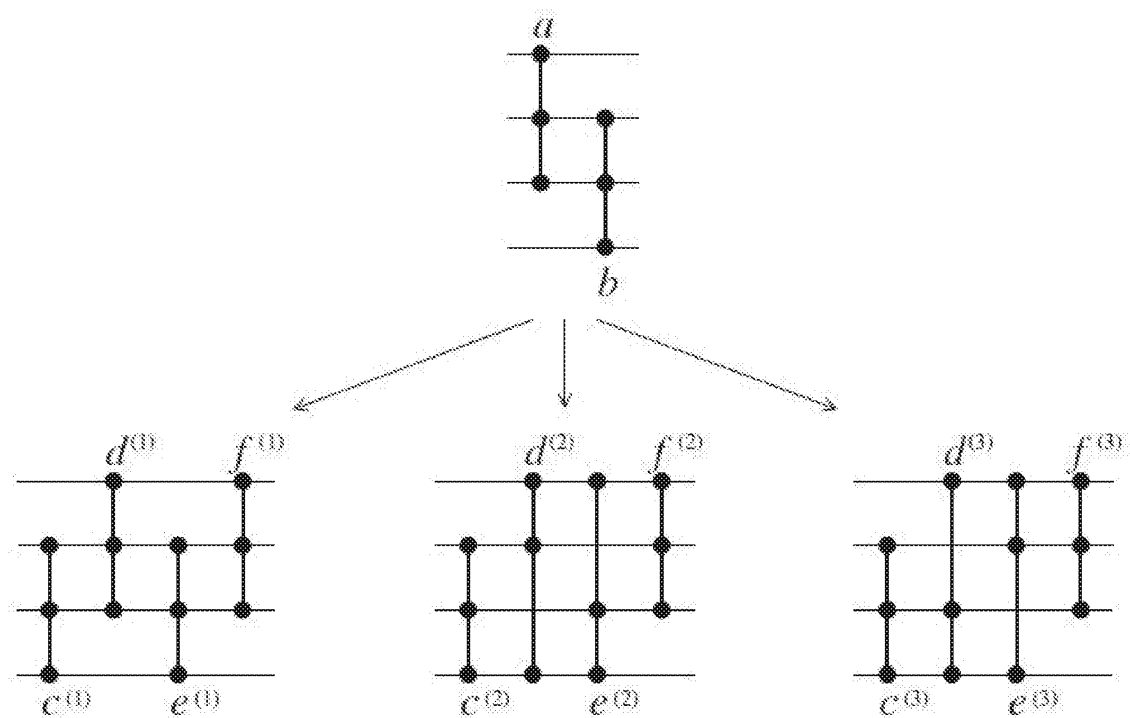


FIG. 13A

<i>a</i>						<i>b</i>						
<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀
0	0	0	→	1	0	0	0	0	→	0	1	0
0	0	1	→	0	0	0	0	0	→	1	1	1
0	1	0	→	0	1	0	0	1	→	0	0	0
0	1	1	→	1	1	1	0	1	→	1	1	0
1	0	0	→	0	1	1	1	0	→	1	0	1
1	0	1	→	0	0	1	1	0	→	1	0	0
1	1	0	→	1	1	0	1	1	→	0	1	1
1	1	1	→	1	0	1	1	1	→	0	0	1

<i>c</i> ⁽¹⁾						<i>d</i> ⁽¹⁾						<i>e</i> ⁽¹⁾						<i>f</i> ⁽¹⁾										
<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	
0	0	0	→	1	0	0	0	0	0	→	1	1	1	0	0	0	→	0	0	1	0	0	0	0	→	0	1	0
0	0	1	→	1	0	1	0	0	1	→	0	0	0	0	0	1	→	0	1	0	0	0	0	1	→	0	0	0
0	1	0	→	0	0	0	0	1	0	→	1	0	1	0	1	0	→	1	0	0	0	1	0	0	→	1	0	1
0	1	1	→	0	1	1	0	1	1	→	0	1	0	0	1	1	→	0	1	1	0	0	1	1	→	0	0	1
1	0	0	→	0	1	0	1	0	0	→	0	1	1	1	0	0	→	0	1	1	1	0	0	1	→	0	1	1
1	0	1	→	0	0	1	1	0	1	→	1	0	0	1	0	1	→	1	0	1	1	0	1	1	→	1	1	0
1	1	0	→	1	1	0	1	1	0	→	1	1	0	1	1	0	→	1	1	0	1	1	0	1	→	1	1	0
1	1	1	→	1	1	1	1	1	1	→	0	0	1	1	1	1	→	0	0	0	1	1	1	1	→	1	1	1

<i>c</i> ⁽²⁾						<i>d</i> ⁽²⁾						<i>e</i> ⁽²⁾						<i>f</i> ⁽²⁾										
<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	
0	0	0	→	1	0	0	0	0	0	→	1	1	1	0	0	0	→	0	0	1	0	0	0	0	→	1	0	1
0	0	1	→	0	1	1	0	0	1	→	0	0	1	0	0	1	→	0	0	0	0	0	1	→	1	1	0	
0	1	0	→	0	0	0	0	1	0	→	0	0	0	0	1	0	→	1	0	1	0	0	1	→	1	0	0	
0	1	1	→	0	1	0	0	1	1	→	1	0	1	0	1	1	→	0	1	0	0	0	0	1	→	0	0	0
1	0	0	→	0	0	1	1	0	0	→	0	1	0	1	1	0	→	1	0	0	0	0	1	→	0	0	1	
1	0	1	→	1	1	0	1	0	1	→	0	1	1	1	0	1	→	1	0	1	0	1	0	→	0	1	0	
1	1	0	→	1	0	1	1	1	0	→	1	0	0	1	1	0	→	1	1	0	0	1	1	→	0	1	1	
1	1	1	→	1	1	1	1	1	1	→	1	1	0	1	1	0	→	1	1	1	0	0	1	→	1	1	1	

<i>c</i> ⁽³⁾						<i>d</i> ⁽³⁾						<i>e</i> ⁽³⁾						<i>f</i> ⁽³⁾										
<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	<i>x</i> ₂	<i>x</i> ₁	<i>x</i> ₀		<i>y</i> ₂	<i>y</i> ₁	<i>y</i> ₀	
0	0	0	→	1	0	1	0	0	0	→	0	1	0	0	0	0	→	1	1	1	0	0	0	0	→	1	0	1
0	0	1	→	0	0	1	0	0	1	→	0	0	1	0	0	0	→	0	0	0	0	0	1	→	1	0	0	
0	1	0	→	0	0	0	0	1	0	→	0	0	0	0	1	0	→	1	1	0	0	0	1	→	0	0	1	
0	1	1	→	1	0	0	0	1	1	→	0	1	1	0	0	0	→	0	1	0	0	0	0	1	→	0	0	0
1	0	0	→	1	1	0	1	0	0	→	1	0	0	1	0	1	→	1	0	0	0	1	1	→	0	1	1	
1	0	1	→	0	1	0	1	0	1	→	1	0	1	0	1	0	→	1	0	1	0	0	1	→	0	1	0	
1	1	0	→	0	1	1	1	1	0	→	1	1	1	0	1	1	→	1	1	0	0	1	1	→	1	1	0	
1	1	1	→	1	1	1	1	1	1	→	1	1	0	1	1	0	→	1	1	1	0	0	1	→	1	1	1	

FIG. 13B

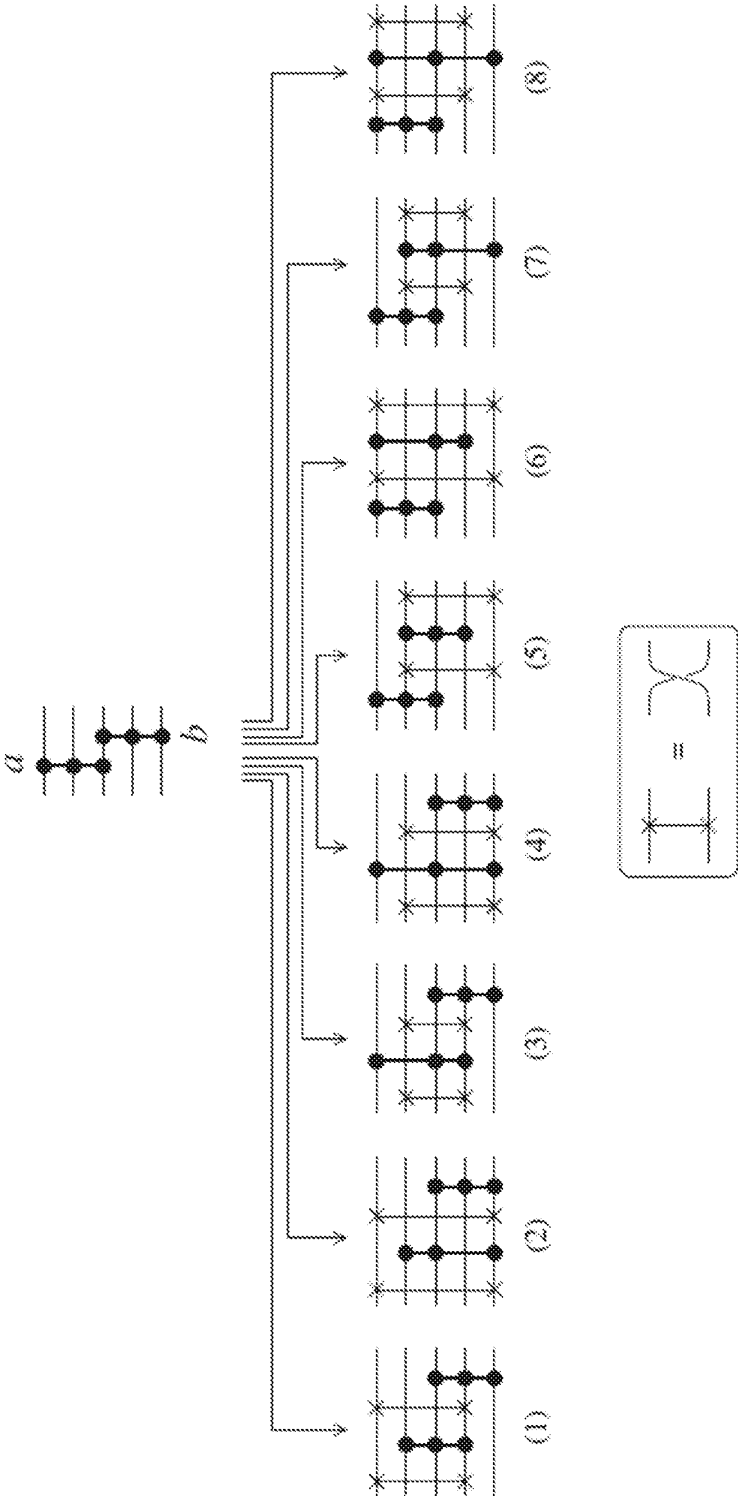


FIG. 14

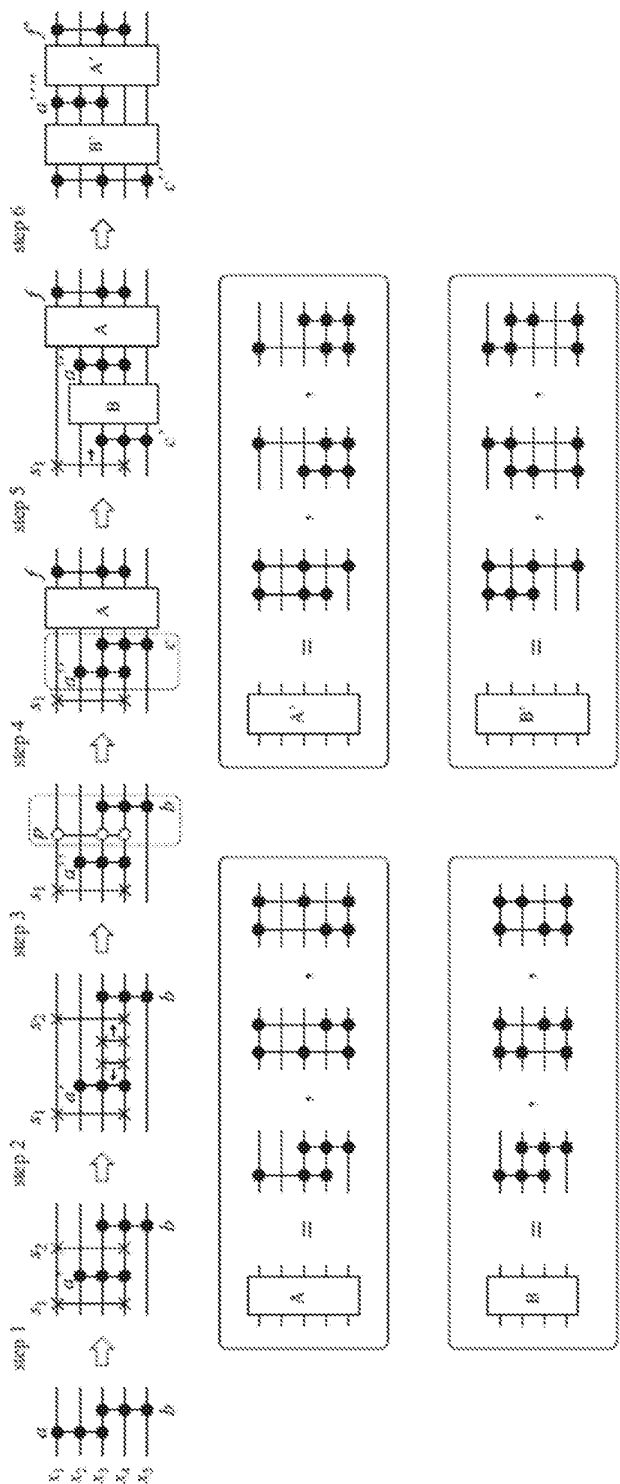


FIG. 15

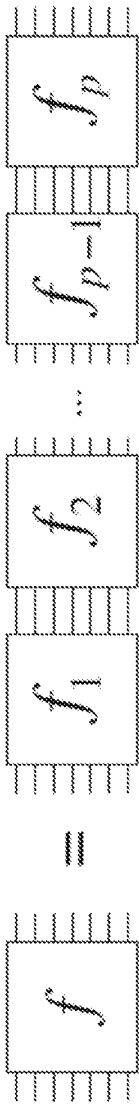


FIG. 16



FIG. 17

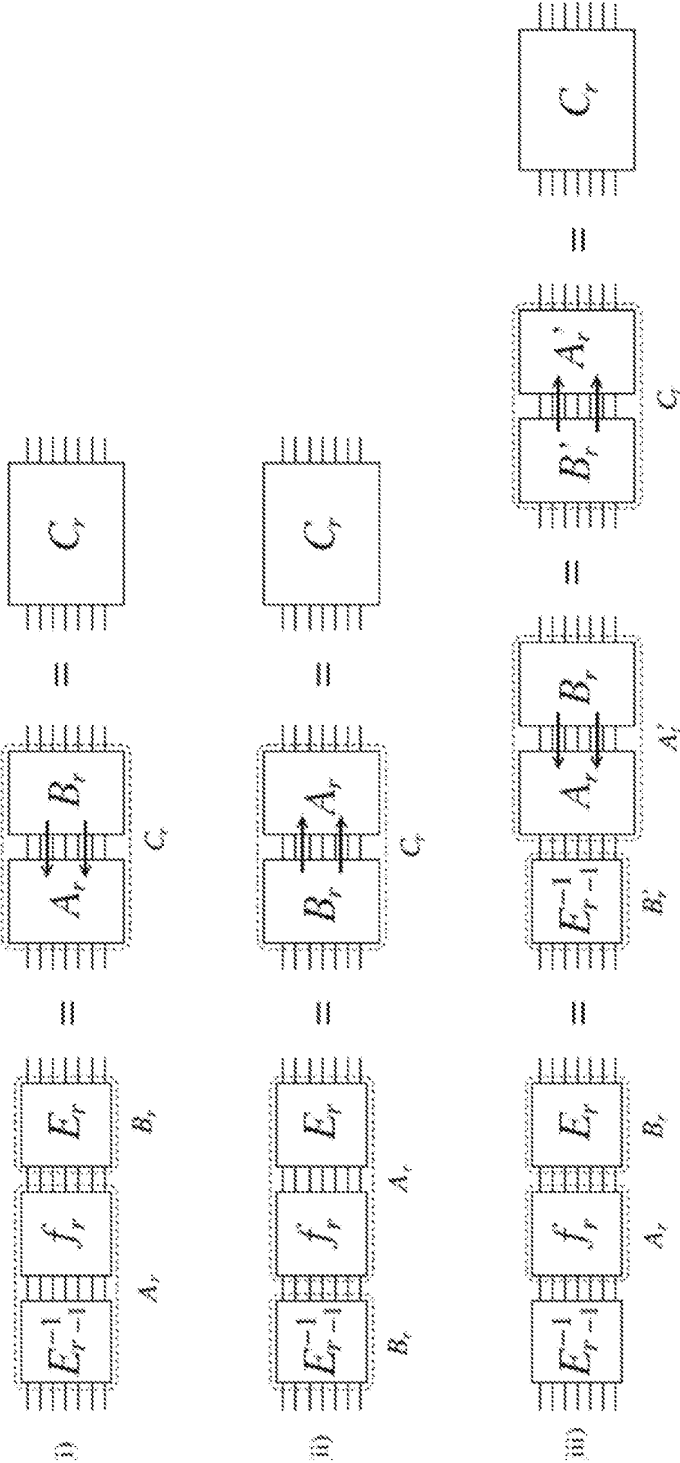


FIG. 18

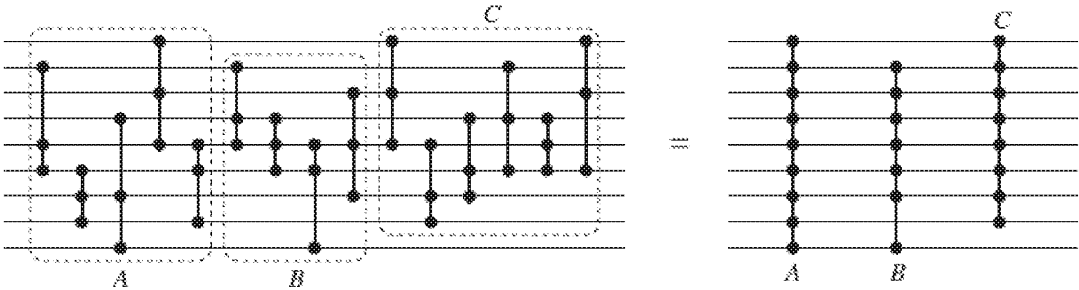


FIG. 19

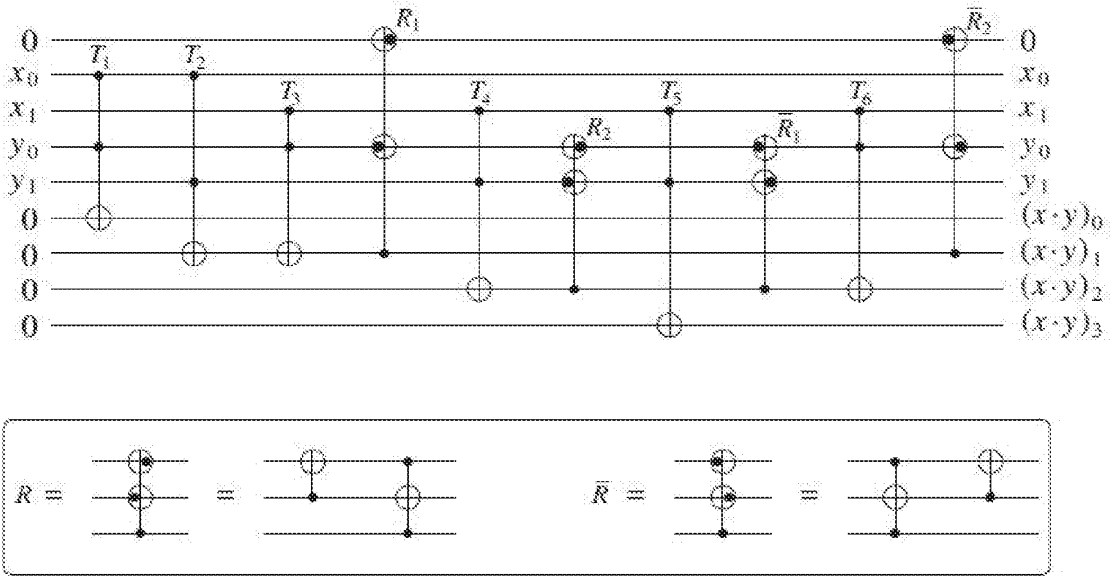


FIG. 20

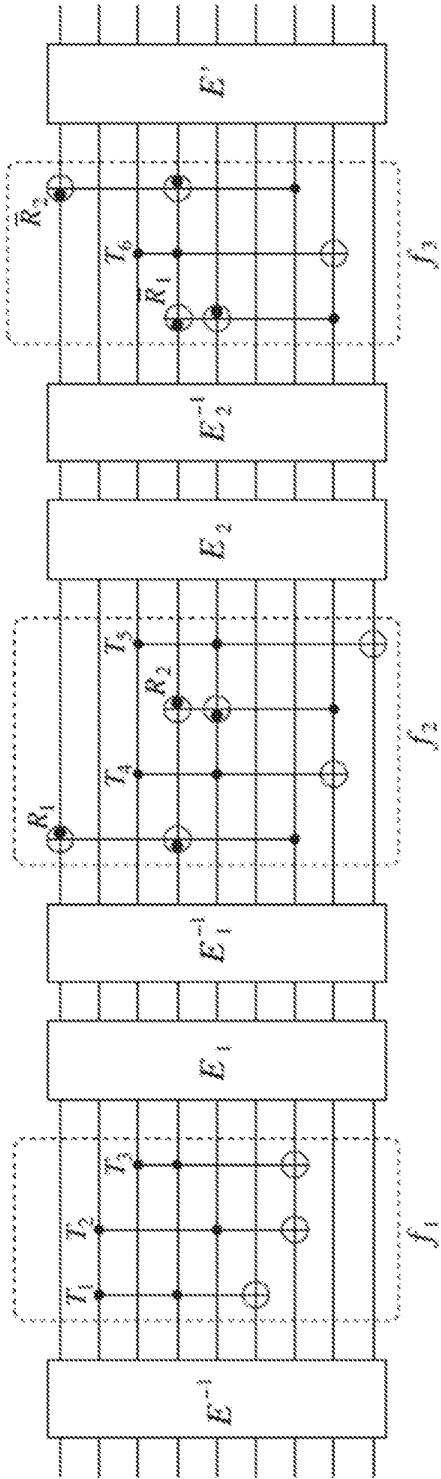


FIG. 21

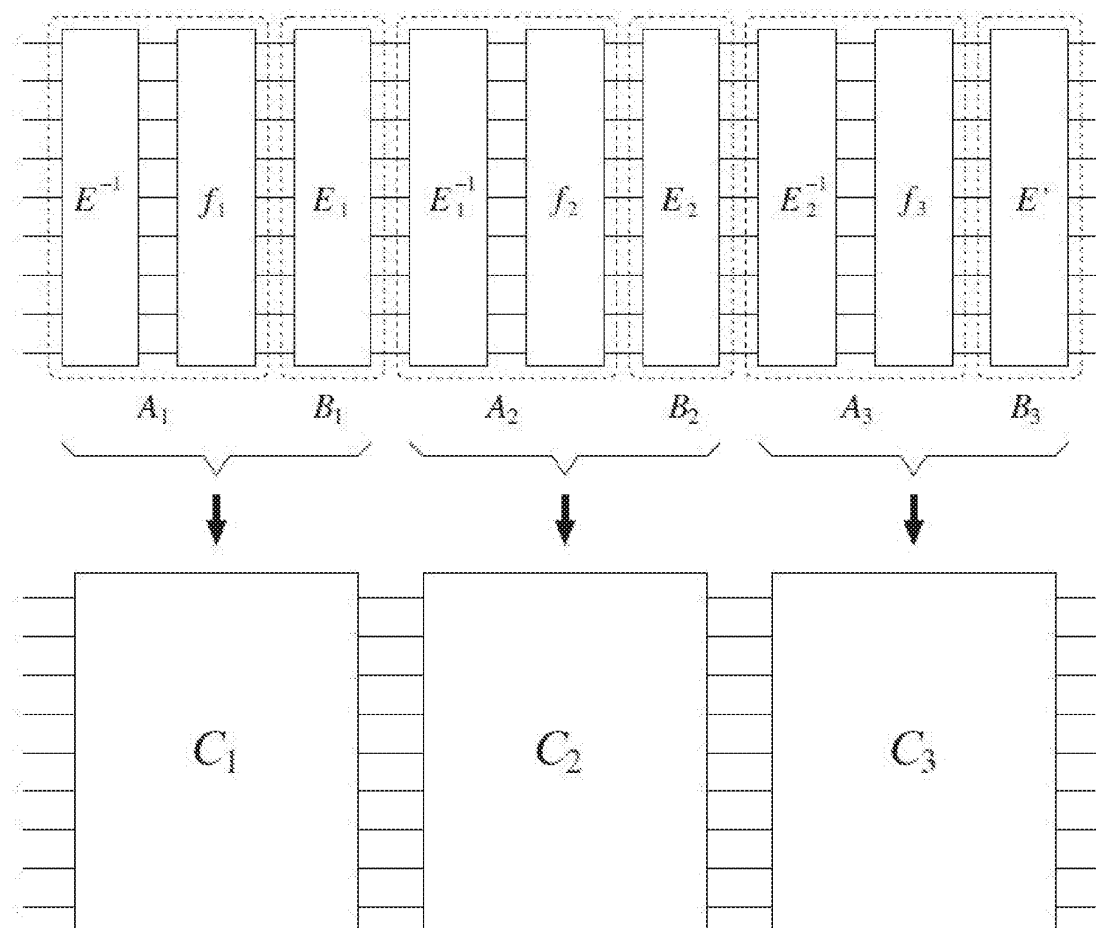


FIG. 22

Move leftmost gate in B_r all the way across A_r

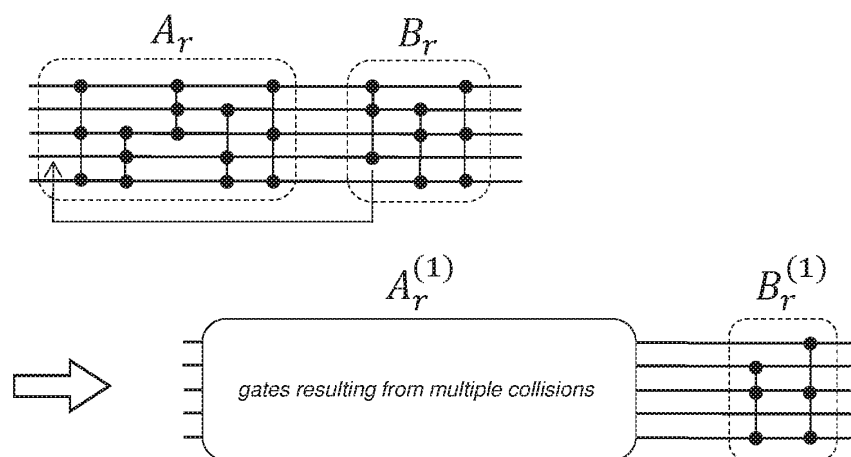


FIG. 23A

Move leftmost gate in $B_r^{(1)}$ all the way across $A_r^{(1)}$, stopping at Δl gates before end

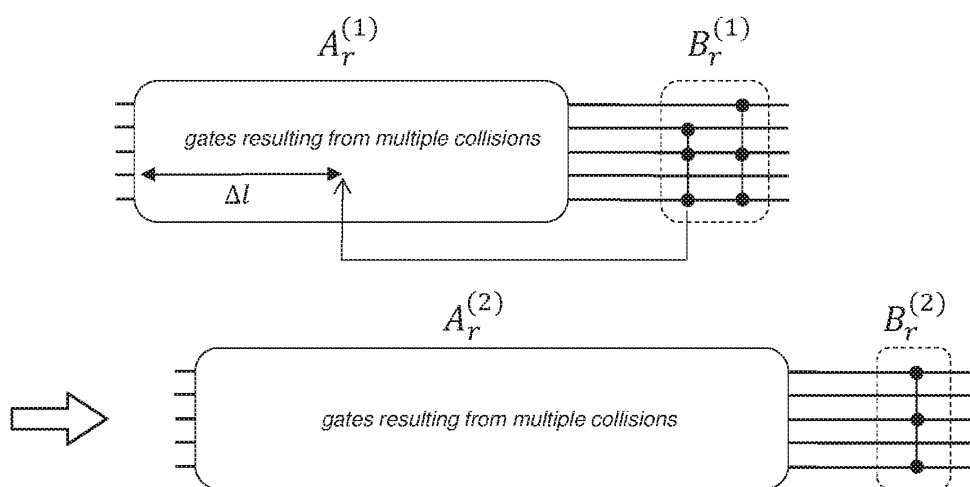


FIG. 23B

Move leftmost gate in $B_r^{(2)}$ into $A_r^{(2)}$, stopping at $2\Delta l$ gates before end

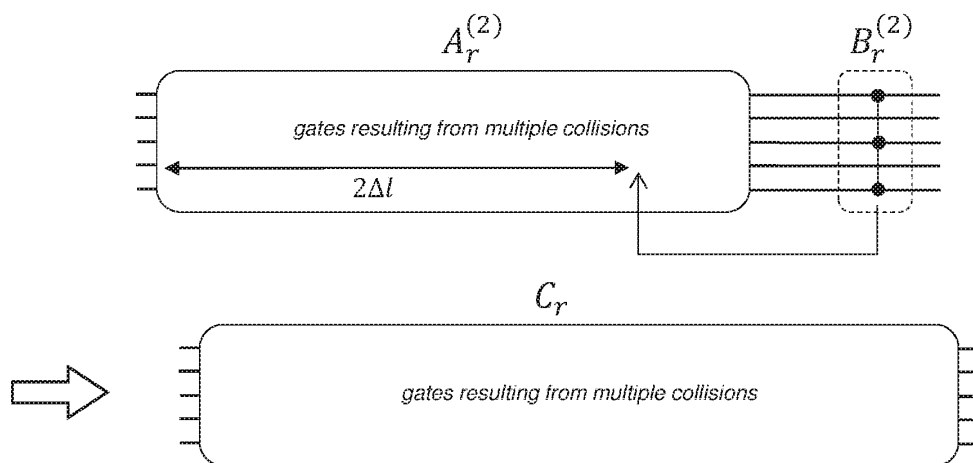


FIG. 23C

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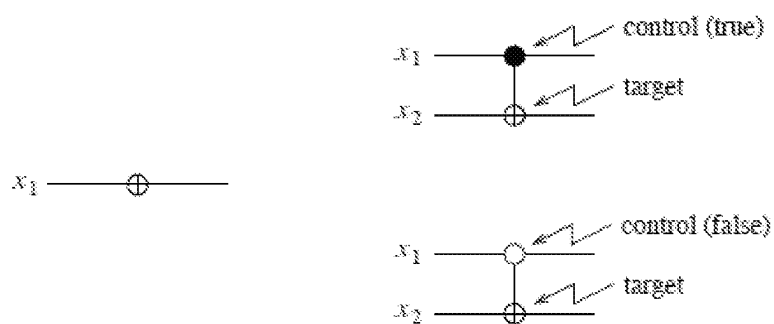


FIG. 24A

FIG. 24B

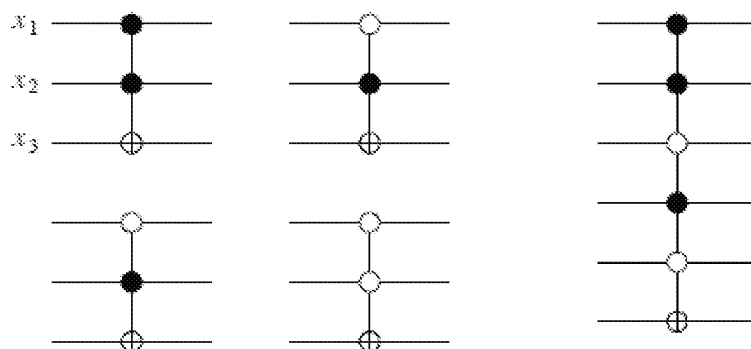


FIG. 24C

FIG. 24D

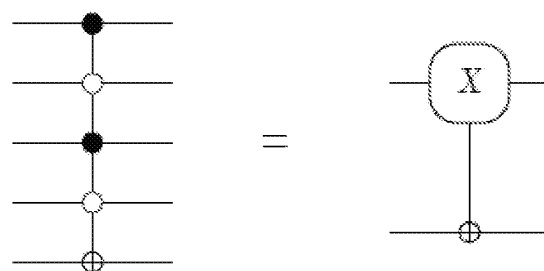


FIG. 25

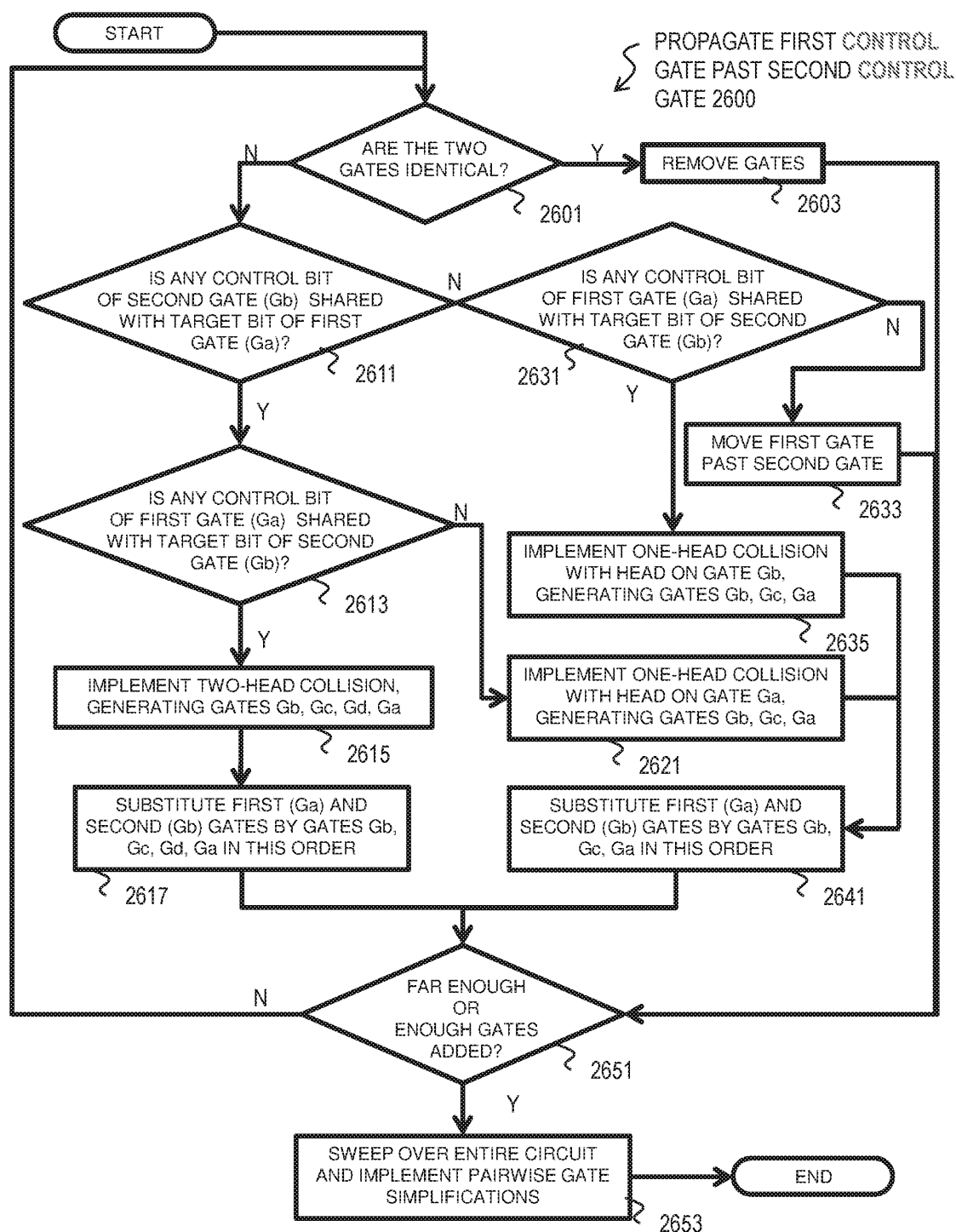


FIG. 26

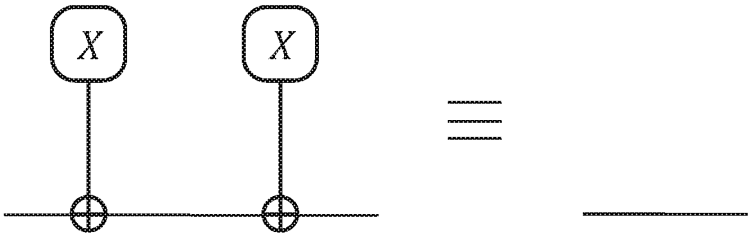


FIG. 27A

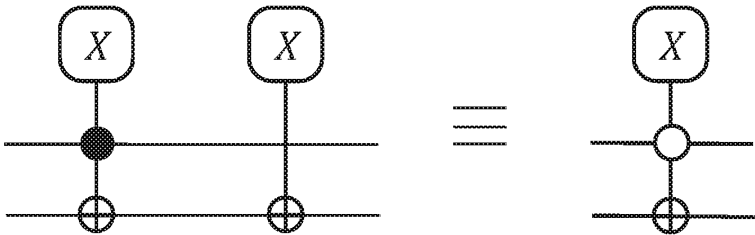


FIG. 27B

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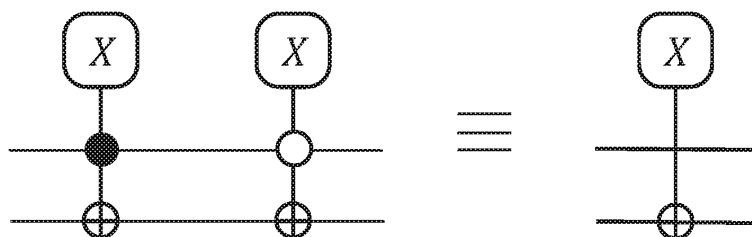


FIG. 27C

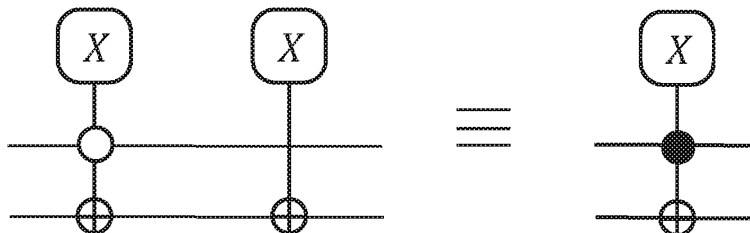


FIG. 27D

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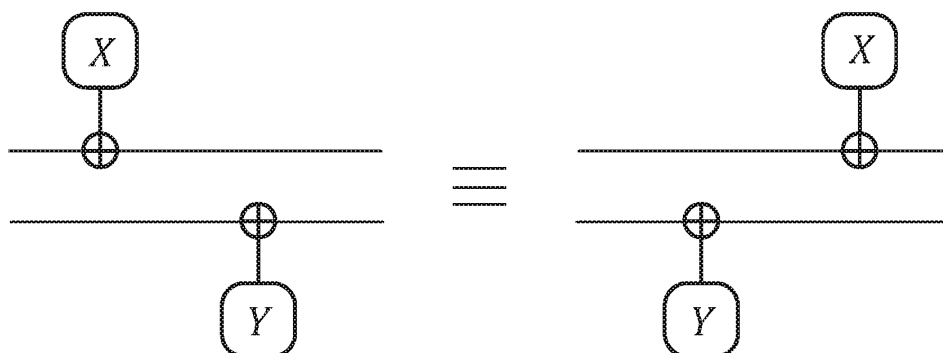


FIG. 28A

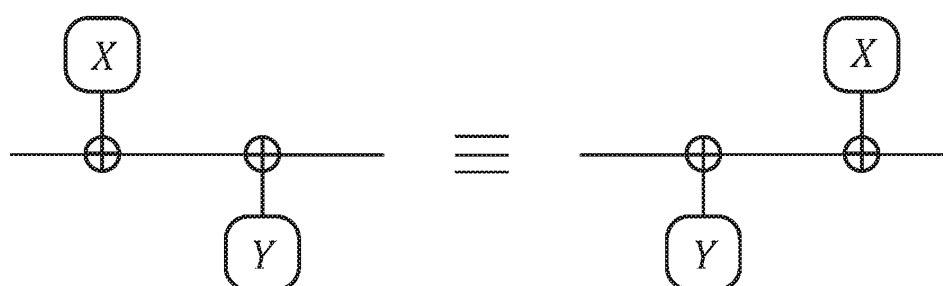


FIG. 28B

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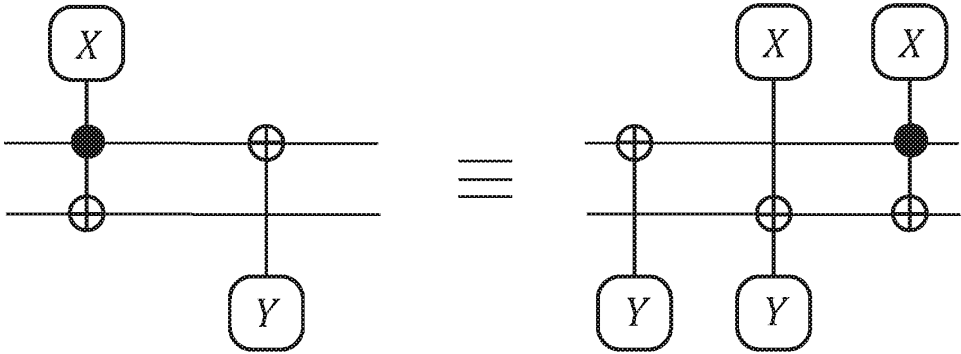


FIG. 29A

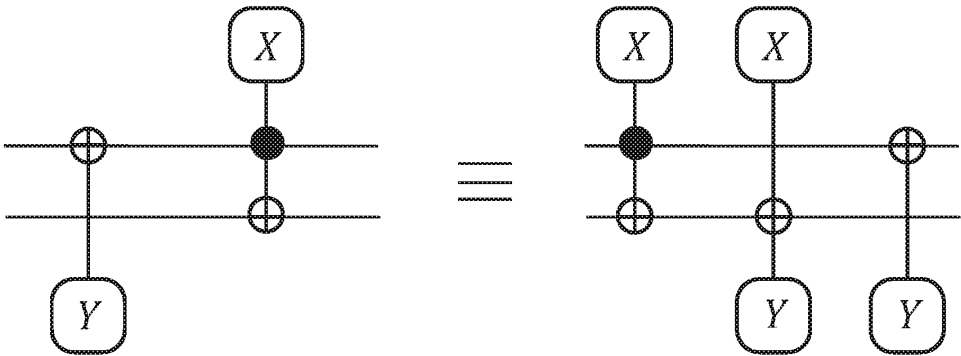


FIG. 29B

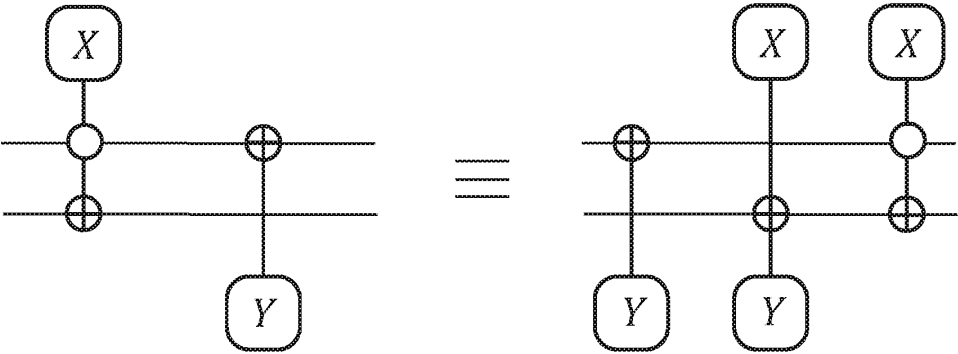


FIG. 29C

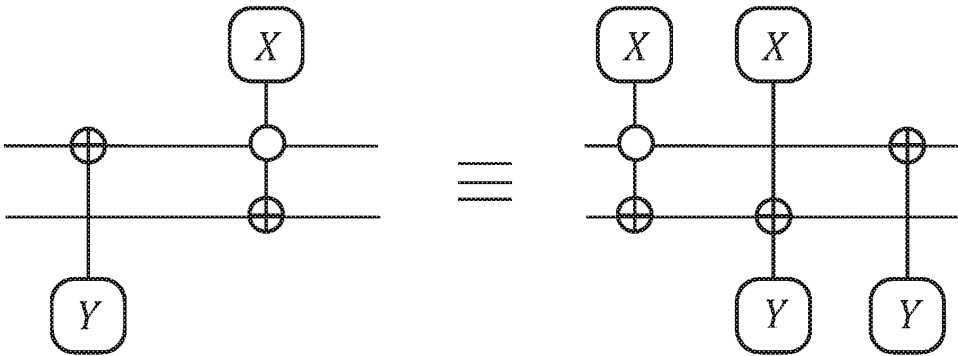


FIG. 29D

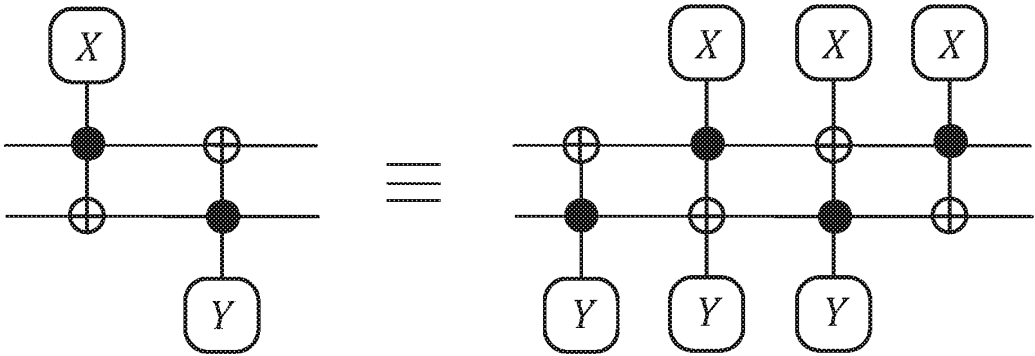


FIG. 30A

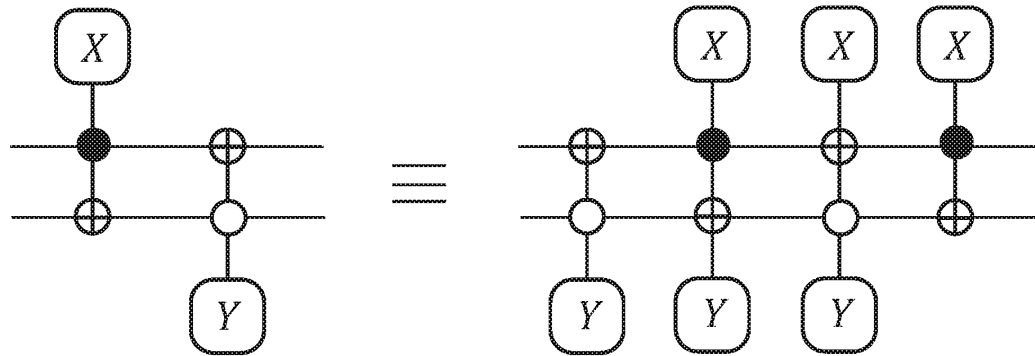


FIG. 30B

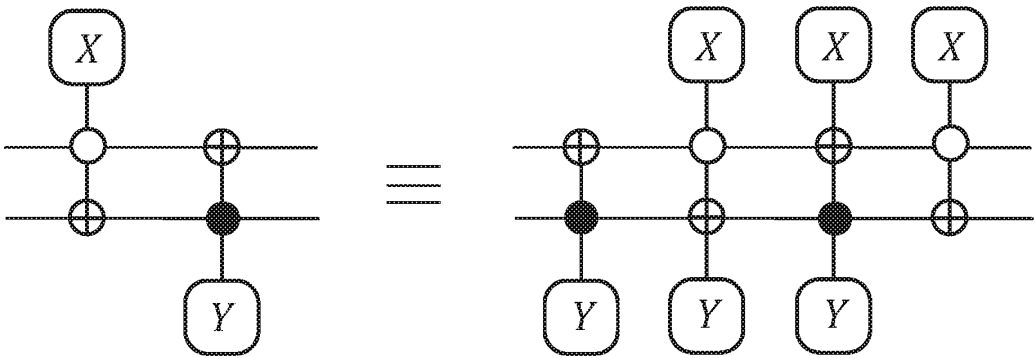


FIG. 30C

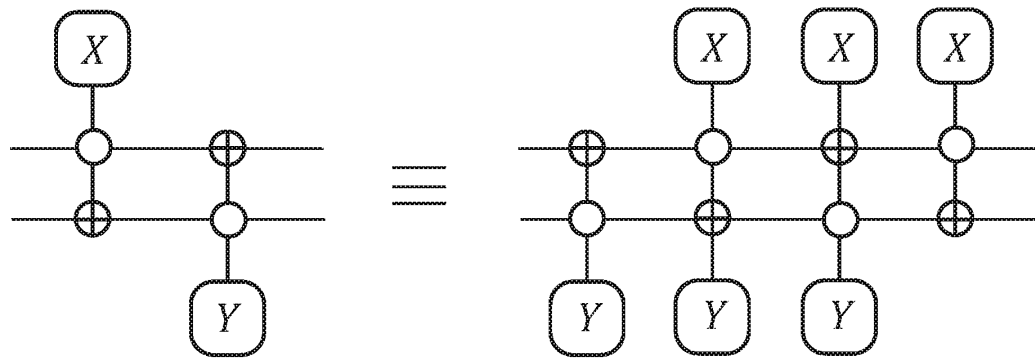


FIG. 30D

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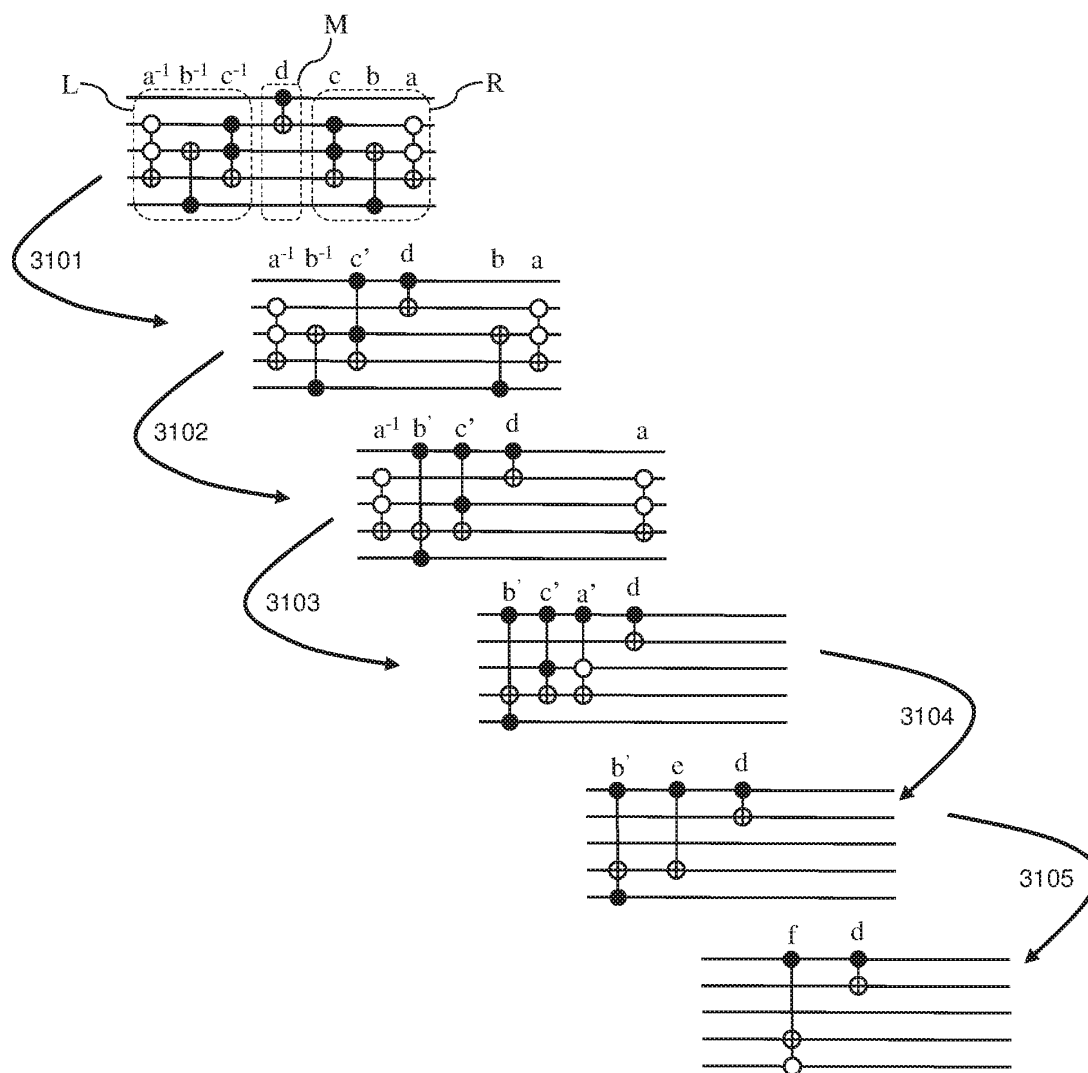
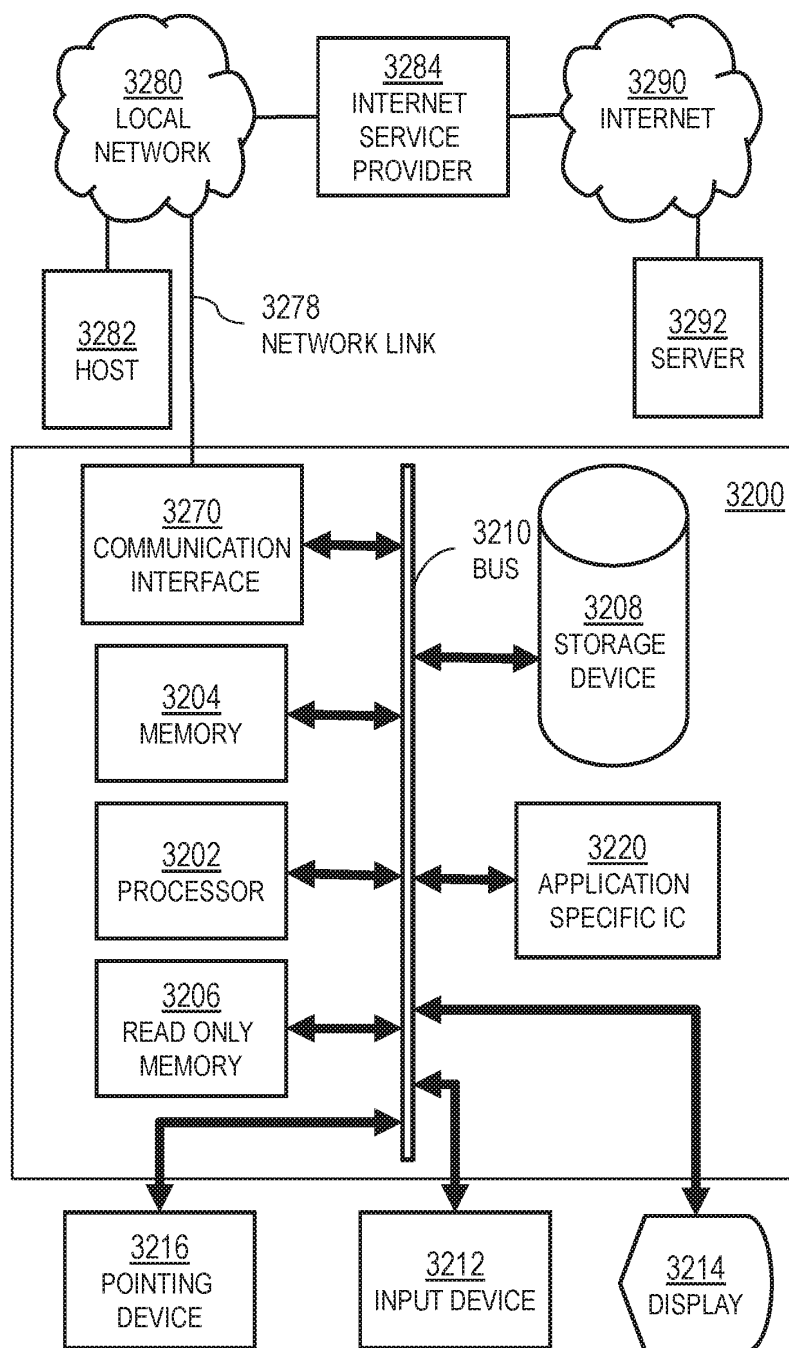


FIG. 31

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FIG. 32



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FIG. 33

