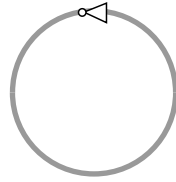


Oscillation Basics

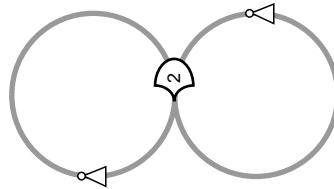
March 2014

Karl Fant

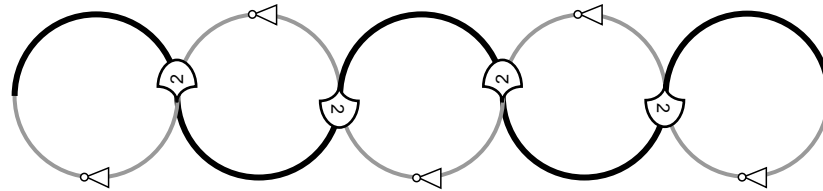
The Oscillation



Linked Oscillations

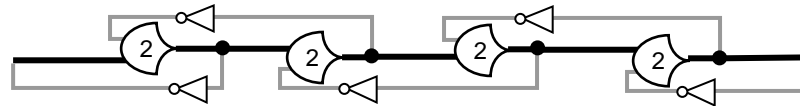


The Flow Path

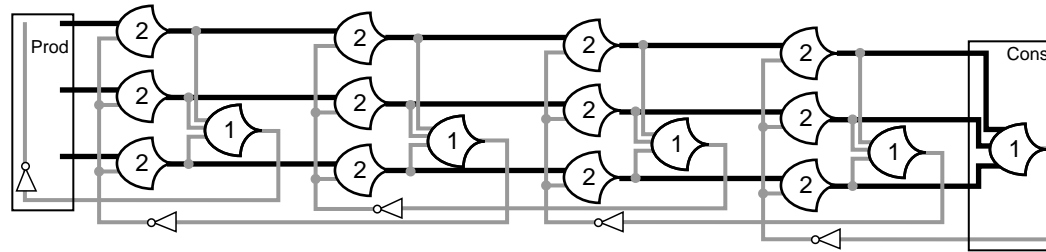


flow path —
closure path —

redrawn to emphasize
the flow path

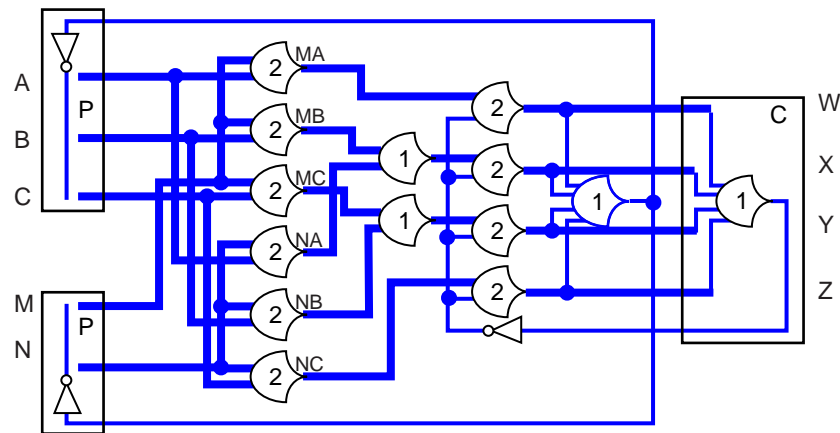


Multi-rail



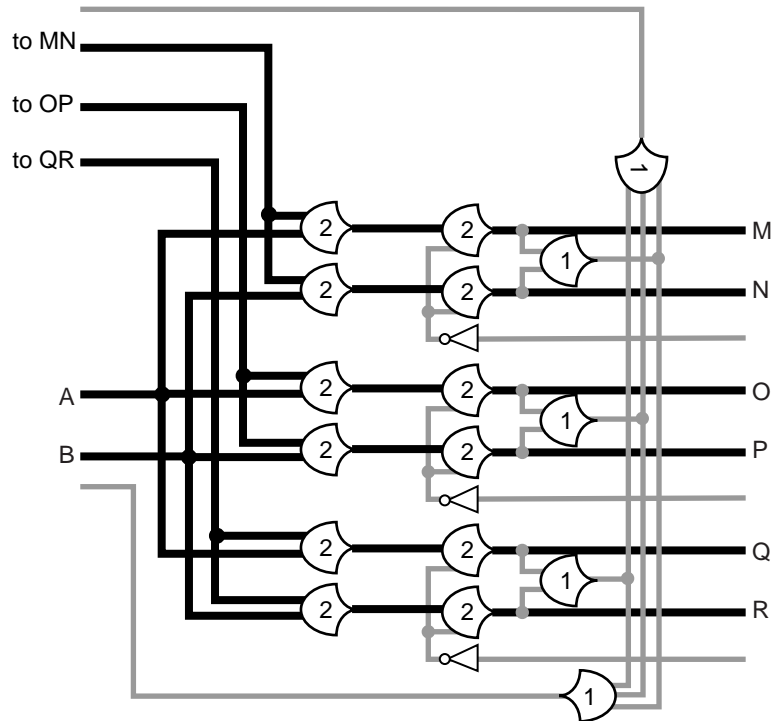
Multi-rail interaction

	A	B	C
M	W	X	Y
N	X	Y	Z



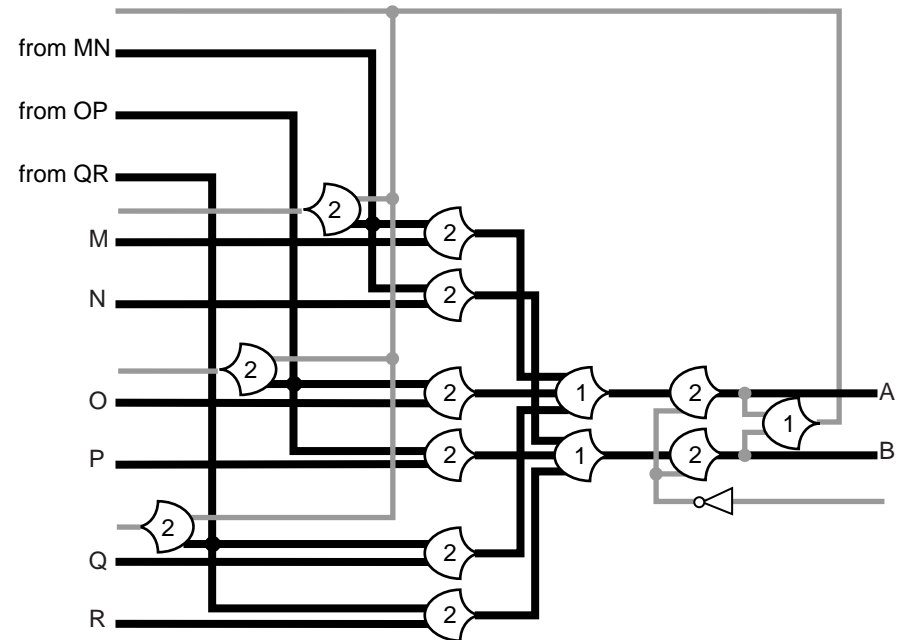
Steer Interaction

	to MN	to OP	to QR
A	M	O	Q
B	N	P	R

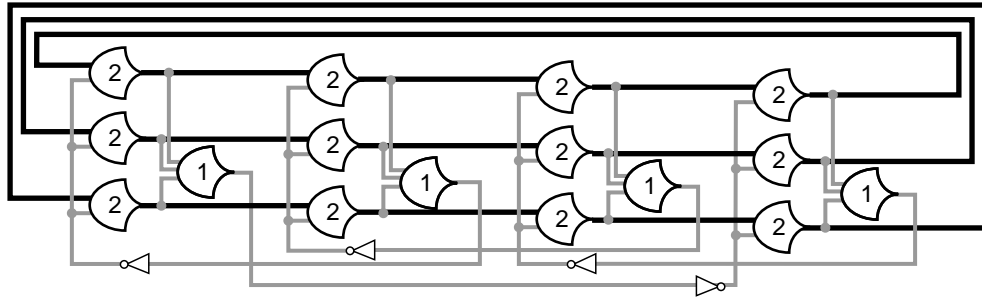


Select Interaction

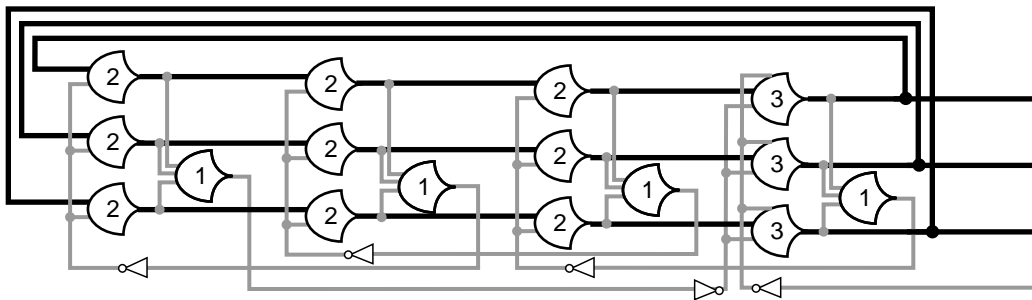
	from MN	from OP	from QR
M	A	-	-
N	B	-	-
O	-	A	-
P	-	B	-
Q	-	-	A
R	-	-	B



The Flow Ring

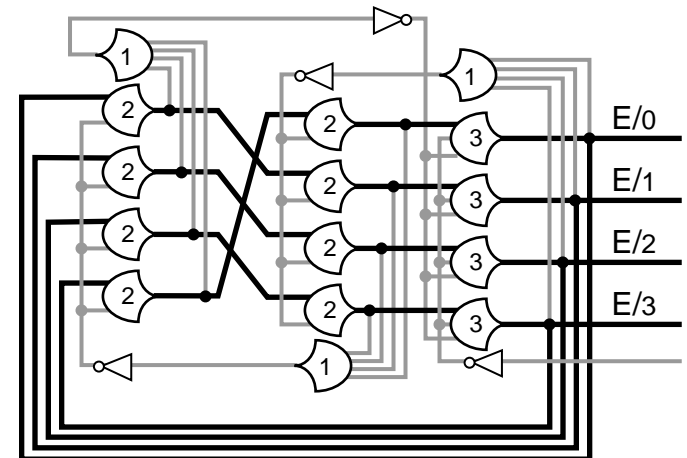


Constant

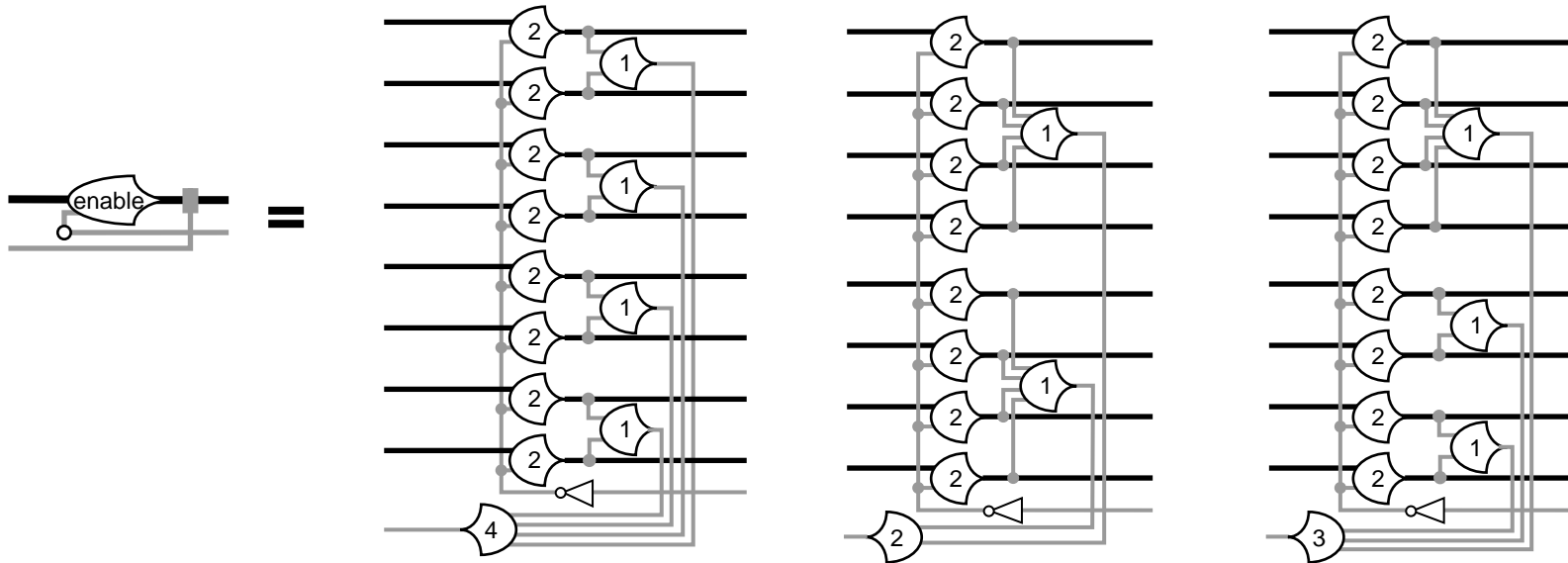


Sequeuncer

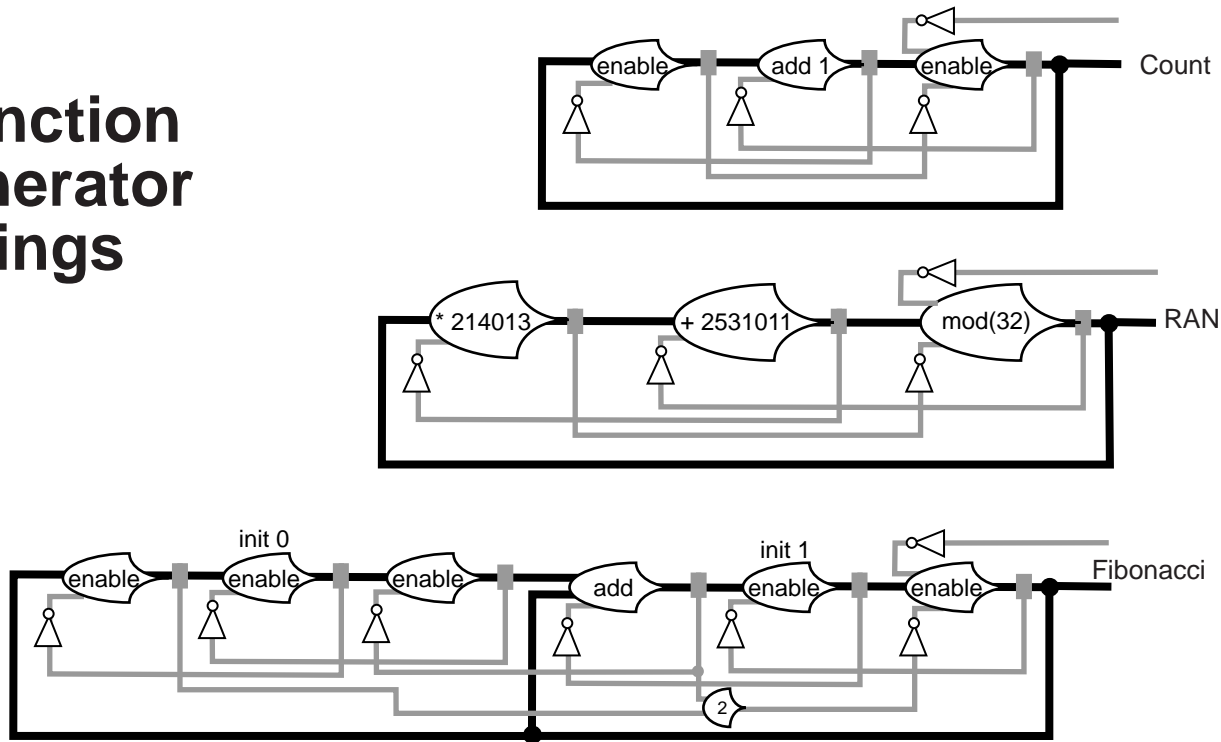
E/0	E/1	E/2	E/3
E/1	E/2	E/3	E/0



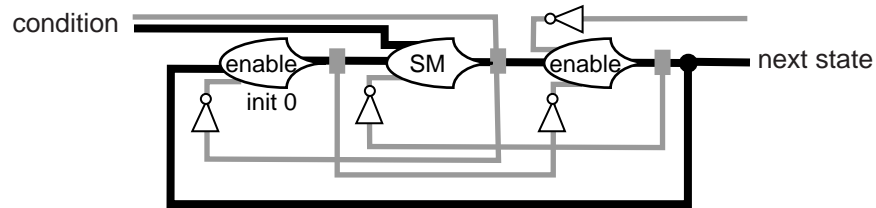
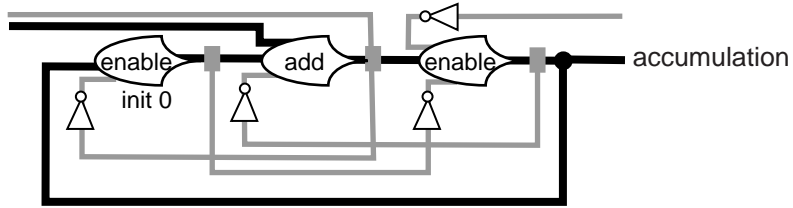
Raising the Abstraction Level



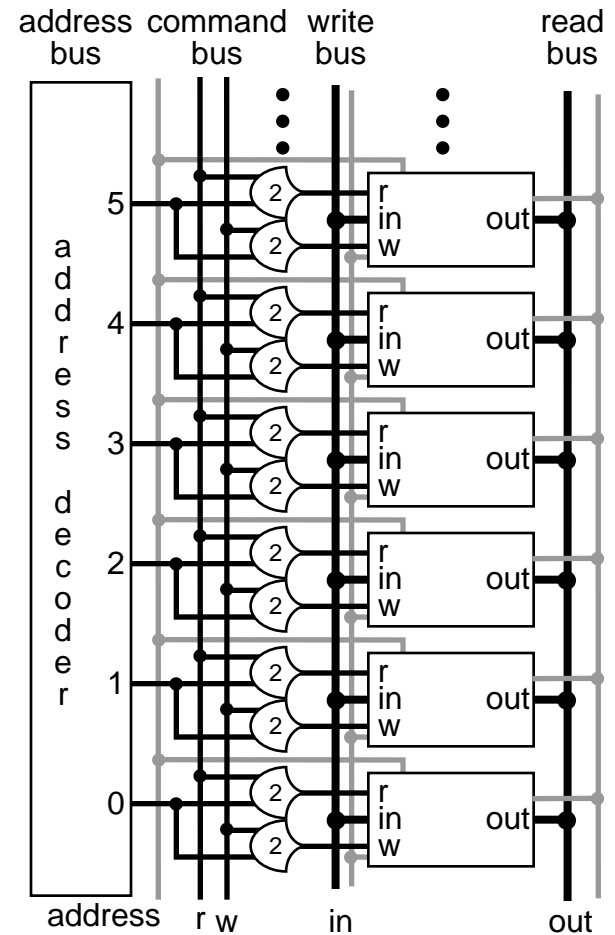
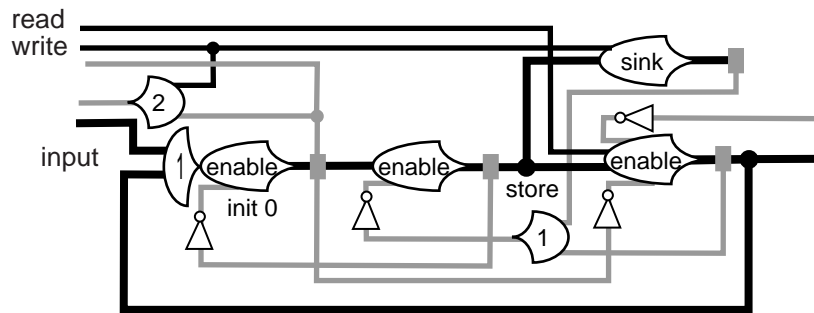
Function generator rings



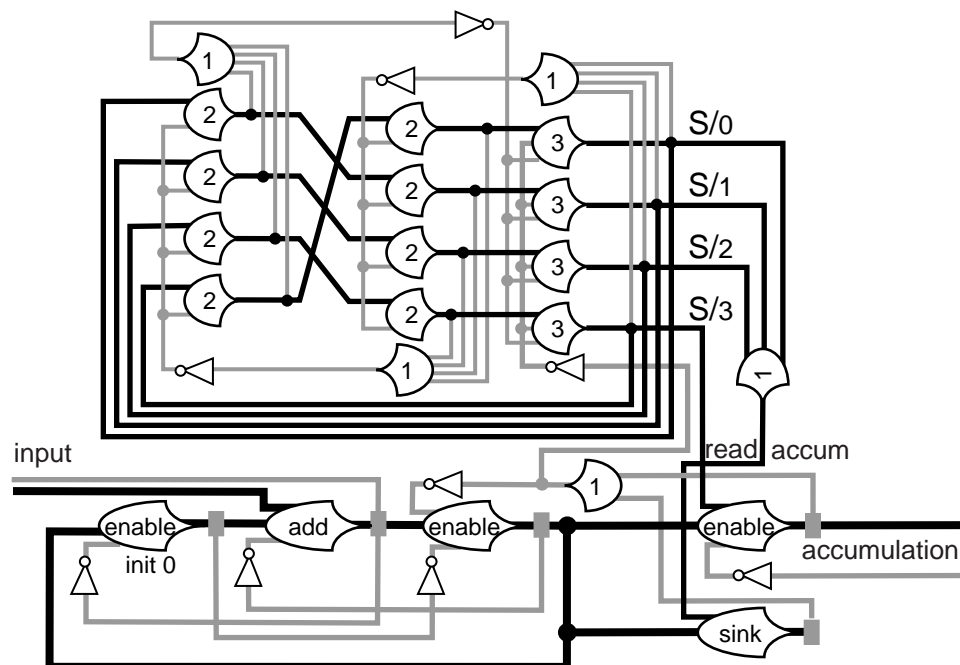
Rings with input and output



Memory



Composed rings



Iterating rings

$$\text{GCD}(a, 0) = a$$

$$\text{GCD}(a, b) = \text{GCD}(b, a \bmod b)$$

