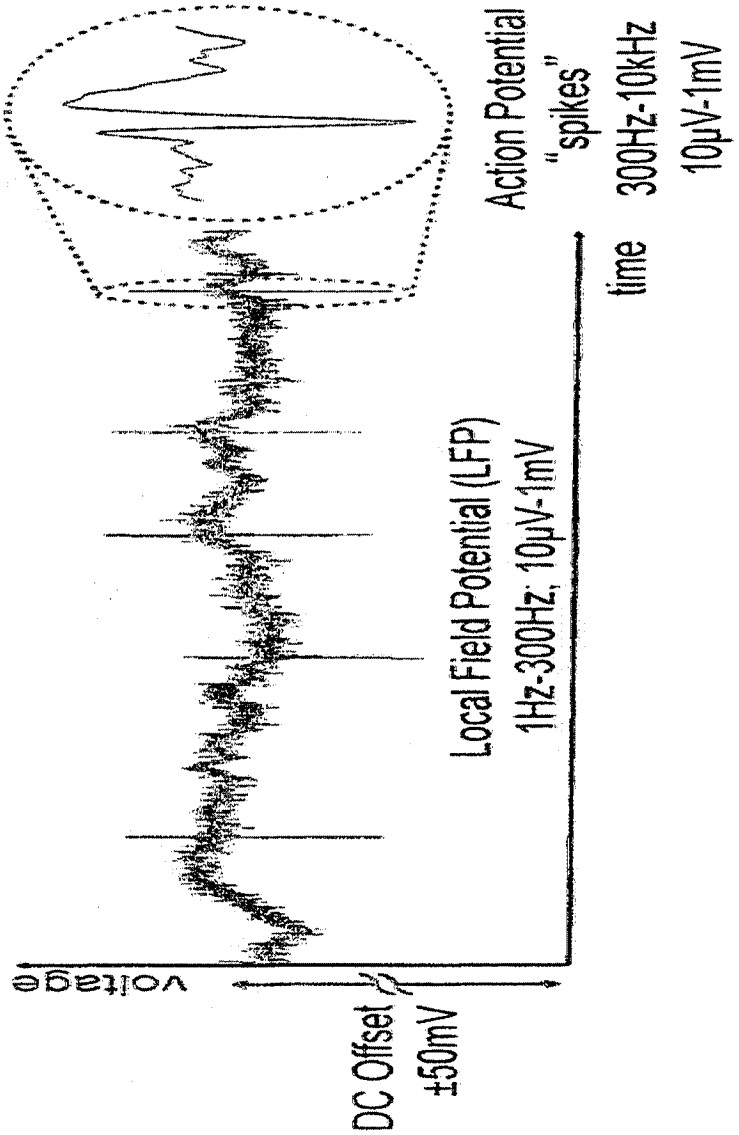


FIGURE 1
PRIOR ART

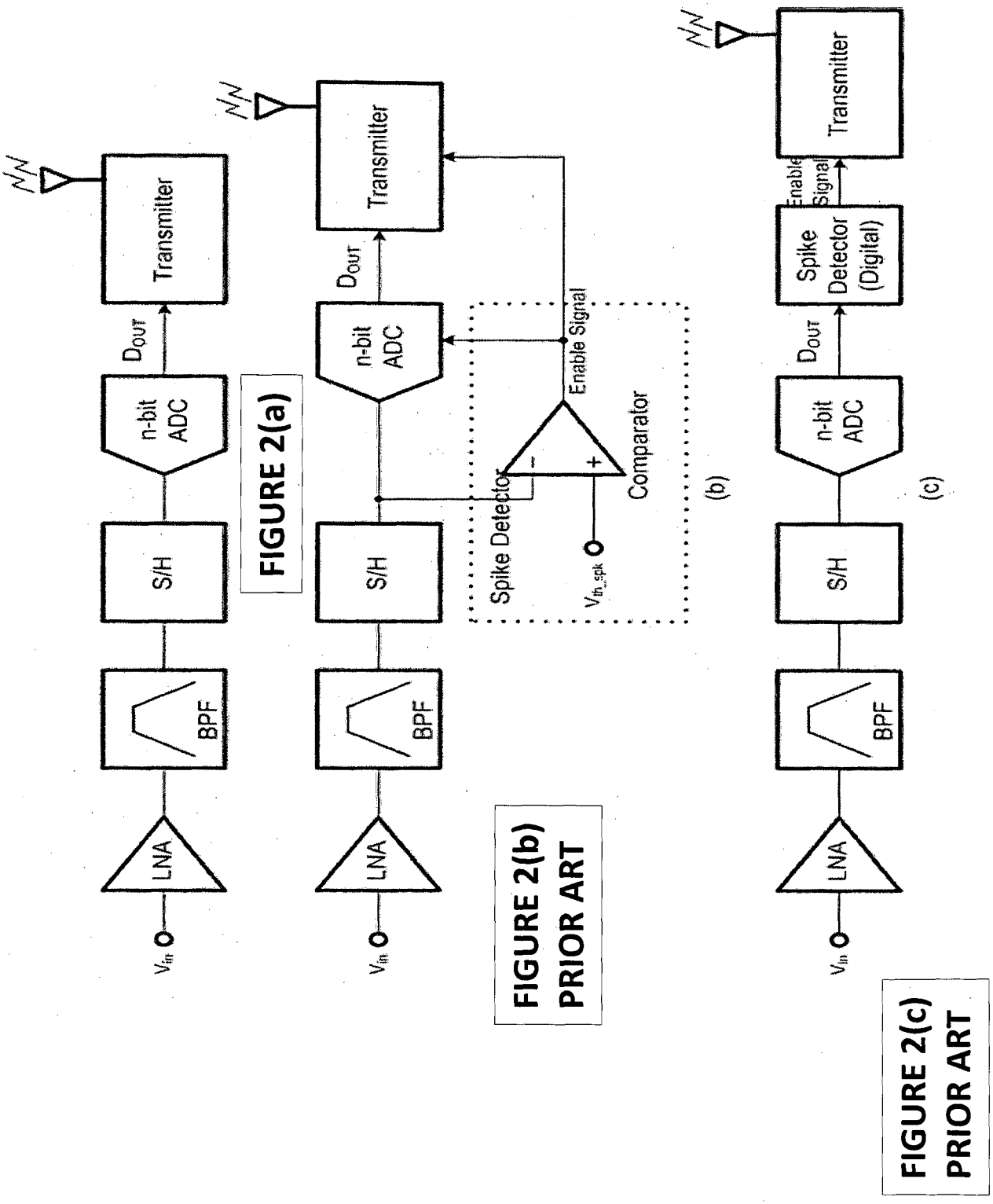


FIGURE 2(a)

FIGURE 2(b) PRIOR ART

FIGURE 2(c) PRIOR ART

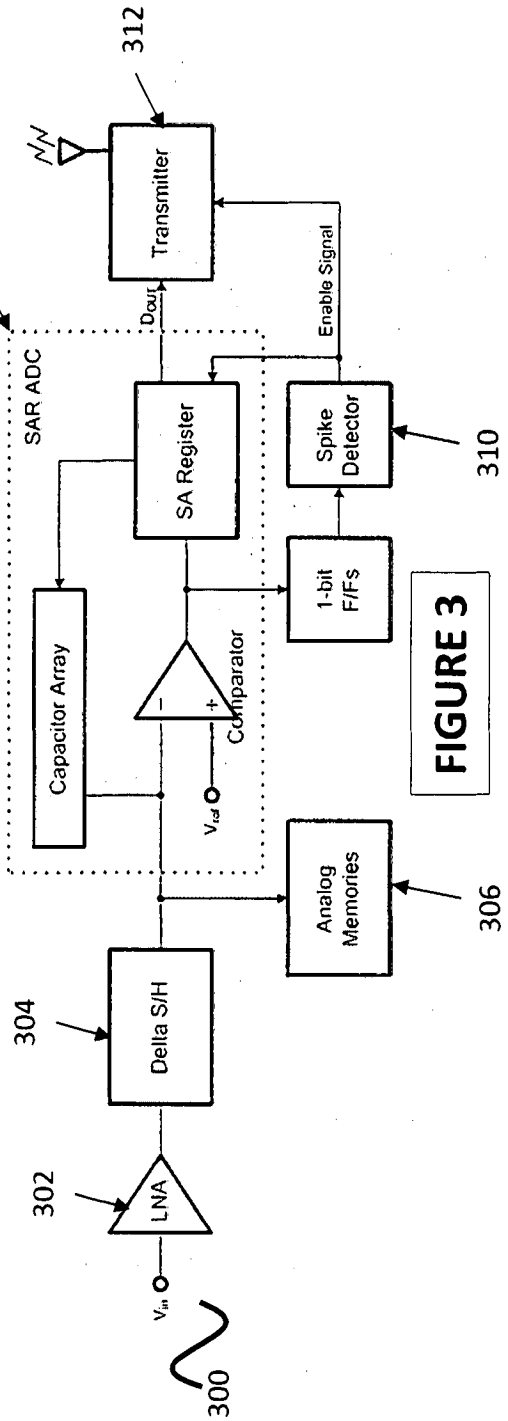


FIGURE 3

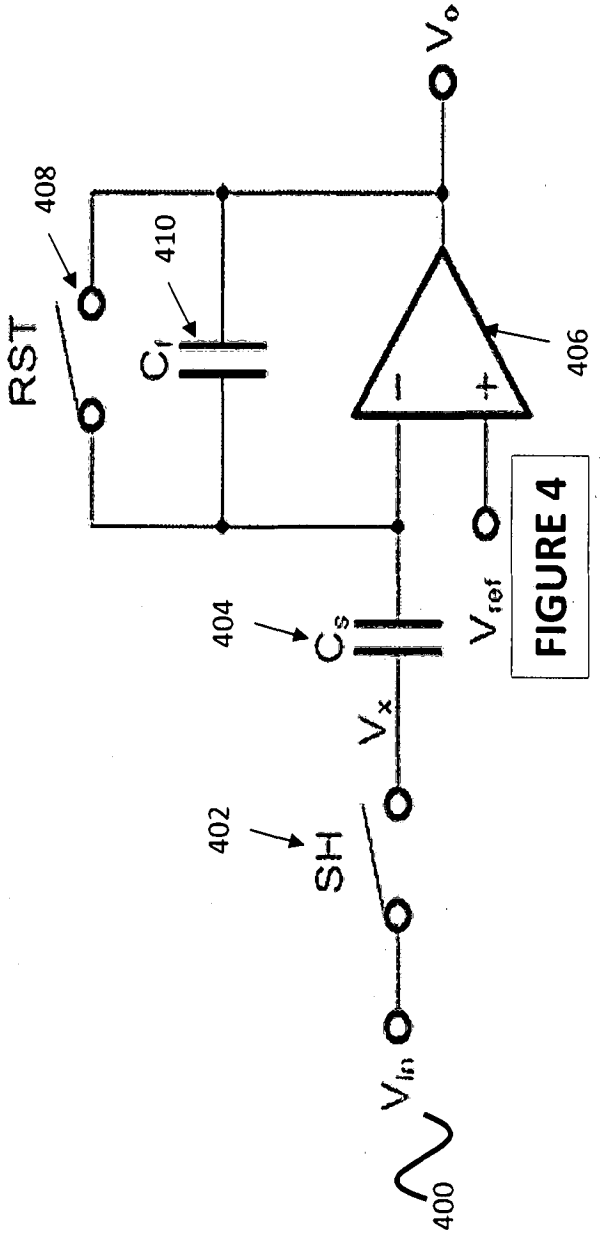


FIGURE 4

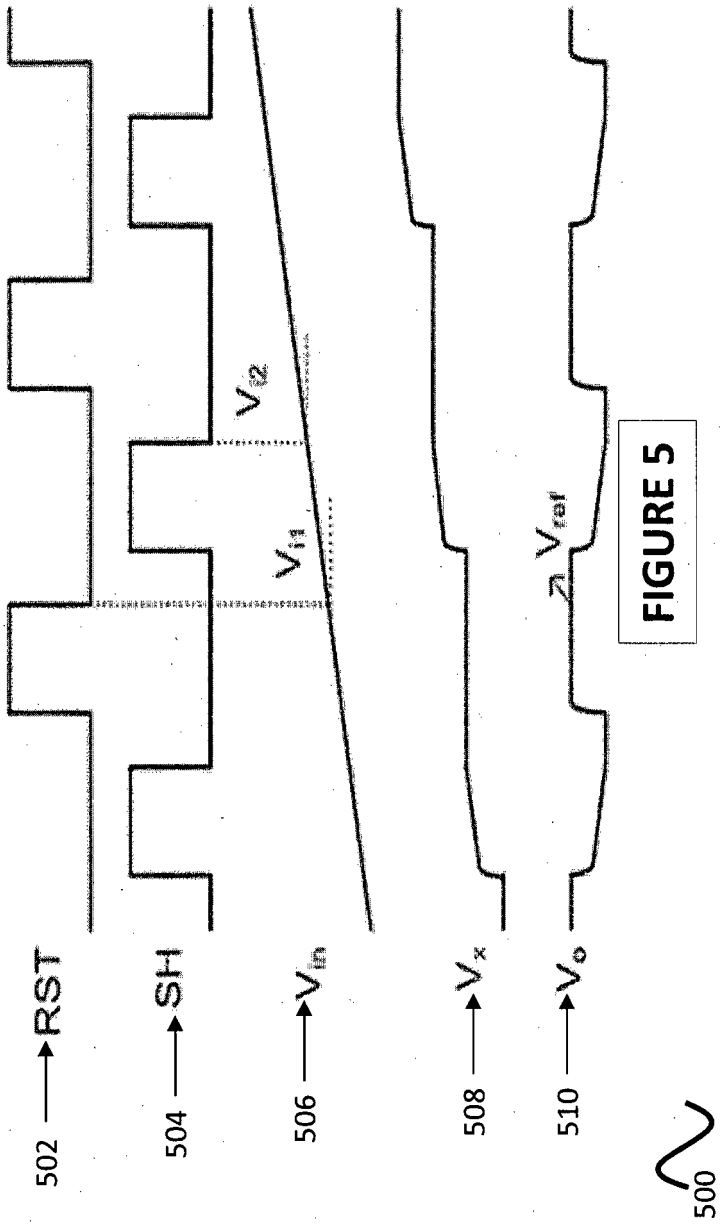


FIGURE 5

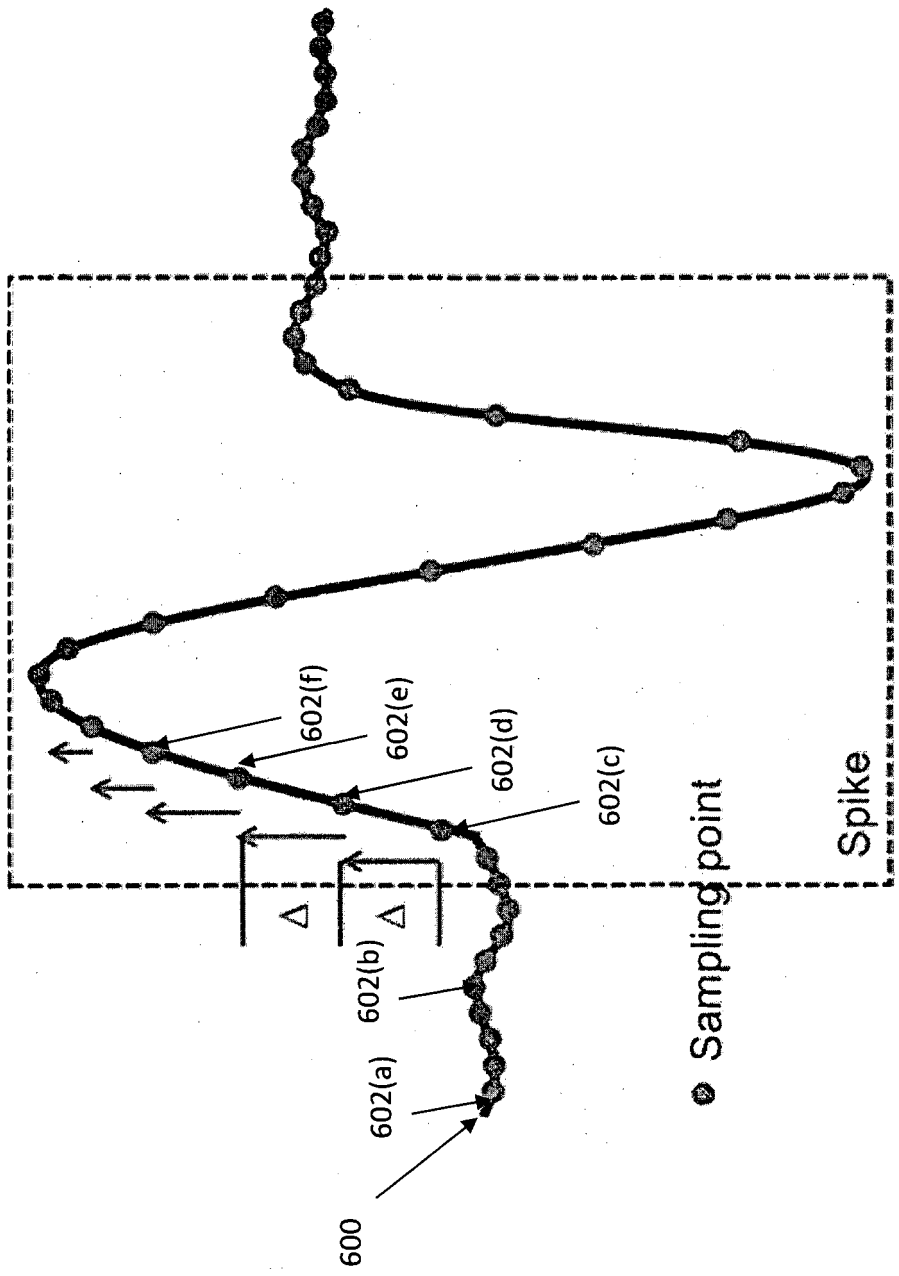


FIGURE 6

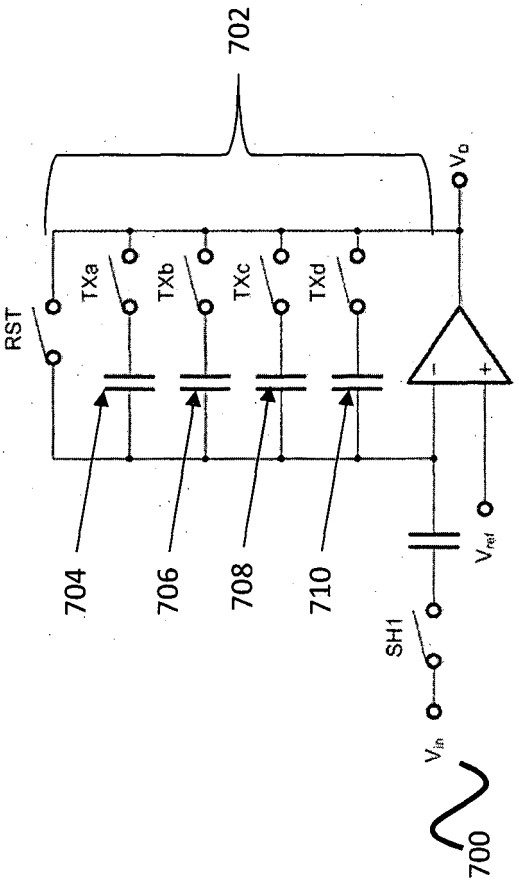


FIGURE 7(a)

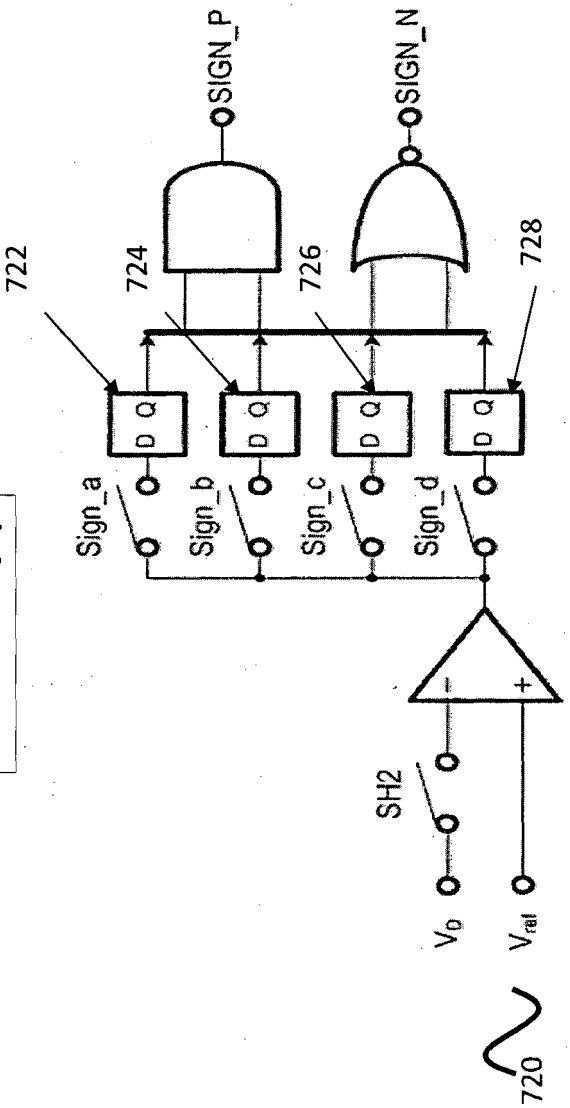


FIGURE 7(b)

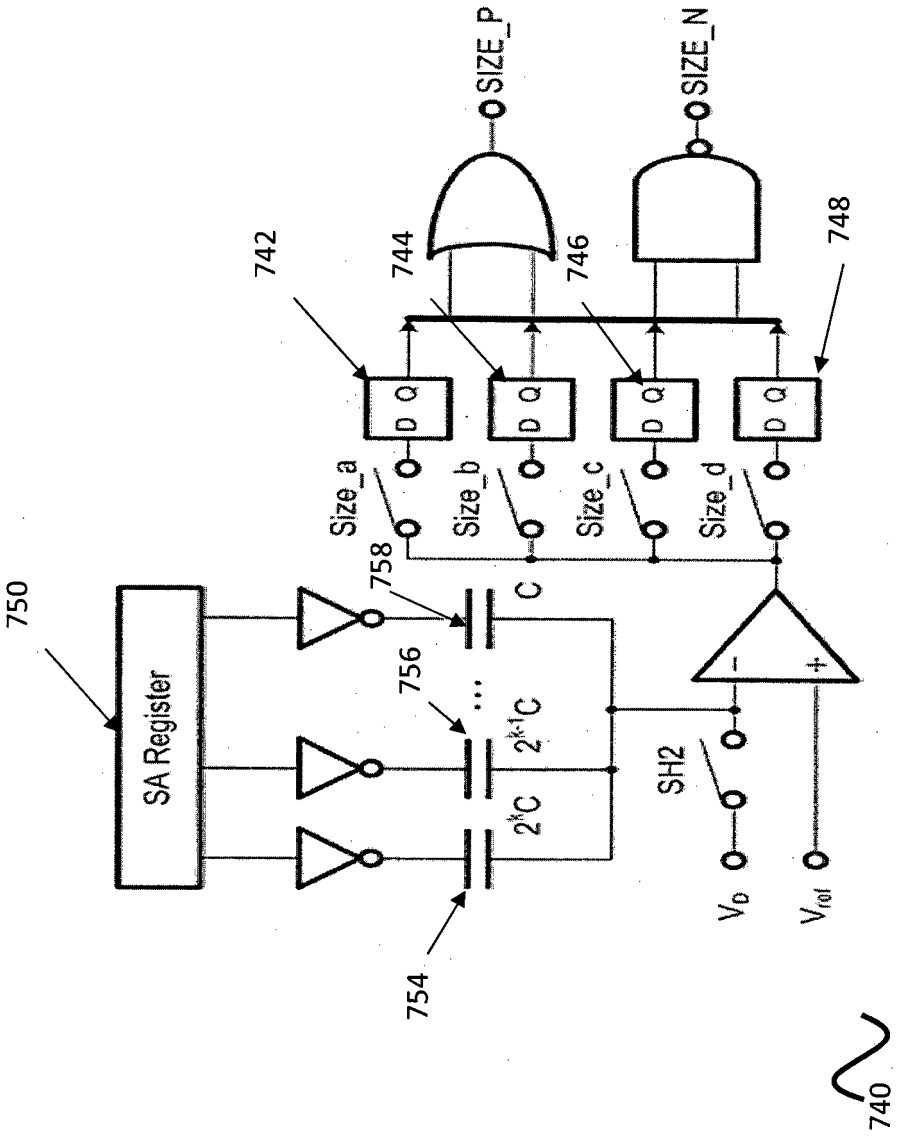

SIZE_P
SIZE_N
742
744
746
748
D Q
Size_a
Size_b
Size_c
Size_d
758
750
SA Register
C
756
$2^{k-1}C$
2^kC
754
SH2
V_D
V_{ref}
740

FIGURE 7(c)

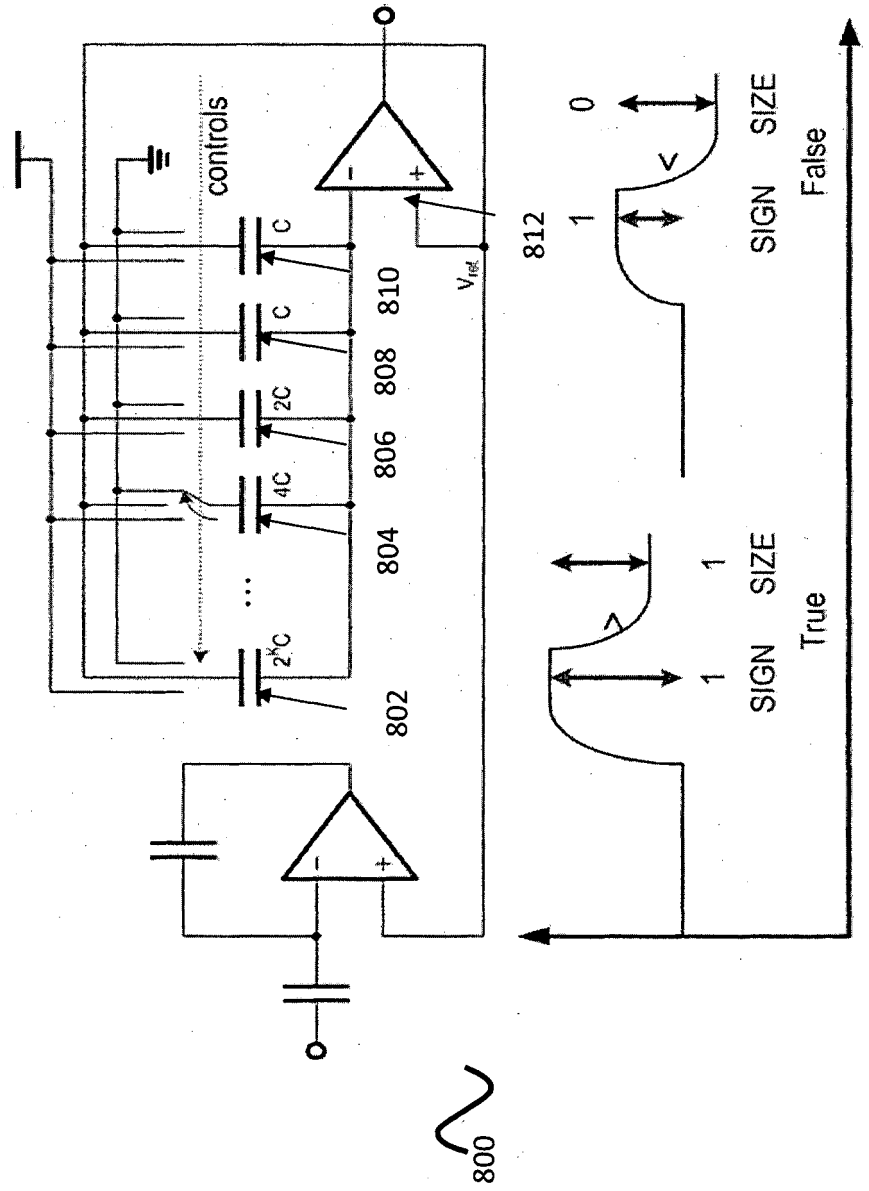

controls
C
C
2C
4C
2^kC
802
804
806
808
810
812
V_{ref}
SIGN
SIZE
1
1
>
True
SIGN
SIZE
1
0
<
False
800

FIGURE 8(a)

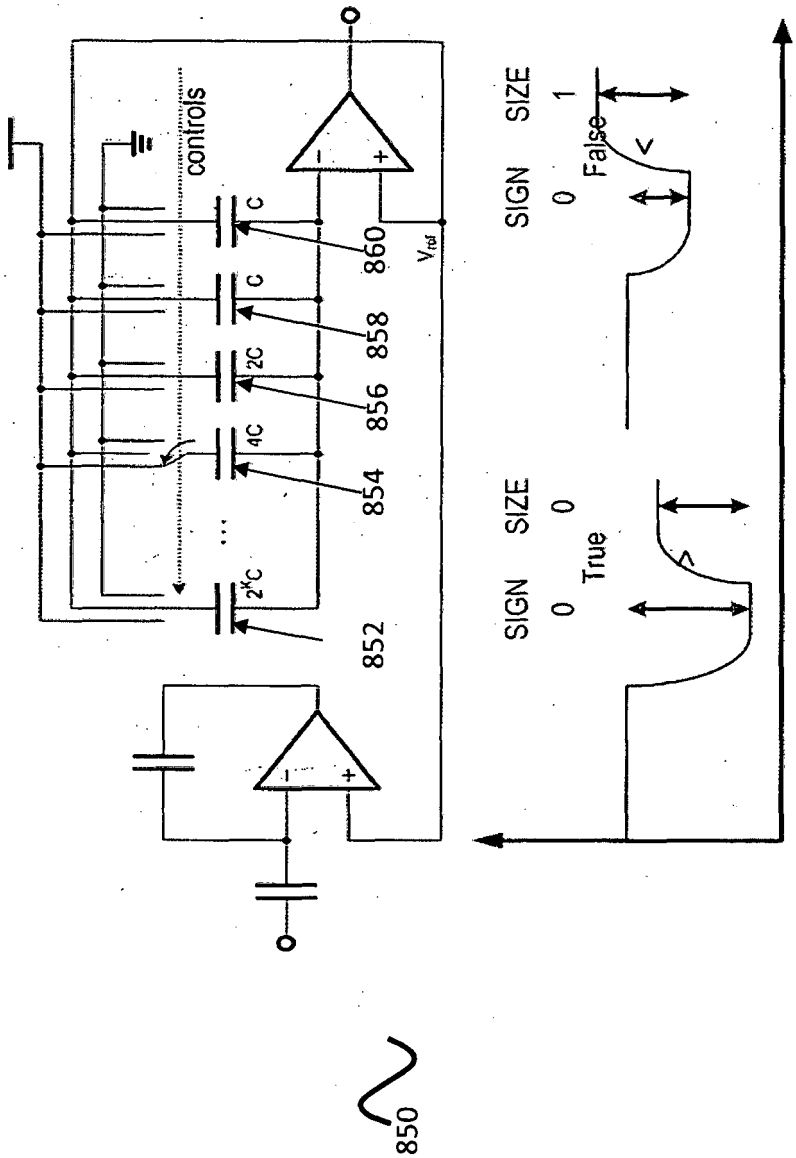

controls
C
C
2C
4C
2^K C
852
854
856
858
860
V_{ref}
SIGN SIZE
0 0
True
SIGN SIZE
0 1
False
>
<
850

FIGURE 8(b)

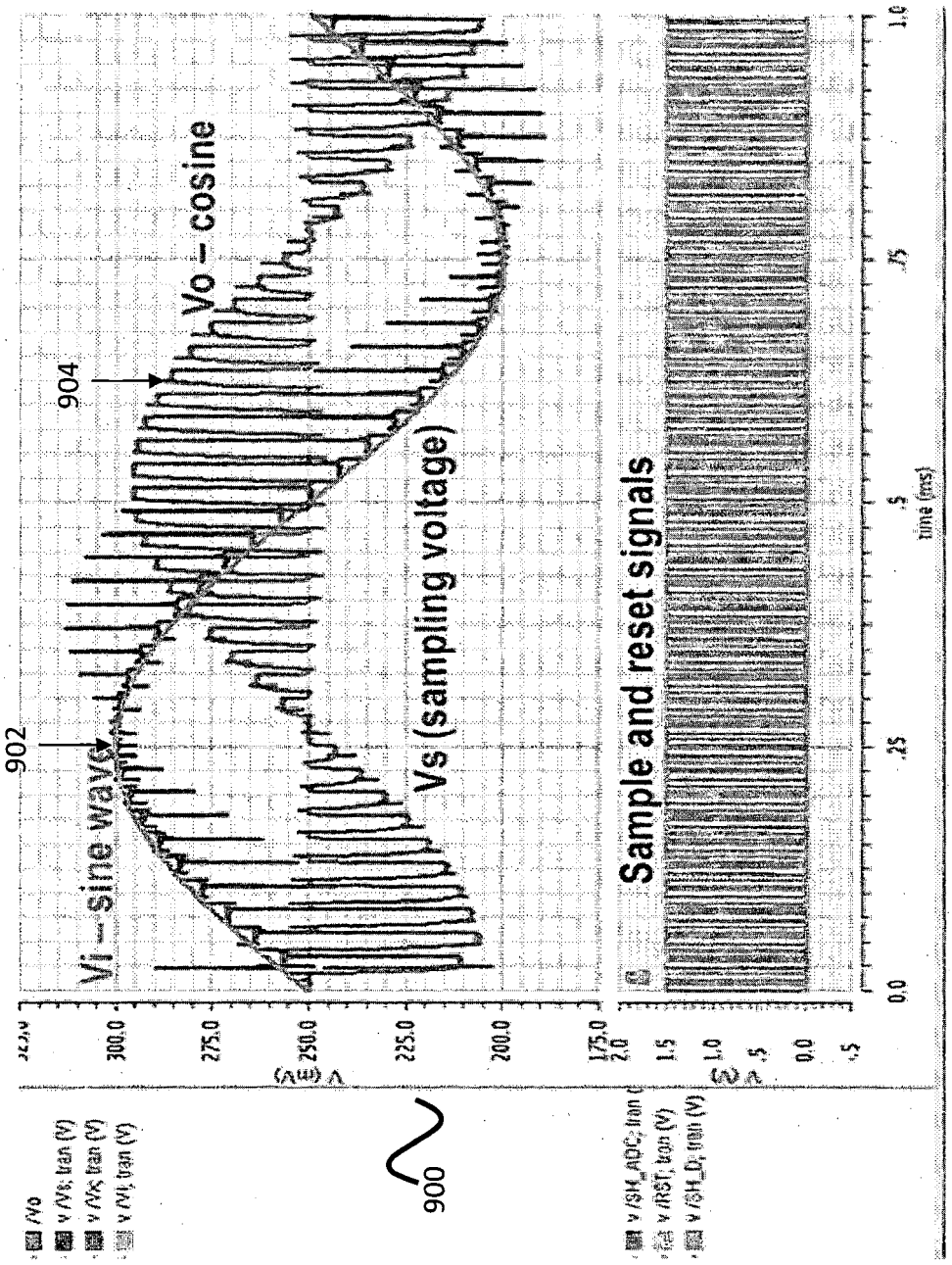

902
904
900
Vi – sine wave
Vo – cosine
Vs (sampling voltage)
Sample and reset signals
Time (ms)

FIGURE 9

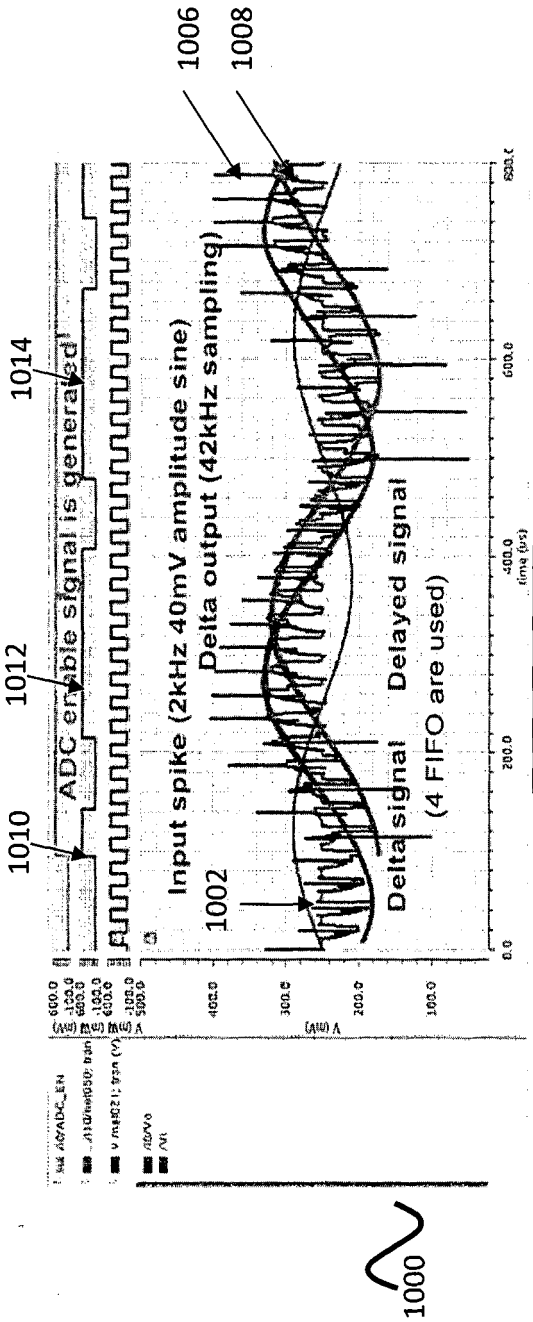


FIGURE 10

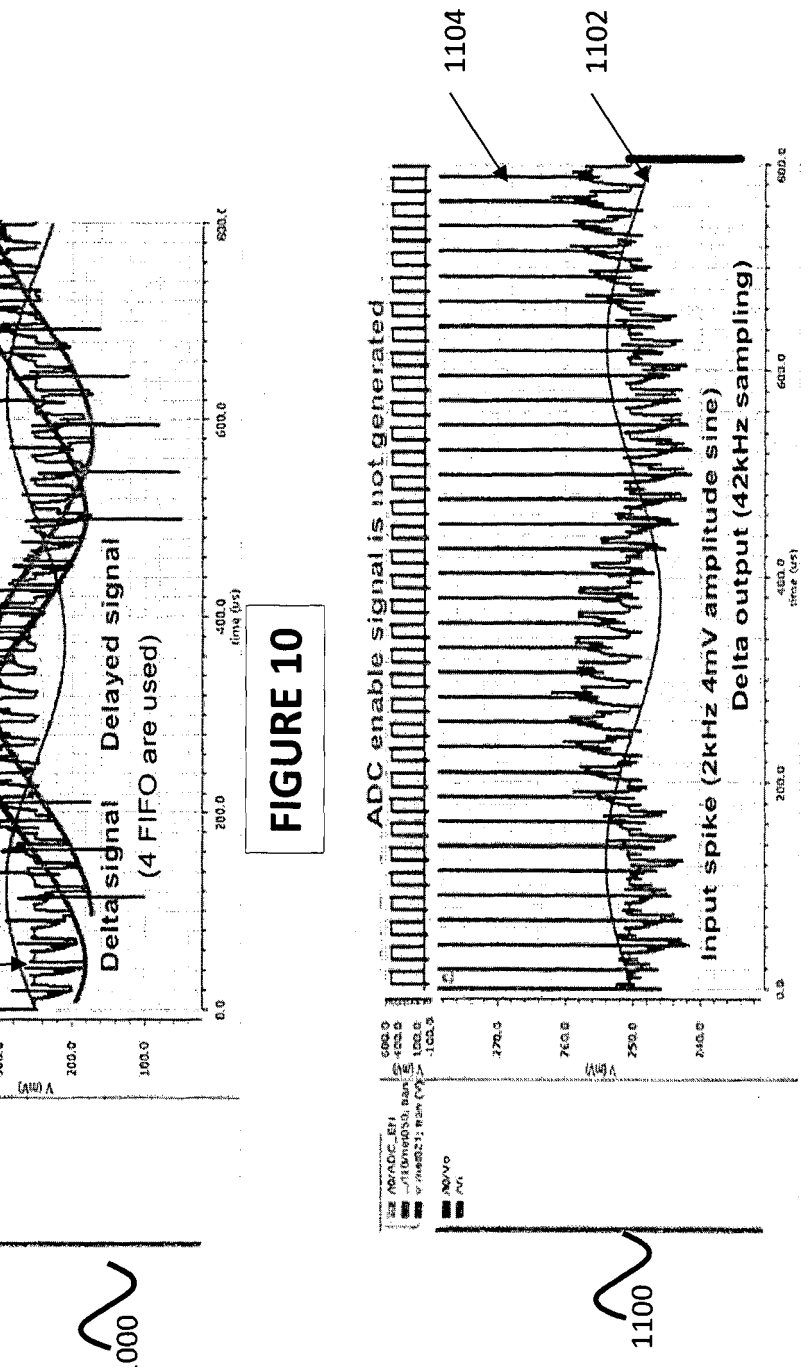


FIGURE 11