Start

Reset = ‘1’

Adjust the variables
V_{LEAK}, V_{RFR}, vg1 vg2

Second layer of the adaptation (still manual)

up_counter_1 = zero
up_counter_2 = zero

Start1 = ’1'
Start2 = ’1'
Adaptive = ’0'
Start3 = ’0'
Start1_inv = '0'

T1, T4, T6 = ON
T2, T3, T5, T7 = OFF
Adaptation Mode-First state

up_counter_1 ENable ='1'
up_counter_2 ENable ='0'

Apply pulse on the clear input

Clear output of DFF1, DFF2
Discharge neurons capacitors
Increase the counter_1 by one.

Apply pulse on in1
Apply pulse on P_d

‘0’ Output of the AND3 ‘1’

Start1 = ’0'
Start1_inv = '1'
Start3 = ’1'

T2, T5 = ON
T1, T3, T4, T6 = OFF
Adaptation Mode-Second State

up_counter_1 Enable = '0'
up_counter_2 Enable = '1'

Apply pulse on the clear input

Clear output of DFF1, DFF2

Apply pulse on in1
Apply pulse on P_d

T7 = ON

‘0’ Output of the AND3 ‘1’

Start2 = ’1'
Adaptive = ’1'

up_counter_1 ENable = '0'
up_counter_2 Enable = '0'

T1, T3, T4, T5 = ON
T2 = OFF
Normal Mode

‘0’ Reset = ‘1’ ‘1’

First layer of the adaptation (automated)