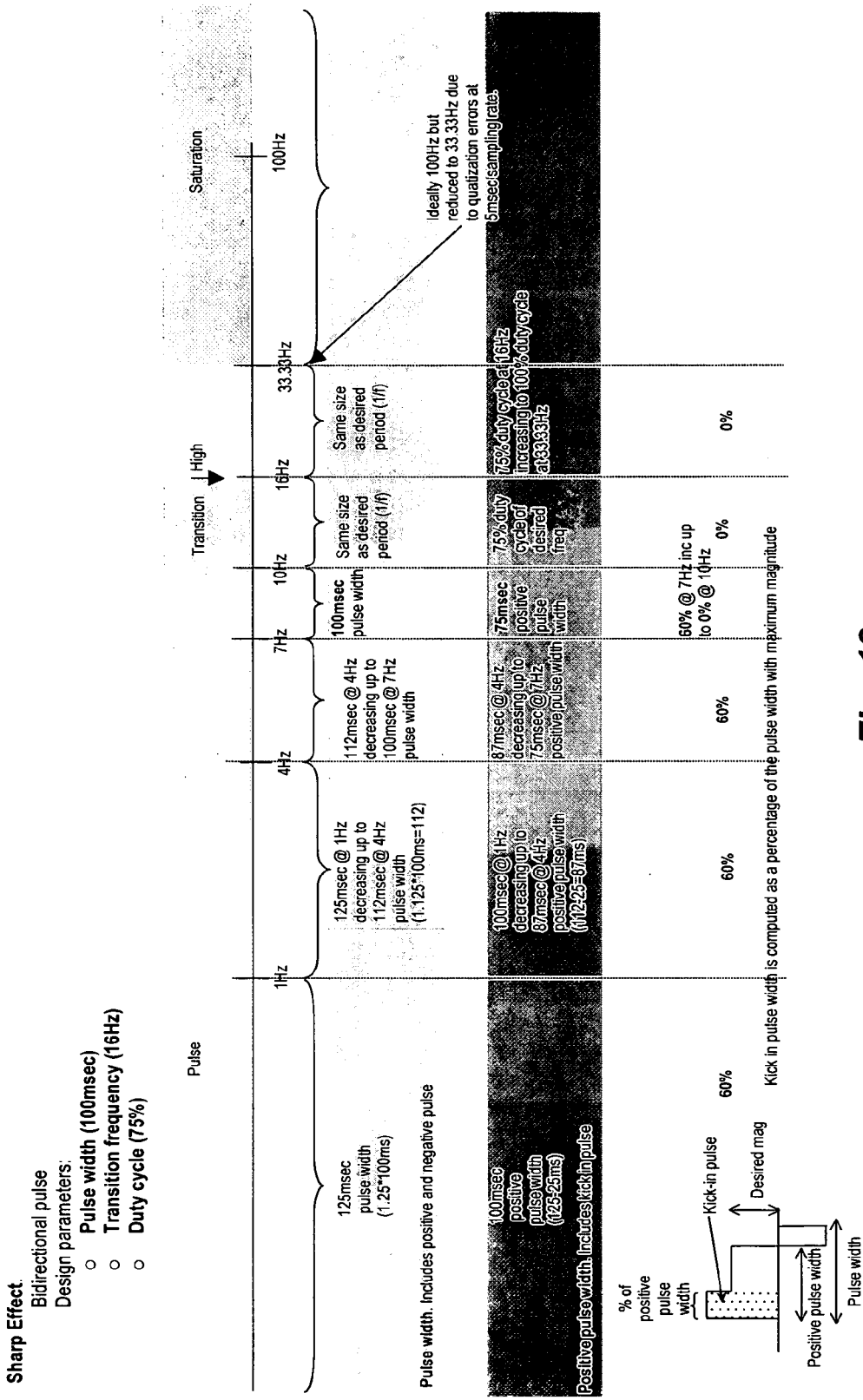
Sharp Effect.
Bidirectional pulse
Design parameters:
Pulse width (100msec)
Transition frequency (16Hz)
Duty cycle (75%)
Pulse
Transition
High
Saturation
1Hz
4Hz
7Hz
10Hz
16Hz
33.33Hz
100Hz
125msec pulse width (1.25*100ms)
125msec @ 1Hz decreasing up to 112msec @ 4Hz pulse width (1.125*100ms=112)
112msec @ 4Hz decreasing up to 100msec @ 7Hz pulse width
100msec pulse width
Same size as desired period (1/f)
Same size as desired period (1/f)
Ideally 100Hz but reduced to 33.33Hz due to qualization errors at 5msec sampling rate.
Pulse width. Includes positive and negative pulse
100msec positive pulse width (125*25ms)
100msec @ 1Hz decreasing up to 87msec @ 4Hz positive pulse width (112*25=87ms)
87msec @ 4Hz decreasing up to 75msec @ 7Hz positive pulse width
75msec positive pulse width
75% duty cycle or desired freq
75% duty cycle at 16Hz increasing to 100% duty cycle at 33.33Hz
Positive pulse width. Includes kick in pulse
60%
60%
60% @ 7Hz inc up to 0% @ 10Hz
0%
0%
Kick in pulse width is computed as a percentage of the pulse width with maximum magnitude
% of positive pulse width
Kick-in pulse
Desired mag
Positive pulse width
Pulse width

Fig. 13