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Yuenyongsgool et al.

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(54) **AUTOMATIC PROTECTION AGAINST RUNT PULSES**

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CPC **H03K 3/017** (2013.01); **G06F 1/06** (2013.01); **H03K 21/02** (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

An apparatus includes an adjustment circuit configured to receive a pulsed-width modulation (PWM) input, generate an adjusted PWM signal based upon the PWM input, and determine that a first pulse of the PWM input is shorter than a runt signal limit. The adjustment circuit is further configured to, in the adjusted PWM signal, extend the first pulse of the PWM input based on the determination that the PWM input is shorter than the runt signal limit, and output the adjusted PWM signal to an electronic device.

18 Claims, 9 Drawing Sheets

