US 20220360206A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0360206 A1**

Breynaert (43) **Pub. Date: Nov. 10, 2022**

(54) **PARASITIC PULSE CANCELATION CIRCUIT**

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(21) Appl. No.: **17/715,228**

(22) Filed: **Apr. 7, 2022**

(30) **Foreign Application Priority Data**

Apr. 9, 2021 (FR) 21/03683

Publication Classification

(51) **Int. Cl.**
H02P 29/00 (2006.01)

(52) **U.S. Cl.**
CPC ***H02P 29/00*** (2013.01); *H03K 19/20* (2013.01)

(57) **ABSTRACT**

A motor control system includes a direct current (DC) motor and a ripple count circuit. The DC motor includes a rotor induced to rotate in response to a drive current generated by a supply voltage. The rotation of the rotor generates a mechanical force that drives a component. The ripple count circuit includes an active filter circuit and a parasitic pulse cancellation circuit. The active filter circuit is configured to filter the drive current and to generate a pulsed signal containing at least one parasitic pulse. The parasitic pulse cancelation circuit is in signal communication with the ripple count circuit to receive the pulsed signal and to output a ripple count signal based on the pulsed signal. The ripple count signal excludes the at least one parasitic pulse.