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TRAN et al.(10) **Pub. No.: US 2023/0231439 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **DIRECT-DRIVE MOTOR DAMPER****Publication Classification**(71) Applicant: **VIETTEL GROUP**, Ha Noi City (VN)(51) **Int. Cl.****H02K 5/24** (2006.01)**H02K 7/08** (2006.01)(72) Inventors: **DUY NHAT TRAN**, Vinh City (VN);
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ABSTRACT

The invention proposed damper protection for direct drive motor angle limits This mechanism includes main components: Assembly guideway-spring, and Assembly angle limit bar, and Assembly direct-drive motor. The content mentioned in the invention describes the damping spring integrated inside the direct motor to protect the device when operating within the desired stroke limit It can be applied to high-precision devices and motors. The invention's products can be applied in Direct-drive motor mechanisms that limit rotation angle with high-accuracy such as robotic arms, multi-sensor automatic observation devices, or unmanned equipment.

