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Design, Development and Innovation of Rotating Brake-Pads

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Abstract: *The aim of this contribution is to provide with new approach and improved technology of braking which even though exists in just theoretical sense can be a potential replacement of the system which shares similar building blocks and concepts used in any other conventional braking systems. It consists of 4 calipers running all around the rotor with the shear intension of giving a support structure to the pads who along with just working as any other conventional disc brake, also rotates in the opposite direction of the rotor which not only suffice all the benefits of conventional disc brake but also offers more adjustments and tunability for the new system. This reverse rotation of pads help in mitigating the inertial forces being applied on the rotor while in motion and in general theoretical perspective improves the consistency and efficiency of braking system. It has a specially designed& developed CAD model for brake pads which sharetooth profile of a sprocket on the circumference of the pressure plate (after which on the face of the plate are usually the brake pads assembled). It also exhibits a novel and versatile mechanism developed using designing software to run the whole system effortlessly without compromising much. As this mechanism is a standalone system it can be mounted on the exact mounting points as any other assembly of rotor and calliper in a braking system. These results and finding can be incorporated in ample fields where there is a need for better and effective braking technology which usually runs in high risk environment.*

Keywords: Braking system, Brake pads, Rotating Calliper, Disc Brake, etc

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