

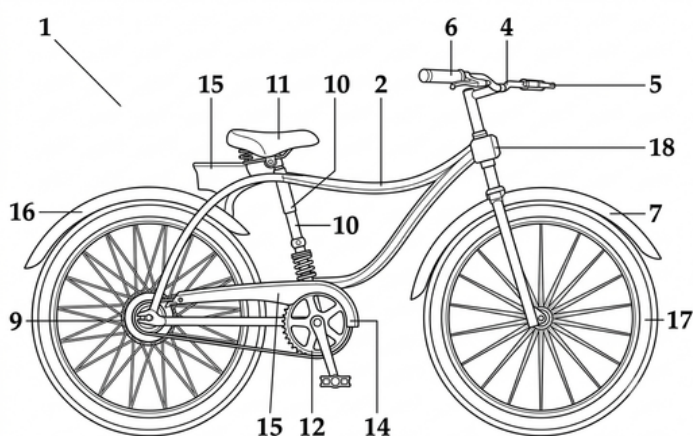
Hysteresis Loop Framed Electric Bicycle

Seeking parties interested in licensing and commercialization of technology.

Technology Brief

An electric bicycle to provide a smooth ride in rough/uneven terrain. The Electric bicycle comprises a main frame madeup of mild steel, in which the front end of the frame is coupled to a handlebar assembly comprising a handlebar with brakes and throttle on top, a front tire and a front mudguard on the bottom, and the rear end of the frame is secured with a brushless DC hub motor hinged to a rear tire, thereby forming the electric bicycle.

Block Diagram



Salient Features

Features a unique hysteresis loop-shaped mainframe integrated directly with a central seat tube, housing a top-mounted seat, a pedal hub with pedals at the bottom, and a centered mono-suspension shock absorber for optimized structural stability over irregular terrain. Positioned behind the seat is a detachable battery secured above a rear mudguard.

This battery directly powers a high-efficiency Brushless DC (BLDC) hub motor mounted on the rear wheel to drive vehicle motion. Outfitted with an integrated LED headlight designed for high-focus visibility, along with a real-time battery level indicator built directly into the handlebar assembly. Incorporates a dedicated frame-mounted controller that segregates and manages distinct electrical signals for the BLDC motor, throttle, headlights, and braking system

Technical Applications

- ✓ Terrain-Adaptive Suspension Integration
- ✓ Distributed Electrical Load & Signal Isolation
- ✓ Direct-Drive Rear Powertrain

Glimpse of the Technology



REFERENCE NUMBER

iTNT-TECH-0171



TECHNOLOGY SECTOR

Automobile, Auto-components & EV



IP STATUS

Patent Granted



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202341054997



TECHNOLOGY READINESS LEVEL

TRL - 4

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