

Extra comfort and safety with the “BIKE BALANCE”

A new system for a (electric) bike to remain seated on your bike at a stop.

Background information

Studies performed by TNO Research Institute and Universities show that elderly using electric bikes experience, besides the many advantages, also problems in controlling the bike in daily traffic situations. Mostly this is a combination of the heavier electric bike caused by the extra weight of the battery, the e-motor and belonging accessories, and a lesser physical condition. These problems mostly occur at slow speed and when stopping the bike followed by getting from and on the bike again actions. Many elderly experience these actions as troublesome and stressful.

These actions have a direct influence on the biking and the safety performance of the biker in traffic conditions where instant reactions are regularly required. As the average driving speed of an electric bike is also higher compared to a bike without electrical drive system, the percentage of accidents with an electric bike is higher. It is expected that the rate of accidents will further increase as the share of electric bikes on the total amount of bikes increases year by year substantially.



*youngsters and elderly ...
stop and remain seated on your bike!
...that's possible with the "Bike Balance"*

The Bike Balance system

This filed patent application by **IS** is for sale and concerns a concept development for two wheelers, with or without electrical drive system and can be mounted on existing and new electric bikes. The system facilitates the biker to remain seated on the bike during a stop and is particularly suitable for the application on electric bikes.

The system consists of two balance wheels which at a slow speed/stop are electrically moved to the ground. After contact with the ground this position of the balance wheels can also be locked automatically. While sitting on the bike the system supports then the biker to keep balance during the stop. When driving away the balance wheels can automatically be lifted from the ground.

Having the Bike Balance system implemented, in most cases it will no longer be necessary during stops to get each time from and on the bike again. The reduction of these actions contributes to extra biking comfort and attention for traffic safety by the biker.

The Bike Balance system is therefore not only most suitable for elderly using electric bikes but for every user of a two wheeler, with or without electric propulsion.

A light weight and cost efficient Bike Balance system concept is included in this basic patent for further development and to make it suitable for production.

In this respect Innovatie Support seeks contact with Electric Bike producers and/or E-drive system producers to bring the Bike Balance system to the market.