Title (en)

#### SYSTEM FOR ASSESSING THE PERFORMANCES OF A CYCLIST ACCORDING TO HIS/HER POSITION ON THE SADDLE

Title (de)

SYSTEM ZUR BEURTEILUNG DER LEISTUNGEN EINES RADFAHRERS NACH SEINER POSITION AUF DEM SATTEL

Title (fr)

SYSTÈME D'ÉVALUATION DES PERFORMANCES D'UN CYCLISTE EN FONCTION DE SA POSITION SUR LA SELLE

Publication

### EP 3756197 A1 20201230 (EN)

Application

## EP 19709797 A 20190219

Prioritv

- IT 201800002996 A 20180223
- IB 2019051321 W 20190219

Abstract (en)

[origin: WO2019162826A1] A system for assessing the performances of a cyclist according to his/her position on the saddle, comprising a) a plurality of first sensors arranged in predetermined areas under the upper surface of the saddle in contact with the cyclist and adapted to measure the load of the cyclist's weight on said predetermined areas; b) a first inertial platform functionally associated with said saddle and adapted to detect inclinations, displacements, accelerations, angular velocities thereof; c) for at least one foot of the cyclist: c1) a shoe insole or midsole comprising at least one second sensor adapted to measure the pressure exerted by the foot of the cyclist on the insole or midsole while pedaling; c2) a second inertial platform functionally associated with said insole or midsole or other part of the cyclist's shoe and adapted to detect inclinations, displacements, accelerations, angular velocities thereof; c3) an electronic device for managing the information from said first and said second sensors and from said first and said second inertial platform; d) wireless communication means arranged respectively between said first sensors, second sensors, first inertial platform, second inertial platform, and said electronic device; e) an electronic program adapted to calculate, based on the information from said first and said second sensors and first and said second sensors and for said second inertial platform, the power exerted on said insole or midsole by the cyclist and to relate said calculated power to the position of the load of the cyclist's weight on the slope of the road, f) a monitor adapted to show the cyclist, in real time, or at a later time, one or more of the following: said power exerted by the cyclist on said insole or midsole, the lateral inclination of the saddle/bicycle, the slope of the road, the bicycle speed, the position of the load of the cyclist's weight on the saddle.

IPC 8 full level

G16H 50/50 (2018.01)

CPC (source: EP) G16H 50/50 (2017.12)

Citation (search report)

See references of WO 2019162826A1

#### Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

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