

Title (en)
A STRUCTURE FOR PERSONAL PROTECTION, DRIVING ASSISTANCE AND SIGNALLING, IN PARTICULAR FOR MOTOR APPLICATIONS

Title (de)
STRUKTUR FÜR PERSONENSCHUTZ, FAHRUNTERSTÜTZUNG UND SIGNALISIERUNG, INSBESONDERE FÜR MOTORANWENDUNGEN

Title (fr)
STRUCTURE DE PROTECTION PERSONNELLE, D'AIDE À LA CONDUITE ET DE SIGNALISATION, EN PARTICULIER POUR DES APPLICATIONS MOTORISÉES

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Application
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• IB 2020051167 W 20200213

Abstract (en)
[origin: WO2020165810A1] A structure for personal protection, driving assistance and signalling, characterized in that it comprises at least: a personal protection device incorporating road signals for vehicles on the road, sensors including at least one accelerometer, and a control unit, a smartphone with dedicated application, one or more user devices, one or more vehicle devices, a wireless transmitter, a driving assistant; said user devices comprising at least one gyroscope and being configured to be worn by a user; said vehicle devices including a gyroscope and means of attachment to a vehicle; said wireless transmitter being connected to the vehicle control unit and transmitting via short-range radio frequency; when driving, said structure indicating braking, acceleration and deceleration of the vehicle; said structure independently activating said signals while driving, without action by the rider. The structure is embodied in a road helmet with position lights and turn, stop and emergency signals. The manner in which the signals are arranged is that already approved, with orange portions at the sides and red in the middle. The technology uses LEDs with fades and frames that, when appropriately timed, enable depth effects. This enables not only braking but also acceleration and deceleration to be signalled. The on-board electronics enables the helmet, together with a smartphone and software, to activate signals along the road independently, without action by the rider. The structure is equipped with a driving assistant which assists the rider with three types of driving: automatic driving, the driving assistant knows where the rider wants to go, manages the turn signals and shows the way to the rider; semi-automatic driving, the driving assistant monitors the rider's driving on the map and turns on or suggests the turn signals; manual driving, the rider operates the turn signals; manual driving is always active and overrides the other driving modes and can be used in the following ways: manual command; sound command, expressed with one whistle for the left turn, two whistles for the right turn; verbal command: used in the rider's own language with the expressions "right", "left"; motion command, expressed through slight movements of the head towards the turning direction, on the axis of rotation most comfortable for the rider; recorded command, the user can customize by using the microphone the sounds or words that will be used to turn on the turn signals.

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Citation (search report)
See references of WO 2020165810A1

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