







#### DEVICE AND METHOD FOR MONITORING THE RESPIRATORY RATE OF A SUBJECT

### DESCRIPTION OF INVENTION

The invention relates to a device for monitoring the respiratory rate of a subject, which comprises: means for detecting changes in the subject's torso that indicate breathing movements; a processor that receives signals from the detection means and checks that a respiratory frequency of the subject is within preestablished reference respiratory frequency values; and means for preventing emergencies, which are designed to be activated by the

processor. According to the invention, the detection means comprise a laser emitter designed to project at least one point onto the subject's torso; a camera; and a filter that is coupled to the camera and designed to detect only the light spectrum emitted by the laser emitter.

#### BUSINESS APPLICATIONS

Automobile and Healthcare

### TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

The present invention relates to the technologies of surveillance or monitoring of the respiratory rate of a subject, be it a driver of a vehicle, an athlete, a patient, etc., that is, a subject involved in any activity that requires maintaining a Continuous monitoring of your respiratory rate.

Particularly, objects of the present application are a device and a procedure for monitoring the respiratory rate of a subject, based on the census of increases and decreases in volume developed by the torso of the subject when breathing.

### STATE OF TECHNOLOGY DEVELOPMENT

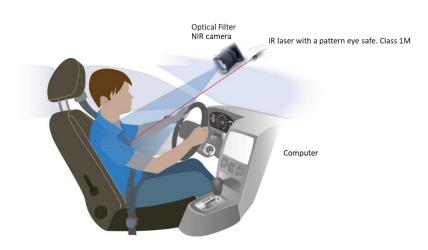
The technology is currently at TRL6, tested in the laboratory and under controlled field conditions.

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**CONTACT INFORMATION** 

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