

# Wearable device to assess fatigue

Stanford researchers have created a novel wearable device and system to assess fatigue on the user based on electrical activity associated with an eye blink of the subject.

Fatigue, particularly while operating a vehicle or working in a workplace, can pose health and safety concerns for an individual and the surrounding environment. This invention provides a real-time assessment and feedback on fatigue status of the user and includes a headset that alerts the subject of their condition, provides measures to keep the subject alert, and communicates the subject's condition to a command center.

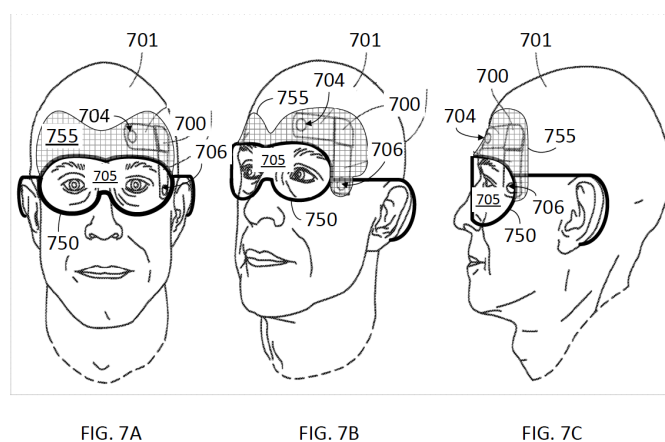
## Stage of Development

Proof-of-Concept

## Related Technology

[Stanford Docket S18-486-Portable Nystagmus Detection and Monitoring Device for Diagnosis and Management of Vestibular Disorders](#)

## Figure:



*Image credit: Inventors*

**Figure description:** Illustration of a headset including a sensor for detecting eye blinks from a user.

## Applications

- Assess the fatigue of the user (i.e vehicle operators and workers)

## Advantages

- **Increases safety**
- **Novel and portable** - first discrete and wearable device to assess fatigue
- **Real-time assessment** - headset contains memory storage and processor circuit to provide instant feedback to alert the subject, awaken the subject, or communicate the feedback to a center

## Patents

- Published Application: [WO2024059217](#)

## Innovators

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