

# Non-invasive Sleep Quality Measuring Device

Tech ID: 33499 / UC Case 2018-058-0

## ABSTRACT

Researchers at the University of California, Davis have developed a sleep quality measuring device to measure waking electroencephalogram (EEG) test to determine the adequacy of sleep

## FULL DESCRIPTION

Researchers at the University of California, Davis have developed a non-invasive sleep quality measuring device that includes EEG sensors to determine the EEG power density of the user for determining sleep adequacy. The researchers have found that sleep restriction on the prior night decreases waking EEG power across a wide range of frequency bands. This relation between prior sleep duration and waking EEG power suggests that this measure of waking brain activity could be an easily recorded indicator of sleep adequacy. If patients complaining of insomnia show diminished sleep adequacy by this measure, it would be a new and inexpensive diagnostic aid which could also be used to determine the effectiveness of drug and other treatments.

## APPLICATIONS

- ▶ EEG indicator of adequate sleep

## FEATURES/BENEFITS

- ▶ Reliable test for sleep adequacy
- ▶ Accurate diagnostic and treatment tool for patients with sleeping disorders
- ▶ Civilian and military application

## RELATED MATERIALS

- ▶ [Shorter sleep durations in adolescents reduce power density in a wide range of waking electroencephalogram frequencies](#)

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	<a href="#">20220087600</a>	03/24/2022	2018-058

## CONTACT

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## INVENTORS

- ▶ Campbell, Ian
- ▶ Feinberg, Irwin

## OTHER INFORMATION

### CATEGORIZED AS

- ▶ **Medical**
  - ▶ Devices
  - ▶ Disease: Central Nervous System
  - ▶ Other
  - ▶ Rehabilitation
- ▶ **Sensors & Instrumentation**
  - ▶ Medical
  - ▶ Scientific/Research

### RELATED CASES

2018-058-0