

SLEEP-WAKEFULNESS DETERMINATION DEVICE AND PROGRAM**ABSTRACT**

[Problem] To provide a sleep-wakefulness determination device and a program which determine sleep-wakefulness at sufficiently high accuracy by using a small mounting tool. [Solution] According to one aspect of the present invention, provided is a sleep-wakefulness determination device which can determine sleep and wakefulness of a user. The sleep-wakefulness determination device is provided with a scalar calculation unit, a feature amount calculation unit, and a sleep-wakefulness determination unit. The scalar calculation unit is configured to be able to calculate a scalar value on the basis of each component of an acceleration vector in a part of the body of the user. The feature amount calculation unit is configured to be able to calculate, on the basis of the scalar value, a feature amount for each epoch defined as a prescribed time. The sleep-wakefulness determination unit is configured to be able to determine sleep or wakefulness of the user on the basis of the feature amount of a desired epoch among the epochs and the feature amounts of surrounding epochs included in preceding and subsequent epochs of the desired epoch in a time series.

(FIG. 4)