

[TITLE OF DOCUMENT] ABSTRACT

System and Method Using Information of Involuntary Body Movement During Sleep, and Sleeping State Detection System and Method

Provided are a sleeping state detection system and method that can detect the sleeping state of a subject such as an inpatient or a tenant without causing the subject stress, and that can ascertain the health state of the subject from the detection results. The sleeping state detection system includes a room or closed space (201) in which the subject sleeps, and a dust counter (206) that measures the dust particles inside the room or closed space (201). In a state where the inside of the room or closed space (201) is kept cleaner than the outside of the room or closed space (201) by using a fan filter unit (208) disposed in the room or closed space (201), while the subject sleeps, the change over time in the number of dust particles inside the room or closed space (201) is measured using the dust counter (206), and thereby the sleeping state of the subject is detected. The inside of the room or closed space (201) is preferably kept at a cleanliness of US 209D Class100 or better.

FIG. 1