ABSTRACT

Provided is a configuration capable of executing a detection test for a comfort level including the quality of sleep, which is measurable at home without requiring the measurement of brain waves or electrocardiogram. The respiratory waveform of a subject during sleep is continuously measured and recorded from the respiratory gas flow, etc., and is window-Fourier transformed at each measurement time to generate a frequency spectrum, and a bandwidth including a respiratory frequency is extracted. The index indicating the regularity of the respiratory period of the subject is also calculated at each time point during the sleep, and the time-dependency of this index during the sleep is represented as a graph. A medical device includes a sleep evaluation system equipped with a control means for performing control so that a sleep cycle repeated at a cycle of about 90 minutes is clearly observed if the comfort level including the quality of sleep of the subject is favorable.