

ABSTRACT OF THE DISCLOSURE

BRAIN FUNCTION ACTIVITY LEVEL EVALUATION DEVICE AND EVALUATION SYSTEM USING IT

5

Discrete Fourier transform is performed on an output of each of brain potential sensors, which measure a brain potential of a subject, for each of segments in order to obtain a discrete Fourier coefficient that has a
10 frequency component, which is an integral multiple of a fundamental frequency that is an inverse number of a predetermined time width, within a predetermined frequency band. A mean value of squares of absolute values of Fourier coefficients is obtained. The Fourier
15 coefficients are normalized using the mean value of the squares of the absolute values thereof in order to obtain a normalized power spectrum ($NPS;j,m$) that is a first parameter. A product of mean values of squares of absolute values of Fourier coefficients of adjoining
20 frequency components in all the segments is normalized using a square value of the sum of the mean values of the adjoining frequency components in order to obtain a normalized power ratio ($NPV;j,m$) that is a second parameter. Two markers $sNAT;j,m$ and $vNAT;j,m$ are derived

from the first and second parameters respectively in order to evaluate a brain function activity level.

Figure 2