Beth Israel Deaconess Medical Center

A teaching hospital of Harvard Medical School

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PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of **Holloway, G. Blake**

Application No.: **13/162,446** Group Art Unit: **1627**

Filed: **June 16, 2011** Examiner: **Mcmillian, Kara Renita**

For: **SYSTEMS AND METHODS FOR BALANCING AND MAINTAINING THE HEALTH OF THE HUMAN AUTONOMIC NERVOUS SYSTEM**

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

October 29, 2013

Dear Sir or Madam:

I, Chung-Kang Peng, Ph.D declare and state that: I am a citizen of The United States residing at 40 Spring Lane, Sharon, MA 02067.

I am a scientist with twenty-six (26) years of experience in the field of statistical physics and its application to the study of physiological measures. I have published over 150 peer-reviewed articles, and these articles have been cited more than 13,700 times (according to Science Citation Index). One of my major research interest is in heart rate variability, the main biophysical measurement of the autonomic nervous system, which is related to the technology of the subject patent application: Systems and Methods for Balancing and Maintaining the Health of the Human Autonomic Nervous System.

In order to demonstrate that the subject matter of the patent application under examination satisfies a long felt need in the art which nothing previously invented has fulfilled, I further declare and state: I, Dr. Chung-Kang Peng, Co-Director of the Rey Institute for Nonlinear Dynamics in Medicine at the Beth Israel Deaconess Medical Center and Associate Professor of Medicine at Harvard Medical School. My primary area of expertise is statistical physics and its application to the study of physiological measures, especially heart rate variability, which is the main biophysical measurement of the autonomic nervous system for twenty-six (26) years. I state that I am not related to any of the inventors of the present patent application and neither I nor any of my relatives have any personal, business, or financial relationship to the inventors of the present patent application, nor any personal, business, or financial interest in the success of this application or the composition disclosed therein. I further state that I am not aware of any adverse information or test results related to the present invention.

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I declare that I have been given the opportunity to review the present patent application and can state that the primary components of the composition of this application are: the concomitant use of cranial electrical stimulation, neurotransmitter supplementation, binaural beat neuroacoustic software and light blocking sleep mask. I have also had the opportunity to review the closest prior art to the composition of the present patent application; namely, audio brainwave entrainment utilizing binaural sound beats, non-benzodiazepine sleep medicines, medical hypnosis, Tai Chi and meditation.

I assert that I am aware of no other composition like the one disclosed in the present patent application and that to my knowledge it would not have been apparent to make this composition based on the current state of the art. When I first learned of the specific characteristics of the composition of the present invention, I did not believe that the composition would work as described. The present composition is counterintuitive and, as such, one would not be motivated to produce this composition with any hope of success at solving the problem in the field. However, upon further study of this composition, I can state that this composition solves the problem of rapidly and broadly alleviating state anxiety without the training and learning curve associated with meditation that I believe to be the closest prior art in this field. Thus, the results of the present invention are unexpectedly better than those found in the prior art.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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