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Balkin et al.

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(54) **SYSTEM AND METHOD FOR PREDICTING HUMAN COGNITIVE PERFORMANCE USING DATA FROM AN ACTIGRAPH**

(58) **Field of Search** 600/300, 544, 600/545

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(57) **ABSTRACT**

A system and a method for providing a determination of predicted cognitive performance of an individual preferably based the time of day and on factors including sleep history based on activity data from an actigraph and the individual's activities. The system and the method provide a numerical representation of the predicted cognitive performance. Both may be used to optimize the work schedule of the actigraph wearer to maximize the cognitive capacity during working hours.

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(51) **Int. Cl.**⁷ **A61B 5/00**

(52) **U.S. Cl.** **600/300; 600/544**

60 Claims, 15 Drawing Sheets

