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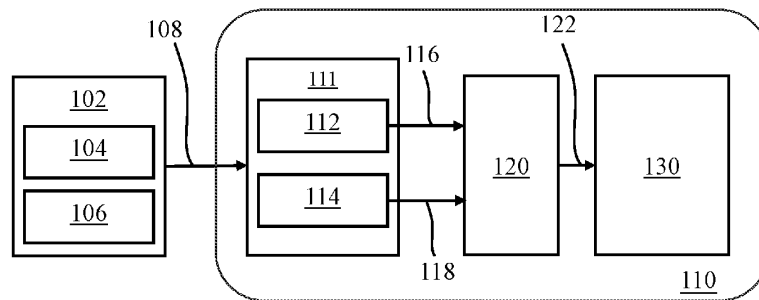


FIGURE 1

(57) Abstract: The invention is to provide a system and method for modifying presentation of digital content on a display based on a user's electroencephalogram (EEG) signals. The method comprises receiving the raw EEG signals and providing the received raw EEG signals as inputs to a trained neural network and a trained multilayer perceptron (MLP) network, generating cognitive scores using the trained neural network, wherein the neural network is trained using EEG signals associated with sustained attention cognitive states and inattention cognitive states, generating physiological scores using the trained MLP network, wherein the MLP network is trained using EEG signal features associated with alpha and beta bands, receiving the cognitive and the physiological scores using a display controller module, and modifying the presentation of the digital content on the display based on the cognitive and the physiological scores using the display controller module. Through the dynamic manipulation of the digital content, the user's cognitive ability may be enhanced.

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