

(57) **Abrégé(suite)/Abstract(continued):**

body based on the stimulation parameter inputs, a signal receiver to receive, detect, and record a signal containing an evoked potential generated by the body in response to the stimulations, a signal processor for processing the recorded signal, for example, by amplifying, filtering, digitizing and temporal averaging the recorded signal, a trigger detector to alert the signal processor module when stimulations are generated to enable synchronization of the response signal with the stimulus for accurate temporal averaging, and an output display for providing data representative of the evoked potential to the user.

19. The feedback loop system of claim 16, wherein the inductive loop of the transcranial magnetic stimulation device is housed within a helmet or other head-contacting unit.

20. The feedback loop system of claim 16, wherein the trigger detector and the external receiver are integrated into a common device.

