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(57) Abstract :
The invention discloses a wearable brain-computer interface device (100) for application control. It includes dry electrodes (101) on a flexible headband (102), a signal processing unit (103), an AI classifier (104), and a wireless module (105). The system translates EEG signals into executable commands for hands-free operation. It supports multiple platforms with low-latency execution and high classification accuracy. Haptic feedback enhances user interaction, and the device is optimized for accessibility, gaming, and professional applications.

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