Paving the way for the practical application of devices that improve motor function using human bio-electrical signals

Registration No.	Number 00402		
Registration Date	September 29, 2026	Registration Category	Category 2

Name (Model, etc.)	HAL-3
Location	Tsukuba-shi, Ibaraki
	CYBERDYNE STUDIO
Owner (Custodian)	CYBERDYNE, INC.
Manufacturer (Company)	University of Tsukuba, Cybernics Laboratory (Yoshiyuki Sankai et al., founders of CYBERDYNE, INC.)
Year Manufactured	2001
Reason For Selection	This item is the first practical ROBOT SUIT (Wearable Cyborg) that enables the wearer to perform intended movements through the detection of faint bio-electrical signals. Based on fundamental research on human exoskeleton systems and power assistance conducted by Yoshiyuki Sankai and colleagues at the University of Tsukuba, this technology is equipped with various sensors and can naturally assist the wearer's movements. Following the laboratory models HAL-1 and HAL-2, the technology was made portable by housing the control computer and other components in a backpack. Subsequent models have been approved as medical devices in various countries in Europe, the United States, and countries in Southeast Asia. This technology is significant as a device that has paved the way for the practical application of a new-concept therapeutic device (medical device) that assists, improves, and expands physical functions based on bio-electrical signals derived from the brain and nervous system.
Registration Criteria	1-C (Contributed to the creation of a new scientific or technological field.) 2-A (Played a notable role in improving people's way of life and creating new ways of living.)

Open/Closed to the Public	Open to the Public
Photos	
Other useful information	