



Device to enable access of Computers to Physically Disabled

TECHNOLOGY AVAILABLE FOR TRANSFER

UNMET NEED & OPPORTUNITY

The present technology will be useful for the handicapped persons with disability/ with no arms, and will enable their access to computer. About 15% of the world's population, have some form of disability. Between 110 million and 190 million adults have significant difficulties in functioning. India has around 60 million people with disability and major percentage is from rural area. In India, there is a confluence of barriers to accessibility with inaccessible and unaffordable technologies, inaccessible websites and unsupportive laws. This technology is a head mounted device which acts as wireless mouse & keyboard as well.

TECHNOLOGY

The technology provides an assistive device for those unable to use their hands to access computers. The device includes a spectacle frame and headband to be worn by the user, a processing unit, an eyewink sensor, lenses, a head movement sensor and an audio device. The user is able to access the computer by connecting the device through blue tooth. The single eye blink corresponds to a left click, and a successive eye blink corresponds to a double click or vice-versa. The cursor movement corresponds to head movement of the user. Being wireless the device is easy to use.

IP STATUS

Indian patent filed in 2018
PCT application filed
Designed registered

KEY FEATURES

1. Cost effective, indigenously developed technology
2. Useful for handicapped people who can no longer control the computers using their hands.
3. The mouse system is compatible with any computer.

STAGE OF DEVELOPMENT

1. Prototype is ready
2. In-house Lab Validation

ADVANTAGE

1. Operating head movement and eye blink
2. Cost effective
3. Wireless
4. Ease of use
5. Comparable with any predicates

APPLICATIONS

1. Computer interaction device for physically disabled
2. Gaming devices
3. Driver fatigue detection application in vehicles.

LICENSING OPPORTUNITY

BCIL is looking for a suitable industrial partner for commercialization of diagnostic kit for Hepatitis E virus detection.

1. http://www.bbc.co.uk/accessibility/guides/factsheets/factsheet_keyboard_mouse_alt.pdf
2. <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>
3. <https://gadgets.ndtv.com/laptops/news/lenovo-yoga-s940-price-in-india-rs-139990-launch-specifications-2077979>

CONTACT:

Dr. Suchita Markan,

Assistant General Manager

BIOTECH CONSORTIUM INDIA LIMITED

V Floor, Anuvrat Bhawan, 210, Deen Dayal Upadhyaya Marg, New Delhi:110 002

Phone: +91-11-23219064-67, 23219053 (Direct) Fax: +91-11-23219063

Email: suchita.@biotech.co.in & info.bcil@nic.in

Website: www.bcil.nic.in