PROJECT REPORT ON

"EASY INPUT HEAD CONTROLLED KEYBOARD FOR DISABLED USERS"

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Abstract

This project is designed for new ways of using computers, which are essential to our modern life. The device can be found most useful by handicapped people who can no longer control the computers using their hands. This device relies on users head movements, thus it can be used by patients who are paralyzed from shoulder downward. Simple head movements don't require too much energy. Therefore users won't get tired using this device, and in contrast they will get exercise on neck, which tends to be the problem for most regular computer users.

The paralyzed and the disabled persons who cannot access the computer can use the easy input device to interact with the computer. The system uses an accelerometer to detect the head movement, thus removing the lighting constraint and it also uses two different hardware units, providing a functional decomposition between sensing and processing over hardware, thus removing the close proximity constraint imposed by the current devices.