Hand moment Controlled Wheelchair for Disabled person

ABSTRACT

- This paper describes an indigenously developed hands-free wheel chair for physically disabled persons.
- The proposed device works based on the Head Gesture Recognition technique using Acceleration sensor.
- sensor.
 Conventional electric powered wheel chairs are usually controlled by joysticks or hand gesture technology which cannot fulfil the needs of an almost completely disabled person who has restricted limb movements and can hardly move or turn his head only.

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- Acceleration sensor is used for the head gesture recognition and RF module is used for the smart wireless controlling.
- With the change of head gesture, data is sent wirelessly to the microcontroller based motor driving circuit to control the movement of the Wheel Chair in five different modes.
- The proposed device is fabricated using components collected from local market and tested in lab for successful functioning, test results are included in this paper