

(54) Title of the invention : WHEELCHAIR FOR PEOPLE WITH DIVERSE ABILITIES

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(57) Abstract :
 A wheelchair for people with diverse abilities, comprising a multi-modal control module to switch control of wheelchair 101 between multiple control modes, multiple nearby environment detecting sensors and multiple health monitoring sensors constantly monitor vital signs of user and triggering alerts in case of anomalies in the vital signs of user, an emergency handling module include a dual-mode SOS trigger for both manual and automatic triggering, a navigation module to detect obstacles and terrain changes for providing real-time adaptive path planning for wheelchair 101, an IoT-based communication module in conjunction with a cloud based database store user preferences, multiple nearby environment detecting sensors and multiple health monitoring sensors in conjunction with the processing module is configured to generate context-aware priority inputs, the context-aware priority inputs are based on detection of nearby environment surroundings and the health of user of wheelchair 101 at an instant.

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