

Design and development of driving external support for lower limb disabled patients

Abstract

The driver who lower limb disabled patients were used the hand control to drive. The hand control was fixed permanently on the pedals. Thus, their family cannot share the car with them. Hence, there are several ways to innovate the hand control become portable product. This study was undertaken to investigate the characteristic driving behaviour of lower limb disabled patient yet to establish the design driving external support that was portable by using hand control. There are many types of mechanism that was used to upgrade the product function compare to existing product. The materials mainly used steel as the materials of hand control stick. The fabrication process was used two weeks to done the prototype. Using a novel upgrading of portable hand control may help the disable patient easily use the fingers and hand, without using any tools. This product also can be refit in others car. The innovation of mechanism assists patients can share their car with their family members.