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(57) Abstract :

A shoulder supporting device, comprising a U-shape wearable body 1 configured with plurality of strings 2 developed to be worn by a user over a thoracic region of the user's body, a laser acuity sensor 3 mapped on the body 1 for detecting dimension of the user's body, a motorized roller 4 configured with each of the strings 2 to rotate for wrapping the strings 2 for securing the wearable body 1 on the user's body, a camera 5 mounted on the body 1 for capturing multiple images of user for detecting dimension and orientation of the user's hand, a pressure sensor mapped on the strap 8 for detecting pressure applied by the user on the frame 6 while lifting the user's hand and a thermal imaging unit mapped on the frame 6 for detecting strain experienced by the user while lifting the user's hand.

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