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(57) Abstract :
A controller system mounted on the steering wheel of a vehicle, comprising of at least one touch screen to receive an input from the operator; feedback module to send a vibration feedback to the operator; character recognition module having a library of pre-defined gestures and pressure values and body control module (BCM) for activating and controlling various electrical units or systems of the vehicle. The input gesture or pressure is initially sensed by the touch screen which is formed from at least two pressure sensitive layers selected from light pressure sensitive layer and moderate pressure sensitive layer. . After the pressure level of the input is sensed, it is sent to the character recognition module, which compares the received input with the list of gestures or pressure values already preinstalled in it. If the input by the operator is not recognized, then the module asks the operator to re-input the gesture or pressure by an indication from the buzzer (beep sound). And, if the input is correctly recognized by the character recognition module, a feedback is provided to the operator after receiving the input, to acknowledge its receipt. The character recognition module then sends control signals to the body control module (BCM) based on the comparison of the input with the saved list of gestures or pressure values. The control signal received by the BCM defines the operation to be performed by it. The BCM then generates control pulses based on the input that it received from the character recognition module and sends them to the intended devices or systems of the vehicle to control their operation thereof.

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