Hitachi develops finger vein authentication technology for steering wheels

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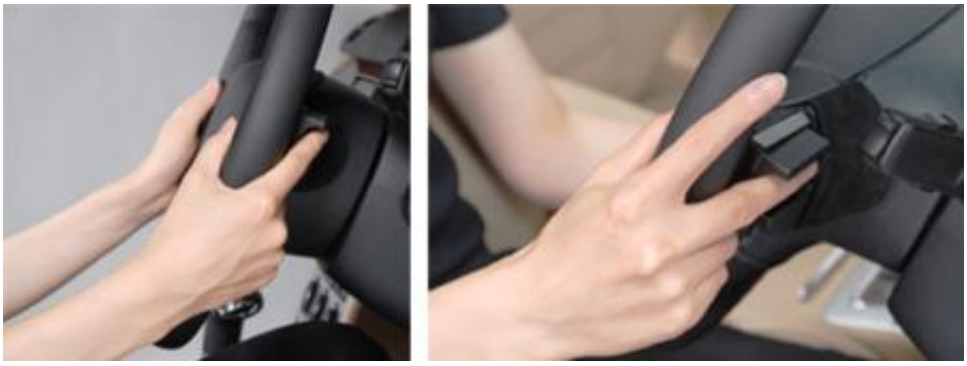

Finger vein authentication technology embedded on the steering wheel

Hitachi, Ltd. announced today the development of finger vein authentication technology which provides authorized driver verification in a fraction of a second just by gripping the steering wheel.

This technology is expected to play an important role in future car information systems to prevent unauthorized access as information technology (IT) systems becomes increasingly integrated in automobiles; for example, authorizing automatic payment in drive-throughs or payment for music downloads to car audio systems, as well as preventing car theft.

Further, by registering different functions to each finger, it is possible to use the system as a multi-function switch enabling, for example, one

finger to set the driving environment such as seat or side mirror position, air-conditioning, etc. to suit the verified driver, and another finger to operate car navigation or car audio systems. Another advantage is that the system does not require the driver to glance to an operating panel and select a button, thus supporting even safer driving in a natural position.

An automobile exhibit fitted with the technology will be on display at the 40th Tokyo Motor Show 2007, to be held at Makuhari Messe, Chiba, Japan, from Saturday, 27th October through to Sunday, 11th November 2007.

Security consciousness has increased in recent years as crimes such as unauthorized entry or access to cars, information, etc. become increasingly visible. Amidst this current situation, in the field of personal identification, attention is being focused on biometric methods of personal verification to provide greater security.

In relation to automobiles, as well as security of the vehicle itself, there is also a growing demand to be able to enjoy the vehicle as a comfortable private space reflecting the driver's preferences.

Hitachi has been developing an original biometric, finger vein authentication technology, which uses the finger vein pattern obtained from passing light through a finger as a key since 1997. In 2005, a grip-type finger vein authentication technology* was developed, enabling a door to be opened simply by gripping the handle. Since then, Hitachi has been working to develop an even more compact system to extend market applications.

In this development, the area of the finger scanned was changed from the finger surface to the side of the finger, and together with other improvements, provide easy operation as well as high security, and the possibility of developing new value. By this, the process from opening

the car to authorizing in-vehicle payment, can be conducted without a key and protected by finger vein security, as well as instantly providing a driver specific comfortable driving environment. Further, all these operations can be conducted without transferring driver gaze from the forward direction, thus contributing to safer driving as well.

Source: Hitachi