

ABSTRACT

When identifying the holder of an IC card mechanically, an illegal transaction using a false copy of signature data of the proprietor is prevented, and a stable coincidence rate is maintained in the mechanized verification of handwritten signature for the IC card.

The degree of difference of each element of data between the registered signature data stored in the IC card and verification signature data is measured, and it is determined whether the authentication should be done or not based on the measured degree of difference. Furthermore, the verification signature data is collated (for verification) with the registered signature data and the signature data used in the past, both stored in the IC card, and re-signature by the user is requested or authentication is rejected if they are in agreement.

The degree of difference of each element of data between the registered signature data stored in the IC card and verification signature data is measured, and the registered signature data is updated by use of data obtained through weighted averaging of the registered signature data and verification signature data permitted by authentication judgment performed on the basis of the measured degree of difference.