

Abstract

Title: Wearable device with pattern recognition

The present technique relates to miniature wearable device. The miniature wearable device is small enough to wear in a finger or fingers as a finger ring. The miniature wearable device is coupled with one or more motion sensor (or) micro electric currents from the fingers' movement (or) micro electric currents from the fingers' movement (or) micro electric currents from the fingers' movement to detect movements of the finger or fingers. The movement of the finger or fingers, using the motion sensor (or) micro electric currents from the fingers' movement (or) micro electric currents from the fingers' movement (or) micro electric currents from the fingers' movement assists in detecting user's gesture. Further, the movement of the finger or fingers or combination of finger gestures using the motion sensor (or) micro electric currents from the fingers' movement (or) micro electric currents from the fingers' movement, assists in generating a sequence of the finger, fingers, hand and arm movement. The motion sensor (or) micro electric currents from the fingers' movement (or) micro electric currents from the fingers' movements are configured to detect movement of the finger, fingers, hand, arm and gesture of the user thereof. The generated sequence creates a pattern of the action performed by the user. Using the pattern, a motion index is computed. The computed motion index for the user is used as a digital signature or any authentication technique which is used in authentication of the user and approval of various transactions performed by the user.

Figure 1