Claims

[Claim 1]

A finger-braille-device capable of performing wireless transmission and reception with an external smartphone or personal computer comprising:

an input/output unit for transmitting motion information based on a finger-braille motion signal of each finger, and receiving vibration information related to finger-braille to each finger to transfer vibration to each finger;

a main body unit for receiving the motion information from the input/output unit to perform predetermined processing, and transmitting the vibration information to the input/output unit; and

a wearing tool for wearing the input/output unit on a back side of each finger and wearing the main body unit on a back of a hand, wherein each finger is an index finger, a middle finger, and a ring finger to which character information related to finger-braille is assigned, and is a thumb to which function information to be executed is assigned,

wherein the input/output unit comprises:

a transceiver that is provided on a back side of each finger of the hand by the wearing tool, and performs transmission and reception with the main body unit;

a motion detector that detects a signal complying with the motion of each finger and transmits the signal as motion information of each finger to the main body unit via the transceiver; and

a vibrator that transfers vibration to a pre-assigned finger based on the vibration information received from the main body unit via the transceiver,

wherein the main body unit comprises a first transceiver that performs transmission and reception with the input/output unit, and a second transceiver that performs wireless transmission and reception with an outside, and

wherein based on motion information complying with the motion of the finger received via the first transceiver and detected by the motion detector, the main body unit identifies character information regarding finger-braille assigned to the index finger, the middle finger and the ring finger and/or function information to be executed assigned to the thumb, wirelessly transmits the character information and/or the function information via the second transceiver to an outside, and

transmits vibration information to be assigned to each finger via the first transceiver based on the character information regarding the finger-braille and the function information received from the outside via the second transceiver.

[Claim 2]

The finger-braille device capable of performing wireless transmission and reception with an external smartphone or personal computer according to claim 1,

wherein the main body unit is provided in advance with association information for associating the motion information with the character information to be identified and /or function information to be executed,

collates the motion information received from the first transceiver of the input/output unit with the association information, thereby converting the motion information to and identifying the character information regarding finger-braille and/or the function information to be executed, and wirelessly transmits them to an outside by the second transceiver.

[Claim 3]

The finger-braille device capable of performing wireless transmission and reception with an external smartphone or personal computer according to claim 1 or 2,

wherein the motion detector comprises a three-axis acceleration sensor that detects three-dimensional waveform information of a motion of each finger, and transmits motion information corresponding to the detected three-dimensional waveform information to the first transceiver of the input/output unit, and the transceiver transmits the motion information to the main body unit.

[Claim 4]

The finger-braille device capable of performing wireless transmission and reception with an external smartphone or personal computer according to any one of claims 1 to 3,

wherein the main body unit transmits, from the first transceiver, vibration information assigned to each finger based on the finger-braille information and/or the function information from an outside that is received by the second transceiver of the main body unit, and

the vibrator comprises an eccentric vibration motor or a piezoelectric actuator for vibrating each of the assigned finger based on the vibration information received from the main body unit via the first transceiver of the input/output unit.