[CLAIMS]

[Claim 1]

A delivery box, comprising:

a storage space in which a package is housed;

a controller that generates a cryptographic key for encrypting information indicating a storage state of a package in the storage space; and

a wireless communicator that establishes wireless communication with a portable terminal to transmit the cryptographic key generated to a server device via the portable terminal.

[Claim 2]

The delivery box according to claim 1, further comprising:

a locking device that locks and unlocks a door of the storage space,

wherein the wireless communicator further receives an unlock request including first authentication information from ~~a~~the portable terminal, and

when the first authentication information included in the unlock request received is determined as proper authentication information, the controller further controls the locking device to unlock the door.

[Claim 3]

The delivery box according to claim 2, further comprising:

an operation acceptor that accepts an input operation of inputting second authentication information from a user,

wherein, when the second authentication information indicated by the input operation accepted is determined as proper authentication information, the controller further controls the locking device to unlock the door.

[Claim 4]

The delivery box according to claim 3, further comprising:

a memory,

wherein the controller stores information indicating that the door is unlocked based on the second authentication information, in the memory, and

when communicating with ~~a~~the portable terminal after the information is stored, the wireless communicator transmits notification information to the portable terminal, the notification information being information for notifying a change in the storage state of the package in the storage space in accordance with the information.

[Claim 5]

The delivery box according to any one of claims ~~1~~2 to 4, further comprising:

a detector that detects opening and closing of the door,

wherein, when it is determined from a result of detection by the detector that the door remains closed for a fixed period of time since unlocking of the door, the controller controls the locking device to lock the door.

[Claim 6]

An information processing method to be executed by a delivery box, the information processing method comprising:

generating a cryptographic key for encrypting information indicating a storage state of a package in a storage space in which the package is housed; and

establishing wireless communication with a portable terminal to transmit the cryptographic key generated to a server device via the portable terminal.