Title (en)

SECURITY MONITORING SYSTEM

Title (de)

SICHERHEITSÜBERWACHUNGSSYSTEM

Title (fr)

SYSTÈME DE SURVEILLANCE DE SÉCURITÉ

Publication

EP 4073773 B1 20240131 (EN)

Application

EP 20819747 A 20201207

Priority

- EP 2020084902 W 20201207
- EP 19215371 A 20191211

Abstract (en)

[origin: EP3836107A1] A security monitoring system comprising:a central unit, having at least one radio frequency transceiver, and a control unit to control the at least one radio frequency transceiver, the central unit being configurable to provide a first RF communication mode and an alternative long range communication mode, the first communication mode supporting a higher maximum bitrate than the long range mode, and the long range mode supporting a greater transmission range than the first mode;a node comprising a node radio frequency transceiver operable in the first communication mode, for direct communication with the central unit, and in the long range communication mode for direct communication with the central unit, and a controller for controlling the node radio frequency transceiver;the controller of the node being configured to:attempt to establish communication with the central unit using the long range communication mode by:transmitting a message comprising a preamble followed by a synch word on a long-range communication channel, andlistening for an acknowledgement from the central unit on a frequency within the long-range communication channel;and, in the event that an acknowledgement is received from the central unit on a frequency within the long-range communication channel, to communicate with the central unit using a frequency within the long-range communication channel;the control unit of the central unit being configured to:control a central unit radio frequency transceiver to tune to one of the multiple different radio frequency sub-channels that together make up the long-range communication channel and to listen for a preamble transmitted by the node, and in the event that no preamble is detected within a predetermined period to control the central unit radio frequency transceiver to tune to another of the multiple different radio frequency sub-channels to listen for a preamble transmitted by the node, and to repeat this procedure until either all the multiple different radio frequency sub-channels have been used or a preamble has been detected;and, in the event that a preamble is detected, to listen for a synch word, and upon detection of a valid synch word to cause a radio frequency transceiver of the central unit to transmit an acknowledgement on a radio frequency within the long-range communication channel.

IPC 8 full level

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CPC (source: EP IL)

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