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(54) **SYSTEM FOR MAIL OR PACKET NOTIFICATION**

SYSTEM ZUR POST- ODER PAKETBENACHRICHTIGUNG

SYSTÈME PERMETTANT UNE NOTIFICATION DE COURRIER OU DE COLIS

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Description

Field of the Invention

[0001] The present invention relates to a system for mail or packet notification, which system comprising one or more closed mail or packet boxes, which mail or packet boxes comprises at least a mail or packet inlet, which inlet is opened for mail or packet inlet which inlet opening is automatic closing after a mail or packet inlet, which mail or packet boxes comprises mail or packet indication means wherein the mail or packet boxes comprises an electronic unit, which electronic unit comprises a circuit for detecting movement of the mail or packet inlet, which electronic unit is fastened to the mail or packet inlet.

Background of the Invention

[0002] WO9743935A1 concerns a mail box which is provided for the secure retention of articles placed therein. The box includes a compartment for receiving mail; a front access door permitting the mail to be deposited into the compartment, but inhibiting subsequent withdrawal there from; and a second rear lockable access door which allows the mail to be retrieved. There are various means to maintain the mail securely in the box which includes an internal baffle adjacent the front access door; or a flap which blocks access to the compartment when the front access door is opened. The locking means for the second access door is microprocessor controlled. The mail box may also incorporate a communications module which is actuated to transmit a signal when the deposit of mail into the compartment is sensed. The mail box may also incorporate a security module which is adapted to be actuated if unauthorised tampering with articles in the mail box is attempted. The security module and an associated alarm means may also be adapted to be operated remotely and independently of any unauthorised tampering with the mail box, thus functioning as a personal or other alarm for a resident in a dwelling who needs to summon attention.

[0003] US6694580 concerns a mail notification system for use with structures and residences are disclosed. The mail notification system comprises an activator attachment that is attached to an inner surface of a mailbox. The activator attachment includes an activator that is kept in a retracted position by a flange attached to a mailbox door when the mailbox door is shut. Once the mailbox door is opened, the activator opens to an extended position, thereby activating a radio wave transmitter in the activator attachment. The radio wave transmitter emits radio waves that are picked up by a radio wave receiver that is incorporated into a face plate unit that is preferably located within a residence of an individual. The radio wave receiver then activates a speaker to emit sounds and attached display to display words that indicate the mailbox door has been opened, suggesting mail has been deposited in the mailbox.

[0004] US5239305 concerns a system for indicating the deposit of mailing mailbox comprises a two channel transmitter positioned within a mailbox and a two channel receiver positioned within a household. The first channel of the system provides a means for indicating at the receiver the opening of the mailbox door (deposit of mail) and the second channel of the system provides a means for resetting the indication of a deposit of mail. The transmitter and receiver both have means for resetting the indication of a deposit of mail. The transmitter has a spring clip for attachment to the mailbox.

[0005] US5023595 describes a remote solar powered radio frequency transmitter assembly and radio receiving and signalling system to indicate delivery of mail. The transmitter means is powered by a rechargeable battery system which is normally recharged by solar cells located on the transmitter means housing. The transmitter means comprises an FM radio transmitter operating in the 49 Mhz band, with a signal strength sufficient for providing an alarm signal to receive at least 4,200 feet distant over unbroken terrain. Upon opening of the mailbox door approximately 30 degrees (30°), a switch initiates a six (6) second operation of the transmitter means. A receiver is provided to detect the radiated signal, and to energize visual and audible signals in response thereto. Ten position DIP switches are provided at both transmitter means and receiver to vary the frequency of operation so as to minimize or eliminate interfering signals. The transmitter means is secured to the mailbox by a single attachment post. A jack plug and flexible cord are provided to connect the transmitter means and the switch. The switch is provided with a flat backing plate having a double sided adhesive for ease of installation. The audible alarm at the receiver comprises a digitally generated musical tune. The musical tune automatically stops after about 20 seconds, unless the receiver is reset sooner. Reset of the receiver turns off both the musical tune audible alarm and the flashing light visual alarm.

[0006] US4520350 relates to a mail box alarm system arranged to notify the owner of a rural mail box when mail has been received. A transmitter positioned in the mail box radiates a coded signal each time the door of the box is opened or closed. A receiver, positioned in the associated residence or business, operates a visual and audible alarm. When mail is delivered, both the visual and audible alarm is energized during the time the door is open for the delivery of mail. When the door is closed, only the visual alarm remains energized. When the mail is picked up, the visual alarm is automatically deenergized and the mechanism re-positioned for a new cycle.

[0007] EP0843298A2 discloses a display device for multi-occupation building door bell or letter box installation. The display device has a respective electronic display, which is programmed via a microcontroller and an electronically-erasable programmable read-only memory, for providing a nameplate for each doorbell button or letter box. Each electronic display is provided with a current supply and a receiver for receiving programming sig-

nals provided by an external programming device, transferred to the memory via the microcontroller.

[0008] US7506796B1 discloses a system for mail or packet notification according to the preamble of claim 1.

Object of the Invention

[0009] It is the object of the patent application to achieve supervision of a of mail or packet boxes placed locally and to inform the user by receiving mail or packets.

Description of the Invention

[0010] The object of the invention can be achieved with a system as described in the preamble to the claim 1 and further modified so, the electronic unit comprises an electronic display for indicating name of the user related to the mail or packet box, and the circuit for detection of movement comprises an acceleration detector and/or a gyro detector for detecting opening and or closing of the mail or packet inlet.

[0011] Hereby it can be achieved that all traditional mail or packet boxes can be used if the electronic unit is placed and fixed to the inlet, where the inlet is moved from a first closes position to a second open position for mail or packets to be placed into the box and the inlet is automatic closing by moving from the second open position to the first closed position. The electronic unit can comprise an electronic display which can indicate the name of the user. The use of electronic display has the advantage that it is rather easy, by electronic communication to the electronic unit to change the name of the person at the mail box. The electronic unit can comprise an energy storage in the form of a power pack which power pack can comprise rechargeable batteries or maybe traditional batteries that must be exchanged.

[0012] The power supply can also be effected by a solar power element placed at the surface of the electronic unit or as part of the electronic display. In that way it is possible to charge a battery by solar power and to achieve sufficient power for several hours. Alternatively, all other kinds of electronic supply systems such as mobile phone chargers, mobile phone batteries etc. could be used in the electronic unit. Any indication of received mail can automatically be transmitted by data communication to for example a local computer system, or it is possible to have the electronic unit communicate directly with a user mobile phone or telephone.

[0013] The circuit for detection of movement comprises an acceleration detector and/or a gyro detector for detecting opening and or closing of the mail or packet inlet. Different kinds of detectors can be used but the use of an accelerometer or a gyro detector or combining the two devices will result in a very reliable indication of received mail or packets. One possible accelerometer could be of the type Free-scale MMA 7361L.

[0014] Communication means for data communication with at least a processor system is based on mobile

phone data transmission. It is possible to have the electronic unit comprise its own mobile phone system so that the electronic unit can perform mobile data communication directly with a computer system. Alternatively, if the electronic unit comprises the mobile phone system, direct communication to a user can be performed by sending e.g. an email or SMS/message directly to one or more preprogrammed mobile phone numbers.

[0015] Communication means for data communication with at least a processor system (28) is based on WIFI communication. In an alternative embodiment, the data communication could use a WIFI net to communicate directly with a computer system placed nearby.

[0016] Electronic units placed at inlets of a plurality mail or packet inlets are communicating with at least a first processor system, which processor system is intended for performing a supervision of the indication means in the packet or mail boxes, which first processor system is intended for performing transmission of mail or packet information to users related to an activated mail or packet indication means.

[0017] Hereby can be achieved that persons living in a building where a number of common placed mail boxes are serviced by the mail man there will be a direct message to each of the users who have received a mail. Just as receiving mail there will probably in the future also become receiving boxes for packages where also an indication for receiving a package can be transmitted in the same way as the transmission of mail. Probably in the future it will be common that there is a mail box as well as a packet box for each apartment. Due to change in mail service there is a possibility that also people living in private houses will have to collect their mail in a common mail box facility. It is already well known in Danish summer houses to have a common mail box system placed in special housing where the people living in different houses can go and collect their mail. Such a system will probably be well known in the future in many villages where mail is only delivered centrally. Where a lot of mail boxes are placed in a common facility there is a need for a system that can supervise the mail boxes. The invention makes it possible for even a small system to be supervised with only one or a few mail boxes or a system that comprises hundreds of mail boxes can more or less be driven by the same computer system. Each mail or packet box must comprise a switch that by an electronic circuit can transmit a data message for example over a data bus to the computer system. In the computer system the receiving computer address will be found automatically and a response will be sent from the computer system to the flat or house where the receiving mail box relates to.

[0018] The transmission can be performed as an E-mail, which e-mail is send to a user related e-mail address, which e-mail address is stored in the computer system. A simple way of transmitting a message to the user is of course to let the computer system send an e-mail. The e-mail will only contain very limited information

saying that you have received new mail at the receiving time where you can see if your e-mail has been waiting for you for a period. It will be very easy to let the computer generate an e-mail each time one of the mail boxes has been activated.

[0019] The transmission can also be performed as an SMS send to a user related mobile phone number, which mobile phone number is stored in the computer system. As mobile phones are commonly used and the SMS is a possibility, therefore many users will prefer to get the message by SMS. By SMS there is a possibility that people on their way receive the information that they have received mail, so they on their way home can pick up the mail and do not have to wait until they have checked their e-mail. E-Mail and SMS can be combined so information is transmitted both as E-mail and SMS.

[0020] The transmission can, in an alternative embodiment for the invention, be performed as an MMS is send to a user related mobile phone number, which mobile phone number is stored in the computer system.

[0021] By Using MMS as the media for transmitting the information it is possible to transmit a picture. This picture could be a computer-generated picture simply on the screen of for example a receiving mobile telephone showing a picture of a mailbox, where, in the mailbox, you can see that one or more letters have been received. The same could be the procedure could be applied to receiving packets in a packet receiving box where the computer-based MMS could also indicate that new packet has been received.

[0022] In this way the user will get his information about received mail or packets, even if the user is away from his home and in this way it is possible for the user to pick up mail or packets when passing the mailbox stand. The mail or packet box can comprises a scanner or a camera for achieving a picture of at least one surface of the received mail or packet, which picture is transmitted over the communication line toward the computer system, which computer system transmit the picture to the related person.

[0023] If the received mail or packet is scanned or photographed in the receiving box, it should be possible by MMS or by email to transmit a picture indicating the received letter or packet. Because digital cameras are becoming quite inexpensive, it should be possible; by for example packet receiving boxes, to take a number of pictures of the packet from different angles, so that the name of the addressee and maybe also the sender name can be indicated.

[0024] By letters supposed to be relatively thin it should be possible by placing the letter in the box simply to scan the letter. In this way, information will automatically be transmitted to the user. In special situations, where there is terrorism, it is possible, by means of these pictures, to indicate the dangers from packets or letters. To protect mail users it should be possible also to transmit pictures of received mail or packets directly to a security organisation which in some situations by suspicion towards

specific mail or packets should be able to monitor the mailbox and perform a secure emptying process. The transmission can be performed as a radio signal, which radio signal is send to a user related radio receiver, which radio receiver address is stored in the computer system. In situations where people living for example in flats or houses do not have any computers or are not able to use SMS on a mobile phone there is always a possibility that a radio receiver is placed in the house or the flat and that radio receiver is indicating that mail has been received either by acoustic or visual indicators.

[0025] The processor system comprises a computer storage intended for storing the mail or packet information, and for deleting the mail or packet information when computer storage the mail or packet box is emptied. A computer system can be programmed in such a way that information could be stored in the system when mail or packages are received, but as soon as the mail box or packet box is empty again there will be an automatic reset in the computer system so that the mail receiving system is ready each time the mail box has been emptied.

[0026] The transmission can be performed as a telephone call to a user related phone, which phone number is stored in electronic unit or in the computer system.

[0027] In situations where the user has no computer and the user is not using mobile phone or the mobile phone cannot receive SMS or MMS messages it is possible that the information could be transmitted directly over a wired telephone line to a user telephone. A computer-generated message could be sent over the line to the user. The mail or packed boxes comprises an electronic display for indicating name of the user related to the mail or packet box, which electronic display is controlled from the processor system.

[0028] In a more advance embodiment of the invention it is possible that the computer system performs communication both from the mail or packet boxes but also to mail or packet boxes. It is hereby possible that the name shield placed on the front of the mail or packet box is in the form of an electronic display which indicates the name and addresses of the user. If there is a change in the addressee, for example because of people move in and out of flats, it is possible for the administration of the building very easily to change the person name on the mail or packet box. Thereby it is possible that a mail or packet receiving system can be used in hotels or other residences where people stay for shorter periods.

[0029] This invention also concerns a method for mail or packed notification from one or more mail or packet boxes where mail notification is transmitted from the mail or packet inlet to a user, whereby following activities are performed, indicate received mail or packet in the mail or packet box by an electronic unit fixed to a mail or packet inlet by detecting movement of the inlet by means of a gyroscope and/or accelerometer, transmit packet or mail notification to a computer system, perform a search in the computer system for the correct user, select the communication system related to the user, perform commu-

nication to the user of the mail notification.

[0030] Hereby it can be achieved that relatively big centralised mail or packet receiving facilities can be very effective in use in that the user or the receiving person of mail or packets will automatically receive information concerning the received mail or packet. For the user, extra trips, walking up and down many steps or even walks over long distances can be avoided. Because the distance from the mail or packet receiving facility to the actual user's flat or house can be rather long, the user will in some situations use a car for the transportation. Many car trips can thereby be avoided if transport is only performed in situations when mail has been received. In big or high buildings, many in trips in elevators will be avoided if the user only takes the elevators to the mail receiving facility when mail or packets have been received in the box.

Description of the Drawing

[0031]

Figure 1 shows a possible embodiment for a system for mail or packet notification.

Figure 2 shows on possible embodiment for the electronic unit.

Figure 3 shows a possible electronic circuit for the electronic unit indicated in fig. 2.

Detailed Description of the Invention

[0032] Figure 1 shows a possible embodiment for a mail or packet notification system 2. The system 2 comprises mail boxes 4-22 which mail boxes are communicating over a data bus 24 which could be a serial parallel or wireless bus connection. This data bus 24 is connected to each of the mail boxes 4-22 and continues in a bus connection 26 which lead to the computer 28. The computer 28 is connected to the internet 30 and to data storage 32. Furthermore, it is possible for the computer 28 to perform communication by the radio transmitter antenna 34 and to the mobile phone antenna 36. The data bus 24 can be bidirectional, herby can be achieved that the computer system can transmit data to the mail or packet boxes. That can lead to a dynamic system where name and address on mail or packet boxes can be exchanged from the computer system 28.

[0033] By the system indicated by figure 1 it is possible each time mail is received in one of the boxes 4-22 that information is transmitted to a receiver either by the internet 30, the radio communication net 34 or the mobile net 36.

[0034] Figure 2 shows on possible embodiment for the electronic unit that has to be placed at the movable part of an inlet of a mail or packet box. The electronic unit 100 comprises a display 102 which can indicate the name of the user of the mail box. Further a solar panel 104 is indicated, for charging a non-indicated battery. Hereby

it can be achieved that the electronic unit can indicate the name of the mail receiver directly be the electronic display. Because the electronic unit comprises indication means it is possible directly via the electronic unit to indicate that mail or packet has been received in the mail or packet box.

[0035] Figure 3 shows a possible electronic circuit for the electronic unit 100 indicated in fig. 2. The electronic unit 200 comprises a processor 202 which is controlling the display 204. Movement detectors 206 communicate with the processor 202 and the processor 202 communicates with a communication unit 208 which has an antenna 210. The processor system further communicates with a power supply 212 which power supply 212 could be connected to the solar power system indicated in fig. 2 as 104. It is to be understood that the power unit 212 also delivers power to the other units such as the communication unit 204, the detector means 206, and for the display 204. A special algorithm in the computer 202 can survey the detection unit 206 but keeping for example the communication unit 208 in a very low power level until the movement sensor 206 has indicated movement of an inlet of a mail or packet box. In this way the power consumption of the electronic unit can be kept at a minimum by which a relatively long lifetime of for example batteries can be achieved.

Claims

1. System (2) for mail or packet notification, which system (2) comprising one or more closed mail or packet boxes (4-22), which mail or packet boxes (4-22) comprises at least a mail or packet inlet which inlet is opened for mail or packet inlet which inlet opening is automatic closing after a mail or packet inlet, which mail or packet inlet comprises mail or packet indication means, wherein the mail or packed boxes (4-22) comprises an electronic unit, which electronic unit comprises a circuit for detecting movement of the mail or packet inlet, which electronic unit comprises communication means for data communication with at least a processor system (28), which electronic unit is fastened to the mail or packet inlet, **characterized in that** the electronic unit comprises an electronic display (102, 204) for indicating name of the user related to the mail or packet box (4-22), and that the circuit for detection of movement comprises an acceleration detector and/or a gyro detector for detecting opening and or closing of the mail or packet inlet.
2. System according to claim 1, **characterized in that** communication means for data communication with at least a processor system (28) is based on mobile phone data transmission.
3. System according to claim 1, **characterized in that**

communication means for data communication with at least a processor system (28) is based on WIFI communication.

4. System according to one of the claims 1-3, **characterized in that** electronic units placed at inlets of plurality mail or packet inlets are communicating with at least a first processor system (28), which processor system (28) is intended for performing a supervision of the indication means in the packet or mail boxes (4-22), which first processor system (28) is intended for performing transmission of mail or packet information to users related to an activated mail or packet indication means.
5. System according to claim 4, **characterized in that** the transmission is performed as an E-mail to a user related e-mail address, which e-mail address is stored in the computer system (28).
6. System according to one of the claims 1-5, **characterized in that** the transmission is performed as an SMS to a user related mobile phone number, which mobile phone number is stored in the computer system (28).
7. System according to claim 1, **characterized in that** the transmission is performed as an MMS, to a user related mobile phone number, which mobile phone number is stored in the computer system (28).
8. System according to one of the claims 1-7, **characterized in that** the mail or packet boxes (4,22) comprises a scanner or a camera for achieving a picture of at least one surface of the received mail or packet, which picture is transmitted over the communication line toward the computer system (28), which computer system (28) transmit the picture to the related user.
9. System according to one of the claims 1-8, **characterized in that** the transmission is performed as a radio signal (34), to a user related radio receiver, which radio receiver address is stored in the computer system (28).
10. System according to one of the claims 1-9, **characterized in that** the computer system (28) comprises a computer storage (32) intended for storing the mail or packet information, and for deletion of the mail or packet information in the computer storage (32) when the mail or packet box is emptied.
11. System according to one of the claims 1-10, **characterized in that** the transmission is performed as a telephone call to a user related phone, which phone number is stored in the electronic unit or in computer system (28).

12. System according to one of the claims 1-11, **characterized in that** the mail or packed boxes (4-22) comprises an electronic display for indicating name of the user related to the mail or packet box, which electronic display is controlled from the computer system (28).

13. Method for mail or packed notification from one or more mail or packet boxes (4-22) where mail notification is transmitted from the mail or packet box inlet to a user **characterized in** the following steps:

- a: indicate received mail or packet in the mail or packet box (4-22) by an electronic unit fixed to a mail or packet inlet by detecting the movement of the inlet by means of a gyroscope and/or an accelerometer,
- b: transmit packet or mail notification from the electronic unit to a computer system
- c: perform a search in the computer system for the correct user
- d: select the communication system related to the user (30, 34,36)
- f: perform communication to the user of the mail notification.

Patentansprüche

1. System (2) zur Post- oder Paketbenachrichtigung, wobei das System (2) einen oder mehrere geschlossene Post- oder Paketkästen (4-22) umfasst, wobei die Post- oder Paketkästen (4-22) mindestens einen Post- oder Paketeinlass umfassen, der zum Post- oder Paketeinlass geöffnet ist, wobei sich die Einlassöffnung automatisch nach einem Post- oder Paketeinlass schließt, wobei der Post- oder Paketeinlass Post- oder Paketbenachrichtigungsmittel umfasst, wobei die Post- oder Paketkästen (4-22) eine elektronische Einheit umfassen, wobei die elektronische Einheit einen Schaltkreis zur Wahrnehmung von Bewegung des Post- oder Paketeinlasses umfasst, wobei die elektronische Einheit Kommunikationsmittel zur Datenkommunikation mit mindestens einem Prozessorsystem (28) umfasst, wobei die elektronische Einheit an dem Post- oder Paketeinlass befestigt ist, **dadurch gekennzeichnet, dass** die elektronische Einheit eine elektronische Anzeige (102, 104) zum Anzeigen des Namens des dem Post- oder Paketkasten (4-22) zugehörigen Benutzers umfasst, und dass der Schaltkreis zur Bewegungswahrnehmung einen Beschleunigungsdetektor und/oder einen Kreiselanzeiger zum Wahrnehmen des Öffnens oder Schließens des Post- oder Paketeinlasses umfasst.
2. System nach Anspruch 1, **dadurch gekennzeichnet, dass** Kommunikationsmittel zur Datenkommu-

- nikation mit mindestens einem Prozessorsystem (28) auf einer Mobiltelefondatenübertragung basieren.
3. System nach Anspruch 1, **dadurch gekennzeichnet, dass** Kommunikationsmittel zur Datenkommunikation mit mindestens einem Prozessorsystem (28) auf WLAN-Kommunikation basieren. 5
 4. System nach einem der Ansprüche 1-3, **dadurch gekennzeichnet, dass** elektronische Einheiten, die an Einlässen einer Vielzahl von Post- oder Paket-einlässen angeordnet sind, mit mindestens einem ersten Prozessorsystem (28) kommunizieren, wobei das Prozessorsystem (28) zur Durchführung einer Überwachung der Anzeigemittel in den Paket- oder Postkästen (4-22) dient, wobei das erste Prozessorsystem (28) zum Durchführen der Übertragung von Post- oder Paketinformationen an einem aktivierten Post- oder Paketanzeigemittel zugehörige Benutzer dient. 10 15 20
 5. System nach Anspruch 4, **dadurch gekennzeichnet, dass** die Übertragung als eine E-Mail an eine einem Benutzer zugehörige E-Mail-Adresse durchgeführt wird, wobei die E-Mail-Adresse in dem Computersystem (28) gespeichert wird. 25
 6. System nach einem der Ansprüche 1-5, **dadurch gekennzeichnet, dass** die Übertragung als eine SMS an eine einem Benutzer zugehörige Mobiltelefonnummer durchgeführt wird, wobei die Mobiltelefonnummer in dem Computersystem (28) gespeichert wird. 30 35
 7. System nach Anspruch 1, **dadurch gekennzeichnet, dass** die Übertragung als eine MMS an eine einem Benutzer zugehörige Mobiltelefonnummer durchgeführt wird, wobei die Mobiltelefonnummer in dem Computersystem (28) gespeichert wird. 40
 8. System nach einem der Ansprüche 1-7, **dadurch gekennzeichnet, dass** die Post- oder Paketkästen (4, 22) einen Scanner oder eine Kamera umfassen, um eine Aufnahme mindestens einer Oberfläche der eingegangenen Post bzw. des eingegangenen Pakets zu machen, wobei die Aufnahme über die Kommunikationslinie an das Computersystem (28) übertragen wird, wobei das Computersystem (28) die Aufnahme an den zugehörigen Benutzer überträgt. 45 50
 9. System nach einem der Ansprüche 1-8, **dadurch gekennzeichnet, dass** die Übertragung als ein Funksignal (34) an einen dem Benutzer zugehörigen Funkempfänger durchgeführt wird, wobei die Adresse des Funkempfängers im Computersystem (28) gespeichert wird. 55
 10. System nach einem der Ansprüche 1-9, **dadurch gekennzeichnet, dass** das Computersystem (28) einen Computerspeicher (32) umfasst, der zum Speichern der Post- oder Paketinformationen dient, sowie zur Löschung der Post- oder Paketinformationen im Computerspeicher (32), wenn der Post- oder Paketkasten geleert wird.
 11. System nach einem der Ansprüche 1-10, **dadurch gekennzeichnet, dass** die Übertragung als ein Telefonanruf an ein dem Benutzer zugehöriges Telefon durchgeführt wird, wobei die Telefonnummer in der elektronischen Einheit oder im Computersystem (28) gespeichert wird.
 12. System nach einem der Ansprüche 1-11, **dadurch gekennzeichnet, dass** die Post- oder Paketkästen (4-22) eine elektronische Anzeige zum Anzeigen des Namens des dem Post- oder Paketkasten zugehörigen Benutzers umfassen, wobei die elektronische Anzeige vom Computersystem (28) gesteuert wird.
 13. Verfahren zur Post- oder Paketbenachrichtigung von einem oder mehreren Post- oder Paketkästen (4-22), wobei eine Postbenachrichtigung von dem Post- oder Paketkasteneinlass an einen Benutzer übertragen und durch die folgenden Schritte **gekennzeichnet** wird:
 - a. Anzeigen eines eingegangenen Poststücks oder Pakets in dem Post- oder Paketkasten (4-22) durch eine elektronische Einheit, die an einem Post- oder Paketeinlass befestigt ist, indem die Bewegung des Einlasses mittels eines Gyroskops und/oder Akzelerators wahrgenommen wird,
 - b. Übertragen der Paket- oder Postbenachrichtigung von der elektronischen Einheit an ein Computersystem,
 - c. Durchführen einer Suche nach dem korrekten Benutzer in dem Computersystem,
 - d. Auswählen des dem Benutzer zugehörigen Kommunikationssystems (30, 34, 36),
 - f. Durchführen der Kommunikation der Postbenachrichtigung an den Benutzer.

Revendications

1. Système (2) pour une notification de courrier ou colis, lequel système (2) comprenant une ou plusieurs boîtes de courrier ou colis fermées (4-22), laquelle boîte de courrier ou colis (4-22) comprend au moins une entrée de courrier ou colis qui est ouverte pour l'entrée de courrier ou colis, laquelle ouverture d'entrée se ferme automatiquement après une entrée de courrier ou colis, laquelle entrée de courrier ou colis

- comprend un moyen d'indication de courrier ou colis, dans lequel la boîte de courrier ou colis (4-22) comprend une unité électronique, laquelle unité électronique comprend un circuit pour détecter le mouvement de l'entrée de courrier ou colis, laquelle unité électronique comprend un moyen de communication pour la communication de données avec au moins un système de traitement (28), laquelle unité électronique est fixée à l'entrée de courrier ou colis, **caractérisé en ce que** l'unité électronique comprend un affichage électronique (102, 204) pour indiquer le nom de l'utilisateur lié à la boîte de courrier ou colis (4-22) ; et **en ce que** le circuit pour la détection de mouvement comprend un détecteur d'accélération et/ou un détecteur gyroscopique pour la détection de l'ouverture et/ou de la fermeture de l'entrée de courrier ou colis.
2. Système selon la revendication 1, **caractérisé en ce qu'un** moyen de communication pour la communication de données avec au moins un système de traitement (28) est basé sur la transmission de données de téléphone mobile.
 3. Système selon la revendication 1, **caractérisé en ce que** le moyen de communication pour la communication de données avec au moins un système de traitement (28) est basé sur la communication WIFI.
 4. Système selon l'une quelconque des revendications 1 à 3, **caractérisé en ce que** des unités électroniques placées sur des entrées de la pluralité d'entrées de courrier ou colis sont en communication avec au moins un premier système de traitement (28) qui est destiné à réaliser une supervision du moyen d'indication dans les boîtes de colis ou courrier (4-22), lequel premier système de traitement (28) est destiné à réaliser la transmission d'informations de courrier ou colis aux utilisateurs liés à un moyen d'indication de courrier ou colis activé.
 5. Système selon la revendication 4, **caractérisé en ce que** la transmission est réalisée comme un e-mail à une adresse e-mail liée à un utilisateur, laquelle adresse e-mail est stockée dans le système informatique (28).
 6. Système selon l'une quelconque des revendications 1 à 5, **caractérisé en ce que** la transmission est réalisée comme un SMS à un numéro de téléphone mobile lié à un utilisateur, lequel numéro de téléphone mobile est enregistré dans le système informatique (28).
 7. Système selon la revendication 1, **caractérisé en ce que** la transmission est réalisée comme un MMS à un numéro de téléphone mobile lié à un utilisateur, lequel numéro de téléphone mobile est enregistré dans le système informatique (28).
 8. Système selon l'une quelconque des revendications 1 à 7, **caractérisé en ce que** les boîtes de courrier ou colis (4, 22) comprennent un scanner ou une caméra pour obtenir une image d'au moins une surface du courrier ou colis reçu, laquelle image est transmise sur la ligne de communication vers le système informatique (28), lequel système informatique (28) transmet l'image à l'utilisateur lié.
 9. Système selon l'une quelconque des revendications 1 à 8, **caractérisé en ce que** la transmission est réalisée comme un signal radio (34), à un récepteur radio lié à un utilisateur, laquelle adresse de récepteur radio est enregistrée dans le système informatique (28).
 10. Système selon l'une quelconque des revendications 1 à 9, **caractérisé en ce que** le système informatique (28) comprend un stockage informatique (32) destiné au stockage des informations de courrier ou colis, et à la suppression des informations de courrier ou colis dans le système informatique (32) lorsque la boîte de courrier ou colis est vidée.
 11. Système selon l'une quelconque des revendications 1 à 10, **caractérisé en ce que** la transmission est réalisée comme un appel téléphonique à un téléphone lié à un utilisateur, lequel numéro de téléphone est enregistré dans l'unité électronique ou dans le système informatique (28).
 12. Système selon l'une quelconque des revendications 1 à 11, **caractérisé en ce que** les boîtes de courrier ou colis (4, 22) comprennent un affichage électronique pour indiquer un nom de l'utilisateur lié à la boîte de courrier ou colis, lequel affichage électronique est contrôlé par le système informatique (28).
 13. Procédé de notification de courrier ou colis d'une ou plusieurs boîtes de courrier ou colis (4-22) où la notification de courrier est transmise par la boîte de courrier ou colis à un utilisateur, **caractérisé par** les étapes suivantes :
 - a : indiquer le courrier ou colis reçu dans la boîte de courrier ou colis (4-22) par une unité électronique fixée à une entrée de courrier ou colis par la détection du mouvement de l'entrée à l'aide d'un gyroscope et/ou d'un accéléromètre,
 - b : transmettre la notification de colis ou courrier de l'unité électronique à un système informatique,
 - c : réaliser une recherche dans le système informatique pour le bon utilisateur,
 - d : sélectionner le système de communication lié à l'utilisateur (30, 34, 36),

f : réaliser la communication à l'utilisateur de la notification de courrier.

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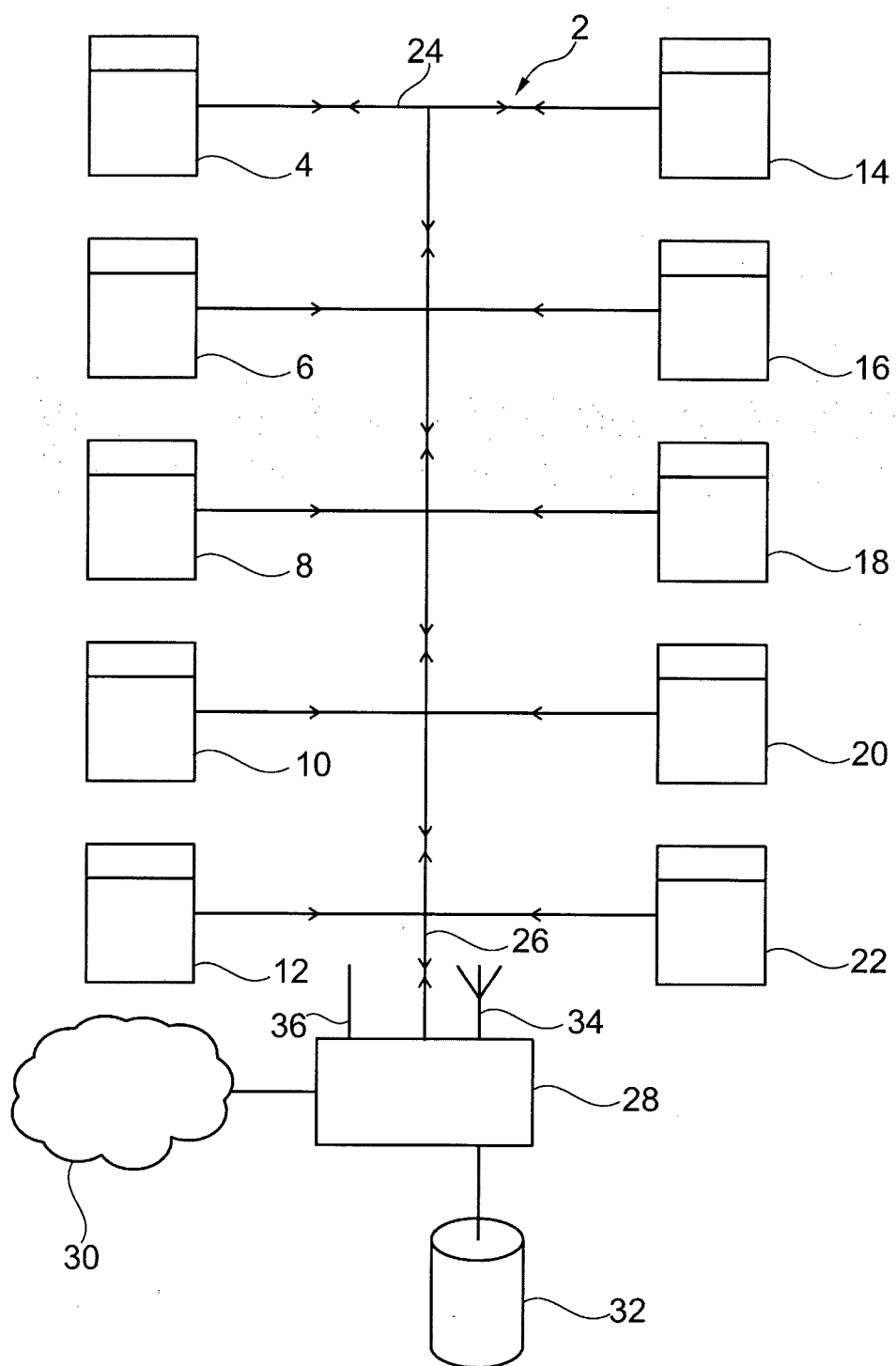


Fig. 1

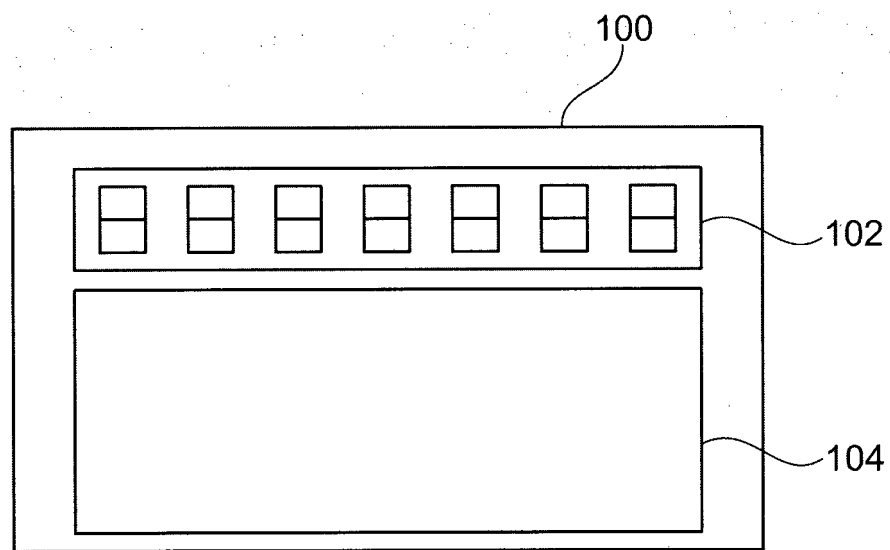


Fig. 2

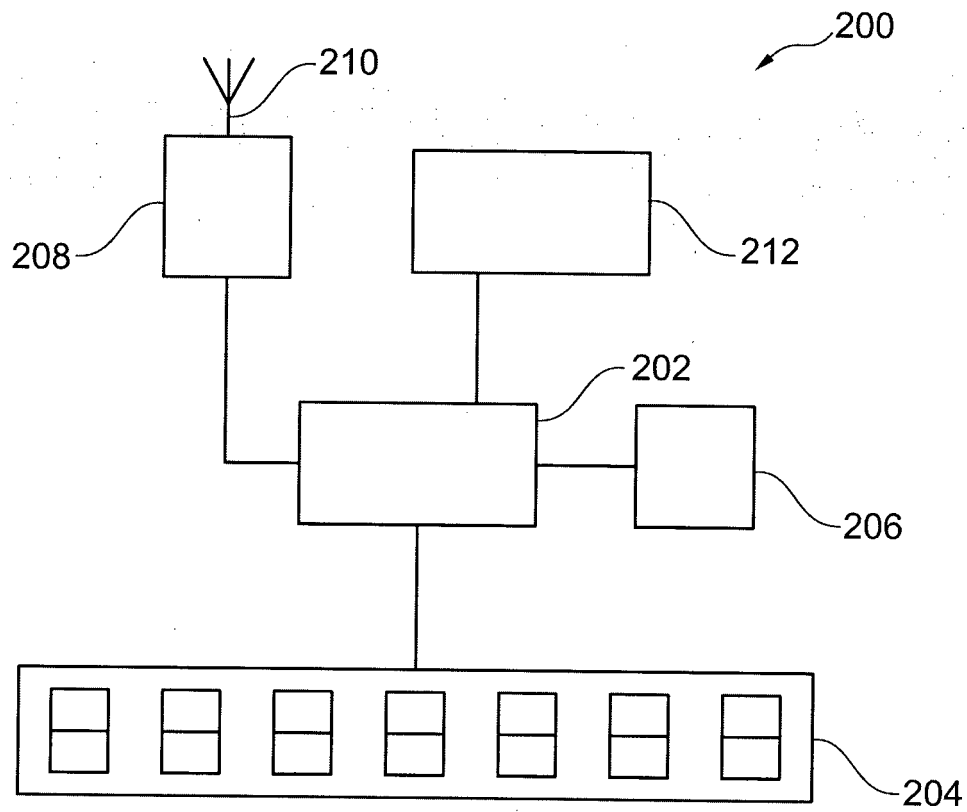


Fig. 3

REFERENCES CITED IN THE DESCRIPTION

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