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(54) A SECURITY APPARATUS AND METHOD FOR STORING OR TRANSPORTING VALUABLES

**SICHERHEITSVORRICHTUNG UND VERFAHREN ZUM LAGERN ODER TRANSPORTIEREN VON
WERTGEGENSTÄNDEN**

**APPAREIL DE SÉCURITÉ ET PROCÉDÉ POUR STOCKER OU TRANSPORTER DES OBJETS DE
VALEUR**

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Description

Technical Field

[0001] The present invention relates to an apparatus for transporting or storing valuable items such as bank notes and to a method of degrading such items.

Background to the Invention

[0002] To deter would-be thieves of bank notes in transit, it has become commonplace for bank notes to be stored and transported in security containers which release an indelible dye or ink onto the bank notes in the event that the security container is stolen or otherwise interfered with, to mark and stain the bank notes, thus rendering them worthless and unusable. It is almost impossible to clean bank notes which have been marked in this way, and thus they cannot easily be used in normal transactions involving a human cashier. Nevertheless, in certain situations such as the low-light environment of a nightclub criminals may successfully attempt to use bank notes stained in this way.

[0003] Thus, whilst known ink- or dye-based marking systems often provide an effective deterrent to would-be thieves, in certain circumstances it is inappropriate to use such a system, and an alternative method of rendering valuable items such as bank notes worthless and unusable is desirable.

[0004] WO91/17681 relates to an apparatus for destroying the contents of a closed and preferably portable safety container upon any abusive handling thereof comprising an envelope including a detonator and a destructive material, the envelope consisting of a material which can burst and discharge said destructive material upon explosion of the detonator.

[0005] DE19619420 relates to a spoiling system in which components of a reactive mass are contained within two cartridges each having a piston. A mixer links the cartridges on the side away from the pistons so that when the pistons are activated the contents of the cartridge are released. The components of the reactive mass form a 2K-polyurethane foam and can contain a dye pigment.

[0006] FR2822880 relates to a case for secure storage and transportation of banknotes and documents which has pyrotechnic device to spray contents with a polymerisable substance. The case has one section to contain banknotes or valuable documents, and a compartment holding a reservoir of a polymerisable substance and a system) for releasing the substance and spraying over the documents in the event of an attempted robbery so that it soaks between them by capillary action and sets to fix them in a block.

[0007] WO93/02435 relates to apparatus for contaminating valuables such as bank notes or other documents held in one or a plurality of containers removably mounted within a housing, by delivering contamination material into each container from a reservoir thereof via a con-

taminant delivery system when a valve is opened.

[0008] FR2866357 relates to a procedure for ensuring secure transport and storage of banknotes and documents which employs heated sulphuric acid to achieve rapid destruction in event of attempted theft. The procedure, in which cellulose molecules in paper are subjected to rapid dehydration and neutralisation, employs a 75 - 98 per cent concentration of sulphuric acid, heated to a temperature compatible with the desired destruction process, with the resulting energy deployed immediately inside a container in which banknotes or documents of value are being transported or an automatic machine from which they are dispensed or recycled. The transport or storage container has a first compartment containing the papers and a second adjoining compartment holding one vessel with the dehydrating product and a second vessel for the exothermic chemical product, with a pyrotechnic device between them to break open the two vessels and the wall separating the compartments.

[0009] EP1847674 relates to an apparatus for secure storage or transport of printed items comprising a case for receiving the items which is associated with at least one reservoir containing a degradation composition for degrading the items, the reservoir being adapted to release the degradation composition on the items under the control of control means.

[0010] EP1589178 relates to a security device for transport and storage of printed valuables which comprises a container that includes at least one reservoir for a product that dissolves printing ink and is designed to be dispensed over the valuables, under control of a command system.

Summary of Invention

[0011] According to a first aspect of the present invention there is provided apparatus for storing or transporting a valuable item, the apparatus comprising a compartment for receiving an item to be stored or transported, a detection system which is operative to detect interference with the apparatus and a dispensing system comprising first and second dispensing means, characterised in that the dispensing system is operative, on detection of interference with the apparatus, to dispense a first part of a degrading agent through one of the dispensing means onto the item and to dispense a second part of the degrading agent through the other of the dispensing means onto the item such that the first and second parts of the degrading agent mix with each other on the item and render the item unusable.

[0012] The use of separate dispensing means for the first and second parts of the degrading agent permits efficient mixing of the two parts of the degradation agent on the item, thereby increasing the effectiveness of the degrading agent in rendering the item unusable.

[0013] In one embodiment, the degrading agent may comprise a two-part resin having a first part and a second part which are dispensed through the first and second

dispensing means respectively.

[0014] In this embodiment the first and second parts of the two part resin mix when they come into contact with each other, causing the item to be encased in a solid resin coating which cannot easily be removed without damaging the item. Thus, the fact that the item has been involved in a theft or other incident can readily be discerned, even in low-light environments.

[0015] The two-part resin may comprise an epoxy resin.

[0016] Alternatively, the two-part resin may comprise a polyurethane resin.

[0017] The first and second parts of the two-part resin are preferably of a low viscosity so as to facilitate penetration of the item by the first and second parts of the two-part resin.

[0018] One or both of the first and second parts of the two-part resin may comprise a fast-acting bonding agent.

[0019] The fast-acting bonding agent may comprise, for example, a cyanoacrylate-based glue.

[0020] The first part of the two-part resin may comprise a priming agent, and the second part of the two-part resin may comprise an activation agent.

[0021] Additionally or alternatively, the degrading agent may be configured to degrade a metallic feature of the item.

[0022] Additionally or alternatively, the degrading agent may be configured to dissolve or erase ink in or on a feature of the item.

[0023] Additionally or alternatively, the degrading agent may be configured to discolour a feature of the item.

[0024] The degrading agent may comprise a solvent.

[0025] For example, the degrading agent may comprise acetone.

[0026] The degrading agent may comprise a bleaching agent.

[0027] The degrading agent may comprise a priming agent and an activation agent.

[0028] The degrading agent may react chemically with the feature of the item to cause the deterioration of the feature of the item.

[0029] The valuable item may comprise a bank note.

[0030] According to a second aspect of the invention there is provided a method of degrading an item contained within an apparatus, the method comprising detecting interference with the apparatus, characterised in that the method comprises dispensing a first part of a degrading agent onto the item through a first dispensing means and dispensing a second part of the degrading agent onto the item through a second dispensing means, such that the first and second parts of the degrading agent mix with each other on the item and render the item unusable.

[0031] In one embodiment, the degrading agent may comprise a two-part resin having a first part and a second part which are dispensed through the first and second dispensing means respectively.

[0032] The two-part resin may comprise an epoxy resin.

[0033] Alternatively, the two-part resin may comprise a polyurethane resin.

[0034] The first and second parts of the two-part resin are preferably of a low viscosity so as to facilitate penetration of the item by the first and second parts of the two-part resin.

[0035] One or both of the first and second parts of the two-part resin may comprise a fast-acting bonding agent.

[0036] The fast-acting bonding agent may comprise, for example, a cyanoacrylate-based glue.

[0037] The first part of the two-part resin may comprise a priming agent, and the second part of the two-part resin may comprise an activation agent.

[0038] Additionally or alternatively, the degrading agent may be configured to degrade a metallic feature of the item.

[0039] Additionally or alternatively, the degrading agent may be configured to dissolve or erase ink in or on a feature of the item.

[0040] Additionally or alternatively, the degrading agent may be configured to discolour a feature of the item.

[0041] The degrading agent may comprise a solvent.

[0042] For example, the degrading agent may comprise acetone.

[0043] The degrading agent may comprise a bleaching agent.

[0044] The degrading agent may comprise a priming agent and an activation agent.

[0045] The degrading agent may react chemically with the feature of the item to cause the deterioration of the feature of the item.

[0046] The valuable item may comprise a bank note.

Brief Description of the Drawings

[0047] Embodiments of the invention will now be described, strictly by way of example only, with reference to the accompanying drawings, of which:

Figure 1 is a schematic representation showing an example of an apparatus for storing or transporting a valuable item;

Figure 2 is a schematic representation showing one side of the apparatus of Figure 1;

Figure 3 is a schematic representation showing an exemplary degrading agent dispensing mechanism;

Figure 4 is a schematic representation of a bank note; and

Figure 5 is a schematic representation showing an alternative degrading agent dispensing mechanism.

Description of the Embodiments

[0048] Referring first to Figure 1, a security apparatus is shown generally at 10. In this example the security apparatus is a security container of the kind used to store and transport bank notes between a storage facility and a distribution facility such as a bank or an automated teller machine (ATM).

[0049] The security container 10 comprises a housing 12 which may be of metal or of a suitable plastics material such as polypropylene. As is shown in Figure 2, the security container 10 has a base portion 14 and a lid 16, which cooperate to define a compartment, shown in dashed outline at 18, for receiving an item or items to be transported or stored.

[0050] In this example the base portion 14 and the lid 16 are attached to each other by a hinge 20 positioned at one end of the security container 10, such that the security container 10 can be opened and closed.

[0051] A handle portion 22 is provided at an opposed end of the security container 10 to the hinge 20 to facilitate handling and carrying of the security container 10. One or more locking mechanisms 24 are provided on or close to the handle portion 22 to secure the base portion 14 to the lid 16 to impede opening of the security container 10. As will be appreciated by those skilled in the relevant art, the locking mechanism 24 may take a variety of forms. For example, the locking mechanism may be a physical lock which is operated by a key, or may be an electronically controlled lock requiring an alphanumeric combination to be entered or an electronic key such as an electronic tag to be presented to a detector of the locking mechanism 24 to activate or deactivate the locking mechanism 24.

[0052] The security container 10 includes a security system, indicated generally at 26 in Figures 1 and 2, which is operative to cause a degrading agent to be deployed in the event of the theft of the security container 10 or other unauthorised interference with the security container 10.

[0053] To this end, the security system 26 includes a theft or interference detection system, which is shown schematically at 28 in Figures 1 and 2. The theft or interference detection system 28 may be operative, for example, to detect particular movements of the security container 10 and to activate a degrading agent dispensing mechanism 30 of the security container 10 in the event that a theft or other interference is detected. Alternatively the theft or interference detection system 28 may be operative to activate the degrading agent dispensing system 30 in the event that a predetermined period of time has elapsed since the security container 10 was removed from a docking station. It will be appreciated that these are merely examples of suitable theft or interference detection systems, and a variety of other suitable systems are known to those skilled in the art, and that any suitable theft or interference detection system 28 could be used in the security container 10.

[0054] An exemplary degrading agent dispensing mechanism 30 is illustrated schematically in Figure 3, and comprises a reservoir 32 for holding the degrading agent, which in this example is a fluid. The reservoir is in fluid communication with a pressure valve 34, which in turn communicates with a conduit 36 which extends into the compartment 18 of the security container 10. The conduit 36 terminates in a spray head 38 which ensures that on activation of the degrading agent distribution mechanism 30 the degrading agent is dispensed over a large area within the compartment 18, to ensure that any item contained within the compartment 18 is struck by the degrading agent and will thus deteriorate as the degrading agent comes into contact with elements or features of the item.

[0055] The degrading agent dispensing mechanism 30 further comprises a canister 40 containing pressurised gas such as carbon dioxide. The canister 40 has an outlet which is connected to an electrically operated actuator 42, which permits fluid communication between the canister 40 and the reservoir 32. The electrically operated actuator 42 is controlled by the theft or interference detection system 28.

[0056] In one embodiment of the security container 10 which is used to store and transport bank notes, the reservoir 32 contains acetone in liquid form. On contact of the acetone with certain features of the bank notes, those features undergo a deterioration, thus rendering the bank notes worthless and unusable.

[0057] Referring now to Figure 4, a bank note is shown generally at 50, and comprises a sheet 52 of material such as paper, a paper-cloth mix or a polymer material. A design is printed on the bank note 50, which may also incorporate a number of anti-counterfeiting or security features. For example, the bank note 50 may include a metallic strip 54 woven into the bank note 50. The bank note may also have a metallic hologram 56 or other metallic anti-counterfeiting device on one or both sides, and a watermark 58 may also be provided.

[0058] Other security features have been proposed, such as security labels formed of metallic or polymeric crystalline structures, security elements comprising photonic crystals, embossed optically refractive elements and the like, and these may also be incorporated in the bank note 50.

[0059] On contact of the liquid acetone degrading agent with the metallic strip 54 and the metallic hologram 56 of the bank note 50, the metallic strip 54 and the metallic hologram 56 undergo a deterioration, being corroded or partially or wholly dissolved by the acetone. Thus, when the degrading agent dispensing mechanism 30 of the security container 10 is activated a bank note 50 contained within the compartment will be degraded and rendered worthless and unusable. The deterioration of the metallic strip 54 and the metallic hologram 56 is also immediately visible, thus providing a visual indication that the bank note 50 has been involved in an incident such as a theft.

[0060] In addition to this deterioration and degradation of the metallic strip 54 and the metallic hologram 56 caused by the liquid acetone degrading agent, certain bank notes 50 such as polymer bank notes are printed using ink which is soluble in acetone. Thus, when the liquid acetone degrading agent comes into contact with such a bank note 50 stored in the compartment 18 following activation of the degrading agent dispensing mechanism 30, some or all of the ink used to print the bank note 50 dissolves, thus causing deterioration of the bank note 50 and rendering the bank note 50 worthless and unusable. Again, this deterioration of the bank note 50 gives a visual indication that the bank note 50 has been involved in an incident such as a theft.

[0061] It will be appreciated that acetone is merely an example of a suitable degrading agent, and alternative degrading agents which have the effect of causing a deterioration of one or more features of the bank note 50, such as the corrosion or partial dissolution of metallic elements and/or complete or partial dissolution of ink used to print the bank note 50, could equally be used.

[0062] In an alternative embodiment, an alternative degrading agent such as a bleaching agent may be used. In this embodiment, the degrading agent causes the ink used to print the bank note 50 to change colour.

[0063] Similarly, an appropriate degrading agent may be employed such that on activation of the theft or interference detection system 28 the degrading agent causes deterioration of one or more features of the bank note 50 by causing the feature(s) to become discoloured or to change colour entirely. For example, such a degrading agent may be a chemical agent which reacts with the metallic strip 54 and/or the metallic hologram 56 to cause the metallic strip 54 and/or the metallic hologram 56 to change from a metallic silver colour to another colour. This deterioration of the feature(s) of the bank note 50 and of the bank note itself renders the bank note 50 worthless and unusable, whilst also providing a visual indication that the bank note 50 has been involved in an incident such as a theft.

[0064] Similarly, an acidic degrading agent may be used to cause deterioration of features of a bank note 50 stored in the compartment 18 of the security container 10 in the event of a theft or other incident involving the security container, by dissolving, corroding, discolouring or otherwise causing deterioration of features such as the metallic strip 54, the metallic hologram 56 and/or the ink used to print the bank note 50.

[0065] Alternatively the degrading agent may interact with the material of the bank note 50 to cause the bank note 50 itself to deteriorate by deforming, for example by shrinking, or to deteriorate by becoming inflexible, brittle or rigid or by affecting the physical properties of the bank note 50 in any other way which renders the bank note 50 worthless and unusable.

[0066] The degrading agent may react chemically with one or more features of the bank note 50, or the interaction between the degrading agent and the bank note 50

may be a physical interaction which causes deterioration of one or more of the features of the bank note 50.

[0067] The degrading agent may be selected to degrade other security features such as those described above. For example, if a security feature including a metallic crystal structure is incorporated in the bank note 50, a degrading agent which causes partial or complete dissolution of the metallic crystal structure may be used.

[0068] It will be appreciated by those skilled in the relevant art that a great many degrading agents are suitable for use in the apparatus and method of the present invention, and that the degrading agents described above are presented as examples only. Indeed, any degrading agent which has the effect of causing deterioration of a feature of the bank note 50 such as the metallic strip 54, the hologram 56, the watermark 58 or the material on which the bank note 50 is printed, whether by etching, partially or wholly dissolving, corroding, deforming or any other means can be used in the apparatus and method of the present invention, although in practice the choice of degrading agent may be restricted or limited by factors such as health and safety legislation.

[0069] The degrading agent may be in a two-part form comprising a priming agent and an activation agent, with the degrading agent being ineffective until the priming agent and the activation agent are mixed together. Figure 5 illustrates an alternative degradation agent dispensing mechanism which is able to dispense the priming agent and the activation agent separately, such that they mix on contact with an item contained in the compartment 18 of the security container 10. This arrangement has the advantage that in the event that one of the priming agent and the activation agent is accidentally dispensed into the container the contents of the container are not spoiled.

[0070] The alternative degradation agent dispensing mechanism is shown generally at 60 and comprises first and second reservoirs 62, 64 for the priming agent and the activation agent respectively. The first and second reservoirs communicate with respective first and second pressure valves 66, 68 which each communicate with a respective conduit 70, 72. The conduits 70, 72 extend into the compartment 18 and terminate in respective spray heads 74, 76. To facilitate mixing of the priming agent and the activation agent on activation of the degradation agent dispensing mechanism 60, the spray heads 74, 76 may be positioned at opposed sides or ends of the compartment 18. However, it will be appreciated that any positioning of the spray heads 74, 76 which facilitates mixing of the priming agent and the activation agent may be used.

[0071] The degrading agent dispensing mechanism 60 further comprises first and second canisters 78, 80 containing a pressurised gas such as carbon dioxide. Each of the canisters 78, 80 has an outlet which is connected to an electrically operated actuator 82, 84, which permits fluid communication between the first and second canisters 78, 80 and the first and second reservoirs 62, 64

respectively. Each of the electrically operated actuators 82, 84 is controlled by the theft or interference detection system 28 such that on detection of interference with the security container 10 the electrically operated actuators 82, 84 are activated to cause the pressurised gas to enter the reservoirs 62, 64, thereby causing the priming agent and the activation agent to be dispensed via spray heads 74, 76 into the compartment 18, to cause deterioration of an item contained in the compartment 18.

[0072] In one embodiment the degrading agent comprises a two-part resin which sets into a solid block when the two parts are mixed. Thus one part (which may be a priming agent) of the two-part resin is stored in the first reservoir 62 and the other part (which may be an activation agent) is stored in the second reservoir 64 such that when the degrading agent dispensing mechanism 60 is activated the two parts of the resin are dispensed into the compartment 18, mixing to form a solid resin which encases the item stored in the compartment 18. This resin coating cannot easily be removed from the item and thus renders it unusable, whilst also providing a visual and haptic indication that the item has been involved in a theft or other incident.

[0073] The two-part resin may be, for example, an epoxy resin or a polyurethane resin, although it will be appreciated that many other two-part resins (or indeed resins comprising more than two parts) are equally suitable. The parts of the resin are preferably of a low viscosity, for example a viscosity comparable to or lower than that of water, such that they can easily be dispensed and are able quickly to penetrate items stored in the compartment 18.

[0074] One or both parts of the two-part resin may comprise an additional bonding agent such as a fast-acting glue. Cyanoacrylate-based glues are particularly suitable for this purpose. The additional bonding agent provides an initial fast-acting bonding stage whilst the slower-acting but more permanent resin penetrates the item and cures to form a solid block in and around the item.

[0075] One or both of the parts of the two-part resin may also include a colouring agent such as a pigment or dye to provide a further visual indication that the item has been involved in a theft or other incident. The colouring agent should preferably be resistant to physical and chemical attack and should have a high colour intensity to stain the item effectively and for high visibility. Colouring agents which produce dark colours such as blue and purple are particularly suitable for this purpose.

[0076] It will be appreciated by those skilled in the art that the degrading agent dispensing mechanism 60 described above with reference to Figure 5 is merely one example of a suitable mechanism, and that other mechanisms could be employed.

[0077] Although the exemplary embodiments described above relate to a security container 10 which can be used to store or transport valuable items such as bank notes, it will be appreciated that the invention is equally applicable to other apparatus, such as safes, safe deposit

boxes and the like. In particular, the invention is suitable for use in Automated Teller Machines (ATMs) to protect bank notes which are stored in the ATM, either in cassettes or as bulk cash. A degrading agent dispensing mechanism 60 may thus be installed or provided in an ATM cassette, with the ATM cassette or the ATM itself being provided with an interference detection system which is operative to trigger the degrading agent dispensing mechanism 60 in the or each ATM cassette stored in the ATM in the event that unauthorised interference with the ATM or the ATM cassette is detected. Alternatively the ATM itself may be provided with one or more degrading agent dispensing mechanisms 60 which is/are positioned such that on detection of unauthorised interference with the ATM the contents of the reservoirs 62, 64 are dispensed onto bank notes stored in the ATM, whether in cassettes or not, such that they mix and encase the bank notes in a solid resin block, thereby rendering them unusable.

[0078] In many cash storage and transport systems bank notes are stored in sealed bags within a security container or other storage or transport device. The present invention can be used in such systems, by adapting the degrading agent dispensing mechanisms 30, 60 to include an element which can pierce or puncture the bags prior to dispensing the degrading agent. A suitable system is disclosed in the applicant's European patent no. 1499787.

[0079] The exemplary embodiments described above refer to the use of a security container to store bank notes, but it will be appreciated that the apparatus and method of the present invention can be used to protect other valuable items. For example, confidential or sensitive documents may be stored in a security container 10 which is equipped with a degrading agent which dissolves or erases ink. Thus, in the event of unauthorised interference with the security container 10, the degrading agent can be dispensed onto the documents, causing some or all of the ink used to print the documents to be dissolved or erased, thereby rendering the documents illegible.

Claims

1. Apparatus (10) for storing or transporting a valuable item, the apparatus (10) comprising a compartment (18) for receiving an item to be stored or transported, a detection system (26) which is operative to detect interference with the apparatus (10) and a dispensing mechanism (60) comprising first and second dispensing means (74, 76), **characterised in that** the dispensing mechanism (60) is operative, on detection of interference with the apparatus (10), to dispense a first part of a degrading agent through one of the dispensing means (74, 76) onto the item and to dispense a second part of the degrading agent through the other of the dispensing means (76, 74) onto the item such that the first and second parts of

the degrading agent mix with each other on the item and render the item unusable.

2. Apparatus according to claim 1 wherein the degrading agent comprises a two-part resin having a first part and a second part which are dispensed through the first and second dispensing means respectively. 5
3. Apparatus according to claim 2 wherein the two-part resin comprises an epoxy resin. 10
4. Apparatus according to claim 2 wherein the two-part resin comprises a polyurethane resin.
5. Apparatus according to any one of claims 2 to 4 wherein the first and second parts of the two-part resin are of a low viscosity so as to facilitate penetration of the item by the first and second parts of the two-part resin. 15
6. Apparatus according to any one of claims 2 to 5 wherein one or both of the first and second parts of the two-part resin comprises a fast-acting bonding agent. 20
7. Apparatus according to claim 6 wherein the fast-acting bonding agent comprises a cyanoacrylate-based glue. 25
8. Apparatus according to any one of claims 2 to 7 wherein the first part of the two-part resin comprises a priming agent, and the second part of the two-part resin comprises an activation agent. 30
9. Apparatus according to any one of the preceding claims wherein the valuable item comprises a bank note. 35
10. A method of degrading an item contained within an apparatus (10), the method comprising detecting interference with the apparatus (10), **characterised in that** the method comprises dispensing a first part of a degrading agent onto the item through a first dispensing means (74) and dispensing a second part of the degrading agent onto the item through a second dispensing means (76) such that the first and second parts of the degrading agent mix with each other on the item and render the item unusable. 40 45
11. A method according to claim 10 wherein the degrading agent comprises a two-part resin having a first part and a second part which are dispensed through the first and second dispensing means respectively. 50
12. A method according to claim 11 wherein the two-part resin comprises an epoxy resin. 55
13. A method according to claim 11 wherein the two-part

resin comprises a polyurethane resin.

14. A method according to any one of claims 11 to 13 wherein the first and second parts of the two-part resin are of a low viscosity so as to facilitate penetration of the item by the first and second parts of the two-part resin.
15. A method according to any one of claims 11 to 14 wherein one or both of the first and second parts of the two-part resin comprises a fast-acting bonding agent.
16. A method according to claim 15 wherein the fast-acting bonding agent comprises a cyanoacrylate-based glue.
17. A method according to any one of claims 11 to 16 wherein the first part of the two-part resin comprises a priming agent, and the second part of the two-part resin comprises an activation agent.
18. A method according to any one of claims 10 to 17 wherein the valuable item comprises a bank note.

Patentansprüche

1. Vorrichtung (10) zum Lagern oder Transportieren eines Wertgegenstandes, wobei die Vorrichtung (10) ein Fach (18) zur Aufnahme eines Gegenstandes, um diesen zu lagern oder zu transportieren, ein Detektionssystem (26), welches dazu dient, einen Eingriff in die Vorrichtung (10) zu detektieren, und einen eine erste und eine zweite Abgabeeinrichtung (74, 76) umfassenden Abgabemechanismus (60) umfasst, **dadurch gekennzeichnet, dass** der Abgabemechanismus (60) dazu dient, bei Detektion eines Eingriffs in die Vorrichtung (10) einen ersten Teil eines Abwertungsmittels aus einem der Abgabeeinrichtungen (74, 76) auf den Gegenstand abzugeben und einen zweiten Teil eines Abwertungsmittels aus dem anderen der Abgabeeinrichtungen (74, 76) auf den Gegenstand abzugeben, so dass der erste und zweite Teil der Abwertungsmittel sich auf dem Gegenstand miteinander mischen und den Gegenstand unbenutzbar machen.
2. Vorrichtung nach Anspruch 1, wobei das Abwertungsmittel ein zweiteiliges Harz mit einem ersten Teil und einen zweiten Teil umfasst, welche durch die erste beziehungsweise die zweite Abgabeeinrichtung abgegeben werden.
3. Vorrichtung nach Anspruch 2, wobei das zweiteilige Harz Epoxidharz umfasst.
4. Vorrichtung nach Anspruch 2, wobei das zweiteilige

Harz Polyurethanharz umfasst.

5. Vorrichtung nach einem der Ansprüche 2 bis 4, wobei der erste und zweite Teil des zweiteiligen Harzes niedrigviskos sind, um das Eindringen des ersten und zweiten Teils des zweiteiligen Harzes in den Gegenstand zu erleichtern. 5
6. Vorrichtung nach einem der Ansprüche 2 bis 5, wobei eines oder beide der ersten und zweiten Teile des zweiteiligen Harzes ein schnell wirkendes Bindemittel umfasst. 10
7. Vorrichtung nach Anspruch 6, wobei das schnell wirkende Bindemittel einen Klebstoff auf Cyanoacrylatbasis umfasst. 15
8. Vorrichtung nach einem der Ansprüche 2 bis 7, wobei der erste Teil des zweiteiligen Harzes einen Haftvermittler umfasst, und der zweite Teil des zweiteiligen Harzes ein Aktivierungsmittel umfasst. 20
9. Vorrichtung nach einem der vorhergehenden Ansprüche, wobei der Wertgegenstand eine Banknote umfasst. 25
10. Ein Verfahren zur Abwertung eines Gegenstandes, der in einer Vorrichtung (10) enthalten ist, wobei das Verfahren die Detektion eines Eingriffs in die Vorrichtung (10) umfasst, **dadurch gekennzeichnet, dass** das Verfahren die Abgabe eines ersten Teils eines Abwertungsmittels auf den Gegenstand aus einer ersten Abgabeeinrichtung (74) und die Abgabe eines zweiten Teils des Abwertungsmittels auf den Gegenstand aus einer zweiten Abgabeeinrichtung (76) umfasst, so dass der erste und zweite Teil des Abwertungsmittels sich auf dem Gegenstand miteinander mischen und den Gegenstand unbenutzbar machen. 30 35
11. Verfahren nach Anspruch 10, wobei das Abwertungsmittel ein zweiteiliges Harz mit einem ersten Teil und einen zweiten Teil umfasst, welche durch die erste beziehungsweise die zweite Abgabeeinrichtung abgegeben werden. 40
12. Verfahren nach Anspruch 11, wobei das zweiteilige Harz Epoxidharz umfasst. 45
13. Verfahren nach Anspruch 11, wobei das zweiteilige Harz Polyurethanharz umfasst. 50
14. Verfahren nach einem der Ansprüche 11 bis 13, wobei der erste und zweite Teil des zweiteiligen Harzes niedrigviskos sind, um das Eindringen des ersten und zweiten Teils des zweiteiligen Harzes in den Gegenstand zu erleichtern. 55

15. Verfahren nach einem der Ansprüche 11 bis 14, wobei eines oder beide der ersten und zweiten Teile des zweiteiligen Harzes ein schnell wirkendes Bindemittel umfasst.

16. Verfahren nach Anspruch 15, wobei das schnell wirkende Bindemittel einen Klebstoff auf Cyanoacrylatbasis umfasst.

17. Verfahren nach einem der Ansprüche 11 bis 16, wobei der erste Teil des zweiteiligen Harzes einen Haftvermittler umfasst, und der zweite Teil des zweiteiligen Harzes ein Aktivierungsmittel umfasst.

18. Verfahren nach einem der Ansprüche 10 bis 17, wobei der Wertgegenstand eine Banknote umfasst.

Revendications

1. Appareil (10) pour stocker ou transporter un objet de valeur, l'appareil (10) comprenant un compartiment (18) pour recevoir un objet à stocker ou à transporter, un système de détection (26) qui permet de détecter des interférences avec l'appareil (10) et un mécanisme de distribution (60) comprenant des premier et second moyens de distribution (74, 76), **caractérisé en ce que** le mécanisme de distribution (60) permet, lors de la détection d'interférences avec l'appareil (10), de distribuer une première partie d'un agent de dégradation à travers un des moyens de distribution (74, 76) sur l'objet et de distribuer une seconde partie de l'agent de dégradation à travers l'autre des moyens de distribution (76, 74) sur l'objet de sorte que les première et seconde parties de l'agent de dégradation se mélangent l'une à l'autre sur l'objet et rendent l'objet inutilisable.
2. Appareil selon la revendication 1, dans lequel l'agent de dégradation comprend une résine en deux parties ayant une première partie et une seconde partie qui sont distribuées à travers les premier et second moyens de distribution respectivement.
3. Appareil selon la revendication 2, dans lequel la résine en deux parties comprend une résine époxy.
4. Appareil selon la revendication 2, dans lequel la résine en deux parties comprend une résine polyuréthane.
5. Appareil selon l'une quelconque des revendications 2 à 4, dans lequel les première et seconde parties de la résine en deux parties sont d'une faible viscosité de manière à faciliter la pénétration de l'objet par les première et seconde parties de la résine en deux parties.

6. Appareil selon l'une quelconque des revendications 2 à 5, dans lequel l'une ou l'une et l'autre des première et seconde parties de la résine en deux parties comprennent un liant à action rapide.
7. Appareil selon la revendication 6, dans lequel le liant à action rapide comprend une colle à base de cyanoacrylate.
8. Appareil selon l'une quelconque des revendications 2 à 7, dans lequel la première partie de la résine en deux parties comprend un agent d'amorçage, et la seconde partie de la résine en deux parties comprend un agent d'activation.
9. Appareil selon l'une quelconque des revendications précédentes, dans lequel l'objet de valeur comprend un billet de banque.
10. Procédé de dégradation d'un objet contenu à l'intérieur d'un appareil (10), le procédé comprenant la détection d'interférences avec l'appareil (10), **caractérisé en ce que** le procédé comprend la distribution d'une première partie d'un agent de dégradation sur l'objet à travers un premier moyen de distribution (74) et la distribution d'une seconde partie de l'agent de dégradation sur l'objet à travers un second moyen de distribution (76) de sorte que les première et seconde parties de l'agent de dégradation se mélangent l'une à l'autre sur l'objet et rendent l'objet inutilisable.
11. Procédé selon la revendication 10, dans lequel l'agent de dégradation comprend une résine en deux parties ayant une première partie et une seconde partie qui sont distribuées à travers les premier et second moyens de distribution respectivement.
12. Procédé selon la revendication 11, dans lequel la résine en deux parties comprend une résine époxy.
13. Procédé selon la revendication 11, dans lequel la résine en deux parties comprend une résine polyuréthane.
14. Procédé selon l'une quelconque des revendications 11 à 13, dans lequel les première et seconde parties de la résine en deux parties sont d'une faible viscosité de manière à faciliter la pénétration de l'objet par les première et seconde parties de la résine en deux parties.
15. Procédé selon l'une quelconque des revendications 11 à 14, dans lequel l'une ou l'une et l'autre des première et seconde parties de la résine en deux parties comprennent un liant à action rapide.
16. Procédé selon la revendication 15, dans lequel le
- liant à action rapide comprend une colle à base de cyanoacrylate.
17. Procédé selon l'une quelconque des revendications 11 à 16, dans lequel la première partie de la résine en deux parties comprend un agent d'amorçage, et la seconde partie de la résine en deux parties comprend un agent d'activation.
18. Procédé selon l'une quelconque des revendications 10 à 17, dans lequel l'objet de valeur comprend un billet de banque.

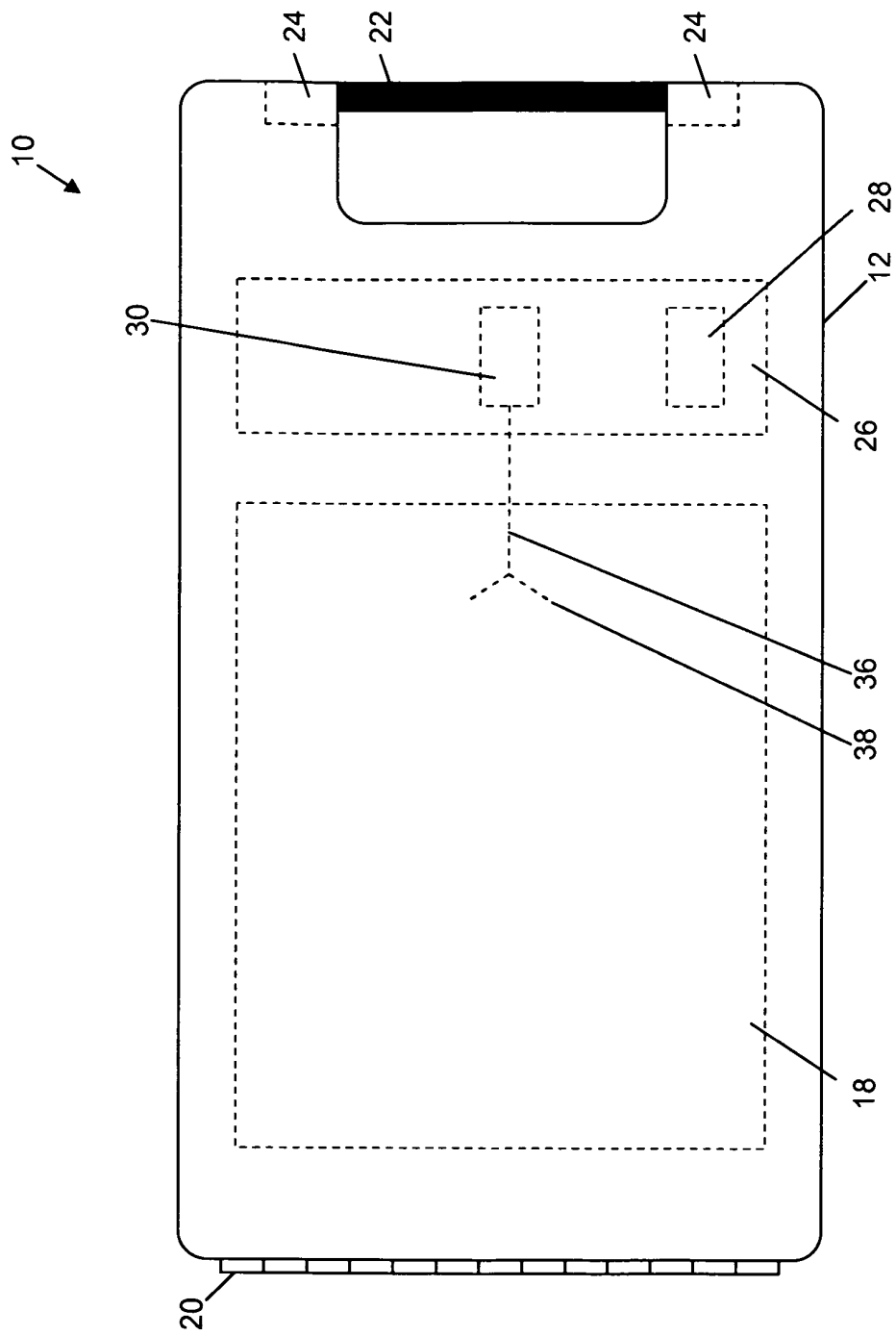


Figure 1

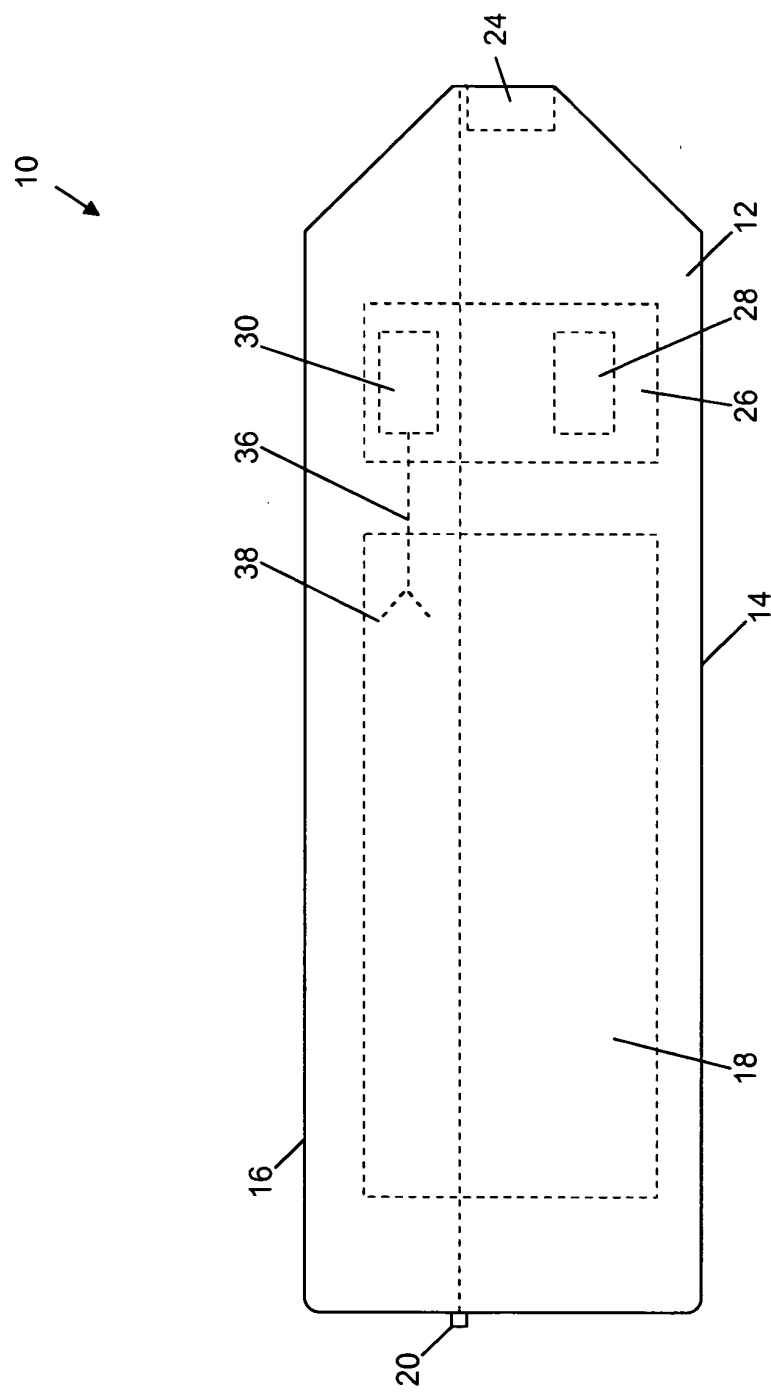


Figure 2

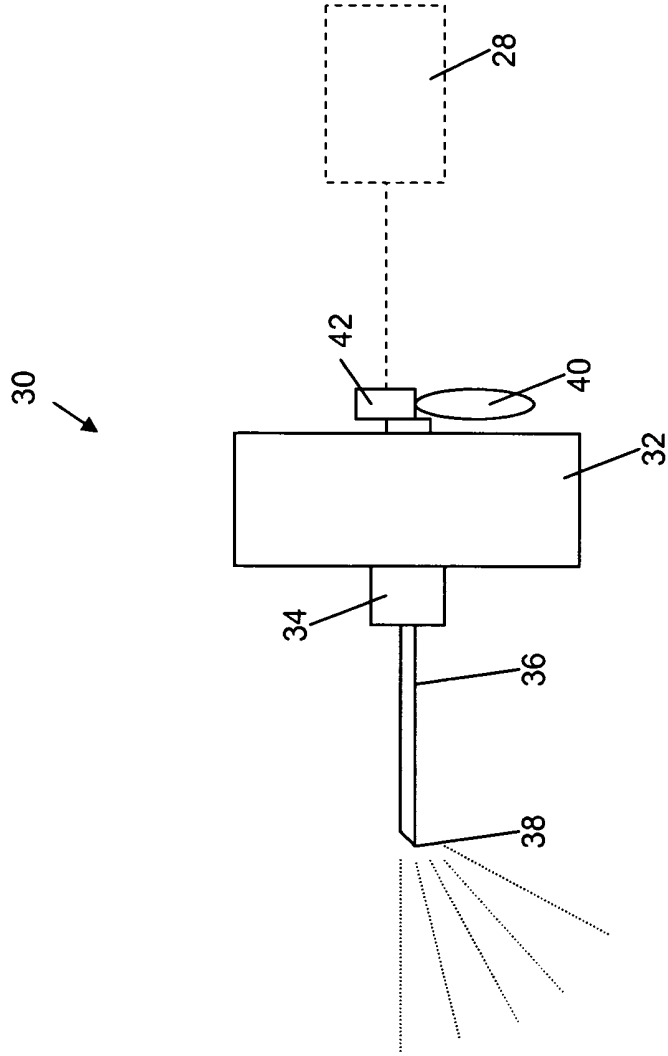


Figure 3

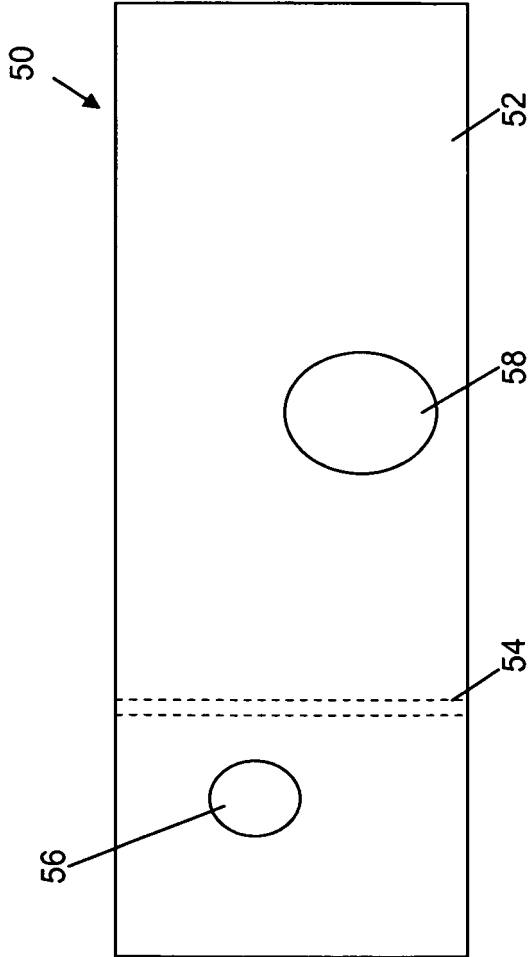


Figure 4

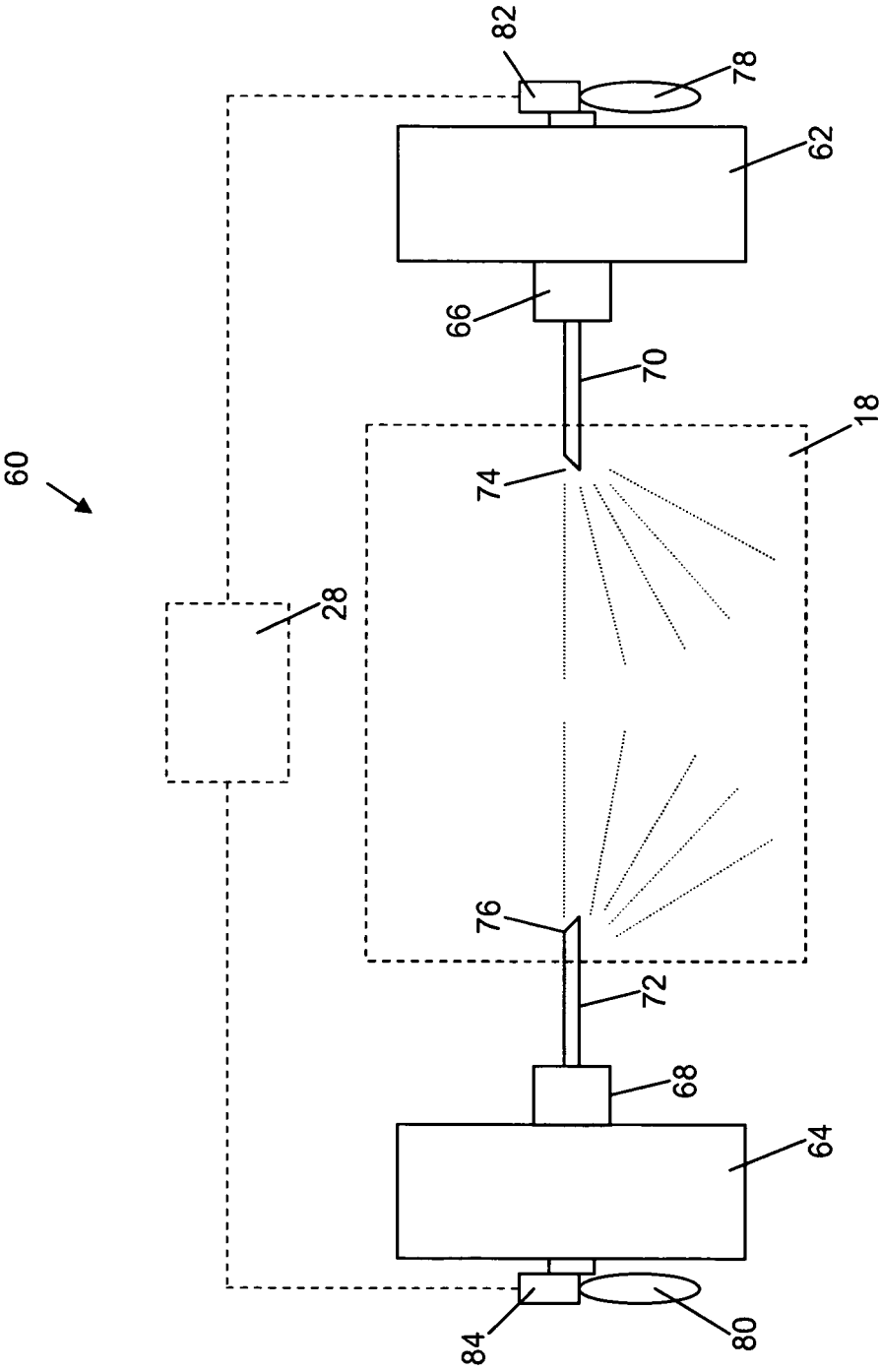


Figure 5

REFERENCES CITED IN THE DESCRIPTION

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