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(54) Rapid system for attaching personalization elements to objects designed for this purpose

(57) The object (3) to be personalized comprises incorporated therein a magnet (5) suitable to retain at least one ferromagnetic plate (9) which can be provided with personalization elements, such as marks or the like.

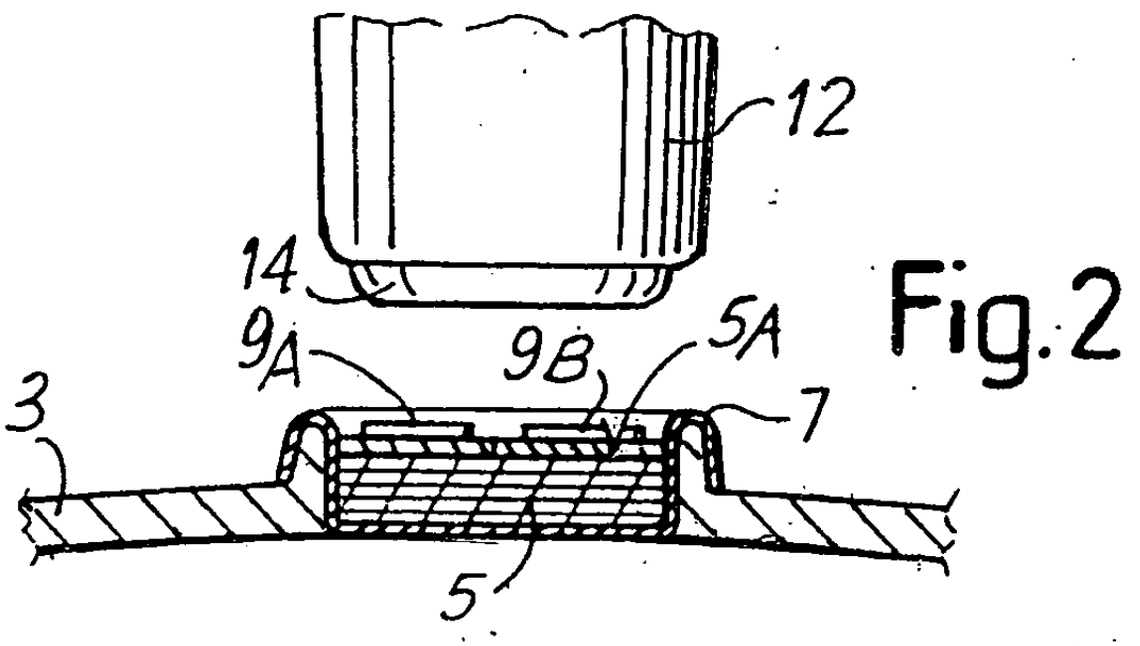

Fig.2

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Description

[0001] Various objects, especially personal objects or objects for personal use, such as writing instruments (such as fountain pens, ball point pens, propelling pencils and the like), bracelets, pendants, rings, brooches, pocket and wrist watches, costume jewelry in general, buttons, cufflinks, leather or hide articles such as ladies bags and briefcases, wallets and the like, especially when they are particularly prestigious and expensive, would be more appreciable if "personalized" in some way - using a mark, a symbol, a date, or the like - on specific request by the purchaser for the person for whom an object is intended. Personalization can be constituted by initials, a company logo, a trademark, a horoscope, a year or a date, or the like.

[0002] This "personalization" - on request by the purchaser - cannot be provided in advance on the object, owing to the enormous variety of requests, and therefore the object must either be provided with the requested details extemporaneously or with an operation to be performed in the shortest possible time, and also or in any case with the lowest costs possible.

[0003] According to the invention, this can be obtained, in an extremely rapid, easy and inexpensive way, with a practically instantaneous operation.

[0004] These and other objects and advantages shall be apparent from the text hereunder.

[0005] According to the invention, the object to be personalized comprises incorporated therein a magnet suitable to retain at least one ferromagnetic plate which can be provided with personalization elements of the instrument.

[0006] For selection in accordance with requests, a plurality of ferromagnetic plates must be available, with symbols which can also easily be arranged together, to choose and attach extemporaneously to an object to be personalized which will be provided with the aforesaid magnet.

[0007] Advantageously, the active surface of the magnet can be surrounded by a side or edge which projects beyond the thickness of the plate or plates to be retained. This prevents accidental detachment of the plate or plates retained magnetically, irrespective of the stresses to which they are subjected.

[0008] The active surface of the magnet is preferably suitable to retain at least two contiguous plate elements, which can be combined to easily produce a personalization. It is therefore easier to supply plate elements equipped with alphabetic or numeric components or the like, by means of which personalization marks can easily be composed with two or more alphanumeric symbols or the like, such as the date of a wedding or birth.

[0009] The invention also relates to an implement to be used to attach the plate or plates to the magnet and/or to detach the plate or plates from the magnet incorporated in the object to be personalized. Said implement comprises an appendix with an operating magnet capable of a stronger or weaker action than the action exerted by the magnet incorporated in the object. This facilitates attachment of the mark to the object, and respectively detachment of a previously attached mark. The same implement can be equipped with both the aforesaid operating magnets.

[0010] The invention shall be better understood by following the description and accompanying drawing, which shows a practical non-limiting example of said finding. In the drawing:

Figure 1 shows a wrist watch;
Figure 2 is an enlarged detail of the area indicated by the arrow f2in Figure 1;
Figure 3 shows an operating method to attach and/or detach a personalization element;
Figures 4A, 4B and 5 show a pair of and a set of three personalization elements in the form of juxtaposable plates, separate and mounted in the seat which contains the magnet;
Figures 6 to 18 show other schematic examples of possible applications of the system according to the invention;
Figure 19 shows a fountain pen, in particular in the example a side view of a fountain pen, partly sectioned to show the presence of a magnet;
Figure 20 is a view along the line XX-XX in Figure 19;
Figure 21 is an enlarged detail of Figure 19;
Figure 22 shows an operating method to attach and/or detach a personalization element; and
Figure 23 shows a pair of personalization elements in the form of juxtaposable plates.

[0011] According to the accompanying drawing (Figures 1 and 2), an object such as a wrist watch is shown, with the body of the watch indicated with 1 and the strap for attachment thereof indicated with 3.

Figures 1, 4A and 5 show pairs of components 9A, 9B juxtaposable to form a personalization element.
Figure 4B shows a set of three components 10A, 10B, 10C juxtaposable to form another possible personalization element.
Figures 6 to 18 show further applications of analogous personalization elements, attached to other objects.
In Figure 6 a personalization element 19 is attached to a zipper slider;
in Figure 7 a personalization element 29 is attached to a belt;
in Figure 8 a personalization element 39 is attached to a button;
in Figure 9 a personalization element 49 is attached to a bracelet;
in Figure 10 personalization elements 59A, 59B are attached to components of a bracelet;
in Figure 11 a personalization element 69 is at-

tached to a lighter;
in Figure 12 a personalization element 79 is attached to a key-ring;
in Figure 13 personalization elements 89A, 89B are attached to a bag and/or to a closure thereof;
in Figure 14 a personalization element 99 is attached to a tiepin or dress pin;
in Figures 15 and 16 personalization elements 109 and 110 are attached to cutlery;
in Figure 17 a personalization element 111 is attached to a cup or to a jug;
in Figure 18 a personalization element 112 is attached to a lamp base.

[0012] A permanent magnet 5 is attached in a suitable - and easily visible - position of each of the objects indicated. This magnet is surrounded (see in particular Figures 2 and 3) by a side or by an edge 7, in respect of which the active surface 5A of the magnet 7 is limitedly recessed. The magnet can have any geometric or non-geometric form, in accordance with required function, available space and desired appearance.

[0013] A personalization element, constituted by one or more thin plates such as those numbered from 9 to 112, in ferromagnetic material, is attached to the surface 5A. Two or more plate components in ferromagnetic material are complementary, so as to complete a surface corresponding to the surface 5A of the magnet; the thickness of the plates is limitedly lower than the projection of the edge or side 7 in respect of the surface 5A.

[0014] By positioning the plate element or elements like those 9 - and/or those 10 and/or those from 19 to 112 - on the surface 5A of the magnet, direct attachment of these elements to the surface 5A of the magnet 5 is achieved. Attachment is sufficiently strong to prevent the plate elements from detaching spontaneously from the surface 5A of the magnet, even if the area in which the magnet 5 is located is subjected to stresses during use.

[0015] Mutually complementary components of plate elements 9 can each have a symbol such as those 9A, 9B, so that by combining two or more plate elements complementary with one another a personalization symbol is created, for example formed of the initials of the first name and/or last name of the person for whom the object is intended, or of a date, or other desired element. It is possible to supply the seller with a set of symbols relatively limited in number but nonetheless sufficient to provide symbols which can be combined, for the aforesaid purpose, without the need for a much larger stock, which would instead be required if a different plate were to be provided containing each one of the symbols to be attached to the surface 5A of the magnet. The complementary shape for combining two or more plate elements - such as the ones shown at 9 or others - guarantees correct positioning of the components of the set to be attached to the magnet. The useful surface of the magnet can have a regular geometric form. It would also be possible to create a form of personalization which, for example, could comprise three or more plate elements - such as the ones 10A, 10B, 10C in Figure 4B - which together cover the useful surface 5A of the magnet.

[0016] The magnet can be one or can also be formed by two or more magnets, contiguous or even at a limited distance from one another.

[0017] As the thickness of the plate elements is lower than the projection of the edge or side 7, there is no risk of accidental detachment of the elements attached to the magnet.

[0018] Attachment - and optionally also detachment of the plate elements - can be easily obtained with an implement which at one end has at least one projecting magnet on which one or two elements such as the ones 9 can be attached temporarily for handling thereof. In particular, with an implement such as the one indicated with 12 in Figure 3, provided at one end with a magnet 14 which can be weaker than the magnet 5, the magnet 14 can hold the element or the two or more elements 9 to be attached to the surface 5A of the magnet 5, which has a stronger force than the magnet 14; by placing the end of the implement 12 on the magnet 5, the element or elements 9 are attracted by the surface 5A of the magnet 5, where they remain attached.

[0019] Another implement or the same implement 12 can also be utilized to detach from the surface 5A elements attached thereto, by providing at one end - or at the opposite end to the one provided with the magnet 14 - a magnet 16 which is more powerful than the magnet 5, so that by placing this magnet 16 against the ferromagnetic elements 9, they can be detached from the surface 5A to which they were fixed. This allows personalization elements attached to the magnet 5 of an object to be personalized to be replaced.

[0020] An implement of the aforesaid type can be available to the final seller, to allow easy attachment, detachment and, if necessary, replacement of a personalization mark on an object provided with a magnet.

[0021] The above implement can be provided with an electromagnet - rather than a magnet - the energization of which can be controlled and also regulated in intensity.

[0022] Figures 19 to 23 show the application of the invention to a writing instrument which (in this example) is a fountain pen. Number 201 indicates the body and number 203 indicates the cap of the pen to protect the nib or the like. A permanent magnet 205 is contained at one end of a stylus such as the one shown, and according to the drawing at the end defined by the cap 203. This magnet is surrounded by an edge 207, in respect of which the active surface 205A of the magnet 207 is limitedly recessed.

[0023] Attached to the surface 205A is a personalization element, constituted by a thin plate made of ferromagnetic material or by a pair of plates made of ferromagnetic material, as indicated with 209, which are

complementary with each other so as to complete a surface corresponding to the surface 205A of the magnet. The thickness of the plates is somewhat lower than the projection of the edge 7 in respect of the surface 205A.

[0024] By positioning the element or elements 209 on the surface 205A, direct attachment of these elements to the surface 205A of the magnet 205 is determined, said attachment being sufficiently strong to prevent the plate elements 209 from detaching spontaneously from the surface 205A of the magnet, even if the area of the end of the stylus in which the magnet 205 is contained is subjected to stresses during use.

[0025] The plate elements 209 complementary with each other can each have a symbol 209A, so that by combining two plate elements such as the ones 209 shown in Figure 23 a personalization symbol is created, for example formed of the initials of the first and last name of the person for whom the stylus is intended. With this system it is possible to supply the seller with a set of symbols relatively limited in number but nonetheless sufficient to provide symbols which can be combined, for the aforesaid purpose, without the need for a much larger stock, which would instead be required if a single plate were to be provided with two symbols to be attached to the surface 5A of the magnet. The complementary shape for combining the two plate elements 209 guarantees correct positioning of the two components of the set to be attached to the magnet. It would also be possible to create a form of personalization that, for example, could comprise three plate elements, which together cover the surface 205A of the magnet. As the thickness of the plate elements 209 is lower than the projection of the edge 207, there is no risk of accidental detachment of the elements attached to the magnet.

[0026] Attachment and detachment of the plate elements can be easily obtained with an implement 212, similar to the implement 12 shown in Fig.3, with one or two magnets 214 and 216 at the ends thereof. Such implement is shown in Figure 22, with a pair of plate elements 209 attached to the end magnet 214, ready for attachment to a pen 203. As disclosed with reference to Figure 3, magnet 214 can be weaker than magnet 205, while magnet 216 can be stronger, for the purposes discussed above.

[0027] It is understood that the drawing only shows an embodiment, provided purely as a practical example of the invention, and that said invention may vary in forms and arrangements without however departing from the scope of the concept on which it is based. Any reference numerals in the appended claims are provided purely for the purpose of facilitating reading of the claims with reference to the description and to the drawing, and do not limit the scope of protection represented by the claims.

Claims

1. Rapid system for attaching personalization elements on an object, such as a bracelet, a pendant, a ring, a brooch, a pocket watch or wrist watch, buttons, cufflinks, costume jewelry in general, leather or hide articles such as ladies bags and briefcases, wallets and the like, **characterized by** comprising, incorporated in the object, at least one magnet (5) suitable to retain at least one ferromagnetic plate (9) which can be provided with personalization elements.

2. System as claimed in claim 1, **characterized in that** the active surface (5A) of the magnet (5) is surrounded by a side or edge (7) which projects beyond the thickness of the plate or plates (9) retained by the magnet.

3. System as claimed in claim 1 or 2, **characterized in that** the active surface (5A) of the magnet (5) is suitable to retain at least two contiguous plate elements complementary with each other, which when combined produce a personalization.

4. System as claimed in at least one of the previous claims, **characterized in that** the magnet is formed of more than one magnetic component, contiguous to or distanced from one another.

5. A writing instrument - such as a fountain pen, a ballpoint pen, a propelling pencil or the like - comprising incorporated therein a magnet (205) suitable to retain at least one ferromagnetic plate (209) which can be provided with personalization elements of said instrument.

6. Instrument as claimed in claim 5, wherein said magnet (205) is contained at one end of the body (1) or of the closing cap (203) of the instrument.

7. Instrument as claimed in claim 5 or 6, wherein the active surface (205A) of the magnet (205) is surrounded by an edge (207), which projects beyond the thickness of the plate (209).

8. Instrument as claimed in at least one of claims 5 to 7, wherein the active surface (5A) of the magnet (205) is suitable to retain two contiguous plate elements (209), which when combined produce a personalization.

9. An implement to be used to attach one or more plate elements (9; 209) to the magnet (5; 205) as claimed in at least one of the previous claims, **characterized in that** it comprises at least one appendix with a magnet (14; 214) capable of a weaker action than the action exerted by the magnet (5; 205) incorpo-

rated in the object to be personalized.

10. An implement to be used to detach from the magnet (5; 205) as claimed in at least one of claims 1 to 8, the plate element or elements attached thereto, **characterized in that** it comprises at least one appendix with a magnet capable of a stronger action than the action exerted by the magnet incorporated in the object to be personalized; said implement can be the same one as claimed in claim 9.

11. Implement as claimed in claim 9 or 10, **characterized in that** the magnet with which said implement is provided is an electromagnet which can be controlled and, optionally, also regulated in intensity.

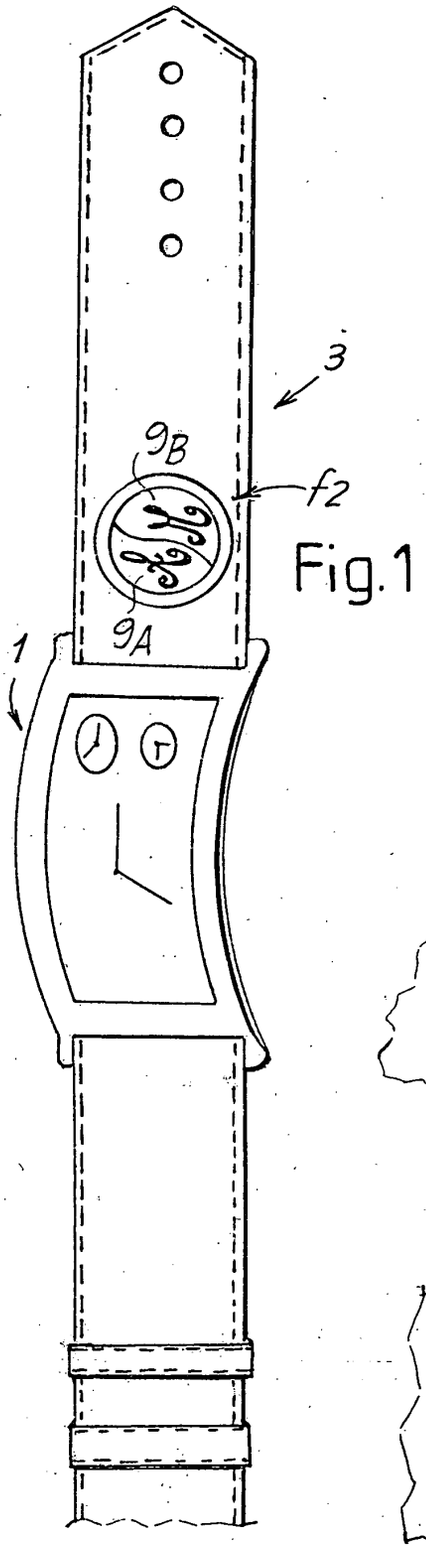

Fig.1

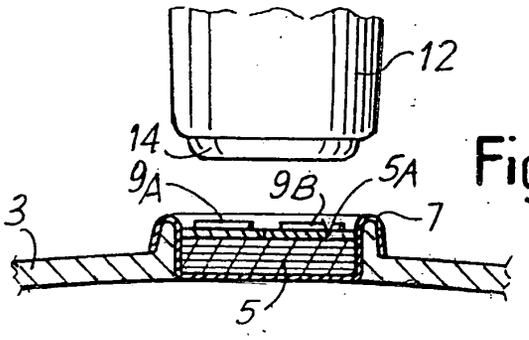

Fig.2

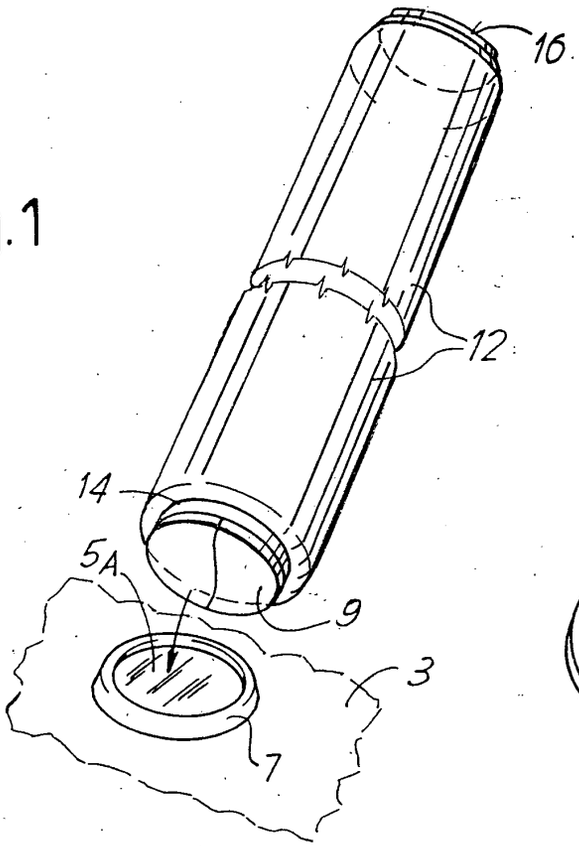

Fig.3

Fig.4A

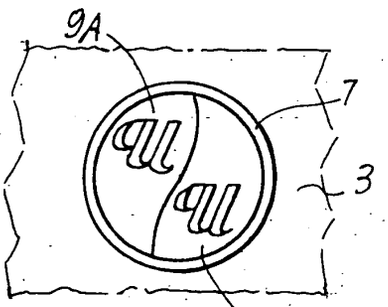

Fig.5

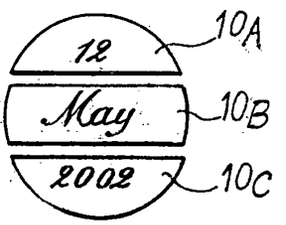

Fig.4B

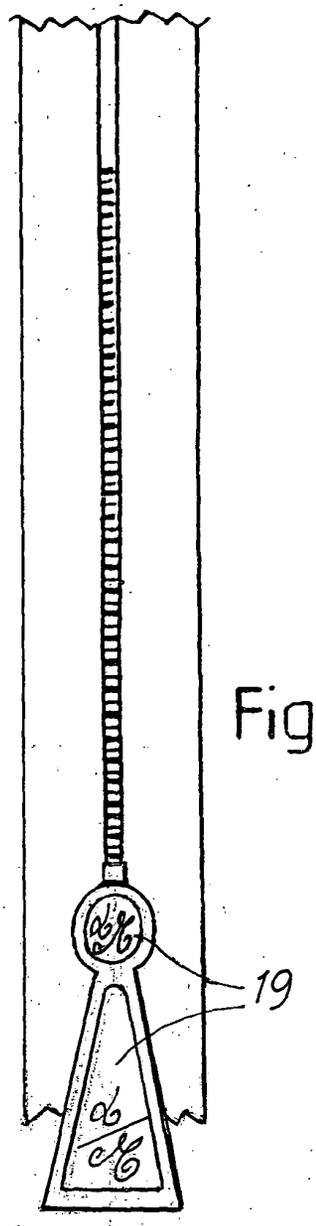

Fig.6

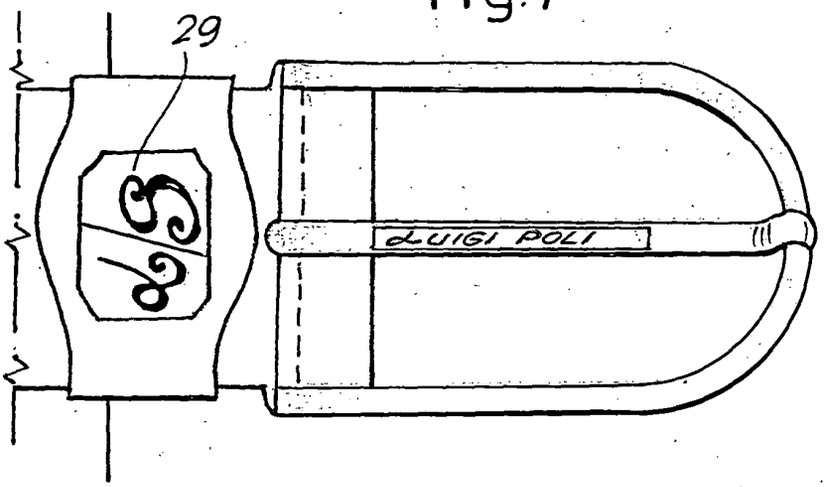

Fig.7

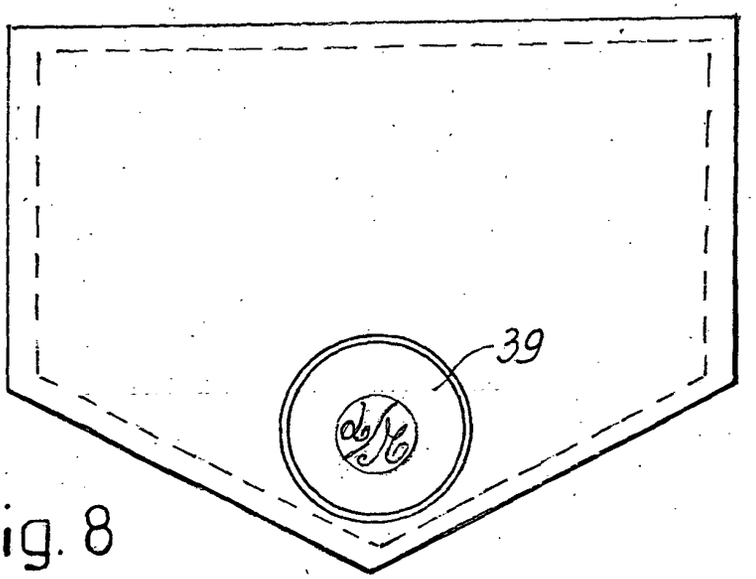

Fig. 8

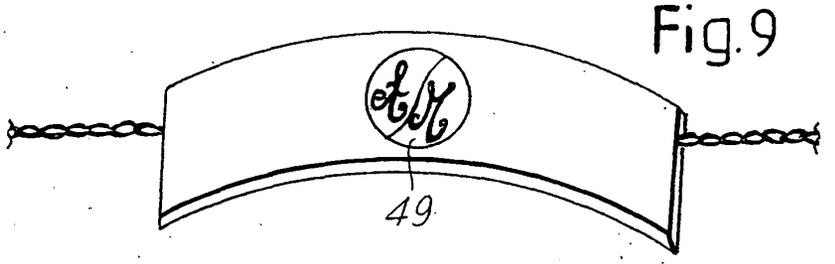

Fig.9

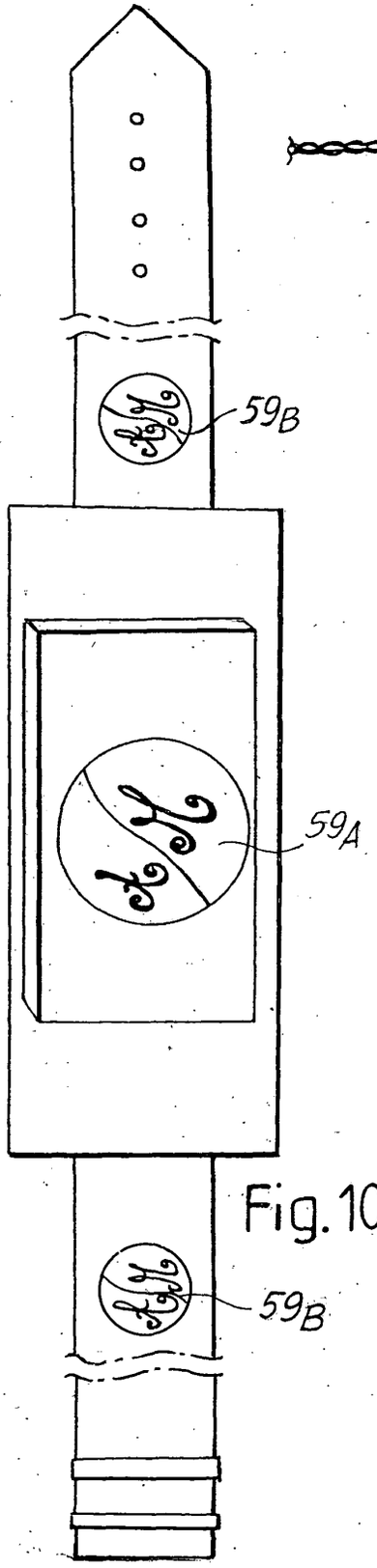

Fig.10

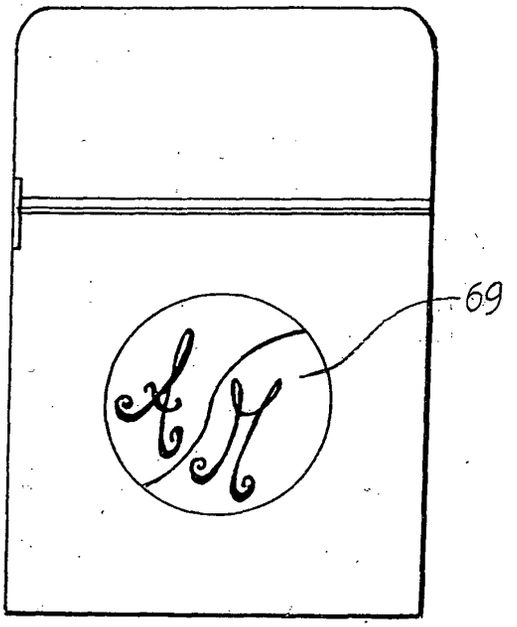

Fig.11

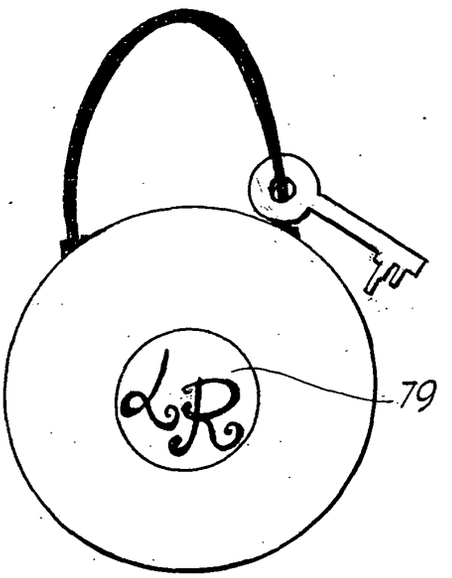

Fig.12

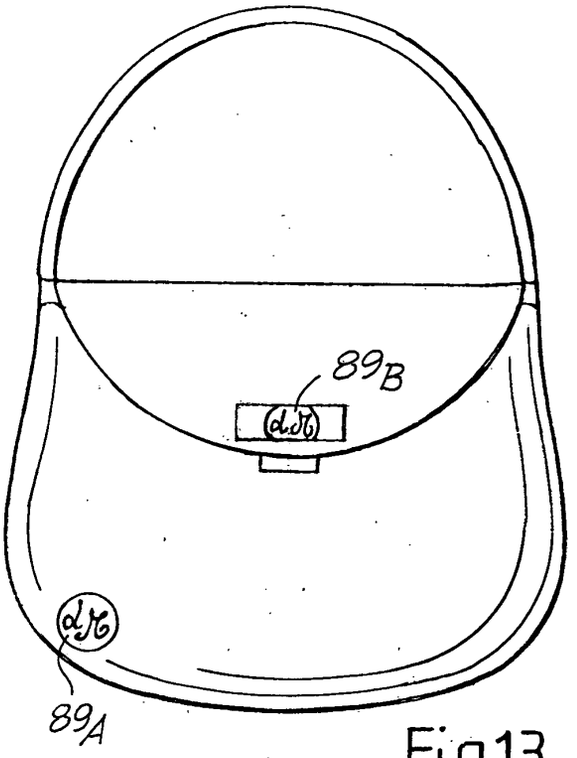

Fig.13

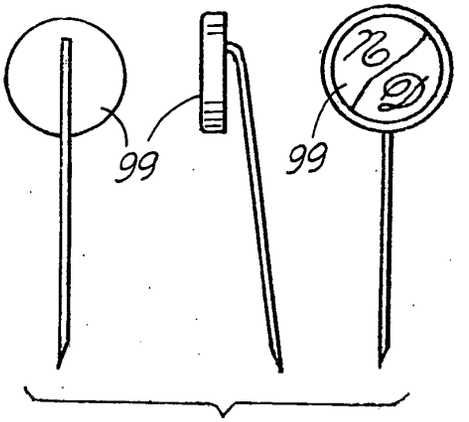

Fig.14

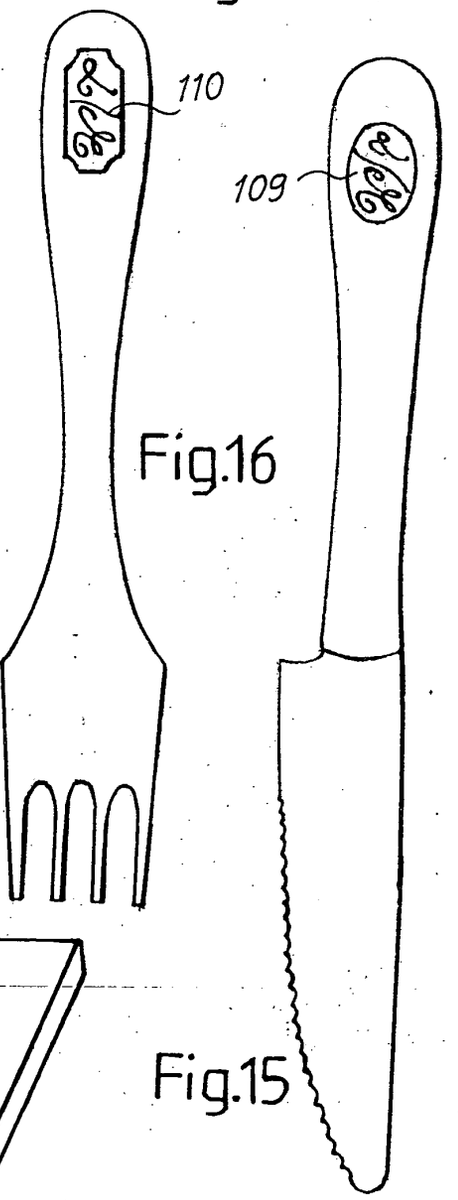

Fig.16

Fig.15

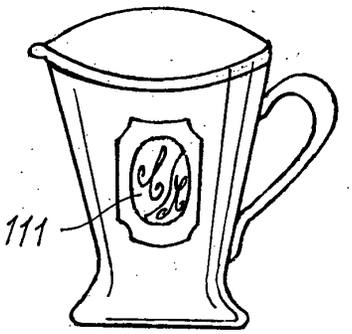

Fig 17

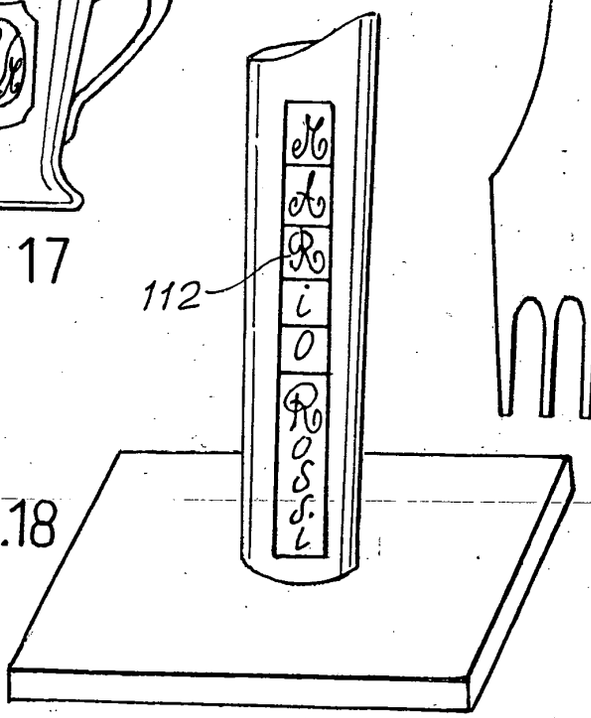

Fig.18

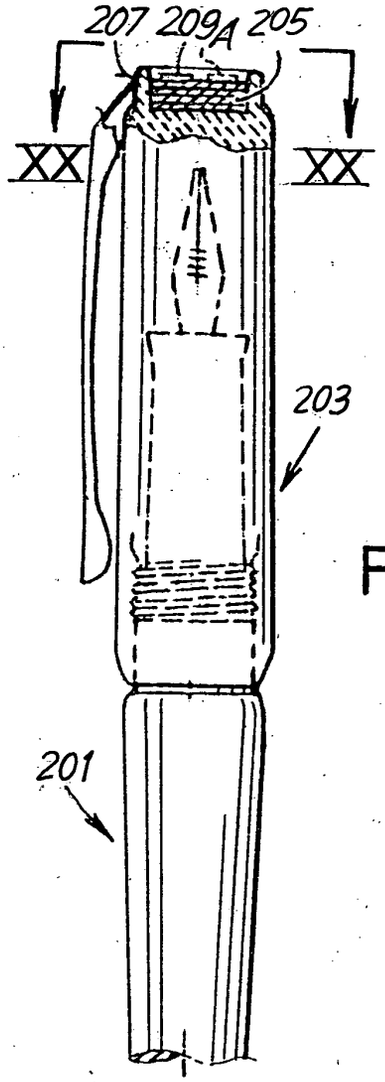

Fig.19

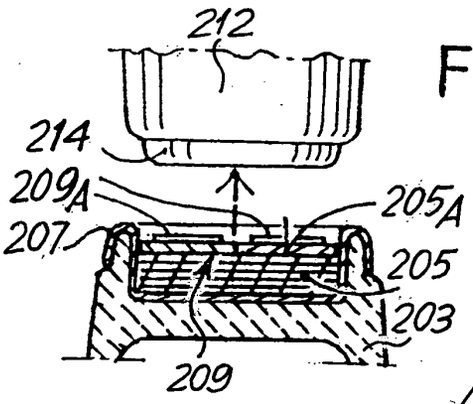

Fig.21

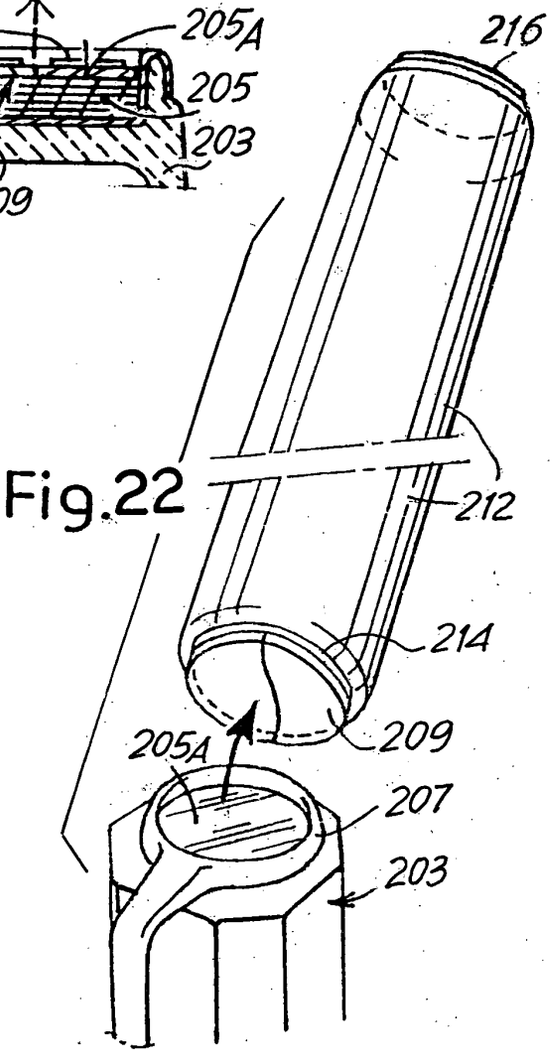

Fig.22

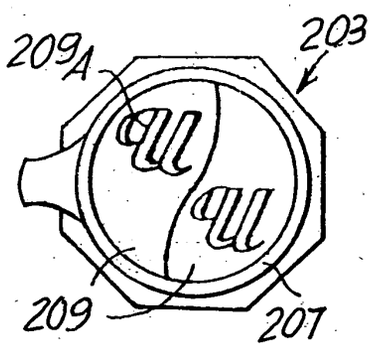

Fig.20

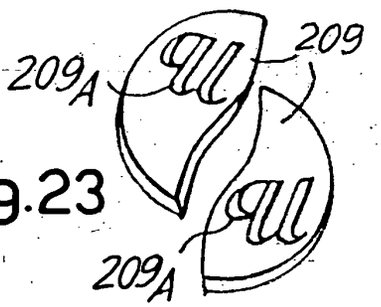

Fig.23

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 42 5085

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	US 6 363 584 B1 (GERO GEORGE ET AL) 2 April 2002 (2002-04-02) * column 1, line 66 - column 2, line 65; figures 1-5 *	1	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	22 June 2005	Horubala, T

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 42 5085

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