

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 0 918 312 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
12.03.2003 Bulletin 2003/11

(51) Int Cl.7: **G09F 3/02**

(21) Application number: **98203805.1**

(22) Date of filing: **11.11.1998**

(54) **Adhesive labels protected against forgery and method for marking and/or stamping goods and/or documents**

Fälschungsgeschützte Klebeetiketten und Verfahren zur Herstellung von Briefmarken und/oder Dokumenten

Etiquettes adhésives protégées contre la contrefaçon et méthode de fabrication des timbres et/ou des documents

(84) Designated Contracting States:
**AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE**

(30) Priority: **21.11.1997 BE 9700939**

(43) Date of publication of application:
26.05.1999 Bulletin 1999/21

(73) Proprietor: **Deckmyn, Joris
8830 Hooglede (BE)**

(72) Inventor: **Deckmyn, Joris
8830 Hooglede (BE)**

(74) Representative: **Leherte, Georges M.L.M., Dr.
K.O.B. n.v.,
Pres. Kennedypark 31c
8500 Kortrijk (BE)**

(56) References cited:
**EP-A- 0 606 699 DE-A- 2 649 424
DE-A- 3 619 466 GB-A- 2 278 098
US-A- 5 380 047**

EP 0 918 312 B1

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

Description

[0001] The use of adhesive labels for rendering goods or documents recognisable is generally known.

[0002] When utilising such adhesive labels it is for example known from the patent document DE 2649424 that sequentially numbered labels can be provided.

[0003] On the other hand it is in itself also known that adhesive labels can be protected against forgery.

In this respect reference can be made to the following patent documents: DE 3317133, JP 9068927, EP 0326091, EP 0342982, EP 0360382, EP 0726555, DE 4314579, US 5477204, US 5020831, US 5303370.

[0004] According to this invention it has now been recognised that through an as yet unconceived and furthermore not obvious combination of these two techniques a totally new approach is possible for marking and/or stamping goods and/or documents. Through this invention it is indeed possible to mark and/or stamp separate goods and/or documents in a certain manner and individually so that each object and/or each document can itself be protected.

[0005] It should be mentioned here that from the American patent 5380047 and British patent application 2278098 methods are known for authenticating goods whereby a connection is made between a numbered label to be put on to the object and a document that refers to the number on the object or a number of objects. The disadvantage of these known methods is that they do not have the versatility and flexibility of the new technique according to this invention.

[0006] The invention therefore provides new adhesive labels protected against forgery for marking and/or stamping goods and/or documents, consisting of separate foil material parts with identifying symbols and/or patterns on one side and an adhesive layer on the other side, whereby the labels are part of at least two corresponding series of separate labels each of which is individually provided with a sequential marking while the labels are each provided with means for counteracting their forgery.

[0007] The specific means which are utilised for counteracting forgery of the labels are in fact subsidiary in relation to the principal idea of the invention; any solutions can in themselves be utilised for those means as known from the state-of-the-art (with respect to that reference is hereby explicitly made to the above quoted list of references).

[0008] The labels according to the invention preferably comprise however one or more specific means, according to the following list, for counteracting forgery of the labels:

- "negative printing" of the sequential marking; by "negative printing" in this context is understood the printing of inkless ("white") symbols or patterns (namely the sequential marking) on a coloured background;

- a transparent foil material for the labels of which a part is unprinted, so that a part of the labels (namely the sequential marking) is kept transparent;
- perforations and/or slits which cause the tearing/disintegration of the label in case of loosening of the adhesive label;
- the identifying symbols and/or patterns of the labels are at least partly printed with metallic inks and/or dyes;
- the identifying symbols and/or patterns of the labels are at least partly printed with characteristic/reserved coloured inks, toners and/or dyes intended for digital printing presses. Such "proprietary" inks/toners are sold by the company INDIGO Ltd., namely for the digital printing press system of the Eprint 1000 type.

[0009] Each of the specific means according to that list should in itself be considered as a separate preferred embodiment of the invention:

the invention does therefore not imply that all these means are present simultaneously. Hence for example also included in the scope of the invention are:

- labels which are not printed on a transparent support, but more specifically on a white support, or
- labels which are printed with a unique ("proprietary") ink/toner which is not based on metallic colours, as that is the case with most of the ink toners from the company INDIGO.

[0010] According to alternative and/or additional preferred characteristics of the invention:

- the sequential marking of the separate labels can be printed with a programmed digital printing press; and/or
- the sequential marking of the separate labels can consist of a sequential numbering; and/or
- the adhesion layer of the adhesive labels can consist of an adhesive layer; and/or
- the adhesion layer can consist of an adhesive layer with an adhesive which is suitable for adhesion on damp supports.

[0011] According to a further fundamental characteristic of the invention the labels are preferably destined in each case to be adhered to at least two goods and/or documents which have a connection with each other.

[0012] The invention furthermore provides a method for marking and/or stamping goods and/or documents through the application of adhesive labels, whereby labels according to the invention are used as described above.

[0013] According to this method at least two identical

series of separate labels are used, whereby the corresponding labels are in each case, preferably, adhered to at least two goods and/or documents which have a connection with each other.

[0014] A number of the characteristics and distinctive features of the invention, and the concrete application thereof are illustrated in greater detail hereafter on the basis of a specific embodiment thereof, with reference to the attached drawings. It should be noted that the specific aspects of the embodiment such as explained are only intended as a preferred example in the scope of the above general specification of the invention, and may in no way be interpreted as a restriction on the scope of the invention as such and as expressed in the following claims.

[0015] In these drawings:

figure 1 is an illustration of a series of adhesive labels according to the invention;

figures 2 up to and including 5 are in each case illustrations of a partial print of what in total print forms the adhesive labels according to figure 1.

[0016] The adhesive labels according to figure 1 are numbered in a sequential order and provided for example in four columns one next to the other and five rows one under the other on a backing foil.

[0017] The labels themselves are part of a transparent foil slit around the labels with the identifying symbols and patterns as well as sequential marking printed thereon. Figure 1 shows 20 labels in each case with one row of four labels with the same marking symbols, and four columns in each case with five sequentially numbered labels.

[0018] The symbols printed on the labels according to figure 1 consist of diverse separately printed "colours" namely gold according to figure 2, silver according to figure 3, a visible colour according to figure 4, that same visible colour plus black according to figure 5, and a number of colours that cannot be reproduced in black and white, consequently not shown. The sequential marking symbols are implemented in negative print against the gold background according to figure 2 and are thus in practice therefore transparent on the labels.

[0019] Each row of labels forms a series of four identical labels. When using the labels in each case one label is adhered to one object to be marked and/or stamped and another identical label can be adhered to one or more matching authentication documents.

[0020] The described method forms a very simple and very flexible manner for the individual user to mark objects, with a very good protection against forgery, whereby at the same time in a very simple way authentication documents can be produced that are very well protected against forgery.

Claims

1. Adhesive labels protected against forgery for marking and/or stamping goods and/or documents, consisting of separate foil material parts with identifying symbols and/or patterns on one side and an adhering layer on the other side, **characterised in that** the labels constitute at least two identical series of separate labels, each label of one series being individually provided with a sequential marking, and all labels being individually provided with means for counteracting their forgery.
2. Adhesive labels according to claim 1, all labels are provided with at least two means for counteracting their forgery, selected from the following means using "negative printing" of the sequential marking;
 - using transparent foil material for the labels of which a part is unprinted;
 - using perforations and/or slits which cause the tearing/disintegration of the label in case of loosening of the adhesive label;
 - using identifying symbols and/or patterns of the labels which are at least partly printed with metallic inks and/or dyes;
 - using identifying symbols and/or patterns of the labels which are at least partly printed with characteristic/reserved coloured inks, toners and/or dyes intended for digital printing presses.
3. Adhesive labels according to claim 1 or 2 **characterised in that** the adhering layer of the labels consists of a layer of adhesive material with an adhesive which is suitable for adhesion on damp supports.
4. Adhesive labels according to any one of the preceding claims, **characterised in that** the sequential marking of the separate labels is printed with a programmed digital printing press.
5. Adhesive labels according to any one of the preceding claims, **characterised in that** the sequential marking of the separate labels consists of a sequential numbering.
6. Adhesive labels according to any one of the preceding claims, **characterised in that** the adhering layer consists of a layer of adhesive material.
7. Adhesive labels according to any one of the preceding claims, **characterised in that** the adhering layer consists of a layer of adhesive material with an adhesive which is suitable for adhesion on damp supports.
8. Adhesive labels according to any one of the preceding

ing claims, **characterised in that** the labels are destined in each case to be adhered to at least two goods and/or documents which have a connection with each other.

9. Method for marking and/or stamping goods and/or documents through the application of adhesive labels, **characterised in that** labels are used according to any one of the claims 1 to 8.

10. Method for marking and/or stamping goods and/or documents according to claim 9, **characterised in that** the corresponding labels are in each case adhered to at least two goods and/or documents which have a connection with each other.

Patentansprüche

1. Gegen Fälschung geschützte Klebeetiketten zum Kennzeichnen und/oder Markieren bzw. Prägen von Waren und/oder Dokumenten, bestehend aus separaten Teilen aus Folienmaterial mit identifizierenden Symbolen und/oder Mustern auf einer Seite und einer Haftschrift auf der anderen Seite, **dadurch gekennzeichnet, dass** die Etiketten wenigstens zwei identische Serien aus separaten Etiketten darstellen, wobei jedes Etikett einer Serie einzeln mit einer sequentiellen Kennzeichnung versehen ist und wobei alle Etiketten einzeln mit Mitteln versehen sind, welche dazu dienen, einer Fälschung der Etiketten entgegenzuwirken.

2. Klebeetiketten nach Anspruch 1, **dadurch gekennzeichnet, dass** alle Etiketten mit wenigstens zwei, einer Fälschung der Etiketten entgegenwirkenden Mitteln versehen sind, welche aus den folgenden Mitteln ausgewählt sind:

Verwendung des "Negativdrucks" der sequentiellen Kennzeichnung;

Verwendung eines transparenten Folienmaterials für die Etiketten, von dem ein Teil unbedruckt ist;

Verwendung von Perforationen und/oder Schlitzten, welche das Zerreißen/Zerfallen des Etiketts verursachen, falls das Klebeetikett abgelöst wird;

Verwendung von identifizierenden Symbolen und/oder Mustern der Etiketten, welche wenigstens teilweise mit metallischen Tinten und/oder Farbstoffen aufgedruckt werden;

Verwendung von identifizierenden Symbolen und/oder Mustern der Etiketten, welche wenigstens teilweise mit charakteristisch/zurückhaltend gefärbten Tinten, Tonern und/oder Farbstoffen aufgedruckt werden, die für digitale Druckpressen vorgesehen sind.

3. Klebeetiketten nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Haftschrift der Etiketten aus einer Schicht aus klebendem Material mit einem für das Kleben auf feuchten Unterlagen geeigneten Kleber besteht.

4. Klebeetiketten nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die sequentielle Kennzeichnung von separaten Etiketten mit einer programmierten, digitalen Druckpresse aufgedruckt wird.

5. Klebeetiketten nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die sequentielle Kennzeichnung der separaten Etiketten aus einer sequentiellen Nummerierung besteht.

6. Klebeetiketten nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die Haftschrift aus einer Schicht aus klebendem Material besteht.

7. Klebeetiketten nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die Haftschrift aus einer Schicht aus klebendem Material mit einem für das Kleben auf feuchten Unterlagen geeigneten Kleber besteht.

8. Klebeetiketten nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die Etiketten jeweils dazu bestimmt sind, auf wenigstens zwei Waren und/oder Dokumente geklebt zu werden, zwischen denen eine Verbindung besteht.

9. Verfahren zum Kennzeichnen und/oder Markieren bzw. Prägen von Waren und/oder Dokumenten durch Anbringen von Klebeetiketten, **dadurch gekennzeichnet, dass** Etiketten gemäß einem der Ansprüche 1 bis 8 verwendet werden.

10. Verfahren zum Kennzeichnen und/oder Markieren bzw. Prägen von Waren und/oder Dokumenten nach Anspruch 9, **dadurch gekennzeichnet, dass** die korrespondierenden Etiketten jeweils auf wenigstens zwei Waren und/oder Dokumente aufgeklebt werden, zwischen denen eine Verbindung besteht.

Revendications

1. Etiquettes adhésives protégées contre la contrefaçon pour marquer et/ou timbrer des marchandises et/ou des documents, constituées de pièces de matière en feuille séparées avec des symboles et/ou des motifs d'identification d'un côté et une couche adhésive de l'autre côté, **caractérisées en ce que** les étiquettes constituent au moins deux séries

identiques d'étiquettes séparées, chaque étiquette d'une série étant individuellement pourvues d'un marquage séquentiel, et toutes les étiquettes étant individuellement pourvue de moyens pour contrecarrer leur contrefaçon.

2. Etiquettes adhésives suivant la revendication 1, **caractérisées en ce que** toutes les étiquettes sont pourvues d'au moins deux moyens pour contrecarrer leur contrefaçon, choisis parmi les moyens suivants:

utilisation d'une "impression négative" du marquage séquentiel;

utilisation d'une matière en feuille transparente pour les étiquettes dont une partie n'est pas imprimée;

utilisation de perforations et/ou de fentes qui entraînent la déchirure/désintégration de l'étiquette en cas de décollage de l'étiquette adhésive;

utilisation de symboles et/ou de motifs d'identification pour les étiquettes qui sont au moins en partie imprimées avec des encres et/ou des colorants métalliques;

utilisation de symboles et/ou de motifs d'identification pour les étiquettes qui sont au moins en partie imprimées avec des encres colorées, des toners et/ou des colorants caractéristiques/réservés destinés à des presses d'impression numériques.

3. Etiquettes adhésives suivant la revendication 1 ou 2, **caractérisées en ce que** la couche adhésive des étiquettes est constituée d'une couche de matière adhésive avec un adhésif qui est approprié à un collage sur des supports humides.

4. Etiquettes adhésives suivant l'une quelconque des revendications précédentes, **caractérisées en ce que** le marquage séquentiel des étiquettes séparées est imprimé à l'aide d'une pression d'impression à numérique programmée.

5. Etiquettes adhésives suivant l'une quelconque des revendications précédentes, **caractérisées en ce que** le marquage séquentiel des étiquettes séparées est constitué d'une numérotation séquentielle.

6. Etiquettes adhésives suivant l'une quelconque des revendications précédentes, **caractérisées en ce que** la couche adhésive est constituée d'une couche de matière adhésive.

7. Etiquettes adhésives suivant l'une quelconque des revendications précédentes, **caractérisées en ce que** la couche adhésive est constituée d'une couche de matière adhésive avec un adhésif qui est

approprié à un collage sur des supports humides.

8. Etiquettes adhésives suivant l'une quelconque des revendications précédentes, **caractérisées en ce que** les étiquettes sont destinées dans chaque cas à être collées sur au moins deux marchandises et/ou documents qui sont en relation l'un(e) avec l'autre.

9. Procédé de marquage et/ou de timbrage de marchandises et/ou de documents par l'intermédiaire de l'application d'étiquettes adhésives, **caractérisé en ce que** les étiquettes sont utilisées suivant l'une quelconque des revendications 1 à 8.

10. Procédé de marquage et/ou de timbrage de marchandises et/ou de documents suivant la revendication 9, **caractérisé en ce que** les étiquettes sont dans chaque cas collées sur au moins deux marchandises et/ou documents qui sont en relation l'un(e) avec l'autre.

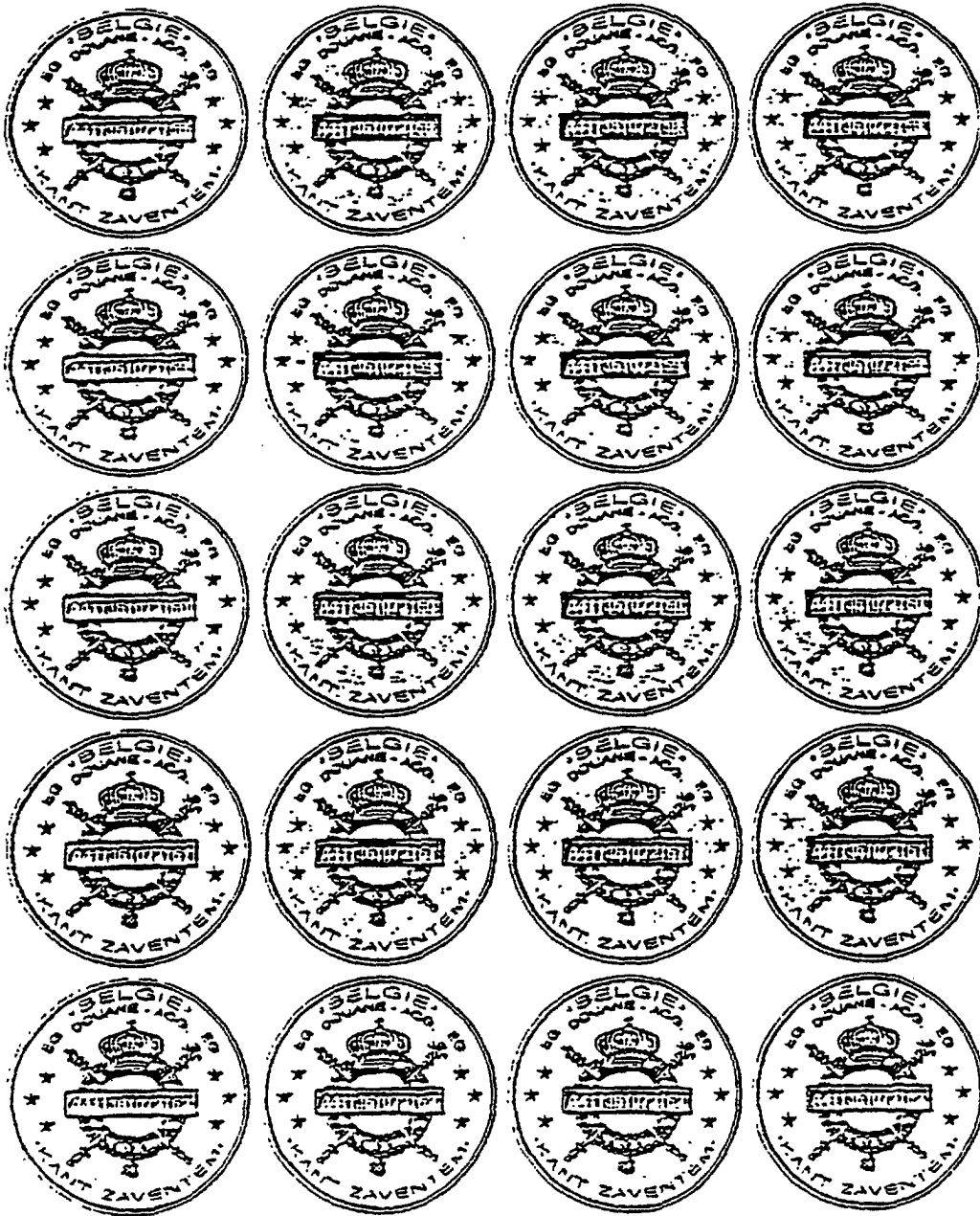


Fig. 1

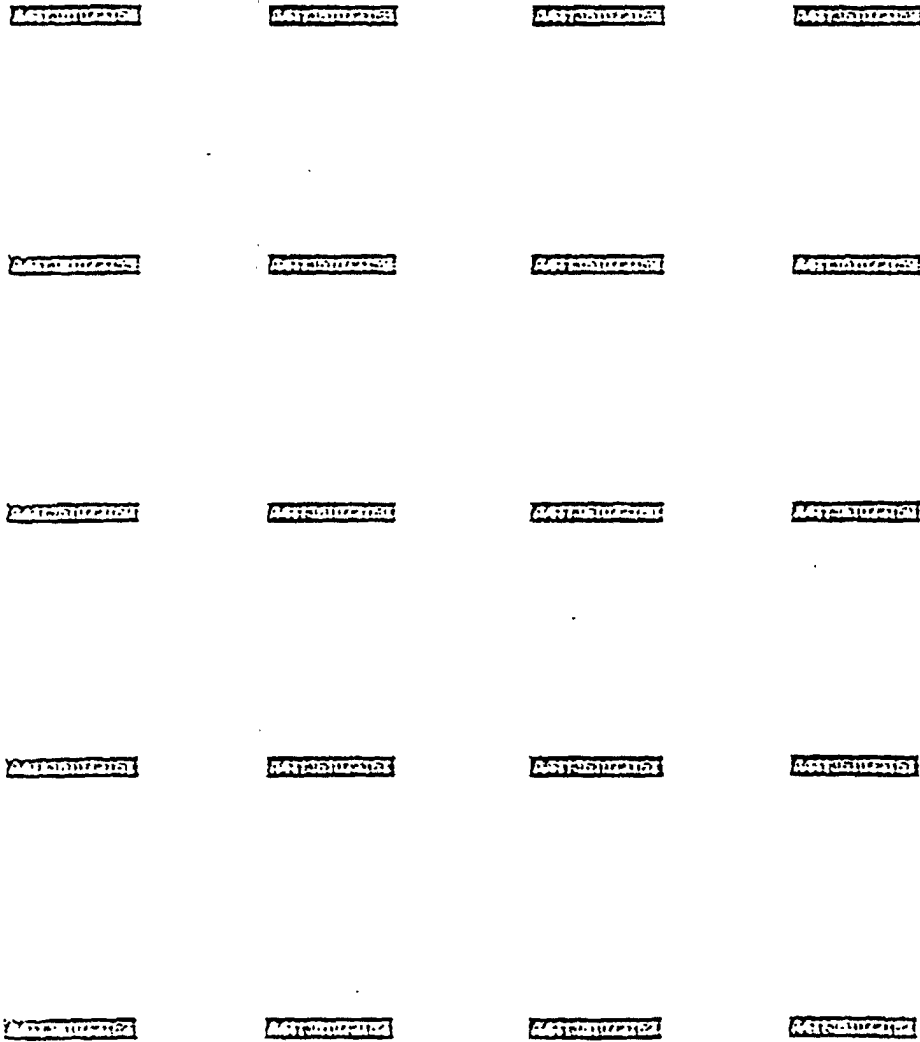


Fig 2

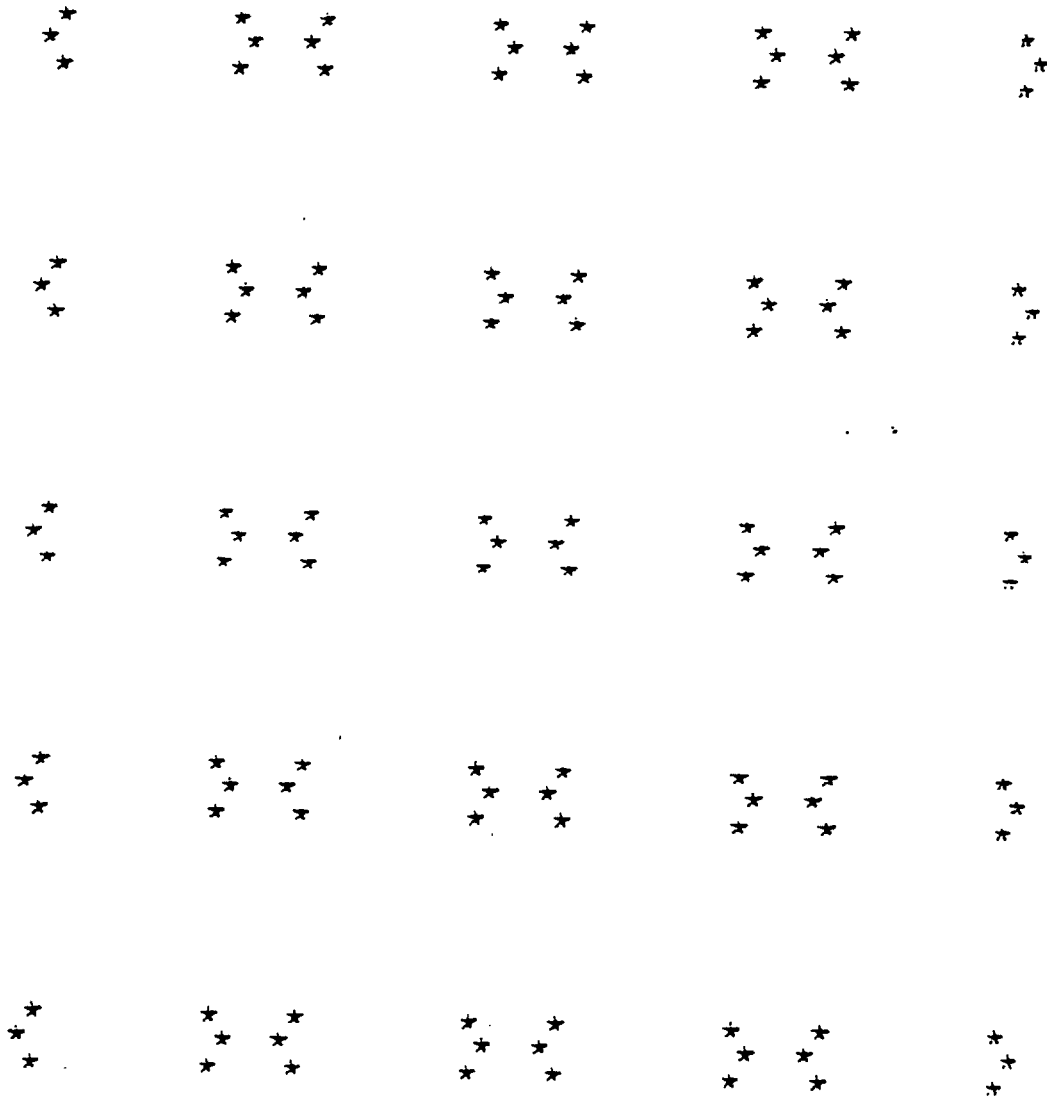


Fig 3

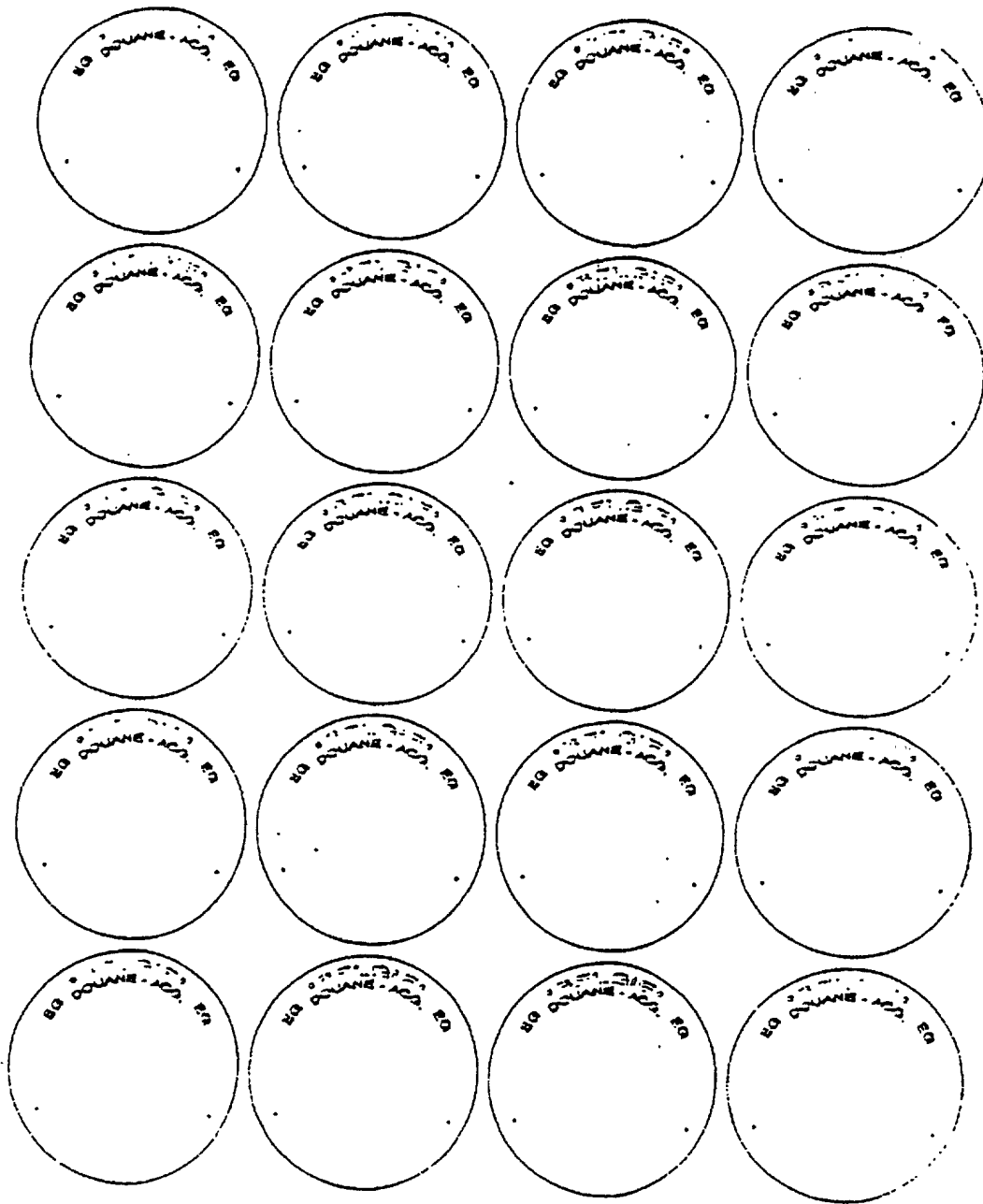


Fig 4

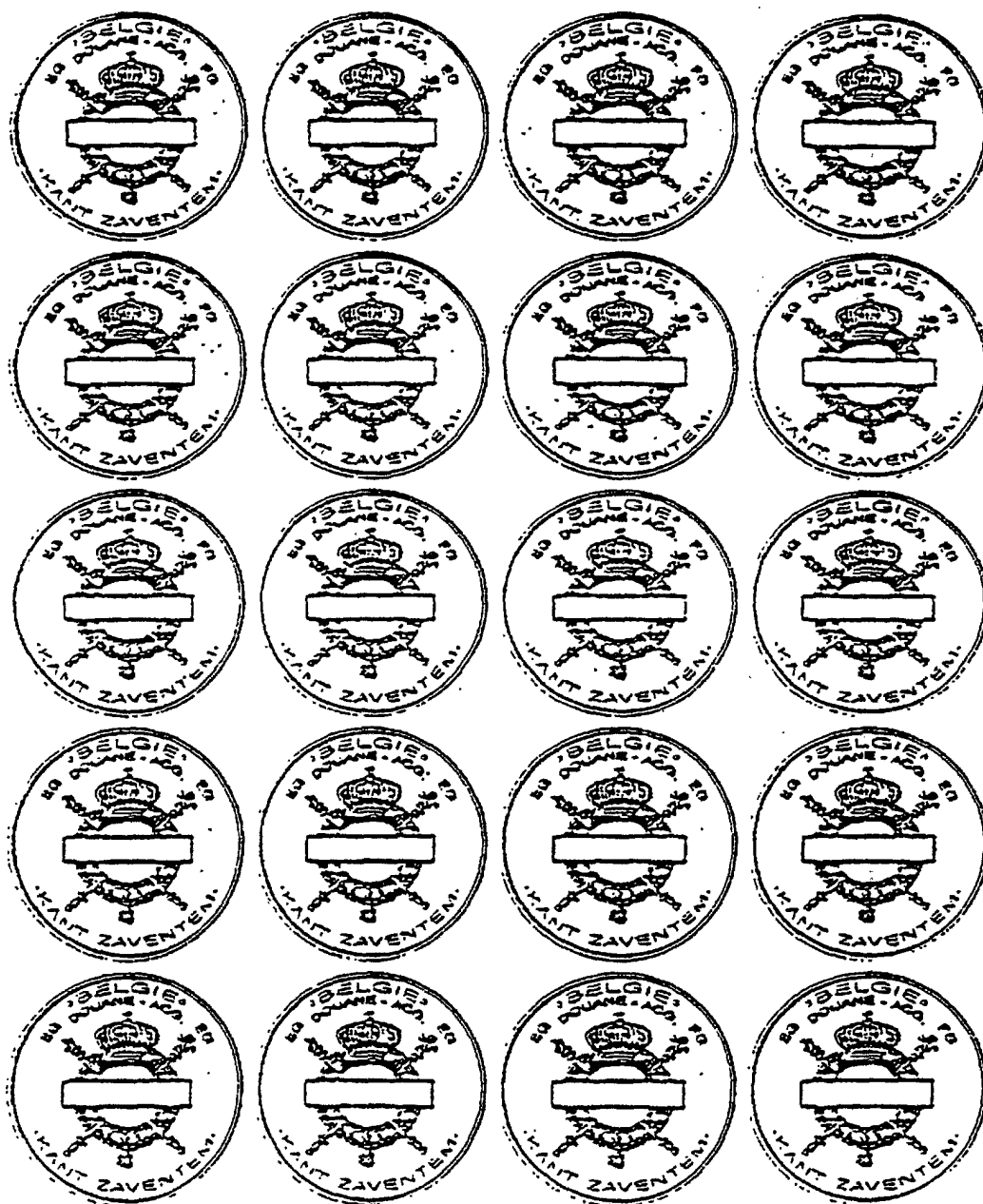


Fig. 5