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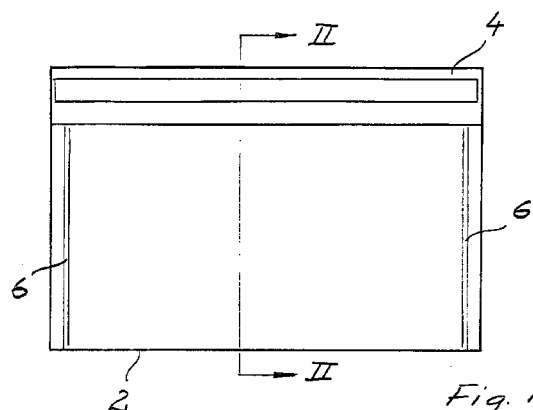
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(54) **A security bag**

(57) A security bag for storage and transportation of bank-notes, valuable papers and the like consists of pervious film material and has an opening provided with a closure device (8, 10). The pervious film material is of non-woven type.



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Description

The present invention relates to a security bag of the kind which is used for safe-keeping and transportation of bank-notes, valuable papers and the like.

It is previously known to use so called security bags for safe-keeping and for transportation and transfer of bank-notes and other valuable papers. Bags of this kind have such a closure device that it can easily be certified if the bag has been opened during the safe-keeping or the transfer of the contents of the bag. A previously known type of security bags consists of plastic film material, and such security bags can be used for example for the transfer of specified amounts of money from one department to another within a bank. Thereby, it can easily be established if some share of the sum of money has been stolen by the fact that it is possible to find out if a bag has disappeared or has been opened during the transfer. Such security bags can be used only for preventing theft at internal safe-keeping and transportation of bank-notes and valuable papers, for example within a bank or a company. In order to prevent theft at external transportation, for example from a company to a bank, it is previously known to use security bags consisting of a fabric having open meshes and which are placed in security cassettes or boxes of the kind in which the bank-notes or valuable papers positioned in the security bags in the cassette or box are spoiled by dyeing by means of a dye ampoule or the like which is activated when the security cassette is subjected to tampering or non-authorized attempts to open the cassette. However, the usefulness of the previously known security bags for transportation in such security cassettes or boxes is restricted by the fact that the security bags consisting of a fabric having open meshes do not protect the contents from visibility and that the previously known security bags which protect the contents from visibility also protect the contents from dyeing.

The object of the invention is to provide a security bag for safe-keeping, storage and transportation of bank-notes, valuable papers and the like which can be used for preventing theft at external safe-keeping or storage and transportation of bank-notes and valuable papers for example from a company to a bank and which also protects the contents of the bag from observation.

In order to comply with this object there has according to the invention been provided a security bag consisting of a pervious film material and having an opening provided with a closure device, which security bag is characterized in that the pervious film material is of non-woven type.

A security bag according to the invention does not prevent the bank-notes or valuable papers positioned in the bag from being dyed at tampering with such a security cassette or box which contains dye ampoules or a dye spraying gun but in spite thereof forms an efficient protection against the study of text and other information on the contents of the security bag. A security bag

according to the invention can thereby be used for internal as well as at external safe-keeping or storage and transportation of bank-notes, valuable papers or the like.

Preferably the film material of non-woven type is formed by extruded fibers of plastic material which preferably are endless and are connected with each other within surface areas of the film material, separated from each other.

The security bag according to the invention is preferably provided with a closure device of a kind known per se which is adapted to indicate if the closure device has been opened.

The invention shall be described in the following with reference to the accompanying drawings.

Fig. 1 is a plan view of an embodiment of an open security bag according to the invention.

Fig. 2 is a section on line II-II in Fig. 1.

Fig. 3 shows on an enlarged scale the film material from which the security bag according to the invention is manufactured.

Fig. 4 is a section corresponding to Fig. 2 of a modified embodiment of a security bag according to the invention.

A security bag according to the invention for storage and transportation of bank-notes, valuable papers and the like is manufactured from a sheet of film material folded along a folding line 2 leaving a closure flap 4, the film material being welded along welding seams 6. The flap 4 is provided with a tape strip 10 covered by a peelable protective film 8. When the desired content has been applied in the security bag the protective film 8 is removed and the closure flap 4 is folded down against the front side of the security bag, the tape thereby adhering to the closure flap. The tape has such a strong adhesive that an opening of the flap 4 brings about visible damages to the film material from which the security bag has been manufactured.

The film material of the security bag is pervious in such a way that bank-notes, valuable papers and the like stored in the security bag will be dyed by a dye to which the security bag is subjected if it is stored in a security cassette which is subjected to damage and which is of the kind in which such damage provides activation of a dye ampoule. Thus, the dye penetrates the film material of the security bag and dyes the bank-notes and valuable papers kept therein when the dye ampoule is activated.

The security bag consists of film material of non-woven type preferably formed by endless extruded fibers of plastic material which are connected with each other within surface areas of the film material, which are separate in relation to each other.

Fig. 3 shows on an enlarged scale how a suitable film material for forming a security bag according to the invention can be composed. Thus, the film material consists of randomly oriented endless fibers 12 which are connected with each other within square surface areas 14. Preferably the film material is manufactured accord-

ing to the so called span-laid technique. The binding within the surface areas 14 is preferably provided by means of a heated embossed roller. The fibers 12 consist of plastic material, preferably polypropylene, but also other plastic materials such as polyethylene, polyamide and polyester can be used for the manufacturing of the film material.

In a suitable embodiment of the security bag according to the invention the pervious film material has a surface weight of about 60 g/m².

The closure device of the security bag according to the invention can be designed according to principles known per se, whereby it is important that the closure device indicates that the security bag has been opened.

In Fig. 4 there is shown a security bag having a closure device consisting of a fiber pile 16 connected with the flap 4a and of a tape strip 20 at the front side of the bag, covered by a covering sheet 18. At the closure of the bag the covering sheet 18 is removed and the fiber pile 16 of the flap is pressed against the tape 20. When the flap 4a is opened the fiber pile adheres to the tape surface and it is not possible to reclose the bag without obvious indications on the fact that the bag has been opened.

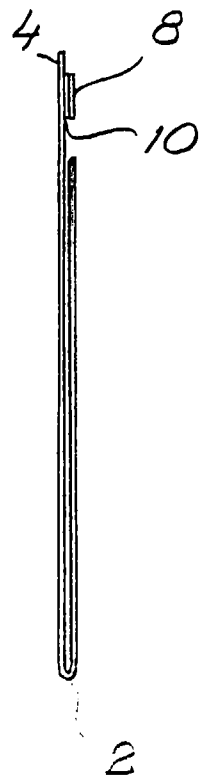
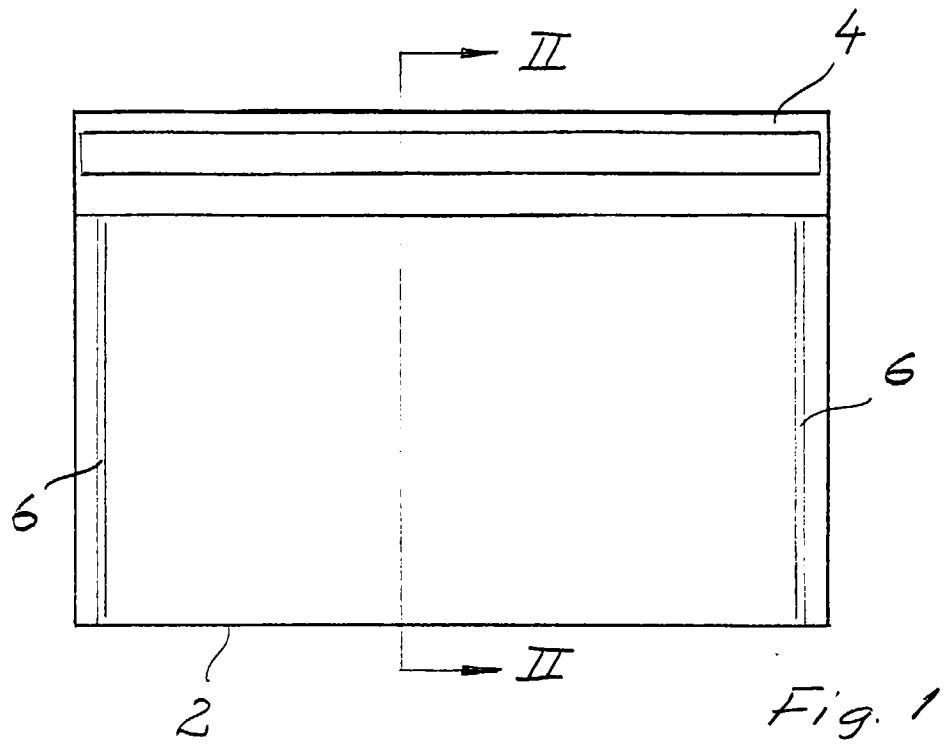
The invention can be modified within the scope of the following claims.

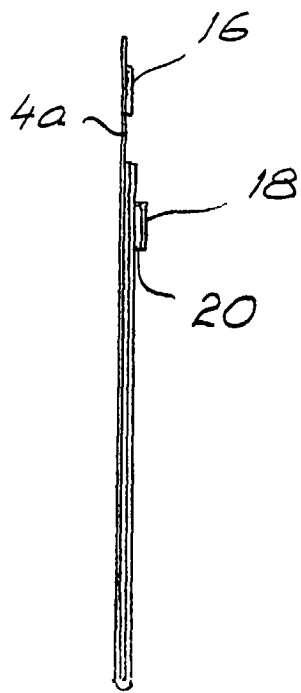
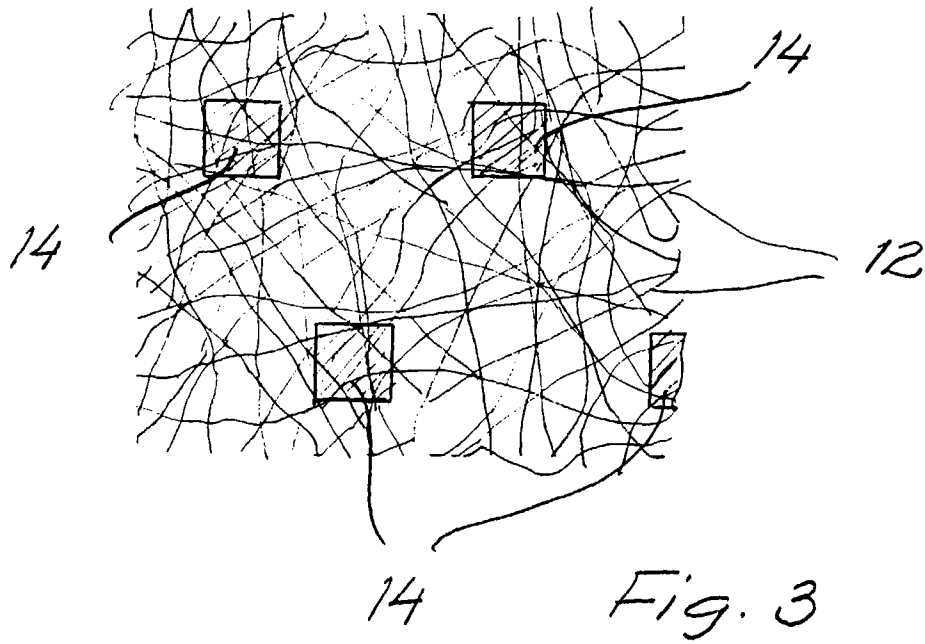
Claims

1. A security bag for storage and transportation of bank-notes, valuable papers and the like consisting of pervious film material and an opening provided with a closure device (8, 10; 16, 18, 20), **characterized** in that the pervious film material is of non-woven type.
2. A security bag according to claim 1, **characterized** in that the pervious film material consists of extruded fibers (12) of plastic material.
3. A security bag as claimed in claim 2, **characterized** in that the fibers (12) are endless.
4. A security bag as claimed in claim 2 or 3, **characterized** in that the fibers (12) are connected with each other within small surface areas (14) of the film material, separated from each other.
5. A security bag as claimed in any of the preceding claims, **characterized** in that the pervious film material consists of polypropylene.
6. A security bag as claimed in any of the preceding claims, **characterized** in that the pervious film material has a surface weight of about 60 g/m².
7. A security bag as claimed in any of the preceding claims, **characterized** in that the closure device is adapted to indicate that the closure device has

been opened.

8. A security bag as claimed in claim 7, **characterized** in that the closure device comprises an adhesive adapted at the opening of the closure device to have a visible influence on the pervious film material.







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EUROPEAN SEARCH REPORT

Application Number
EP 96 85 0016

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.6)
X	US-A-3 978 185 (BUNTIN)	1,2,5,7	G08B13/14
Y	* column 18, line 36 - line 43 *	3,4,6	B65D30/00
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Y	EP-A-0 192 897 (DU PONT DE NEMOURS)	3,4,6	
A	* claim 11 *	1,2,5	

A	EP-A-0 372 363 (REEMAY)	1,7,8	
	* column 1, line 1 - column 2, line 13 *		

A	WO-A-93 02435 (TRANSALARM LTD)	1	
	* abstract; figure 3 *		

A	EP-A-0 347 091 (TRANSALARM LTD)	1	
	* abstract; figure 1 *		

A	FR-A-2 713 203 (DECOMATIC)	1,7,8	
	* page 1, line 3 - line 8 *		

			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D G08B D04H
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		4 July 1996	Zanghi, A
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
Y : particularly relevant if combined with another document of the same category		E : earlier patent document, but published on, or after the filing date	
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