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(54) **Screen comprising a net and ribbons inserted therein**

(57) Screening net which is obtained by incorporating tapes or ribbons in meshes of a support mesh network (which may be metallic or non-metallic).The screening net can be used in the fields of demarcation, fencing, boundary lines and shelters or protection in whole or in part; it functions as screening or embellishment or signalling.

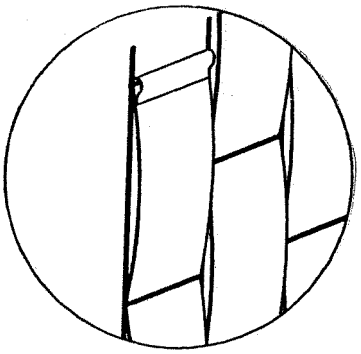

Fig. A1.1

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## Description

**[0001]** The present invention treats of Screening Net with a preferential metal core (but it can be no-metal) for demarcation and for the total or partial shielding of a surface portion.

**[0002]** Currently the state of the technique provides that to close, to ensure confidentiality and to prevent the view of outsiders on a surface portion one can, for example, get the total or partial shielding by building masonry walls or distributing generic panels, or stretching generic blackout fabrics made in synthetic or natural fiber.

**[0003]** However, the masonry construction is a work demanding projects adopted for stable fence or hedge; the choice of generic panels opens costs and concerns about their method of anchoring and about their suitable and overall installation; also overshadowing tissues (mainly packaged in roll) requires a pre-continuous structure on which to adhere the tissue darkening along the whole stretch.

**[0004]** Is growing and changing the request for confidentiality of people, so the Screening Net with metal core features in one product and by means of a unique installation a locking system adoptable in many industries and environments.

**[0005]** For example, in the field of fences, the utility of this method of shielding is intuitively appreciable considering the requirements of the environments promiscuous or narrow spaces; or considering the need to equip small and large spaces that need to be broken down even temporarily with a insertable easily wall and removable in an existing furniture. Screening Net will adapt also to be a product more reusable.

**[0006]** In this regard, the Screening Net intend to be a new product into a mid-range and easy to install compared to existing products in state of the technique.

**[0007]** About this invention, the applicant has made several sample tests.

**[0008]** Current invention, named Screening Net, will be hereinafter clarified in a preferred embodiment, that is, one that uses a network of wires support in which to adhere the tapes-ribbons (hereinafter "ribbons"). This way to product the invention is an illustrative solution and therefore not limiting, so to enlarge understanding there are attached the following tables of the drawings which represent in particular:

__Table1(Tab.1):

I. Fig. A1 shows an embodiment of the Screening Net according to the present invention that is obtained by the intertwining of ribbons into meshes of a welded steel net
II. Fig. A1.1 shows the detail of the ribbon inserted into the mesh
III. Fig. A1.2 is the section a-a showing the overall thickness Screening Net
IV. Fig. A2 shows the welded steel net used as a part of Screening Net (as depicted in Fig. A1)
V. Fig. A3 shows the tape / ribbon used as part of Screening Net (as depicted in Fig. A1);

__Table2(Tab.2):

I. Fig. B1 shows an embodiment of the Screening Net according to the present invention that is obtained by the intertwining of ribbons into meshes of a metallic loose mesh network
II. Fig. B1.1 shows metallic loose mesh network used as a part of Screening Net (as depicted in Fig. B1)
III. Fig. B2 shows an embodiment of the Screening Net according to the present invention that is obtained by the intertwining of the ribbons into metallic meshes of a corrugated wire network
IV. Fig. B2.1 shows corrugated wire network used as a part of Screening Net (as depicted in Fig. B2)
V. Fig. B3 shows the tape / ribbon used as a part of Screening Net (as depicted in Fig. B1 and B2);

__Table3 (Tab.3):

I. it shows an overview of the external environment with an example of Screening Net installation in a fence stretch ;

__Table 4 (Tab.4):

I. it shows an embodiment of the Screening Net according to the present invention that is obtained by the intertwining of the ribbons into meshes of a welded steel net (as form in fig. A1) depicted in a closed environment overview for furniture function;

__Table 5 (Tab.5):

I. Fig. D1, D2, D3 - just as an example - show alternative products that can be used for the network Screening Net
II. Fig. D4 shows the tape / ribbon to be used as a part of Screening Net;

Table 6 (Tab. 6):.

I. Fig. E1 shows an embodiment of the Screening Net according to the present invention that is obtained by the intertwining of the ribbons into meshes of a non-metallic net
II. Fig. E1.1 shows non-metallic net used as an element of Screening Net (as depicted in Fig. E1)
III. Fig. E3 still shows the design of the tape / ribbon to be used as part of Screening Net.

**[0009]** Screening Net, subject of this application, in a preferred point of view is obtained inserting into the meshes of a network (mostly metal network) a series of foldable and flexible tapes-ribbons (hereinafter "ribbons") proper to natural or synthetic fabric or by-products of sheet-iron; whenever the ribbons will coupled to the network support peculiarities.

**[0010]** The ribbon size, their color and their density will depend on the shielding degree and / or embellishment that you'll want to get.

**[0011]** Still by way of example, if the network support is metallic, it can be raw, galvanized, coated, painted, etc.., in a roll form or simply panel form or framed form, with squared mesh or rhomboidal mesh - as examples fig. A2, B1.1, B2.1. Also surface color of the wire net support may be matched to the ribbons color.

**[0012]** The ribbons can be monochrome or differently colored; and it should be noted that is possible to weave by a single-mode and / or multiple-mode and / or intersected different ribbons. Screening Net can be provided with a continuous ribbon plot into each hole so that the network will be completely filled by the ribbons, or it can be provided with an alternate plot which would create alternations of empty and full. The thickness, width, length, quality and executive-production structure of the ribbons; the colors, the wire network diameter; still, the type of steel can be metal or alloy (if metallic network support) and so for components; the mesh network size; plot type, processing type of the same network; Screening Net length, its overall dimensions, its height, its packaging; ribbon's attachment plot mode *(and so on...)* allow a considerable range of combinations available to the producer for a dedicated custom supply. These combinations are important alternative embodiments and are an invention characteristic because for example they allow any adaptation in order to the selling price as well as in order to its consistent environmental integration.

**[0013]** Therefore reiterates as an example that the Screening Net with metal core offer in a single product and with a single istallation a fence or a wall that are also blind. Screening Net may be provided in rolls or panels of custom size.

**[0014]** As a further example is noted that the invention embodiment Screening Net, if obtained by inserting tapes-ribbons in a wire mesh produced by a grid system to loose mesh (fig. B1), gives it a look ordered, reformed, more self-supporting, with windproof function that creates no weakening, indeed, promotes greater stability and in some cases even greater tensile load.

**[0015]** Screening Net is provided with the tapes or the ribbons already inserted and then the installer will only stretch or apply this product simply fixing plates or tensioner wires to the straight or to the partition wall. The set of accessories for installation must be consistent with the model of Screening Net adoptee (in roll or panel) and suggestion of these accessories will be care by the manufacturer.

**[0016]** The realization of the Screening Net, as said, is obtained by joining tape or ribbon into the network support and this can be done manually or on a plane of mechanized grippers.

**[0017]** For fixing (represented only by way of example in Fig. B1) tape or ribbon at the ends of Screening Net's roll or panel can be adopted various systems (example are: riveting or sewing or heat-sealing) that can occur during or after roll or panel scrolling / wrapping on a conveyor belt. This is because fixing period depends on the nature of the tape itself and on the final detail that you decide to apply to the screening product.

**[0018]** The present invention has been illustrated and described with reference to preferred embodiments; but any executive variants (though not fully represented in the drawings) presented here are in practice exercisable and addible because all possible and also, as described, are not outside of protection scope of the present patent application for industrial invention.

## Claims

1. SCREENING NET packed in roll or panel in particular for the marking and / or for the partial or total shielding of open or closed spaces (non-exhaustive examples of drawings in Table 3 and Table 4) obtained by manual as well as mechanical ribbons-tapes insertion within a generally metallic net-like support;

2. SCREENING NET according to claim 1 wherein the net-like support is not metallic;

3. SCREENING NET conceived as a single body according to one of the preceding claims, which is therefore generally provided with ribbons-tapes already adhered to the net-like support;

4. SCREENING NET according to one of the preceding claims wherein the ribbons-tapes are inserted in the net-like support by a plot mode (examples fig. A1, B1, B2, E1).

TITLE OF INVENTION: SCREENING NET

Tab. 1

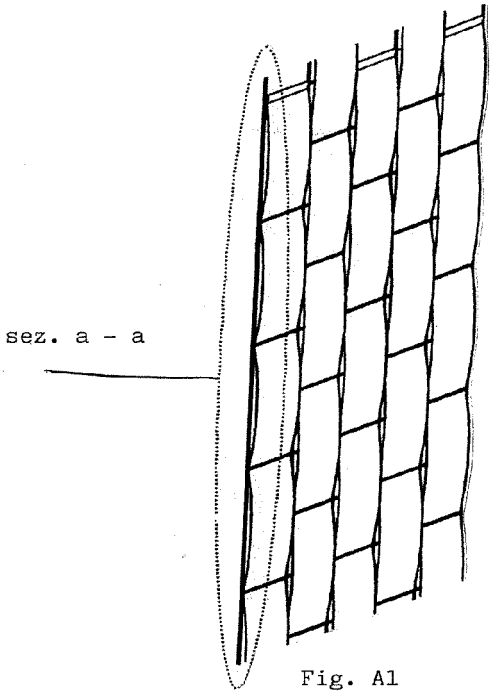



Fig. A1

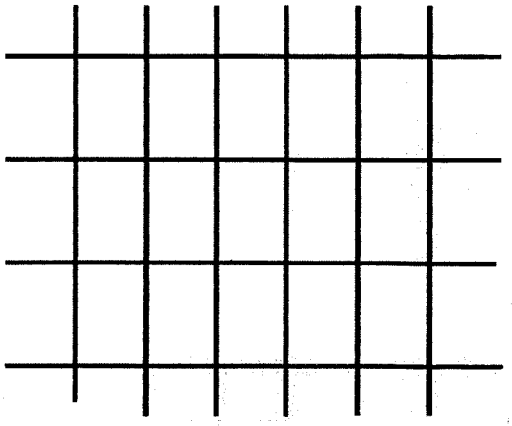


Fig. A2

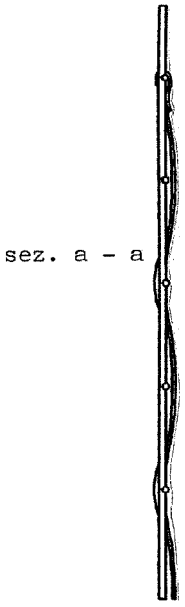



Fig. A1.2

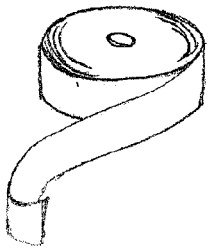


Fig. A3

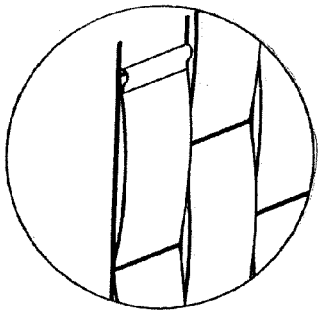


Fig. A1.1

Tab. 2

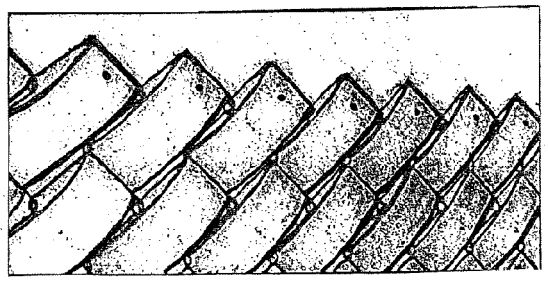


Fig. B1

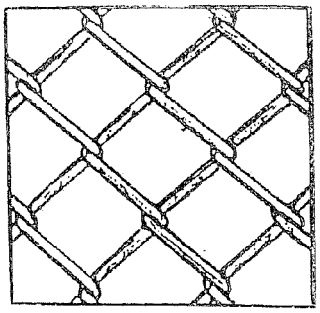


Fig. B1.1

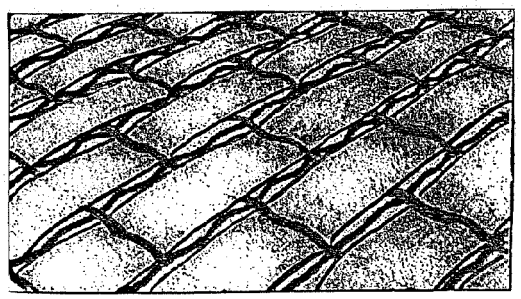


Fig. B2

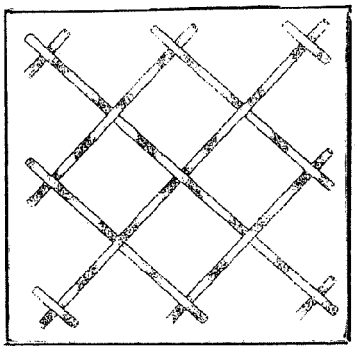


Fig. B2.1

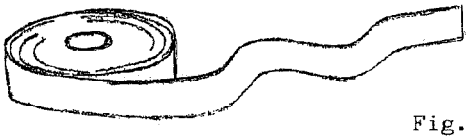
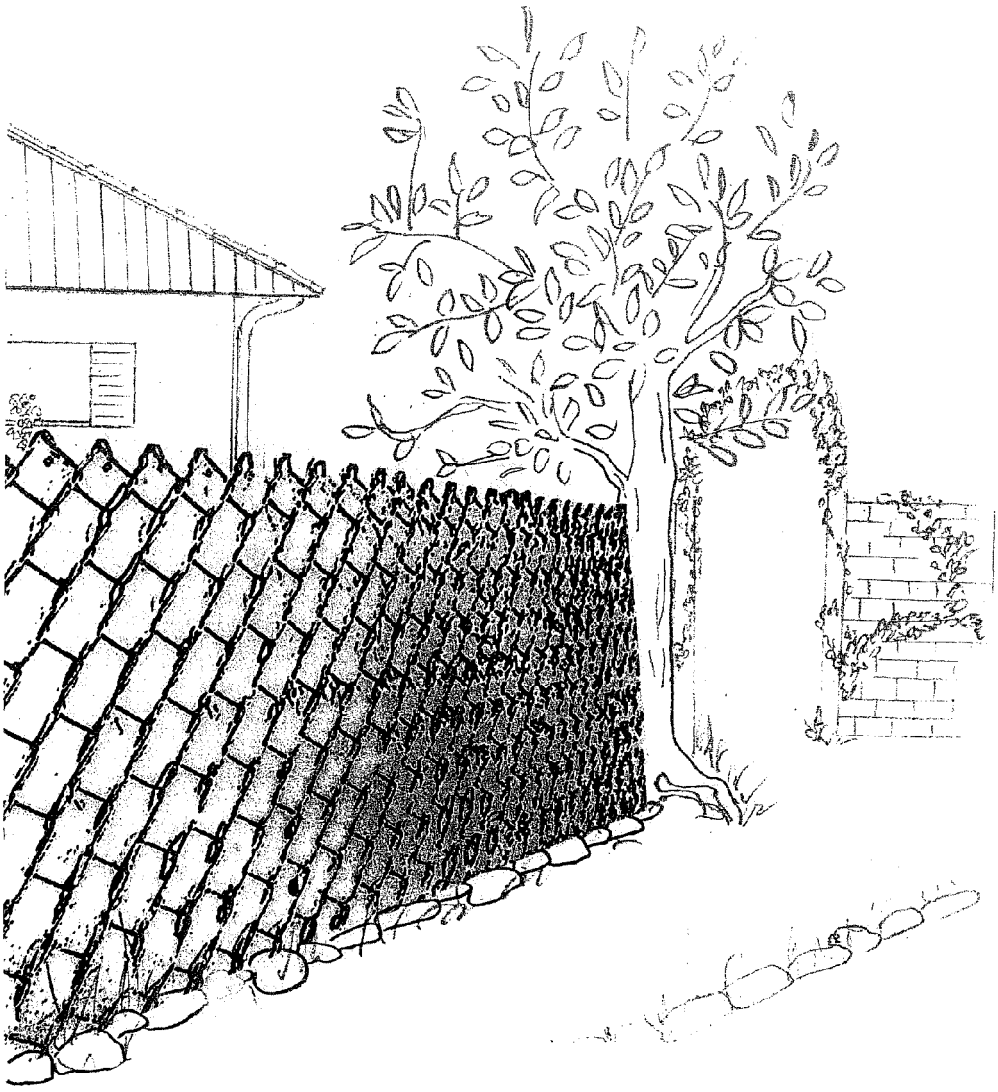


Fig. B3

Tab. 3



Tab. 4

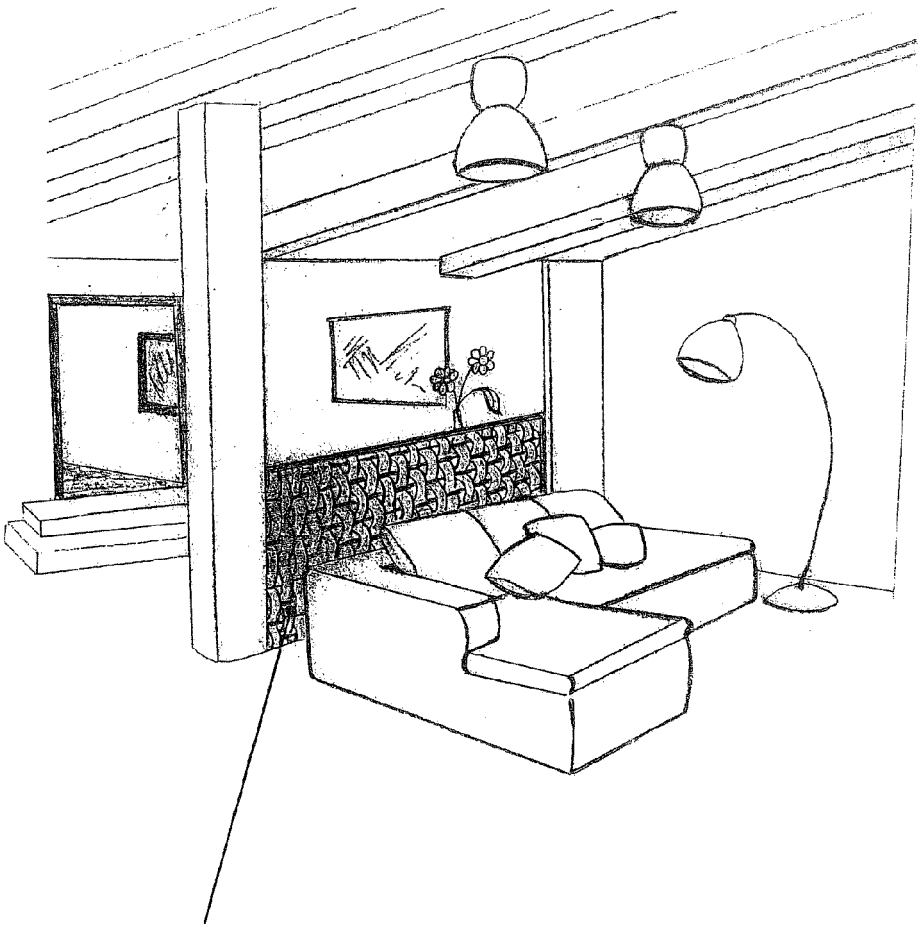


Fig. A1

Tab. 5

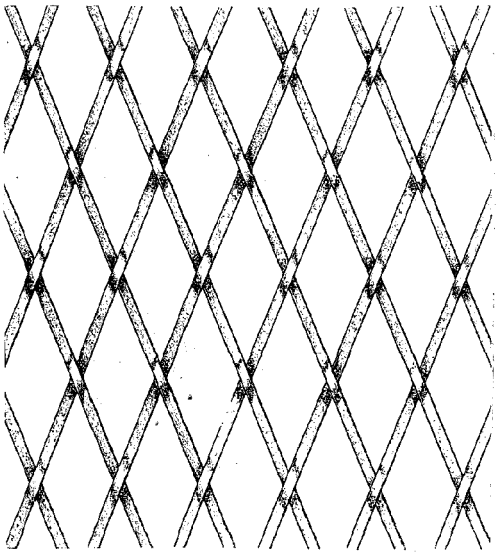


Fig. D1

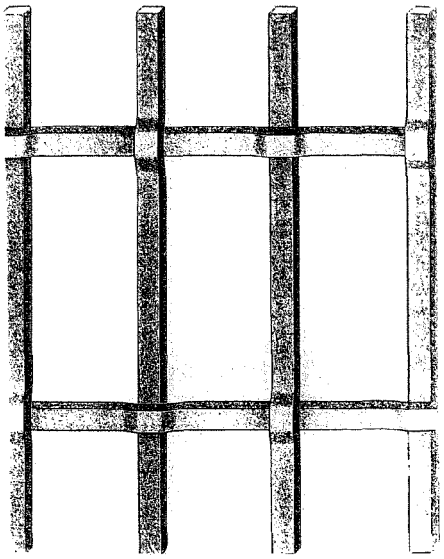


Fig. D2

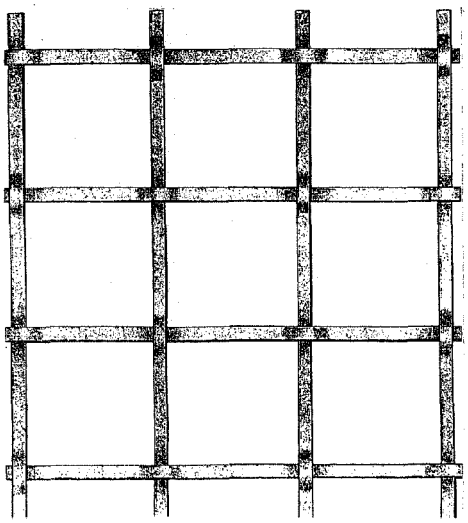


Fig. D3

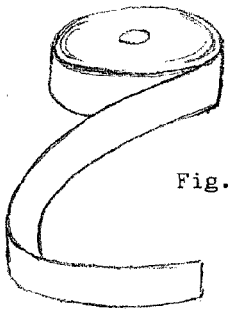


Fig. D4

Tab. 6

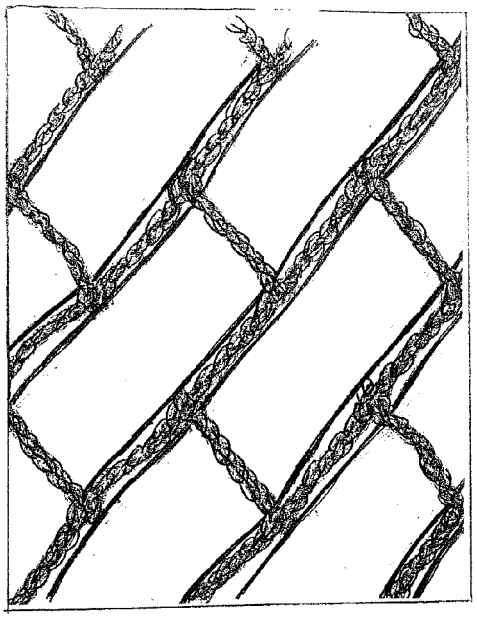


Fig. E1

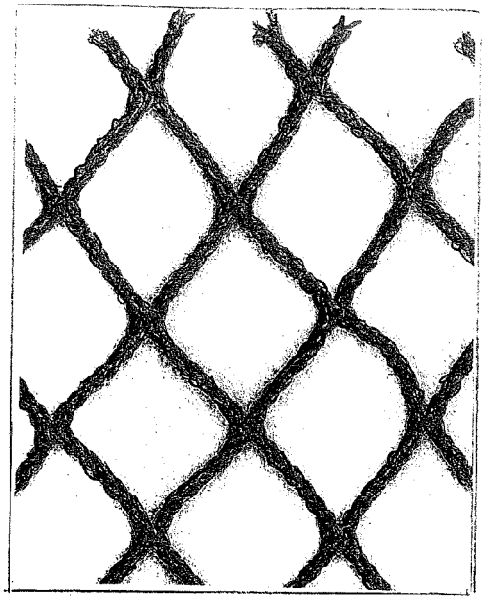


Fig. E1.1

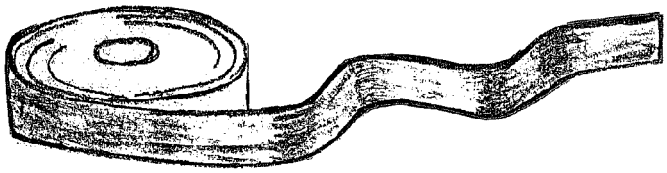


Fig. E3

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# EUROPEAN SEARCH REPORT

Application Number
EP 14 42 5125

## DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
|---|---|---|---|
| X | MC 636 A (NAMAN ROBERT [FR])<br>17 October 1967 (1967-10-17)<br>* figure 1 *<br>* page 2, line 9 - line 22 *<br>* page 3, line 23 - line 25 *<br>* page 1, line 1 - line 3 * | 1-4 | INV.<br>E04H17/06<br>E04H17/14<br>E04H17/16 |
| X | GB 725 998 A (CYRIL NATHAN ELSDON)<br>16 March 1955 (1955-03-16)<br>* figures 1-3 *<br>* page 1, line 60 - line 90 * | 1,3,4 | |
| X | DE 21 57 703 A1 (STROMEYER & CO GMBH L)<br>24 May 1973 (1973-05-24)<br>* figures 1-3 *<br>* page 6 * | 1-4 | |
| | | | TECHNICAL FIELDS SEARCHED (IPC)<br>E04H |

The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| Munich | 18 February 2015 | Brucksch, Carola |

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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E : earlier patent document, but published on, or after the filing date
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L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 14 42 5125

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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18-02-2015

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---|---|---|
| MC 636 A | 17-10-1967 | NONE | |
| GB 725998 A | 16-03-1955 | NONE | |
| DE 2157703 A1 | 24-05-1973 | NONE | |

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82