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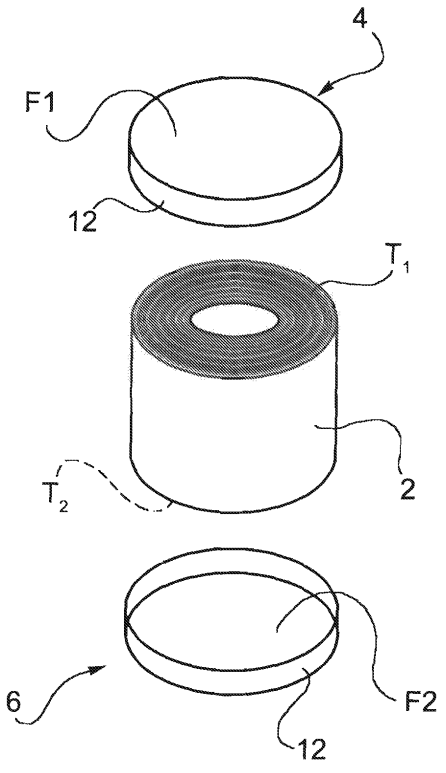
(54) Protective assembly for sheet metal in coils or packs

(57) A protective assembly for metals (2), particularly sheet metals in coils and packs, comprises caps (4,6;8,10; 20,22) which can be fitted to ends (T1,T2) of a coil or pack of sheets. The caps (4,6) are cup-shaped, being substantially cylindrical or of other shape, comprising closed bases (F1,F2) joined to outer lateral rims (12). The caps (8,10;20,22) have a cross section in the shape of a circular ring or other shape with outer rims (12) and possibly with inner rims (14).

Fig. 1



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Description

[0001] The present invention relates to a protective assembly for metals, particularly sheet metal in coils and packs, which is commonly referred to as "coils" and "packs".

[0002] Sheet metal in coils is usually protected from atmospheric agents and from impact or damage by covering with sheets of flexible material, plastics or card.

[0003] Angle or corner pieces must be provided for the terminal or end parts in all cases, thus increasing the time taken to produce the covering and the costs incurred.

[0004] The object of the present invention is to provide a protective assembly for metals, particularly sheet metals in coils and packs, which overcomes the aforesaid drawbacks, is easily produced and assembled, and is inexpensive.

[0005] The present invention achieves the aforesaid objects by means of a protective assembly for metals, particularly sheet metals in coils and packs, which has the characteristics claimed specifically in the claims below.

[0006] Further characteristics and advantages of the invention will be made clear in the following detailed description, provided purely by way of example and without restrictive intent, with reference to the attached drawings, in which:

- Fig. 1 shows the protective assembly according to the invention in a first embodiment, before it is positioned;
- Fig. 2 shows the protective assembly of Fig. 1 after it has been positioned;
- Fig. 3 shows the protective assembly according to the invention in a second embodiment, before it is positioned; and
- Fig. 4 shows the protective assembly of Fig. 3 after it has been positioned;
- Fig. 5 shows the protective assembly according to the invention in a third embodiment, for packs of sheets.

[0007] With reference to the figures, in which identical or equivalent elements are indicated by the same reference numbers, the number 2 indicates the whole of a coil of sheet metal.

[0008] The outer cylindrical part of the coil 2 is wrapped with a "protective cover" (not shown). The ends T1 and T2 are protected by caps 4 and 6 (Figs. 1 and 2), or 8 and 10 (Figs. 3 and 4).

[0009] In Figs. 1 and 2, the caps 4 and 6 are cup-shaped and comprise closed bases F1 and F2 joined to outer lateral rims 12.

[0010] The dimensions of the bases F1 and F2 are such that the caps 4 and 6 are fitted on the ends T1 and T2 in such a way that the lateral rims 12 cover, at least partially, the outer cylindrical part of the coil 2.

[0011] In Figs. 3 and 4, the caps 8 and 10 which protect the ends T1 and T2 have a cross section in the form of a circular ring, with outer rims 12 and inner rims (the inner boss may or may not be present) 14, in such a way that they can be fitted on the ends T1 and T2 while allowing access to the open part V of the ends T1 and T2.

[0012] In Fig. 5, the caps 20 and 22 have a shape matching that of the pack of sheets P on which they are to be fitted.

[0013] The caps 4, 6, 8 and 10 are advantageously made from recyclable plastics material.

[0014] The above description clearly reveals the advantages of the protective assembly according to the present invention.

[0015] The caps described above effectively protect the ends of the coils or pack of sheet, enabling them to be moved with cranes or the like (for caps with closed bases) or with lift trucks or overhead cranes (circular ring caps).

[0016] The caps described above can be destroyed without causing pollution, and are light and inexpensive.

[0017] Clearly, provided that the principle of the invention is retained, everything that has been described and illustrated can be modified considerably without departure from the scope of protection of the present invention.

Claims

1. Protective assembly for metals, particularly sheet metals in coils and packs, **characterized in that** it comprises a pair of caps (4, 6; 8, 10; 20, 22) which can be fitted to the ends (T1, T2) of the coil (2) or pack of sheets (P).

2. Protective assembly for metals according to Claim 1, **characterized in that** the said caps (4, 6) are cup-shaped, being substantially cylindrical or parallelepipedal or of other shape, comprising closed bases (F1, F2) joined to outer lateral rims (12).

3. Protective assembly for metals according to Claim 1, **characterized in that** the said caps (8, 10) have a cross section in the shape of a circular ring or other shape with outer rims (12) and possibly with inner rims (14).

Fig. 1

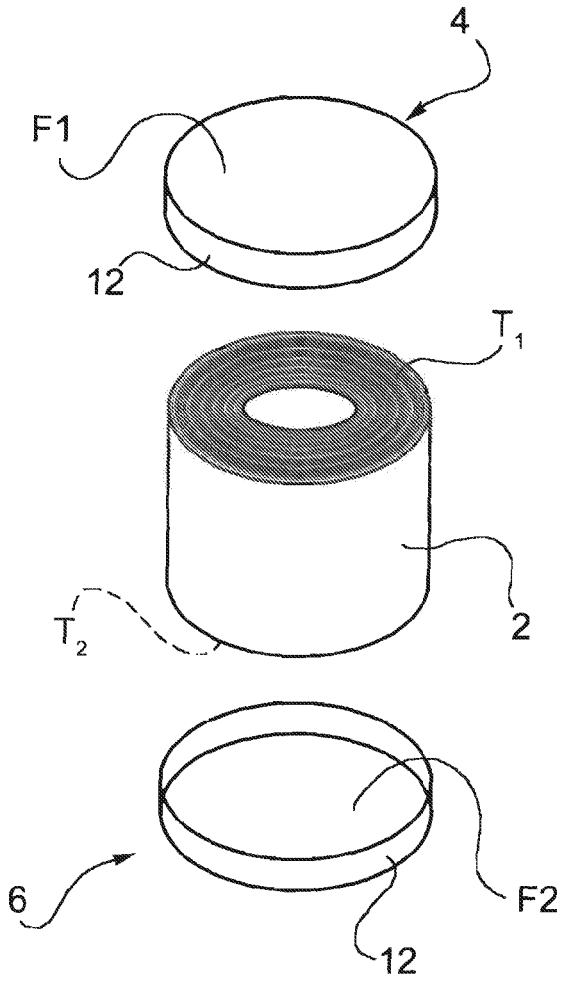


Fig. 2

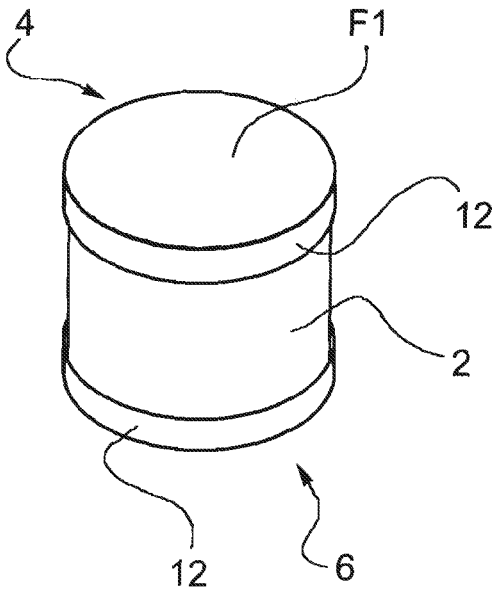


Fig. 3

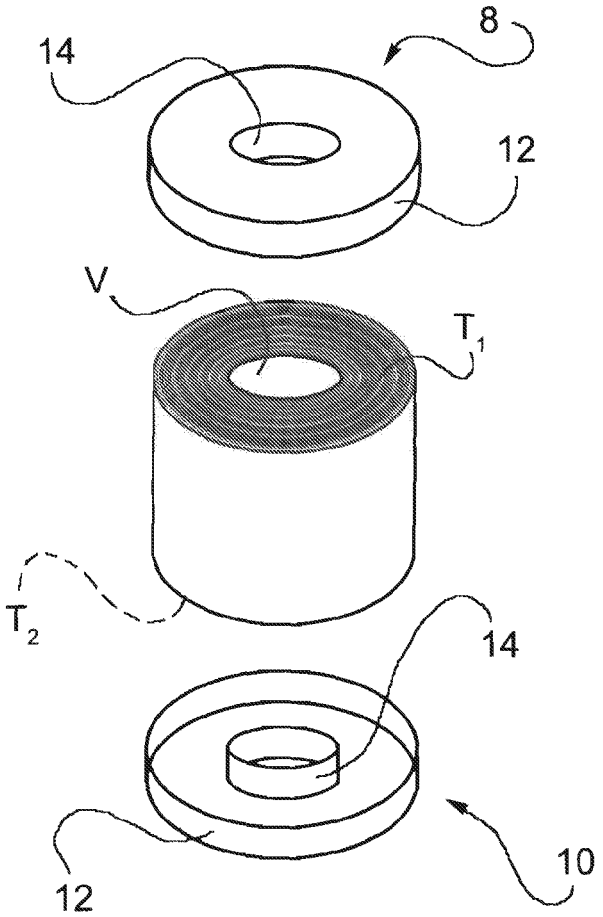


Fig. 4

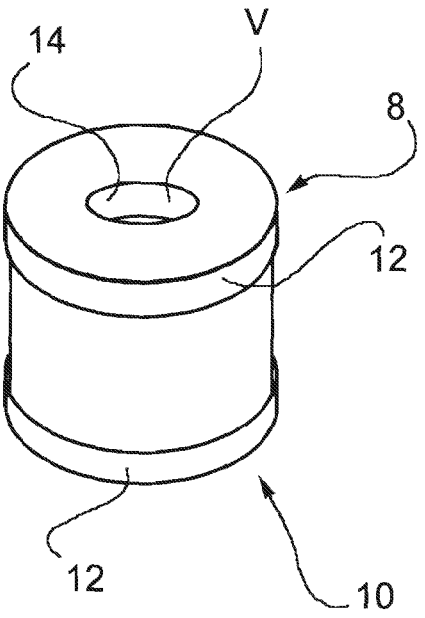
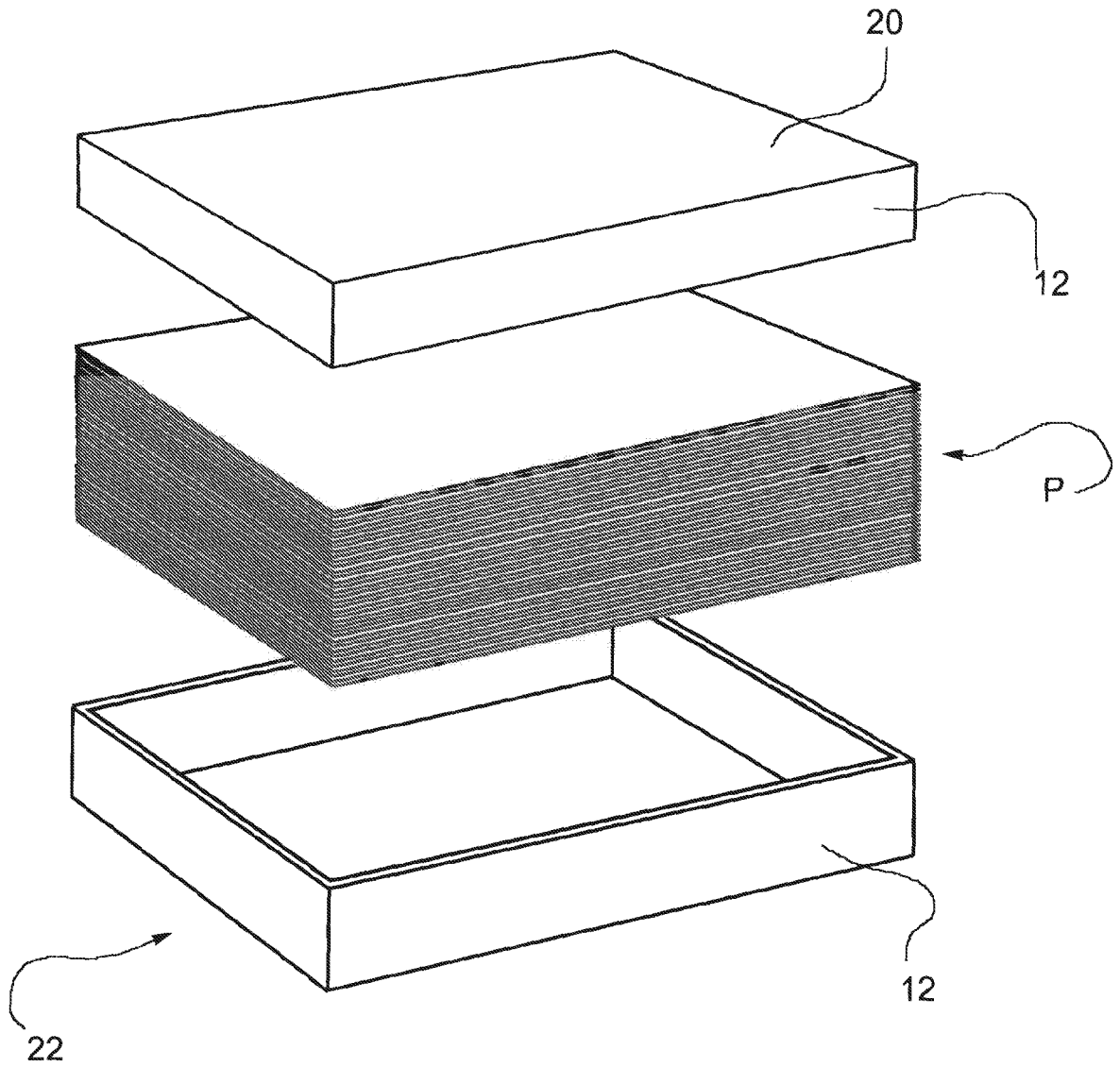


Fig. 5



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EUROPEAN SEARCH REPORT

Application Number
EP 06 11 0689

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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X	DE 37 43 797 A1 (BUCKERT,HELMUT) 6 July 1989 (1989-07-06) * column 2, line 62 - column 3, line 20; figures 1-5 *	1-3	
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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	30 May 2006	Galli, M

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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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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