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(54) **Suspension file**

Hängemappe

Classeur suspendu

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(56) References cited:
**DE-U- 7 238 855 DE-U- 8 308 743
NL-C- 1 000 021 US-A- 6 063 226**

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Description**Field of the Invention**

[0001] This invention relates to a suspension file adapted for mounting in multiple numbers across parallel, spaced-apart support rails of a drawer of a filing cabinet.

Background of the Invention

[0002] Conventional suspension files comprise a 'U'-shaped pocket of card, manila, plastics or a mix of such materials, with upper edges of the pocket attached to a metallic strip having a notch adjacent each end for location on an adjacent support rail.

[0003] In use, suspension files are frequently overloaded, with inserted paperwork exceeding both the capacity of the pocket and the load bearing capability of the strips, resulting in usually permanent damage and/or deformation to both components.

[0004] In DE 8308743 U is described a suspension file for the storage of thin film material within a 'V'-pocket with non-magnetic hanging rails extending along loops or tunnels at the top of the two sidewalls making up a 'V'-pocket, the rails having magnetic components, whilst the film has a magnetic top strip.

[0005] In NL 1000021 is described the construction of individual sidewalls to form a 'V'-pocket, with a strip formed with a hanging rail receiving loop or tunnel attached to an upper edge of each sidewall.

[0006] In DE 7238855 U is described a suspension file with a plastics rail clipped into four spaced-apart slots extending along the top of a sidewall.

Object of the Invention

[0007] A basic object of the invention is the provision of an improved, and heavy duty, suspension file.

Summary of the Invention

[0008] A suspension file in accordance with the present invention is defined in Claim 1. Preferred or optional features are defined in the appended sub-claims.

Advantages of the Invention

[0009] The bulbous shape in the lower section of each body file provides a wider base than a conventional suspension file, allowing loading of more material without the sleeve "shrinking" in overall height, while the support rods can be so formed and/or dimensioned as to be incapable of deformation by weight of the contents of the suspension file alone, thus ensuring maintenance of the shape and integrity of the suspension file, whilst the use of oval rods provides for increased load bearing capacity.

Preferred or Optional Features

[0010] Each sleeve is formed from plastic laminate.

[0011] Each sleeve is provided with webbing additives for enhanced strength and tear resistibility.

[0012] Each sleeve extends the full length of each upper edge of its pocket.

[0013] Each sleeve has inner projections adapted to engage an inserted rod to retain a rod in its sleeve, whilst permitting rod-to-sleeve movement as and when required.

[0014] The rods are of solid material.

[0015] The rods are tubular.

[0016] The rods are of synthetic plastics material.

[0017] The rods are of steel.

[0018] The rods are of an aluminium alloy.

[0019] The rods are a combination of metal and plastics eg a metal inner rod, surrounded by a plastics sheath.

[0020] The rods are non-circular.

[0021] The rods are oval, with the major axis adapted to be located vertically.

[0022] The rods slightly exceed the length of each sleeve, so as to enable each end of the rod to project from each end of the sleeve.

[0023] Each rod has an indentation or recess adjacent its end, adapted to engage a portion of a support rail of a filing cabinet drawer with restrained lateral movement, but with provision for sliding movement along the rails.

Brief Description of the Drawings

[0024] The invention will now be described in greater detail, by way of example only, with reference to the accompanying drawing, in which:

[0025] Figure 1 is a perspective view of a suspension file in accordance with the invention; and
[0026] Figure 2 is a perspective view of a support rod for the file of Figure 1.

Detailed Description of the Drawings

[0025] A suspension file 1 comprises a 'U'-shaped pocket 2 of flexible synthetic plastics material, being a one piece sheet defining two side panels 3 and an inter-connecting bulbous lower portion or base 4. The panels 3 have upper edges 5 welded into tubular sleeves 6 extending the full length of each side panel 3. Beneath each tubular sleeve 6 is a length 7 of reinforcing webbing which may also be secured by welding.

[0026] A solid steel rod 8 is of oval section with the major axis vertically located, and of length slightly exceeding the length of the sleeves 6, so that ends 9 opposite of each rod 8 project beyond each end of each sleeve 6. The ends 9 are provided with an underside notch 10 to engage a support rail of a drawer of a filing cabinet. Each sleeve 6 has inner projections or fingers (not shown) adapted to engage the periphery of its rod

8 to assist in retaining a rod 8 within its sleeve 6.

Claims

1. A suspension file comprising a generally 'U'-shaped pocket (2) of flexible, or semi-flexible material, with the two upper edges (5) of the pocket (2) formed into tubular sleeves (6), with each sleeve (6) housing a support rod (8) of length exceeding its associated sleeve (6), whereby ends (9) of each rod (8) project beyond each end of the sleeve (6), with each projecting end (9) having a notch (10) to engage a support rail of a drawer of a filing cabinet, **characterised in that**
 - (i) the pocket (2) is of synthetic plastics material;
 - (ii) the pocket (2) has a bulbous lower portion; and
 - (iii) the tubular sleeves (6) are formed by welding the plastics material of the pockets.
2. A suspension file as claimed in Claim 1, **characterised in that** each sleeve (6) is formed from plastics laminate.
3. A suspension file as claimed in Claim 1 or Claim 2, **characterised in that** each sleeve (6) is provided with webbing additives for enhanced strength and tear resistibility.
4. A suspension file as claimed in Claims 1-3, **characterised in that** each sleeve (6) extends the full length of each upper edge of its pocket (2).
5. A suspension file as claimed in Claims 1-4, **characterised in that** each sleeve (6) has inner projections adapted to engage an inserted rod to retain a rod in its sleeve, whilst permitting rod-to-sleeve movement as and when required.
6. A suspension file as claimed in any one of Claims 1-5, **characterised in that** the rods (8) are of solid material.
7. A suspension file as claimed in any one of Claims 1-5, **characterised in that** the rods (8) are tubular.
8. A suspension file as claimed in any one of Claims 1-7, **characterised in that** the rods (8) are of synthetic plastics material, or of steel, or of an aluminium alloy or a combination of metal and plastics eg a metal inner rod, surrounded by a plastics sheath.
9. A suspension file as claimed in any one of Claims 1-8, **characterised in that** the rods (8) are non-circular.

10. A suspension file as claimed in Claim 9, **characterised in that** the rods (8) are oval, with the major axis adapted to be located vertically.

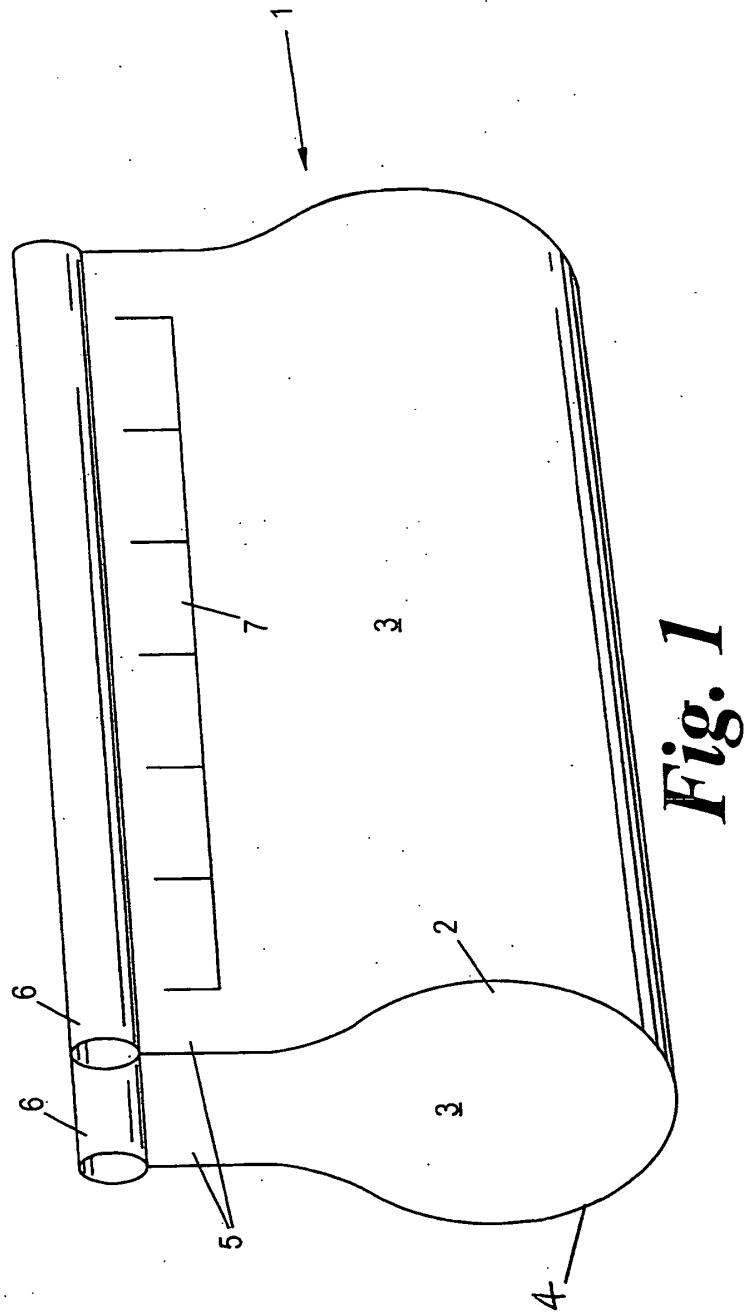
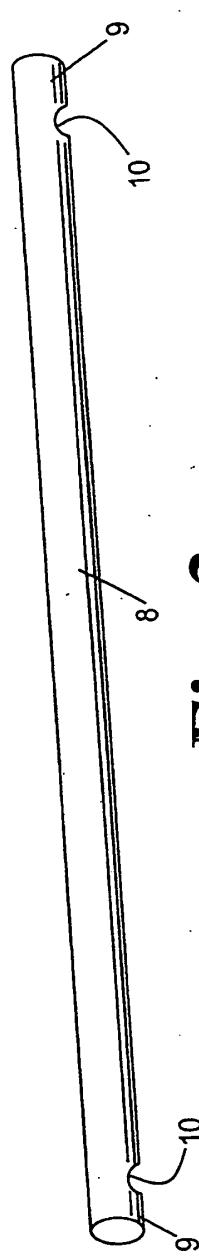
Patentansprüche

- 5 Hängemappe, umfassend eine im Allgemeinen U-förmige Tasche (2) aus einem biegsamen oder halb-biegsamen Material, wobei die zwei oberen Ränder (5) der Tasche (2) als röhrenförmige Schläuche (6) ausgebildet sind, wobei in jedem Schlauch (6) ein Trägerstab (8) untergebracht ist, dessen Länge die des ihm zugeordneten Schlauchs (6) überschreitet, wodurch die Enden (9) eines jeden Stabs (8) über die Enden des Schlauchs (6) hinausragen, wobei jedes hinausragende Ende (9) eine Kerbe (10) aufweist, um in eine Lagerschiene einer Lade eines Aktenschrank einzugreifen, **dadurch gekennzeichnet, dass**
 - (i) die Tasche (2) aus einem synthetischen Kunststoffmaterial besteht;
 - (ii) die Tasche (2) einen bauchigen unteren Abschnitt aufweist; und
 - (iii) die röhrenförmigen Schläuche (6) durch Schweißen des Kunststoffmaterials der Taschen ausgebildet sind.
- 10 20 25 30 35 40 45 50 55 2. Hängemappe nach Anspruch 1, **dadurch gekennzeichnet, dass** jeder Schlauch (6) aus Kunststofflaminat gebildet ist.
3. Hängemappe nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** jeder Schlauch (6) mit Gurtbandzusätzen für höhere Stärke und Zerreißfestigkeit versehen ist.
4. Hängemappe nach einem der Ansprüche 1 bis 3, **dadurch gekennzeichnet, dass** sich jeder Schlauch (6) über die gesamte Länge eines jeden oberen Rands der zugehörigen Tasche (2) erstreckt.
5. Hängemappe nach einem der Ansprüche 1 bis 4, **dadurch gekennzeichnet, dass** jeder Schlauch (6) innere Vorsprünge aufweist, die dazu geeignet sind, in einen eingeführten Stab einzugreifen, um einen Stab im zugehörigen Schlauch (6) festzuhalten, dabei aber ein Bewegung des Stabs in Bezug auf den Schlauch zulassen, wann immer dies erforderlich ist.
6. Hängemappe nach einem der Ansprüche 1 bis 5, **dadurch gekennzeichnet, dass** die Stäbe (8) aus massivem Material bestehen.
7. Hängemappe nach einem der Ansprüche 1 bis 5, **dadurch gekennzeichnet, dass** die Stäbe (8) röhrenförmig sind.

8. Hängemappe nach einem der Ansprüche 1 bis 7, **dadurch gekennzeichnet, dass** die Stäbe (8) aus einem synthetischen Kunststoffmaterial oder aus Stahl oder einer Aluminiumlegierung oder aus einer Kombination aus Metall und Kunststoff, z.B. aus einem mit einer Kunststoffhülle ummantelten Innenstab aus Metall, bestehen.
9. Hängemappe nach einem der Ansprüche 1 bis 8, **dadurch gekennzeichnet, dass** die Stäbe (8) nicht kreisrund sind. 10
10. Hängemappe nach Anspruch 9, **dadurch gekennzeichnet, dass** die Stäbe (8) oval sind, wobei die Hauptachse angepasst ist, um vertikal angeordnet zu werden. 15

Revendications

1. Dossier suspendu comprenant une poche de forme globale en U (2) d'un matériau flexible ou semi-flexible, les deux bords supérieurs (5) de la poche (2) étant formés en manchons tubulaires (6), chaque manchon (6) logeant une tige de support (8) d'une longueur dépassant son manchon associé (6), les extrémités (9) de chaque tige (8) se projetant ainsi au-delà de chaque extrémité du manchon (6), chaque extrémité en projection (9) possédant une encoche (10) pour engager un rail de support d'un tiroir d'un classeur, **caractérisé en ce que** :
- (i) la poche (2) est constituée d'une matière plastique synthétique ;
 - (ii) la poche (2) possède une partie inférieure renflée ; et
 - (iii) les manchons tubulaires (6) sont formés par soudage de la matière plastique des poches. 30
2. Dossier suspendu selon la revendication 1, **caractérisé en ce que** chaque manchon (6) est formé d'un stratifié de matière plastique. 40
3. Dossier suspendu selon la revendication 1 ou 2, **caractérisé en ce que** chaque manchon (6) est muni d'additifs de sanglage pour une solidité et une résistance au déchirement améliorées. 45
4. Dossier suspendu selon les revendications 1 à 3, **caractérisé en ce que** chaque manchon (6) s'étend sur toute la longueur de chaque bord supérieur de sa poche (2). 50
5. Dossier suspendu selon les revendications 1 à 4, **caractérisé en ce que** chaque manchon (6) possède des projections internes adaptées pour engager une tige insérée afin de retenir une tige dans son manchon tout en permettant un déplacement de la 55
- tige par rapport au manchon comme et lorsque cela est requis.
6. Dossier suspendu selon l'une quelconque des revendications 1 à 5, **caractérisé en ce que** les tiges (8) sont d'un matériau plein.
7. Dossier suspendu selon l'une quelconque des revendications 1 à 5, **caractérisé en ce que** les tiges (8) sont tubulaires.
8. Dossier suspendu selon l'une quelconque des revendications 1 à 7, **caractérisé en ce que** les tiges (8) sont d'une matière plastique synthétique, ou d'un acier ou d'un alliage d'aluminium ou d'une combinaison d'un métal et d'une matière plastique, par exemple une tige interne de métal entourée par une gaine de matière plastique.
9. Dossier suspendu selon l'une quelconque des revendications 1 à 8, **caractérisé en ce que** les tiges (8) sont non-circulaires. 20
10. Dossier suspendu selon la revendication 9, **caractérisé en ce que** les tiges (8) sont ovales, le grand axe étant adapté pour être positionné de façon verticale. 25



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- DE 8308743 U [0004]
- NL 1000021 [0005]
- DE 7238855 U [0006]