(12) UK Patent Application (19) GB (11) 2 439 914 (13) A

(43) Date of A Publication 16.01.2008

(21) Application No: 0613833.3

(22) Date of Filing: 12.07.2006

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(51) INT CL:
A47B 88/04 (2006.01)

(52) UK CL (Edition X):
A4B B15A2

(56) Documents Cited:
GB 2203327 A
DE 004139441 A1
US 5090786 A
EP 1287764 A1
US 5681101 A

(58) Field of Search:
UK CL (Edition X) **A4B**
INT CL **A47B**
Other:

(54) Abstract Title: **Drawer slide runner component**

(57) A component 1 for a drawer slide runner assembly comprises an elongate body 2 having an angled section that is shaped to fit around the elongate edge of a drawer. The body 2 comprises a main central wall section 3 with an upper turned section 4 and a lower turned section 5. The lower turned section has a plurality of upstanding portions 6 with prongs 9 extending towards the main body 3. The main body 3 also has prongs 8 extending towards the other prongs 9. The component is fitted around an elongate edge of material and the upstanding portions are forced towards the material such that prongs 8 and 9 penetrate the material to fix the component in place. A wheel 7 is located at one end of the central body 3 and stops 10 are located in the upper turned section 4 to limit movement of the component relative to a secondary component.

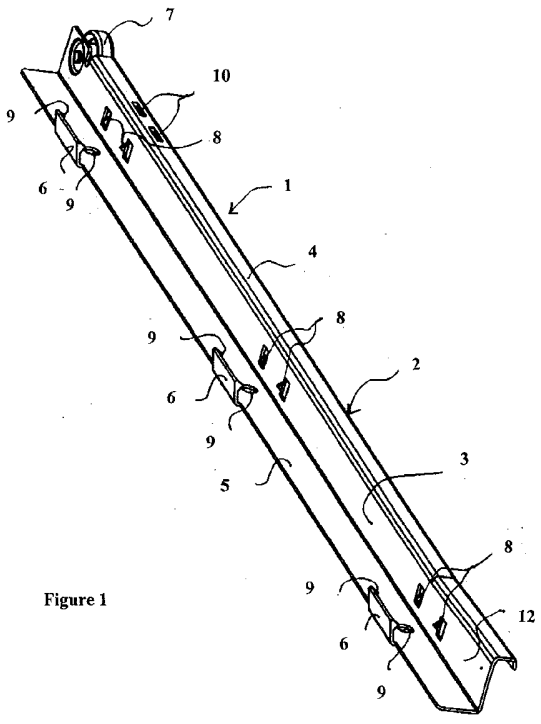

Figure 1

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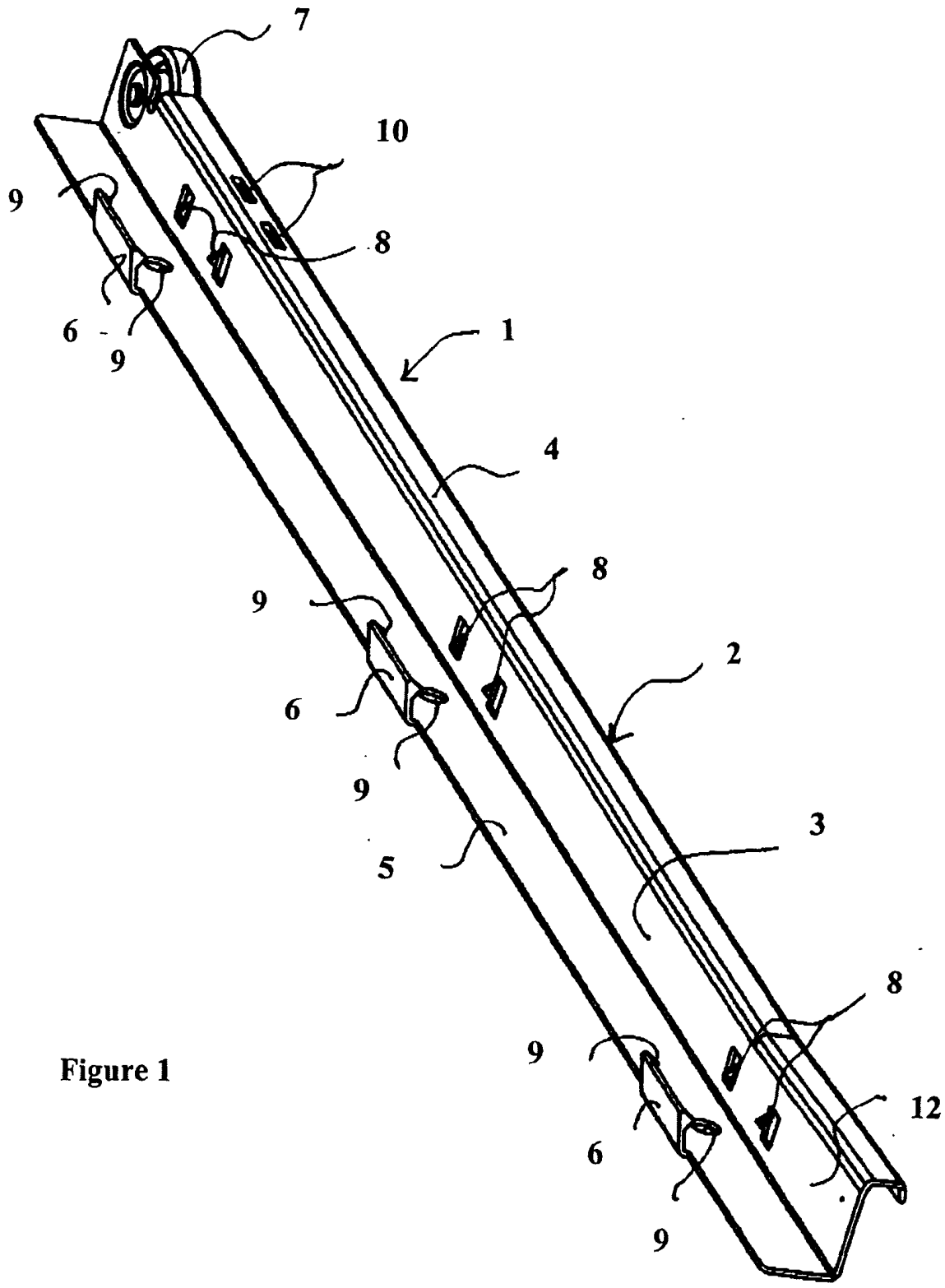

Figure 1

Method Of Fitting A Component

This invention relates to means for fixing components to wooden surfaces and in particular to a means for fixing a drawer runner to a drawer or desk.

Typically a desk will include a number of drawers and each of the drawers will be fixed by means of a rail mounting system provided on each side of the drawer. The system comprising two rails, one rail mounted one on the drawer and the other on the desk, which rails inter-engage with one another with a wheel provided on one rail running in a groove provided on the other rail.

In conventional arrangements the rails are mounted to the drawer or the desk either by means of screw fixings, or a single series of prongs that are deformed and bite into the surface to which they are being attached.

The drawback of the screw fixing system is that it is time consuming and costly to use. However the fixing is secure. In the case of the single series of prongs which are deformed to engage and bite the material of the drawer the position is reversed, and in this case fitting is simply and easily achieved. However, the component is not as secure as could be desired. Specifically if the component is knocked or load applied that contorts the drawer, the rail may be dislodged and pop free from the surface to which it is mounted.

The present invention is concerned with overcoming the above-mentioned problems and providing means for fitting in which the above-mentioned problems are at least alleviated.

In accordance with the present invention there is provided means for fitting components to a pliable member, which means for fitting comprises at least two spaced apart series of prongs wherein the series of prongs are arranged so that the prongs engage the pliable member in substantially opposing directions.

The system may be used for mounting components to any pliable material but in one application it is envisaged that the components are being mounted to a wooden member, such as a chip board member or solid wood member.

The provisions of the prongs acting in opposing directions means that at least one series of prongs will always act to prevent movement of the component with respect to the member. This in effect means that the component is tightly secured with respect to the member and further utilises readily available technology. Thereby the problems mentioned above are overcome.

In one embodiment of the present invention at least one of the series of prong is stamped out from the component and deformable with respect to the component.

The prongs may be formed with smooth sides for engaging the wooden surface or alternatively the prongs may be provided with barbs to bite into the wooden surface.

The components may be formed from mild steel or other suitable resilient material.

In one configuration of the invention the two series of prongs are designed to grip either side of a wooden panel disposed there between. In this arrangement the component may comprise an elongate member having a bottom section with at least one upstanding wall section wherein one series of prongs is provided on the elongate member and the second is provided on the upstanding wall section or sections.

In accordance with a second aspect of the invention there is provided a method of fitting a component to a member which method comprises locating a component including a means for fitting in accordance with the first aspect of the present invention with respect to the member to which it is to be fitted; applying a load to the means for fitting so that the prongs of the two series of prongs engage and bite into the member.

The invention will now be described by description of an example with reference to the accompanying drawings in which:

Fig 1 shows a component including a means for fitting made in accordance with the present invention.

Turning to the drawings there is shown in Fig 1 a drawer runner component 1 made in accordance with the present invention. The component 1 is formed from an elongate section 2 having a main central wall section 3 with an upper turned section 4 and a lower turned section 5. The upper and lower turned sections 5 and 6 are turned in opposing directions to one another.

The upper turned section 4 may have provided therein two stops 10 to halt movement of rollers that would be provided on a secondary component.

The lower curved section 5 is of flat profile and has spaced along its length three upstanding portions 6. The upstanding portions 6 are bent back to overlap the main wall section 3 and are equally spaced along the length of the elongate member. Each upstanding section is provided with a prong 9 at the longitudinally opposed edges.

The prongs 9 on the upstanding portions 6 in combination provide a first series of prongs.

A wheel 7 is located in the upper section of the central wall 3 at one end of the elongate section.

A second series of prongs 8 are provided in the main section wall 3. The prongs 8 are spaced apart along the length of the central wall section 3 and each of the prongs 8 is punched out from the central wall section 3.

Further as shown in the configuration illustrated in Fig 1 the main central section 3 over substantially all of its length is of uniform height. However an end section 12 of the main central section 3 remote from the wheel 7 is of steadily increasing height. This feature is provided on a number of the currently available drawer runners and enables the drawer to be locked in the closed position.

The drawer runner component 1 is formed from mild steel. It is punched out as a flat component that is then shaped and bent using suitable tools to form the drawer runner 1. In this shaped and bent state the actual component is really a precursor component with the upstanding portions 6 at an offset angle to their final position to allow for the fitting of the component to the pliable member, such as a wooden draw side.

In fitting the component to a drawer the drawer is located so that a portion of the drawer extends into the space between the upstanding portions 6 and the main central section 3. The prongs 8, 9 may be in contact with the sides of the drawer but this is not critical. The component is located so that the drawer is in contact with the lower turned section 5. The upstanding portions 6 are now bent inwardly so that the prongs 8 and 9 bite into the material of the drawer so securing the component to the drawer. In the final assembled position the upstanding portions 6 will be substantially parallel to the main central section 3 with the prongs fully biting into the material of the drawer.

Claims

1 A means for fitting components to a pliable member, which means for fitting comprises at least two spaced apart series of prongs wherein the series of prongs are arranged so that the prongs engage the pliable member in substantially opposing directions.

2 A means for fitting as claimed in claim 1 wherein at least one of the series of prong is stamped out from the component and deformable with respect to the component.

3 A means for fitting as claimed in claim 1 or claim 2 wherein the prongs are formed with smooth sides.

4 A means for fitting as claimed in claim 1 or claim 2 wherein the prongs are provided with barbs to bite into the material.

5 A means for fitting as claimed in any preceding claim wherein the component is formed from mild steel.

6 A means for fitting as claimed in any preceding claim wherein the component comprises an elongate member having a bottom section with at least one upstanding wall section wherein one series of prongs is provided on the elongate member and the second is provided on the upstanding wall section or sections.

7 A method of fitting a component to a member which method comprises locating a component including a means for fitting in with any preceding claim with respect to the member to which it is to be fitted; applying a load to the means for fitting so that the prongs of the two series of prongs engage and bite into the member.

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Application No:	GB0613833.3	**Examiner:**	Mr Hal Young
Claims searched:	1-7	**Date of search:**	9 November 2006

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-7	US5681101 A (HAVLAT) see whole document.
X	1-7	EP1287764 A1 (SALICE) see whole document and especially fig 5.
A		GB2203327 A (BLUM)
A		DE4139441 A1 (ALFIT)
A		US5090786 A (ALFIT)

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^{X} :

A4B

Worldwide search of patent documents classified in the following areas of the IPC

A47B

The following online and other databases have been used in the preparation of this search report

WPI, EPODOC