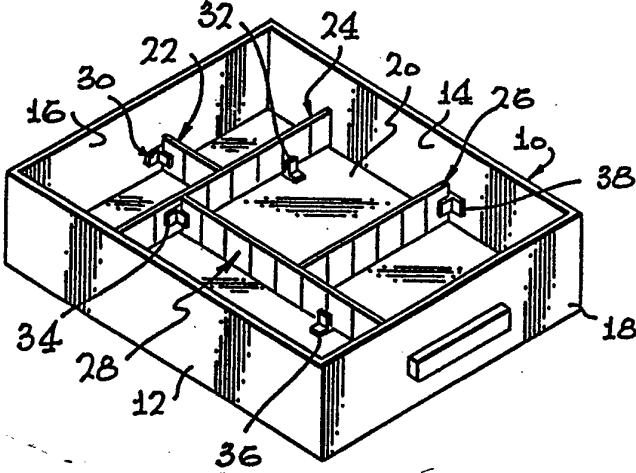


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <p>(51) International Patent Classification <sup>5</sup> :<br/>A47B 88/20, 95/00</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>A1</p> | <p>(11) International Publication Number: WO 94/01020</p> | <p>(43) International Publication Date: 20 January 1994 (20.01.94)</p> |
| <p>(21) International Application Number: PCT/US92/11000</p> <p>(22) International Filing Date: 22 December 1992 (22.12.92)</p> <p>(30) Priority data:<br/>912,763 13 July 1992 (13.07.92) US</p> <p>(71)(72) Applicant and Inventor: KOVES, Thomas [US/US];<br/>P.O. Box 1387, Anahuac, TX 77514 (US).</p> <p>(74) Agents: ABRAHAM, Colin, P. et al.; Ladas &amp; Parry,<br/>3600 Wilshire Boulevard, Suite 1520, Los Angeles, CA<br/>90010 (US).</p> <p>(81) Designated States: AU, CA, JP, KR, European patent (AT,<br/>BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC,<br/>NL, PT, SE).</p> |           | <p>Published<br/>With international search report.</p>    |                                                                        |
| <p>(54) Title: DIVIDERS FOR DRAWERS OR THE LIKE</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |                                                           |                                                                        |
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| <p>(57) Abstract</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           |                                                           |                                                                        |
| <p>Divider panels (22-28) are sized to fit partway or all the way across a drawer (10) or the like and extend sufficiently high to functionally divide the drawer into separate areas. The divider panels (22-28) are notched for breakoff to the desired length. The divider panels (22-28) are held in place by bifurcated mounting supports (32-38) which can be secured to the drawer bottom (20), drawer sides (12-18) or another divider panel to retain the divider panels in the selected position.</p>                                                                                 |           |                                                           |                                                                        |

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## DIVIDERS FOR DRAWERS OR THE LIKE

### FIELD OF THE INVENTION

This invention is directed to a divider for drawers or the like wherein divider panels are positioned in the  
5 drawer with the length created by breaking the panels off at snap notches and are held in place with bifurcated mounting supports.

### BACKGROUND OF THE INVENTION

It is impossible to organize the contents of a  
10 drawer into groups of things without divider panels because the opening and closing of the drawer causes relative motion between the things in the drawer and the drawer itself. To keep these things organized, drawer dividers are necessary.

Some drawers are originally manufactured with fixed  
15 drawer dividers. However, systems of this nature cannot be reconfigured for different needs. Other drawers are originally manufactured with movable dividers, such as those which slide into slots on the interior sides of drawer sides. This system is useful for some kinds of reconfiguration, but  
20 needs to be built into the original drawer construction. Therefore, in that system, drawers without the original divider slots cannot be configured later to receive the dividers. Aside from drawers, there are other similar structures which require dividers to maintain organization.  
25 Accordingly, there is need for a divider system which can be installed in a drawer without modification of the drawer to create dividers of the space therein.

### SUMMARY OF THE INVENTION

According to one aspect of the invention there is  
30 provided a divider for a drawer or the like, comprising a substantially rectangular divider having a length, thickness and width; a mounting support, said mounting support having a base and said base having a mounting surface thereon for attachment to a portion of a drawer, said mounting support  
35 having first and second spaced fingers thereon opposite said

mounting surface, said fingers being spaced apart substantially the thickness of said divider so as to receive therebetween said divider for supporting said divider.

In order to aid in the understanding of this invention, it can be stated in essentially summary form that it is directed to dividers for drawers or the like wherein the dividers comprise divider panels and mounting supports. The divider panels may be rectangular strips which can be fashioned to a length as needed by the drawer. The mounting support is preferably bifurcated to grasp the divider panels at the ends or bottom to hold the divider panels in the selected location.

Accordingly, it is an advantage of this invention to provide dividers for drawers or the like wherein divider panels are fashioned to length for the divider configuration desired within the drawer and mounting supports hold the dividers in place by engaging the drawer sides and the divider panel ends and/or beneath the divider panels to engage the lower edge of the divider panels and the drawer bottom. A further advantage of this invention is to provide dividers for drawers or the like wherein the divider panels may be fashioned so that they may be broken to length so that they may be configured as desired within the drawer.

Preferably, this invention provides bifurcated mounting supports for the divider panels with the mounting supports configured to grasp the divider panels on their lower edge to support the divider panels with respect to the drawer bottom and configured to grasp the divider panels at the ends to secure the divider panels with respect to the drawer sides and/or other divider panels.

The features of the present invention which are believed to be novel are set forth with particularity in the appended claims. The present invention, both as to its organization and manner of operation, together with further objects and advantages thereof, may be best understood by reference to the following description, taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is an isometric view of a drawer or the like containing dividers in accordance with this invention.

FIGURE 2 is a side-elevational view of a divider panel, with the center broken away to show it is of greater length and showing the breakoff notches.

FIGURE 3 is a view similar to FIGURE 2, but showing a divider panel of taller configuration for deeper drawers.

FIGURE 4 is an enlarged section taken generally along line 4-4 of FIGURE 2, showing the notches in the divider panel.

FIGURE 5 is an isometric view of one of the bifurcated mounting supports, shown in mounting position with respect to a drawer side and a divider panel shown in dashed lines.

FIGURE 6 is a plan view of a bifurcated mounting support, with a divider panel shown in dashed lines.

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

A drawer 10 is shown in FIGURE 1. The drawer 10 has left and right sides 12 and 14, back side 16 and front side 18. Bottom 20 is attached to the sides and closes the drawer bottom. This configuration resembles an open-top box, and the dividers of this invention can be used in a box-type structure in addition to being useful in the drawer 10. Dividers 22, 24, 26 and 28 lie adjacent the bottom 20 and stand in an upright position to divide the lower part of the drawer into different compartments. They are held in place by mounting supports 30, 32, 34, 36 and 38, as well as other mounting supports not seen in FIGURE 1.

All of the dividers are the same, except that they may be shortened in accordance with the divider needs. Divider 24 is shown in detail in FIGURES 2 and 4 and is an example of each of the dividers. As is seen in FIGURES 2 and 4, divider 24 is a substantially rectangular solid. It is made of injection-molded thermoplastic synthetic polymer composition material of fairly hard and strong characteristics. As a particular example, the divider 24 is 1/16 inch thick, 1-1/4 inch tall, and 6 inches long. The length is

divided by notches. Notches 42 and 44 are seen as opposite each other adjacent the right end of divider 24, as seen in FIGURE 4. Notches 46 and 48 are shown adjacent each other. In accordance with this particular example, the notches 42 and 5 44 are 1/2 inch from the right end 50 of the divider; and notches 48 and 46 are 1/2 inch from the notches 42 and 44, respectively. There are additional notches spaced at 1 inch intervals down the length of the divider 24. As seen in FIGURE 2, notches 52, 54 and 56 are shown. In accordance with 10 the teaching of notches 46 and 48, there are also corresponding notches 58 and 60 in the far side of the divider 24, as seen in FIGURE 2. Each of the notches 48 through 56 are spaced 1 inch apart along the length of the divider 24. The notches are sized and the divider is of such strength as 15 to permit the divider to be shortened by breaking it off at one of the notches. Thus, the divider 24 may be shortened from its full 6 inch length to a lesser length in 1 inch and 1/2 inch increments. Divider 62, shown in FIGURE 3, is identical to the dividers 22 through 28, except that it is 20 taller. The divider 62 is useful in drawers which are deeper and for which deep dividers are desired. It is structurally similar and useful in the same way.

The bifurcated mounting support 30 is shown in more detail in FIGURES 5 and 6. The bifurcated mounting support 25 30 has a base 64 which has a flat mounting surface 66. The mounting surface carries a pressure-sensitive adhesive 68 which is supplied with a protective release sheet 70. When the release sheet 70 is removed, the adhesive 68 is exposed so that the mounting support 30 can be placed in the desired 30 location and re-located if desired. In the present instance, the location is against the back side 16. However, as illustrated in FIGURE 1, the mounting support can be placed against the side wall as support 38, against the bottom as support 32, or against a divider as support 34. The mounting 35 supports are appropriately secured in place, and the dividers are broken to length and placed between the fingers 72 and 74, which are the bifurcated portion of the mounting support which grasps a divider. The spacing between the fingers is such as to firmly receive the divider so that the divider is grasped

and securely held. As seen in FIGURE 6, the spacing between the inner walls 76 and 78 of respective fingers 72 and 74 is less than the thickness of divider 22 so that the fingers act as leaf springs to hold the divider 22 firmly. The length of the fingers from the base end to the free end is  $3/4$  inch, which is slightly longer than the width of the smaller breakoff portion of the divider. In this way, the dividers will always be grasped by the fingers. If the divider is slightly less than  $1/2$  inch too long and  $1/2$  inch is broken off, the shorter divider can now be engaged and grasped between the fingers and extend halfway down between the fingers to the base. This is adequate support for the divider. The base is preferably  $1/2$  inch wide and  $3/4$  inch long when the divider is about one inch tall for the example shown in FIGURE 2. The mounting support may be composed of any suitable material and is preferably injection-molded of thermoplastic synthetic polymer composition material so as to be inexpensively supplied. An alternate method of manufacture is to extrude the material through an appropriate die and cut it off to the desired length, as indicated in FIGURE 5.

Divider 62, except for its height, is the same as divider 24 and can be used in the same way. In view of the height of the divider 62, it may be desirable to use two mounting supports on the sides of the drawer, one above the other, to support the height of the taller divider 62. Other than that difference, the divider 62 is used in the same way and has different sections broken off in order to achieve the desired width.

This invention has been described in its presently contemplated best mode, and it is clear that it is susceptible to numerous modifications, modes and embodiments within the ability of those skilled in the art and without the exercise of the inventive faculty. Accordingly, the scope of this invention is defined by the scope of the following claims.

CLAIMS

1. A divider for a drawer or the like,  
comprising:

a substantially rectangular divider having a  
5 length, thickness and width;

a mounting support, said mounting support  
having a base and said base having a mounting surface thereon  
for attachment to a portion of a drawer, said mounting support  
having first and second spaced fingers thereon opposite said  
10 mounting surface, said fingers being spaced apart  
substantially the thickness of said divider so as to receive  
therebetween said divider for supporting said divider.

2. The divider of Claim 1 wherein both said  
divider and said mounting support are made of thermoplastic  
15 synthetic polymer composition material.

3. The divider of Claim 1 wherein said divider has  
a series of notches therein extending in the width direction  
of said divider so that said divider may be reduced in length  
by being separated at one of said notches.

20 4. The divider of Claim 3 wherein said divider has  
a notch in both sides thereof where said notches are opposite  
each other for aid in separation of said divider.

5. The divider of Claim 1 wherein said mounting  
surface of said divider is substantially planar.

25 6. The divider of Claim 5 wherein said mounting  
surface carries pressure-sensitive adhesive thereon.

7. The divider of Claim 6 wherein said pressure-  
sensitive adhesive carries a release sheet thereon and said  
release sheet is removed for attachment to a drawer surface.

30 8. The divider of Claim 6 wherein said fingers  
have a dimension parallel to said mounting surface and said

fingers are substantially equal in length along said dimension as said mounting surface.

9. The divider of Claim 6 wherein said divider has a series of notches therein extending in the width direction of said divider so that said divider may be reduced in length by being separated at one of said notches.

10. The divider of Claim 9 wherein said divider has a notch in both sides thereof where said notches are opposite each other for aid in separation of said divider.

11. The divider of Claim 10 wherein both said divider and said mounting support are made of thermoplastic synthetic polymer composition material.

12. Dividers for drawers or the like, comprising:

a plurality of divider panels, each of said divider panels having a thickness, a width and a length, each of said divider panels having spaced along the length of said panels notches extending in the width-wise direction on said panels so that each panel can be individually broken at a notch to create a divider panel of the desired length;

a plurality of mounting supports, each of said mounting supports having a base and each said base having a substantially planar mounting surface thereunder, said base having a pair of fingers thereon opposite said mounting support, said fingers being spaced apart a distance substantially equal to the thickness of said dividers so as to firmly receive a divider in each said mounting support, said mounting supports being mountable upon drawer sides, drawer bottoms and the sides of dividers so that said mounting supports can be positioned and secured in a drawer and said dividers can be broken to a length to form a plurality of divider dividers.

13. The dividers of Claim 12 wherein said mounting supports carry pressure-sensitive adhesive thereon on said mounting surface for the mounting of said mounting supports

on drawer sides and bottom.

14. The dividers of Claim 13 wherein a release sheet is provided over said adhesive and said release sheet is removed for adhesive attachment of said mounting support  
5 against a drawer side.

15. The dividers of Claim 12 wherein said fingers on said mounting support are longer than the smallest breakoff length of each said divider so that two of said mounting supports can engage the ends of a divider broken off for  
10 insertion into said mounting supports.

16. The dividers of Claim 15 wherein said mounting supports carry pressure-sensitive adhesive thereon on said mounting surface for the mounting of said mounting supports on drawer sides and bottom.

17. The dividers of Claim 16 wherein a release sheet is provided over said adhesive and said release sheet is removed for adhesive attachment of said mounting support  
15 against a drawer side.

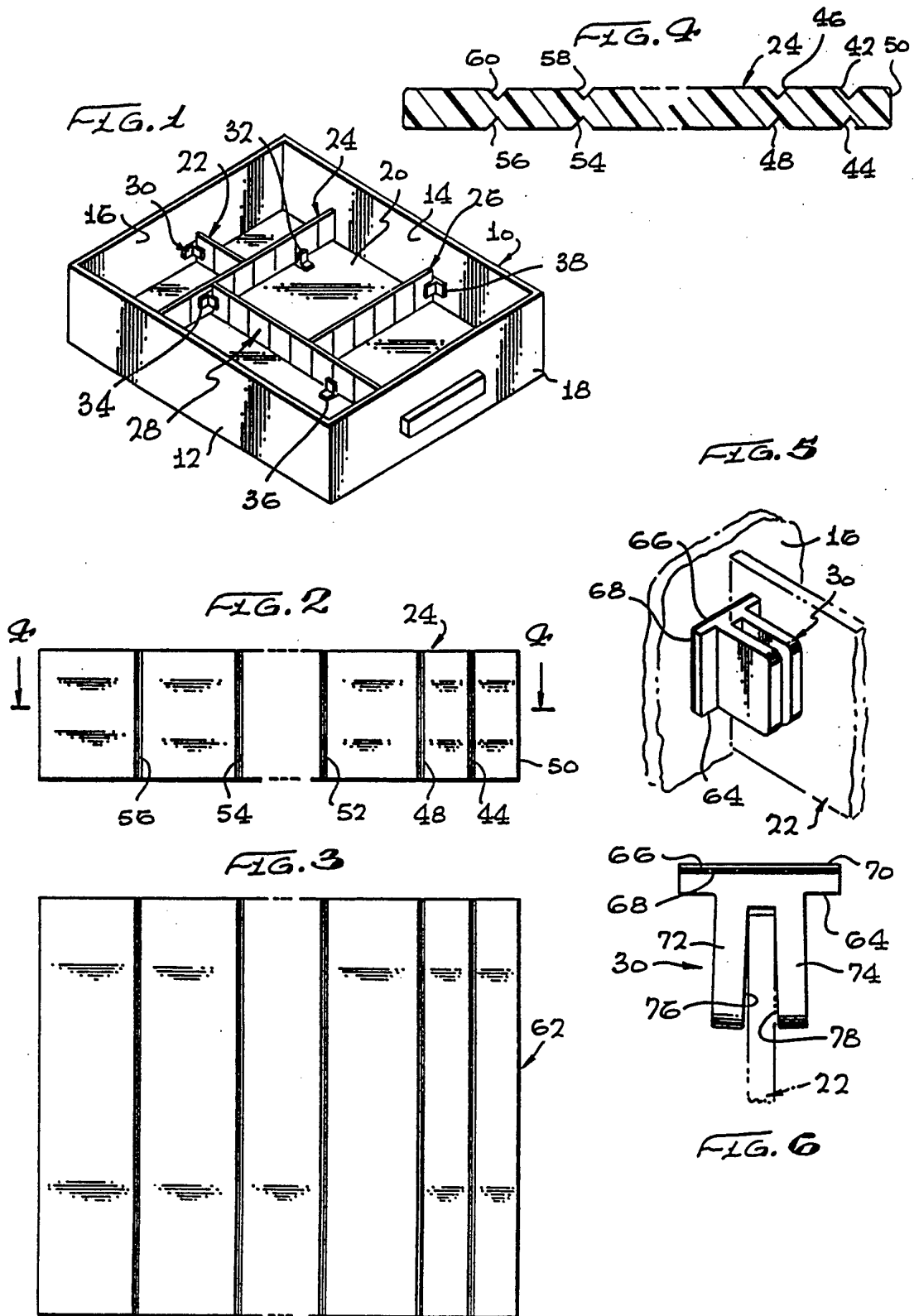
18. A divider system comprising:  
20 a container having sides and a bottom, said sides and said bottom being rectangularly arranged to define a substantially rectangular open-top container;  
a plurality of mounting supports, each of said plurality of mounting supports having a mounting surface with  
25 adhesive thereon and a plurality of said mounting supports being attached to said sides and said bottom of said container, each of said mounting supports having a pair of fingers thereon opposite said mounting surface, said fingers being spaced from each other substantially a thickness  
30 dimension;

a plurality of dividers, each of said plurality of dividers being of such substantially rectangular configuration and having a length, a width and a thickness, each of said plurality of dividers having notches in the

width-wise direction thereof for breaking off said dividers to a selected length dimension, said dividers being engaged between said fingers on said mounting supports so that said dividers are supported from the sides and bottom of said  
5 container.

19. The divider system of Claim 18 wherein the length of said fingers for engaging said dividers therebetween is greater than the length of the smallest breakoff portion of said dividers so that said dividers can be broken off at  
10 a selected length and engaged between said fingers.

20. The divider system of Claim 19 wherein at least one of said mounting supports is attached to the side of one of said dividers.



## INTERNATIONAL SEARCH REPORT

International application No.

CT/US92/11000

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(5) : A47B 88/20; A47B 95/00

US CL : 312/348.3; 211/184; 248/909

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 312/193; 24/304, DIG. 11; 248/205.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category*         | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No.          |
|-------------------|------------------------------------------------------------------------------------|--------------------------------|
| Y                 | US,A, 4,488,653 (BELOKIN) 18 December 1984.                                        | 3,4,9-14                       |
| <del>X</del><br>Y | GB, A, 1,160,414 (PILLEY) 06 August 1969.                                          | <del>1,2,5-8</del><br>3,4,9-14 |
| A                 | US, A, 3,999,663 (WALTER) 28 December 1976.                                        |                                |
| A                 | US,A, 4,595,246 (BROSS) 17 June 1986.                                              |                                |
| A                 | US, A, 3,656,786 (LARSON) 18 April 1972.                                           |                                |
| A                 | US, A, 4,693,383 (GALEN) 15 September 1987.                                        |                                |
| A                 | EP, A, 116,013 (MEJER) 26 January 1984.                                            |                                |

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

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Date of the actual completion of the international search

23 FEBRUARY 1992

Date of mailing of the international search report

22 MAR 1993

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US92/11000

| C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |                                                                                    |                       |
|------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------|
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| A                                                    | FR, A, 1,280,108 (DELAGOUTTE) 18 November 1960.                                    |                       |