

A PARTITIONING SYSTEM

FIELD OF THE INVENTION

The invention relates to a partitioning system, used to partition a storage area into desired sections.

BACKGROUND OF THE INVENTION

When storage areas are not managed or organized properly, it leads to time wastage when a certain item or article has to be retrieved quickly.

Lack of proper management of a storage area often results in wastage of storage area, and the space is not efficiently or effectively used.

This is especially evident, when the storage area is limited, for e.g. in a storage box or a drawer.

There have been attempt to address the above problem, mainly by providing standard sized drawer dividers. However, these drawer dividers are of a fixed size and compartments, and often do not fully utilize the storage space or drawer. Another attempt, disclosed in GB 2 134 884, utilizes the whole storage space, but does not allow a user to fully manipulate the size of each individual compartment.

As a user often has a variety of items of different dimensions for storage, the solution proposed by GB 2 134 884 is not effective.

It is an objective of the present invention to alleviate the above problems.



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DETAILED DESCRIPTION OF THE INVENTION

According to an aspect of the invention there is provided a partitioning system for partitioning an area, said system including a plurality of partitioning units, each partitioning unit having a lengthwise dimension and a breadth wise dimension, said lengthwise dimension having at least one connecting portion and said breadth wise dimension having at least one complementary connecting portion.

In a second embodiment, said partitioning unit further includes a connecting portion at an opposed lengthwise dimension.

In a third embodiment, the partitioning system according to claim 1, wherein said partitioning unit further includes a connecting portion at an opposed breadth wise dimension.

In a fourth embodiment said partitioning unit further includes a complementary connecting portion at an opposed lengthwise dimension.

In a fifth embodiment, said partitioning unit further includes a complementary connecting portion at an opposed breadth wise dimension.

Preferably, said connecting portion is a recess, and said complementary connecting portion is a protrusion sized to be received by the recess.

In a variation, said connecting portion is a protrusion, and said complementary connecting portion is a recess dimensioned to receive the abutment.

Preferably, the partitioning system further includes a terminating unit, said terminating unit having a recess along a dimension of said terminating unit.

In a second embodiment of the terminating unit, said terminating unit has a protrusion along a dimension of said terminating unit.

Preferably, the partitioning unit and the terminal unit are made of a resilient material.

Still preferably, the partitioning unit may be sheared to manipulate the dimension of the partitioning unit.

Preferably, each partitioning unit is substantially rectangular in shape.

DESCRIPTION OF THE FIGURES

In order that the present invention might be more fully understood, embodiments of the invention will be described, by way of example only, with reference to the accompanying drawings, in which:

Figures 1A to 1D shows variations of a first embodiment of a partitioning unit, for use in a partitioning system of the present invention presented in a top view.

Figures 2A to 2D show variations of a second embodiment of a partitioning unit, for use in a partitioning system of the present invention presented in a top view.

Figures 3A to 3D shows a third embodiment of a partitioning unit, for use in a partitioning system of the present invention presented in a top view.

Figures 4A to 4E shows a fourth embodiment of a partitioning unit, for use in a partitioning system of the present invention presented in a top view.

Figures 5A to 5C shows a fifth embodiment of a partitioning unit, for use in a partitioning system of the present invention presented in a top view.

Figures 6A and 6B shows a variation of the connecting portion, and the complementary connecting portion presented in a top view.

Figures 7A to 7C shows a first and second embodiment of a terminating partitioning unit, for use in a partitioning system of the present invention presented in a top view.

Figure 8 shows the partitioning system with a plurality of the partitioning units of a fourth embodiment, used in a preferred embodiment of the present invention presented in a top view.

In each of the embodiments and variations, the same reference numerals have been used for similar components, merely for ease of understanding the specification.

DETAILED DESCRIPTION OF THE INVENTION

Reference will now be made in detail to the preferred embodiments of the invention, examples of which are illustrated in the accompanying drawings. While the invention will be described in conjunction with the preferred embodiments, it will be understood that they are not intended to limit the invention to these embodiments. On the contrary, the invention is intended to cover alternatives, modifications and equivalents, which may be included within the spirit and scope of the invention as defined by the appended claims. Furthermore, in the following detailed description of the present invention, numerous specific details are set forth in order to provide a thorough understanding of the present invention. However, it will be obvious to one of ordinary skill of the art that the present invention may be practiced without these specific details. In other instances, well known methods, procedures, components, and features have not been described in detail as not to unnecessarily obscure aspects of the present invention.

The following figures of the invention show the invention as viewed in a top view.

Variations of a first embodiment of a partitioning unit 100, for use in the partitioning system of the present invention, is shown in Figures 1A and 1B. As seen in these figures, the partitioning unit 100 has a lengthwise dimension 10, and a breadth wise dimension 11. In the first embodiment, the lengthwise dimension 10 and the breadth wise dimension 11 have a connecting portion 20 and a complementary connecting

portion 30 respectively. In Figure 1A, the connecting portion 20 is a protrusion 50, and the complementary connecting portion 30 is a recess 40. In Figure 1B, this is reversed.

Figures 1C and 1D shows the first embodiment of the partitioning unit in use. The protrusion 50 is in the form of a protrusion having a reduced diameter region, or a necked protrusion 51 and the recess 40 is in the form of a necked recess 41. The advantage of this necked region 70 is that a connecting adjacent partitioning unit will not be urged out of engagement to the partitioning unit 100 by a transverse force to the necked region 70.

As seen in Figure 1C, a force F, acting transversely to the necked region, will not cause the two adjacent partitioning unit to be detached.

Variations to a second embodiment of a partitioning unit 100 is shown in Figure 2A through to 2D. In this embodiment, the lengthwise dimension has a connecting portion or a complementary connecting portion, and the opposed lengthwise dimension has either a complimentary connecting portion or a connecting portion.

As seen in Figure 2A, the first variation of the second embodiment of the partitioning unit 100 has a necked recess 41 at both the lengthwise dimensions, and a necked protrusion 51 at a breadth wise dimension.

In a second variation shown in Figure 2B, the partitioning unit 100 has a necked protrusion 51 at both lengthwise dimension 10, and a necked recess 41 at the breadth wise dimension 11.

In a third variation shown in Figure 2C, the partitioning unit 100 has a necked protrusion 51 at a lengthwise dimension 10, and a necked recess 41 at an opposed lengthwise dimension 10. The breadth wise dimension 11 has a necked recess 41.

As seen in the second embodiment of the partitioning unit, illustrated in Figures 2A to 2D, the partitioning unit 100 has an additional connecting portion 20 to an opposed

lengthwise dimension of the partitioning unit 100, as compared to the first embodiment of the invention.

In the third embodiment of the partitioning unit 100, the variations of this embodiment as seen in Figures 3A to 3D, the partitioning unit 100 has an additional connecting portion 20 at an opposed breadth wise dimension 11 at the partitioning unit 100.

In a first variation as seen in Figure 3A, the partitioning unit 100, has a necked protrusion 51 on a lengthwise dimension 10, and a necked recess 41 at each opposed breadth wise dimension 11.

In a second variation shown in Figure 3B, the partitioning unit 100, has a necked protrusion 51 along a lengthwise dimension 10, and a breadth wise dimension 11, and a necked recess 41, at an opposed breadth wise dimension 11.

In a third variation shown in Figure 3B, the partitioning unit 100, has a necked recess 41 at a lengthwise dimension 10, and necked protrusions 51 at both opposed sides of the breadth wise dimension.

In a fourth variation shown in Figure 3D, the partitioning unit 100 has a necked recess 41 at a lengthwise dimension 10, and a breadth wise dimension 11, and a necked protrusion 50, at an opposed breadth wise dimension 11.

In the fourth embodiment of the partitioning unit 100, the variations of which are seen in Figures 4A to 4E, the partitioning unit 100 has connecting portions and complementary connecting portions on the lengthwise and breadth wise dimensions of the partitioning unit 100.

In a first variation as shown in Figure 4A, the partitioning unit 100 has necked protrusions 51 at both lengthwise dimensions, and necked recesses 41 at both breadth wise dimensions.

In a second variation as shown in Figure 4B, the partitioning unit 100 has necked recess 41 at both breadth wise dimensions, and a necked protrusion 51 at a lengthwise dimension, and a necked recess 41 at an opposed lengthwise dimension.

In a third variation as shown in Figure 4C, the partitioning unit 100 has necked protrusions 51 at each opposed lengthwise dimension, and a necked protrusion 51 and a necked recess 41 at opposed sides of the breadth wise dimension.

In a fourth variation as shown in Figure 4D, the partitioning unit 100 has necked protrusions 51 at each opposed breadth wise dimension, and a necked protrusion 51 at a lengthwise dimension, and a necked recess 41, at an opposed lengthwise dimension.

In a fifth variation as shown in Figure 4E, the partitioning unit 100 has a necked protrusion 51 at a breadth wise dimension, and a necked recess 41 at an opposed breadth wise dimension, and necked recesses 41 at opposed lengthwise dimensions.

Figure 5A to 5C show variations of a fifth embodiment of the partitioning unit. In this embodiment, each lengthwise dimension has more than one necked recess 41 or necked protrusion 51.

In a first variation as shown in Figure 5A, both lengthwise dimensions have a plurality of necked recesses 41. There is a necked protrusion 51, and a necked recess 41, at each opposed ends of the partitioning unit 100.

In a second variation as shown in Figure 5B, both opposed ends of the breadth wise dimension have necked protrusions 51. Both opposed ends of the lengthwise dimension have necked recesses 41.

In a third variation as shown in Figure 5C, one end of the breadth wise dimension has a necked protrusion 51, and an opposed end of the breadth wise dimension has a necked recess 41. Both opposed ends of the lengthwise dimension have necked recesses 41.

Figures 6A and 6B show a variation of the connecting portion, and the complementary connecting portion.

In Figures 6A and 6B, the protrusion is an angular necked protrusion 52 and the recess is a complementarily shaped angular necked recess 42.

Figure 6A shows an angular necked recess 42 at one breadth wise dimension, and an angular necked protrusion 52 at an opposed end. Figure 6B shows the necked angular protrusions 52 at both ends of the breadth wise dimension.

As can be seen in the six embodiments of the invention, each partitioning unit 100, has a connecting portion at one dimension (for e.g. lengthwise) and a complementary connecting portion at another dimension (for e.g. breadth wise) which allows a user to manipulate an eventual size of each individual compartment.

Figure 7A shows a first embodiment of the terminal unit 90 where a necked recess 41 is formed on a lengthwise dimension 10 whereas Figure 7B shows the terminal unit 90, where the necked recess 41 is formed on a breadth wise dimension 11.

Figure 7C shows a second embodiment of the terminal unit 90 where the effective length of the terminal unit 90 may be varied. A user may cut across, or cause a shear across the breadth of the terminal unit, across the regions of weakness 91, where the breadth wise dimension is smallest.

Figure 8 shows the partitioning system, using a plurality of partitioning units of the fourth embodiment, using the second embodiment of the terminal unit 90. The partitioning units are used to compartmentalise a storage area 110, into individual compartments 111 of varying sizes.

As can be seen from Figure 8, a user may easily manipulate the size of each individual compartment.

Also as seen in the Figures and embodiments of the partitioning unit, namely in Figures 2A to 2D, 3A to 3D, 4A to 4E, 5A to 5C and 6A to 6B, the protrusions and recesses are shown aligned to each other at opposed lengthwise or breadth wise dimensions. However, it is to be understood that the protrusions and /or recesses may be offset from each opposed dimension without detracting from the spirit of the invention.

The embodiments of the invention have been advanced by way of example only, and modifications are possible within the scope of the invention as defined by the appended claims.

CLAIMS

1. A partitioning system for partitioning an area, said system including a plurality of partitioning units, each partitioning unit having a lengthwise dimension and a breadth wise dimension, said lengthwise dimension having at least one connecting portion and said breadth wise dimension having at least one complementary connecting portion.
2. A partitioning system according to claim 1, wherein said partitioning unit further includes a connecting portion at an opposed lengthwise dimension.
3. A partitioning system according to claim 1, wherein said partitioning unit further includes a connecting portion at an opposed breadth wise dimension.
4. A partitioning system according to claim 1, wherein said partitioning unit further includes a complementary connecting portion at an opposed lengthwise dimension.
5. A partitioning system according to claim 1, wherein said partitioning unit further includes a complementary connecting portion at an opposed breadth wise dimension.
6. A partitioning system according to any one of claims 1 to 5, wherein said connecting portion is a recess, and said complementary connecting portion is a protrusion sized to be received by the recess.
7. A partitioning system according to any one of claims 1 to 5, wherein said connecting portion is a protrusion, and said complementary connecting portion is a recess dimensioned to receive the abutment.
8. A partitioning system according to any one of claims 1 to 7, wherein the partitioning system further includes a terminating unit, said terminating unit having a recess along a dimension of said terminating unit.

9. A partitioning system, according to any one of claims 1 to 7, wherein said system further includes a terminating unit, said terminating unit having a protrusion along a dimension of said terminating unit.
10. A partitioning system, according to any one of the preceding claims, wherein the partitioning unit and the terminal unit are made of a resilient material.
11. A partitioning system according to any one of the preceding claims, wherein the partitioning unit may be sheared to manipulate the dimension of the partitioning unit.
12. A partitioning system according to any one of the preceding claims, wherein each partitioning unit is substantially rectangular in shape.