Title of the Invention: Locking system and method of use thereof
Abstract Title: Locking System

A locking system 2 suitable for securing at least two items together in use includes a first member 4 attachable to a surface of a first item in use, and at least a second member 6 attachable to a surface of a second item in use. At least a part of the first member 4 can be moved into engagement with and/or is received within at least a part of a sleeve or channel means 17 provided on or associated with the second member 6, thereby securing or locking the items together.
Fig. 3
Locking System and Method of Use Thereof

The present invention relates to the provision of a system to lock or secure at least two items relative to each other and/or in a substantially fixed position with respect to one another, and a method of using the same.

Although the following description refers exclusively to a system for allowing furniture panels to be attached together in a predetermined arrangement, such as furniture panels making up part of a cabinet in a domestic kitchen, it will be appreciated that the locking system of the present invention can be used for connecting any two or more items together in any suitable application, and can be used either as an external and/or internal locking system.

Conventionally when fitting kitchens, and in particular when building cabinets from a plurality of panels, orthogonally positioned panels are usually locked in position or attached together using a number of brackets with apertures in the same through which screws are threaded to engage with said panels.

Often problems are encountered when aligning the panels and positioning the brackets correctly, particularly when marking the panels with the positions of the screws and/or brackets.

It is therefore an aim of the present invention to provide a locking system which addresses the abovementioned problems.

It is a further aim of the present invention to provide a locking system that provides a snug fit and improved alignment between two or more items being joined together.
It is a yet further aim of the present invention to provide a method of using a locking system that addresses the abovementioned problems.

In a first aspect of the invention there is provided a locking system suitable for securing at least two items together in use, said system including a first member attachable to a surface of a first item in use, and at least a second member attachable to a surface of a second or further item in use, wherein at least a part of the first member can be moved into engagement with and/or is received within at least a part of a sleeve or channel means provided on or associated with the second member, thereby securing or locking the items together.

Preferably at least a portion of the at least first member part is resiliently biased into an engaged position with said sleeve or channel means in use.

Preferably the at least first member part includes two or more portions and at least one of said two or more portions are resiliently biased away from the other/each other or outwardly of the other/each other to form an engaged position with the second member in use.

In one embodiment the one or more portions of the at least first member part are moveable from a disengaged position, wherein the first member part can be located into and/or removed from the sleeve or channel means of the second member, to an engaged position, wherein the first member part is engageable with the sleeve or channel means of the second member.

In one embodiment once the at least first member part is engaged with the sleeve or channel means of the second
member, the at least first member part is substantially prevented from being disengaged from the second member.

In one embodiment once the at least first member part is engaged with the sleeve or channel means of the second member, the at least first member part can be disengaged from the second member manually, using a tool, using significant force and/or the like.

In one embodiment, in order to introduce into or disengage the first member part from the sleeve or channel means of the second member, one or more portions of the first member part have to be moved inwardly, towards each other, compressed and/or the like.

Typically the items and/or the surfaces thereof to which the system is attached are substantially flat or planar. Further typically the surfaces are external surfaces of one or more substantially planar items such as panels, boards, plates and/or the like.

In one embodiment the at least first member part is substantially elongate in form and/or substantially linear.

Typically the first member is attached to and extends outwardly from the surface of said first item in use. Further typically the first member extends substantially perpendicularly from the first item and/or surface thereof.

In one embodiment the first member includes a fixing means. Typically the fixing means is used to fix or attach the first member to the first item in use.
Preferably one end of the at least first member part is integral with or attached to the fixing means.

Preferably the at least first member part extends outwardly from said fixing means.

Preferably the at least first member part extends substantially perpendicularly to said fixing means.

Preferably the at least first member part is located substantially centrally of said fixing means.

Preferably the fixing means includes a panel member and/or substantially planar surface from which the first member part extends. The panel member typically has a front surface from which the first member part extends and a rear surface opposite to the front surface.

In one embodiment the fixing means or panel member of the first member includes at least one aperture. Typically the at least one aperture allows the first member to be fixed in position to the first item using one or more screws, nuts and bolts and/or the like.

In one embodiment the fixing means or panel member of the first member includes marking means which allow a mark, puncture, etch and/or score to be made on a surface with which said marking means are brought into contact with in use. This allows the correct position of the first member on the item to be determined. Therefore, in one example, the location of the first member and/or fixing means can be scored or marked on the first item or surface thereof before the same is fixed in position. This allows the first member to be offered up to the first item surface, marking the same, when either engaged or disengaged
with the second member to ensure the positioning is as exact as possible and removes the need for measuring.

Preferably the marking means are located on a surface of said fixing means or panel member opposite to the surface with the at least first member part protrudes outwardly therefrom. For example, the at least first member part can protrude from a front surface of the fixing means or panel member and the marking means can protrude from a rear surface of the fixing means or panel member. The rear surface is typically brought into contact with the first item with which the first member is to be engaged with in use and can mark, punch, etch and/or score said first item.

Preferably the marking means includes any or any combination of one or more protrusions, projections, spikes, pins and/or the like.

In one embodiment the at least first member part is substantially cylindrical in form. However, it is to be noted that it could be any suitable shape or have any suitable cross sectional shape, such as for example, cuboidal, hexagonal or any such suitable polygonal shape.

In one embodiment the at least first member part includes at least one flared or outwardly diverging portion. Typically the flared portion increases at least a portion of the diameter of the first member, thereby improving engagement with the sleeve or channel means of the second member in use.

Preferably engagement of the first member part with the sleeve or channel means of the second member is via frictional engagement. As such, increasing the diameter of the first
member part in at least one location improves the frictional engagement and/or fit with the second member in use.

In one embodiment the flared portion is formed substantially at one end of the first member. Typically the at least one flared portion is located substantially at a distal end, free end or end opposite to the fixing means end of the first member.

In one embodiment the flared portion substantially limits or prevents removal of the first member part from the channel or sleeve means of the second member.

In one embodiment the flared portion protrudes from one end of the channel or sleeve means of the second member when the first member part is engaged therewith. The flared portion prevents easy withdrawal of the first member part back through the channel or sleeve means of the second member, thereby substantially preventing disengagement of the first member part with the second member.

Preferably at least part of the flared portion acts as a stop or abutment against withdrawal of the first member part back through the channel or sleeve means of the second member once inserted therethrough.

In one embodiment the flared portion is, consists of, forms part of or corresponds to the resiliently biased portion of the first member.

Preferably a front edge of the flared portion closest to the free end of the at least first member part is slightly tapered to allow ease of insertion of the flared portion into the sleeve or channel means of the second member in use.
In one embodiment the first member part is substantially hollow, or at least hollow towards said free end or distal end thereof.

In one embodiment the at least first member part includes any or any combination of one or more channels, slots, slits, grooves, apertures and/or the like. Further typically the one or more channels, slots, slits, grooves, apertures and/or the like are arranged along at least part of the length of the first member part. Thus, in one example, a longitudinal axis of the channel, slot, slit, groove or aperture is substantially parallel to a longitudinal axis of the first member part.

In one embodiment the one or more channels, slots, slits, grooves, apertures and/or the like extend from the distal or free end of the first member part towards the fixing means. Typically the one or more channels, slots, slits, grooves, apertures and/or the like allow the first member part to be resilient, flexible and/or deformable at least along a part thereof. Further typically provision of the one or more channels, slots, slits, grooves, apertures and/or the like allow the first member part to be compressable to facilitate engagement and/or disengagement with the sleeve or channel means of the second member.

In one embodiment the sleeve or channel means is typically of a substantially complementary shape to the at least first member part for location therein when engaged.

Preferably the sleeve or channel means is substantially cylindrical in form.

Preferably the sleeve or channel means is substantially elongate in form.
In one embodiment the sleeve or channel means includes a substantially linear chamber or cavity therein.

Typically a chamber or cavity of the sleeve or channel means is defined by an outer wall of said sleeve or channel means.

Preferably a chamber or cavity of the sleeve or channel means is open at both ends. In an alternative embodiment the chamber or cavity of the sleeve or channel means is only open at one end.

In one embodiment an interior wall or walls of the sleeve or channel means includes one or more formations to help guide the insertion of the first member part therein in use. Typically the formations can be any or any combination of one or more ribs, guides, projections, notches, grooves, cut-outs, apertures and/or the like.

Typically the first member part is moved into engagement with the sleeve or channel means of the second member by inserting said first member part into an open end of the sleeve or channel means. Further typically the first member part is inserted into the sleeve or channel means such that at least part of the same protrudes from an opposite end of the sleeve or channel means when fully engaged or locked therewith.

In one embodiment at least part of the flared portion of the first member part protrudes from the end of the sleeve or channel means thereby engaging the same with a frictional fit. Typically the flared portion is larger in diameter than the sleeve or channel means or chamber of the same. Further typically at least the end of the first member can be deformed, flexed and/or is resiliently biased such that the diameter of the same
can be temporarily reduced so that the first portion fits inside the sleeve member or chamber.

In one embodiment the second member includes fixing means for allowing the second member to be fixed to a second or further item in use.

Preferably the fixing means of the second member includes one or more panels. Further typically the fixing means or one or more panels is substantially planar.

Preferably one or more apertures are defined in the fixing means or one or more panels. One or more screws, nut and bolts and/or other suitable attachment means can be inserted through the apertures to attach the sleeve or channel means to the second or further item in use.

Preferably at least one aperture is defined either side of the sleeve or channel means on the second member to allow the second member to be securely fixed to a second item in use.

Preferably at least one aperture is defined either side of the first member part to allow the first member to be securely fixed to a first item in use.

Preferably a longitudinal axis of the sleeve or channel means is provided substantially parallel to a longitudinal axis of the fixing means or panel to which it forms part of in use.

Preferably the sleeve or channel means is located substantially centrally of the fixing means or one or more panels.

Preferably an open end of the sleeve or channel means through which the first member part is first located through in use is set
back a predetermined distance from an edge of the fixing means or panel. Preferably this pre-determined distance is substantially equal to the thickness or depth of the fixing means or panel of the first member, such that with the first member part located in the sleeve or channel means of the second member, the rear surface of the fixing means or panel of the first member is substantially flush with the edge of the fixing means or panel of the second member from which the sleeve or channel means is set back from, thereby allowing abutment and/or a snug fit of the first item with respect to the second item in use.

In one embodiment the system includes further lock means to prevent removal of the first member part from the second part when engaged.

The further lock means can be permanently engaged with the first member part and/or second member or can be releasably engageable with the first member part and/or second member.

Preferably the further lock means engages with a free end of the first member part when it is engaged with the second member, and preferably the flared or distal end of the first member part, to help or substantially prevent withdrawal of the first member part back through the sleeve or channel means of the second member without removal of the further lock means.

Preferably the further lock means acts to prevent compression of the free end, flared end or distal end of the first member part when in position, thereby preventing withdrawal of the first member part from the sleeve or channel means of the second member part.
In one embodiment the further lock means is in the form of a cap. Preferably the cap has a head portion and a body portion extending outwardly from said head portion.

Preferably the body portion of the cap has a cross sectional shape substantially complementary to the cross sectional shape of cavity formed within the first member part when engaged with the second member.

Thus, in one embodiment, with the first member part engaged in the sleeve or channel means of the second member, one or more slots, channels, grooves and/or the like defined longitudinally of the first member part create a shaped cavity at the free end, flared end or distal end of the first member. The body portion of the cap is shaped so as to engage with the shaped cavity at the end of the first member part.

In one embodiment the body portion of the cap is substantially cruxiform in shape or X-shaped.

Preferably the further lock means prevents the first member part from being disengaged from the sleeve or channel means by preventing at least part of the first member part from deforming, being compressed or flexing.

In one embodiment indication means are provided on the second member to allow alignment of the second member with the first member, first item and/or second item. Preferably the indication means are in the form of one or more lines, grooves, marks and/or the like formed along one or more edges or surfaces of the second member and further preferably formed along the edge of the second member with which the rear surface of the first member is arranged to be substantially flush with when fitted.
In one embodiment the second member includes one or more lug means. Preferably the lug means extend from a rear surface of the second member or rear surface of fixing means or panel of the second member. Typically the lug means ensure the second member is maintained a spaced distance from the second or further item to which it is attached in use. Further preferably the lug members are removable. The lug means are particularly useful to allow for the thickness of rubber bumpers and/or the like to be taken into account and assist in maintaining the unit in alignment. Typically the lug means can be removed with a chisel or other sharp edged instrument in required.

In one embodiment the first member and/or second member include one or more lines of weakening, frangible means and/or the like. Typically the lines of weakening or frangible means allow one or more portions of the first and/or second members to be removed.

In one embodiment the lines of weakening or frangible means allow the one or more lug members to be removed.

According to a second aspect of the present invention there is provided a method of using a locking system suitable for securing at least two items together in use, said method including the steps of attaching a first member to a surface of a first item in use, attaching at least a second member to a surface of a second or further item in use, and moving at least part of the first member into engagement with at least a part of a sleeve or channel means provided on or associated with the second member, thereby securing or locking the items together.

It is to be noted that the above method steps can be undertaken in any order.
In one embodiment further lock means are engagable with the first member and/or second member to prevent the members from being disengaged.

The fixing means or panels can be integrally formed or attached to the sleeve or channel means of the second member or the first member part.

According to further independent aspects of the present invention there is provided a first member for use in a bracket assembly or locking system; and a second member for use in a bracket assembly or locking system.

It is to be noted that the locking system could also be referred to as a bracket system.

Thus, it can be appreciated that the present invention provides a high precision locking or bracket assembly that forms a tight fit to securely and accurately fit two items together.

An embodiment of the present invention will now be described with reference to the accompanying figures, wherein:

Figure 1 is a perspective view of the locking system when separated in accordance with one embodiment of the present invention;

Figure 2 is a perspective view of the locking system when the system is engaged or locked in accordance with one embodiment of the invention; and

Figure 3 is a perspective of the locking system when the system is engaged in accordance with one embodiment of the invention
The present invention relates to a new locking system particularly suited to locking cabinet panels together.

Turning to the figures, there is shown a locking system 2 suitable for securing together two panels (not shown) in a substantially orthogonal arrangement. The system comprises a first bracket member 4 attachable to a first panel in use, a second bracket member 6 attachable to a second panel in use and a further locking means 8 for helping to prevent disengagement of the first and second bracket members from each other in use.

First bracket member 4 includes fixing means in the form of a panel 16a having a front surface 3, a rear surface 5 and side edges 7 having a depth 'D'. Apertures 9 are defined through panel 16a to allow one or more fixing screws to be used to fix the panel 16a to a first panel in use.

First bracket member 4 also has a part in the form of an elongate arm portion 11 having a first end 13 attached to panel 16a and a second free end 12. Elongate arm portion 11 has a plurality of elongate slots 10 that extend longitudinally of the same from free end 12 approximately half way down the same. The slots 10 substantially divide the arm portion 11 into four sections and provide a degree of resilience or biasing force to the free end 12, and/or allow a degree of compression of free end 12 in use. Thus, in use, the sections of free end 12 can be compressed inwardly of each to allow free end 12 to be inserted through an opening 15 of sleeve member 17 of second bracket member 6 in use. The resilient biasing force of the four sections biases the sections outwardly into frictional engagement with the internal walls of sleeve member 17 when the first and second bracket members are engaged together in use.
The second bracket member 6 includes fixing means in the form of a panel 16b with sleeve member 17 located thereon. More particularly, a longitudinal axis of sleeve member 17 is located substantially parallel to a longitudinal axis of panel 16b, with sleeve member 17 located substantially centrally of sleeve member 16b. Apertures 9 are provided either side of sleeve member 17 in panel 16b to allow fixing screws and/or the like to be inserted therethrough for attachment of the second bracket member 6 to the second panel in use.

Sleeve member 17 having opening 15 defined therein is set back a pre-determined distance from front edge 19 of second bracket member 6. This pre-determined distance is substantially equal to the depth ‘D’ of side edge 7 of panel 16a, such that with the first and second bracket members 4, 6 engaged together, rear surface 5 of panel 16a is substantially flush with front edge 19 of second bracket member 6, thereby providing a snug fit of the first and second panels.

The free end 12 of arm portion 11 includes a flared portion 12a that is slightly larger in diameter than the adjoining portion of arm portion 11. Once the flared portion has been inserted and moved through the sleeve member 17 via opening 15, it protrudes outwardly of the opposite open end 21 of sleeve member 17. The outward resilient force of the sections of arm portion 11 cause the flared portion 12a to abut against the walls of the sleeve member 17 defining open end 21, thereby preventing withdrawal of flared portion 12a back through the sleeve member.

Optionally, further locking means 8 in the form of a cap can be fitted to the free end 12 of the arm portion 11 when engaged with second bracket member 6 to prevent the same from being
deformed and removed from sleeve member 17. More particularly, cap 8 has a head portion 23 and a body portion 25 extending outwardly from a lower surface of said head portion. The body portion 25 is cruxiform in shape having four outwardly protruding arms 14 that engage in the four slots 10 provided in arm portion 11. The dimensions of the four arms 14 are substantially complementary to the dimensions of the slots 10 when under a degree of compression as a result of the arm portion 11 being engaged in sleeve member 17. The head portion 23 allows a user to easily grip and manipulate the cap 8.

With the cap 8 in position, protruding arms 14 that engage in slots 10 formed and, when engaged, prevent the arm portion 11 member from being deformed or placed under compression. The person skilled in the art will appreciate that the cap 8 and/or the arm portion 11 could include one or more lines of weakening or frangible portions that could be removed after insertion of the arm portion into sleeve member 17 to prevent removal of the same.

Rear surface 5 of panel 16a has marking means in the form of two spikes 18 provided on the same to aid fitting of the device. These allow a user to mark out the position of the first bracket 4 on the first panel before fitting the same. Indication means in the form of a groove 27 can be provided substantially centrally of front edge 19 of the second bracket member 6 so as to allow a user to mark out the position of the second bracket member on the second panel when fitting the same.

A recommended fitting method is to insert or engage the bracket members 4, 6 together and then attach the second bracket member 6 to a panel using suitably sized screws via apertures 9. A further panel (usually a back panel or board) can then be positioned as required and the spikes 18 mark or etch onto the
further panel exactly where the first bracket member 4 needs to be fitted in order to engage precisely with the second bracket member 6. The first and second bracket members 4, 6 can then be disengaged and the first bracket member 4 can be correctly fitted to the further panel. The first and second bracket members 4, 6 can then be engaged together again in the correct position and the cap 8 can be located on the free end 12 of the first bracket member 4 to lock the same in position with second bracket member 6.

A person skilled in the art will appreciate that the second bracket member 6 could also be equipped with spikes to allow etching or punching of a mark in an item in a similar manner to the first bracket member 4. In addition the first bracket member 4 could be first fitted followed by marking the second bracket member 6 using spikes on the same. Both methods avoid the need for measuring and a robust cabinet can be assembled quickly and efficiently using a minimum number of tools.

Figure 2 shows how the second bracket part 6 is coupled to the first bracket part 4 in an engaged position. The panel to which the brackets are attached in use are not shown for the purposes of clarity.

Turning to figure 3, which shows a slightly different embodiment with a smoother outer surface to the sleeve member 17 with apertures 9 defined in the outer surface of the sleeve member. A pair of lugs 20 on the rear surface 29 of the plate 16b of second bracket member 6. Rear surface 29 is opposite to front surface 31 on which the sleeve member 17 is located. These lugs 20 are designed to project the unit forward from the surface of the panel to which the bracket is fitted to in use to allow, for example, the thickness of rubber bumpers on a unit door to be taken into account and therefore helps maintain the
bracket members and/or the panels they are attached to in alignment. The lugs can be removed with a chisel etc if the user requires the finished panel to include a flush fixing.
Claims

1. A locking system suitable for securing at least two items together in use, said system including a first member attachable to a surface of a first item in use, and at least a second member attachable to a surface of a second or further item in use, wherein at least a part of the first member can be moved into engagement with and/or is received within at least a part of a sleeve or channel means provided on or associated with the second member, thereby securing or locking the items together.

2. A locking system according to claim 1 wherein at least a portion of the at least first member part is resiliently biased into an engaged position with said sleeve or channel means.

3. A locking system according to claim 2 wherein said at least first member part includes two or more portions and said two or more portions are resiliently biased away from each other or outwardly of each other.

4. A locking system according to claim 2 wherein said at least one portion of the at least first member part is moveable from a disengaged position, wherein the first member part can be located into and/or removed from the sleeve or channel means of the second member, to an engaged position, wherein the first member part can be engaged with the sleeve or channel means of the second member.

5. A locking system according to claim 1 wherein once the at least first member part is engaged with the sleeve or channel means of the second member, the at least first
member part is substantially prevented from being disengaged from the second member.

6. A locking system according to claim 1 wherein once the at least first member part is engaged with the sleeve or channel means of the second member, the at least first member part can be moved to a disengaged position manually, using a tool or using significant force.

7. A locking system according to claim 2 wherein in order to introduce into or disengage the first member part from the sleeve or channel means of the second member, one or more portions of the first member part have to be moved inwardly, towards each other and/or compressed.

8. A locking system according to claim 1 wherein the at least first member part is substantially elongate in form and/or substantially linear.

9. A locking system according to claim 1 wherein the first member includes a fixing means to fix or attach the first member to the first item in use, said fixing means arranged at one end of the at least first member part and said first member part extends outwardly of said fixing means.

10. A locking system according to claim 9 wherein the fixing means is in the form of a panel member having a front surface and a rear surface, the at least first member part extending outwardly from the front surface.

11. A locking system according to claim 9 wherein one or more apertures are defined in the fixing means to allow
one or more screws or nuts and bolts to be used to fix the fixing means to the first item in use.

12. A locking system according to claims 9 or 10 wherein a surface of the fixing means or panel member includes marking means which allow a mark, puncture, etch and/or score to be made on a surface with which said marking means is brought into contact with in use.

13. A locking system according to claim 12 wherein the marking means includes any or any combination of one or more protrusions, projections, spikes and/or pins.

14. A locking system according to claim 1 wherein the at least first member part includes at least one flared portion, outwardly diverging portion or a portion having a greater diameter than the remaining portion of the first member part to improve the engagement of the first member part with the sleeve or channel means of the second member in use.

15. A locking system according to claim 14 wherein the at least one flared portion, outwardly diverging portion or a portion having a greater diameter than the remaining portion of the at least first member part is provided at a free end or distal end of said first member part.

16. A locking system according to claim 14 wherein a front edge of the flared portion closest to the free end of the at least first member part is slightly tapered so as to increase the ease of insertion of said free end into said sleeve or channel means in use.
17. A locking system according to claim 1 wherein said at least first member part is substantially hollow, or at least is hollow towards a free end or distal end of said first member part.

18. A locking system according to claim 1 wherein the at least first member part includes any or any combination of one or more channels, slots, slits, grooves and/or apertures, provided along a length of said first member part.

19. A locking system according to claim 18 wherein the one or more channels, slots, slits, grooves and/or apertures extend from a distal or free end of the first member part towards the fixing means.

20. A locking system according to claim 1 wherein the channel or sleeve means is substantially complementary in shape to the at least first member part.

21. A locking system according to claim 1 wherein the channel or sleeve means has an opening at both ends.

22. A locking system according to claim 1 wherein an interior wall or walls of the sleeve or channel means include one or more formations to help guide the insertion of the first member part therein in use.

23. A locking system according to claim 22 wherein the one or more formations include any or any combination of one or more ribs, guides, projections, notches, grooves, cut-outs and/or apertures.

24. A locking system according to claim 14 wherein the at least one flared portion, outwardly diverging portion or
the portion having a greater diameter than the remaining portion of the first member part is arranged to protrude from an open end of the sleeve or channel means when engaged.

25. A locking system according to claim 1 wherein the second member includes fixing means or one or more panels for allowing the second member to be fixed to a second or further item in use.

26. A locking system according to claim 25 wherein one or more apertures are defined in the fixing means or one or more panels for allowing one or more screws or nuts and bolts to be located therethrough in use.

27. A locking system according to claim 1 wherein an open end of the sleeve or channel means through which the first member part is located in use is set back a pre-determined distance from an edge of the fixing means or panel, said pre-determined distance substantially equal to the thickness or depth of fixing means or panel of the first member, such that with the first member part located in the sleeve or channel means of the second member, a rear surface of the fixing means or panel of the first member is substantially flush with the edge of the fixing means or panel of the second member from which the channel or sleeve means is set back from.

28. A locking system according to claim 1 wherein further lock means are provided to prevent removal of the first member part from the second part when engaged in use.

29. A locking system according to claim 28 wherein the further lock means engages with a flared end, distal end or
free end of the first member part when engaged with the channel or sleeve means of the second member to help or substantially prevent withdrawal of the first member part from the sleeve or channel means.

30. A locking system according to claim 28 wherein the further locking means is in the form of a cap having a head portion and a body portion, the body portion having a cross sectional shape substantially complementary to the cross sectional shape of a cavity defined in a free end, distal end or flared end of the first member part.

31. A locking system according to claim 1 wherein indication means are provided on the second member to allow correct alignment of the second member with the first member, first item and/or second item in use.

32. A locking system according to claim 31 wherein the indication means are in the form of one or more lines, grooves, marks and/or the like.

33. A locking system according to claim 1 wherein one or more lug means are provided on or associated with the second member or fixing means or panel of the second member.

34. A locking system according to claim 33 wherein the one or more lug means are arranged to be removable.

35. A method of using a locking system suitable for securing at least two items together in use, said method including the steps of attaching a first member to a surface of a first item in use, attaching at least a second member to a surface of a second or further item in use, and moving at
least part of the first member into engagement with at least a part of a sleeve or channel means provided on or associated with the second member, thereby securing or locking the items together.
**Patents Act 1977: Search Report under Section 17**

**Documents considered to be relevant:**

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**Field of Search:**

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

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

F16B
The following online and other databases have been used in the preparation of this search report

WPI, EPODOC

**International Classification:**

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