

(12) UK Patent Application (19) GB (11) 2 388 302 (13) A

(43) Date of A Publication 12.11.2003

(21) Application No: 0209725.1

(22) Date of Filing: 29.04.2002

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(51) INT CL⁷:
A47B 96/20

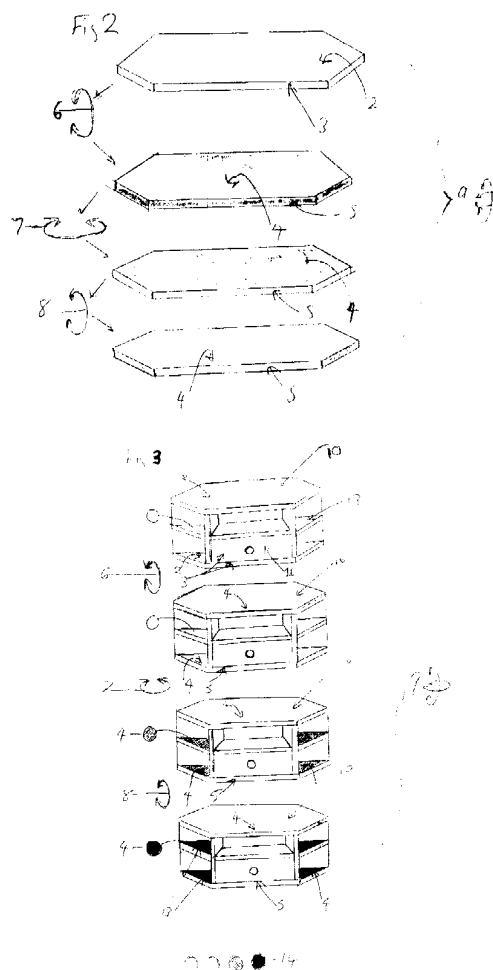
(52) UK CL (Edition V):
A4B B9B7
A4L LSB

(56) Documents Cited:
GB 2239389 A **GB 2034177 A**
EP 0527681 A **FR 002481342 A**
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(58) Field of Search:
UK CL (Edition V) **A4B, A4L**
INT CL⁷ **A47B**
Other: **Online: WPI, EPODOC, JAPIO**

(54) Abstract Title: **Furniture with reversible decor**

(57) An item of furniture is made up of a plurality of panels of differing shapes, eg. hexagonal (1, Fig 1). Each panel has a first surface 2 and a reverse surface 4 wherein each surface has a different colour or surface finish. In addition, opposing edges 3 and 5 also carry differing surface colours or finish. By rotating the panels through 180° about both vertical and horizontal axes each panel can assume one of 4 visually differing orientations. Different shaped panels go to make up a piece of furniture and these may include square and triangular panels 12,13. The overall decor of the item of furniture can be changed by rearranging the orientation of individual panels. The panels may be constructed from wood, plastic or metal and may include fabric material. Numerous different types of furniture can be constructed using the principles outlined.



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Fig 1

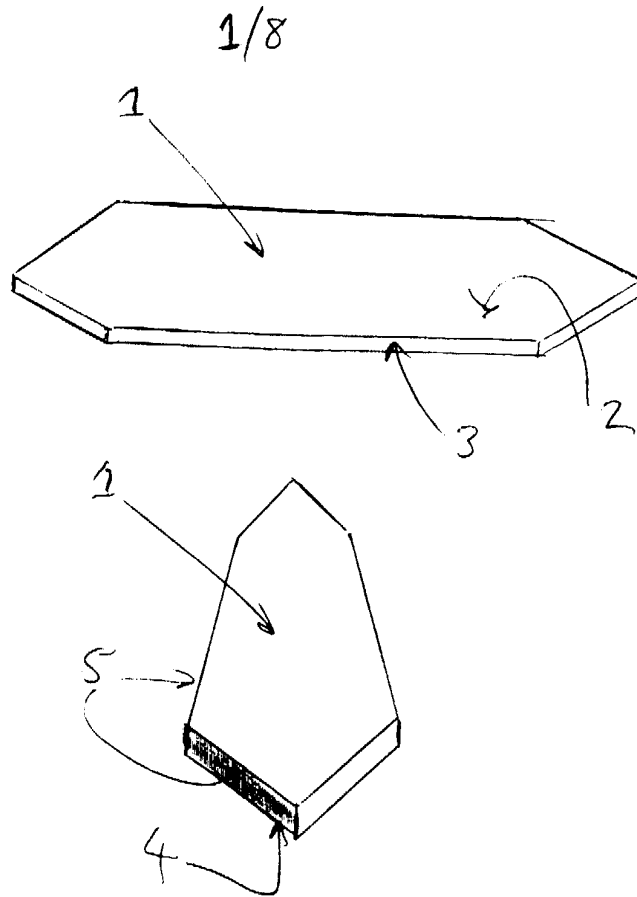
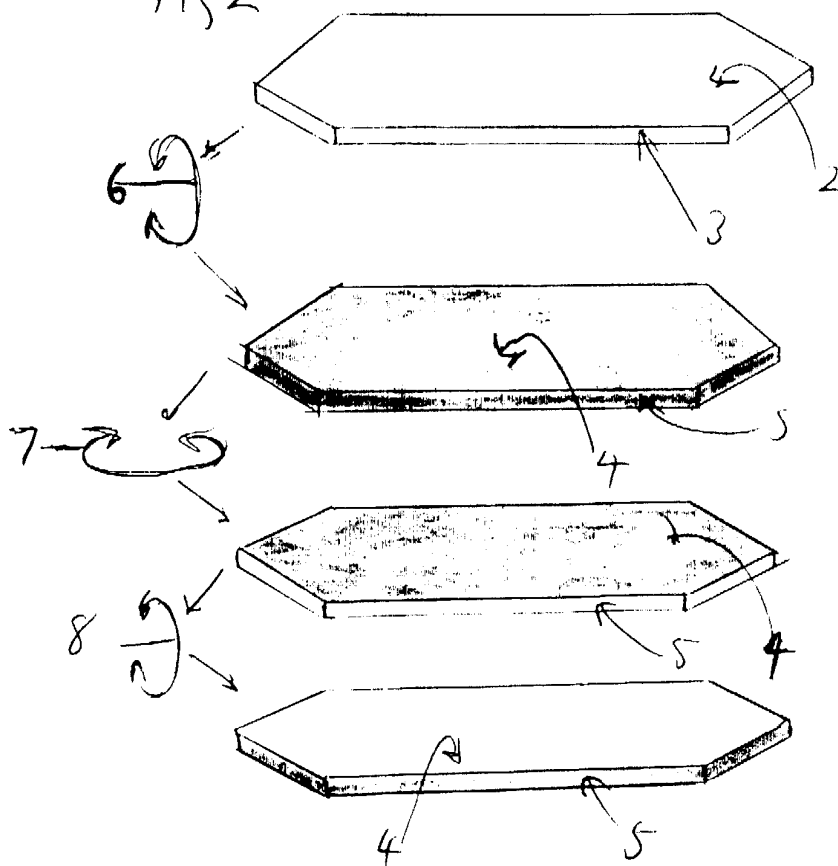


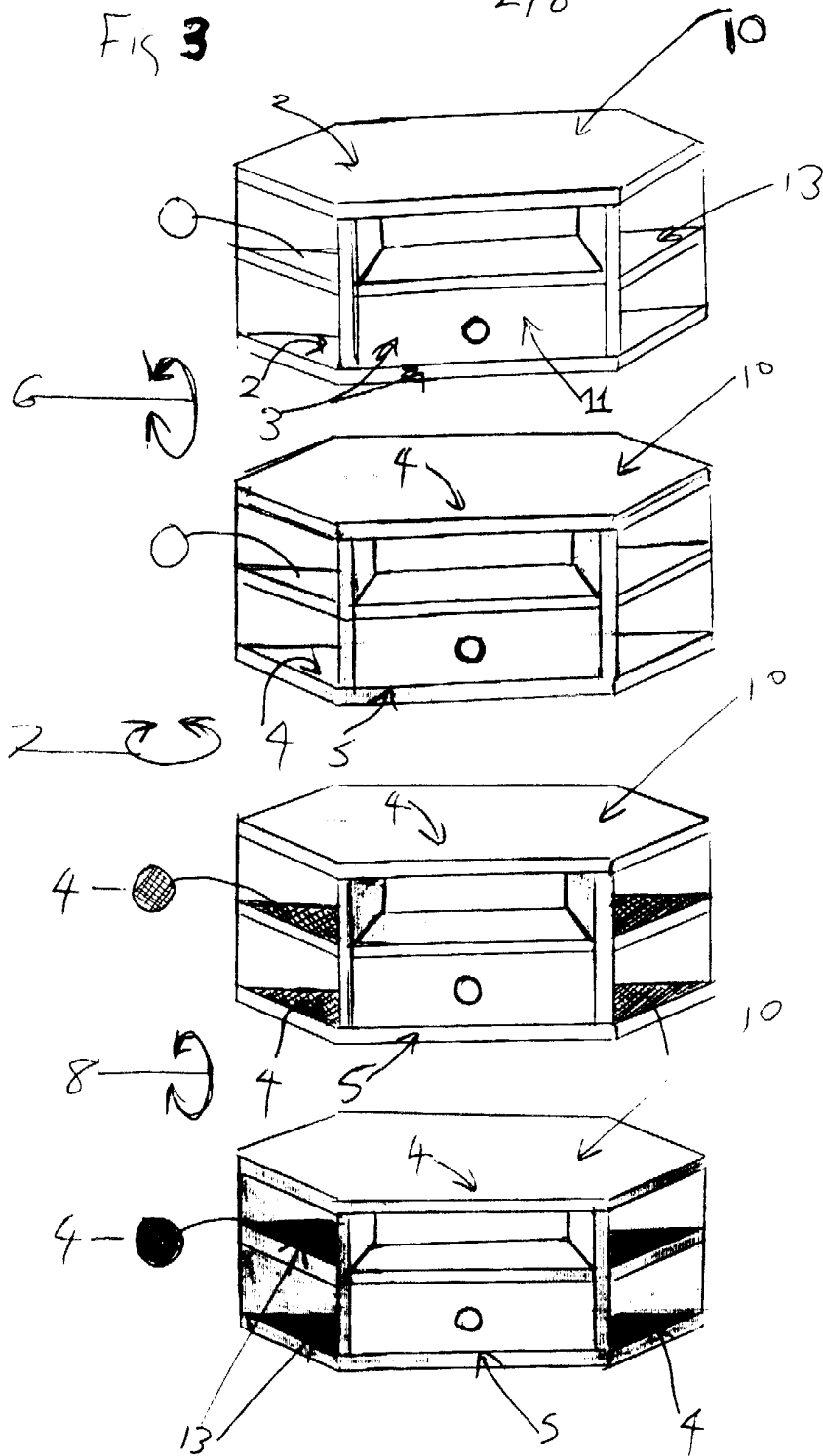
Fig 2



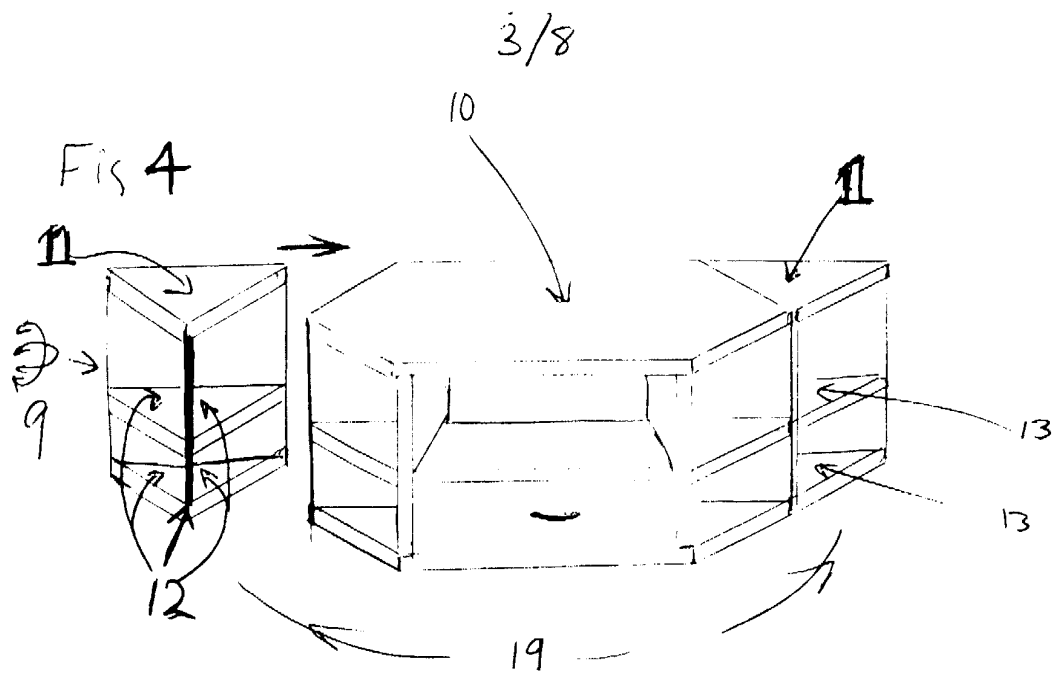
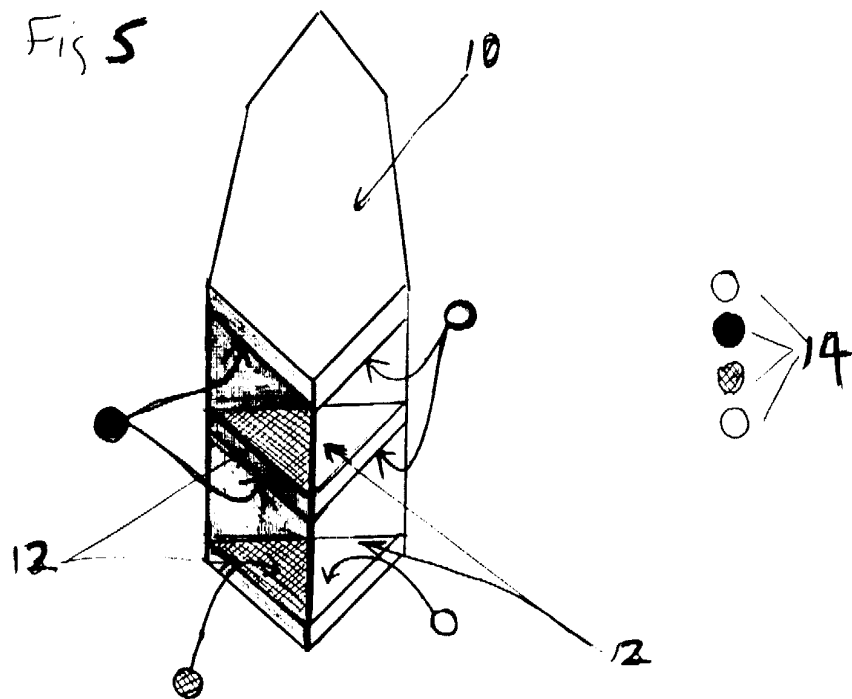
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Fig 3

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4/8

Fig 6

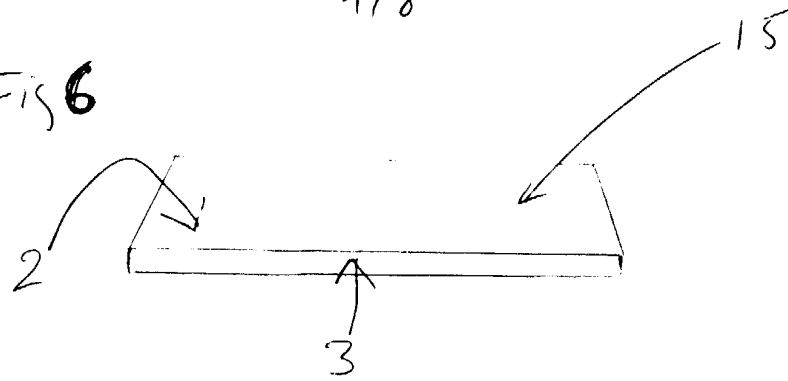
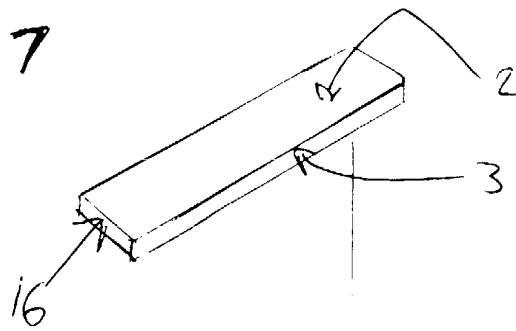
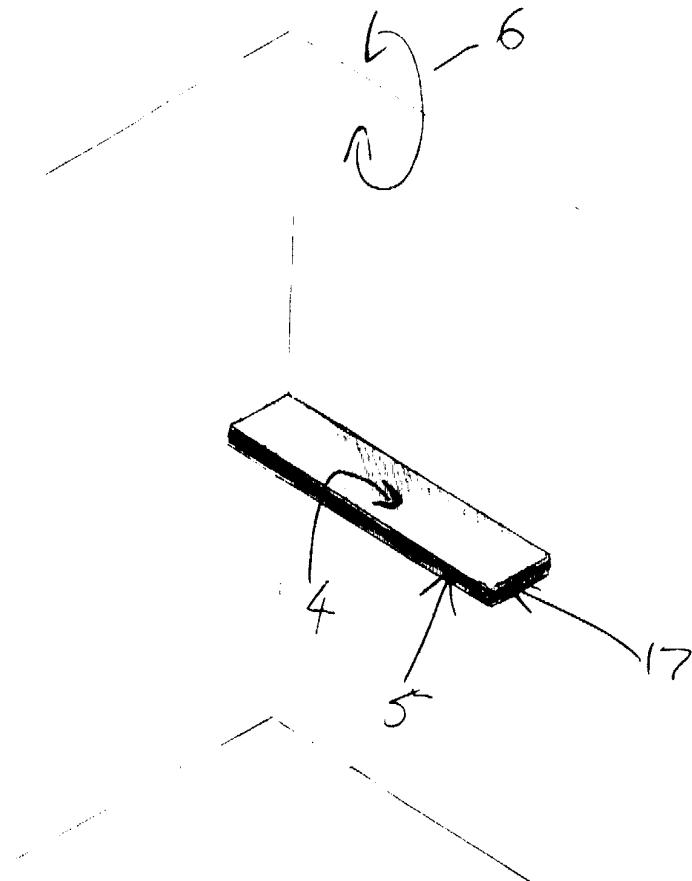
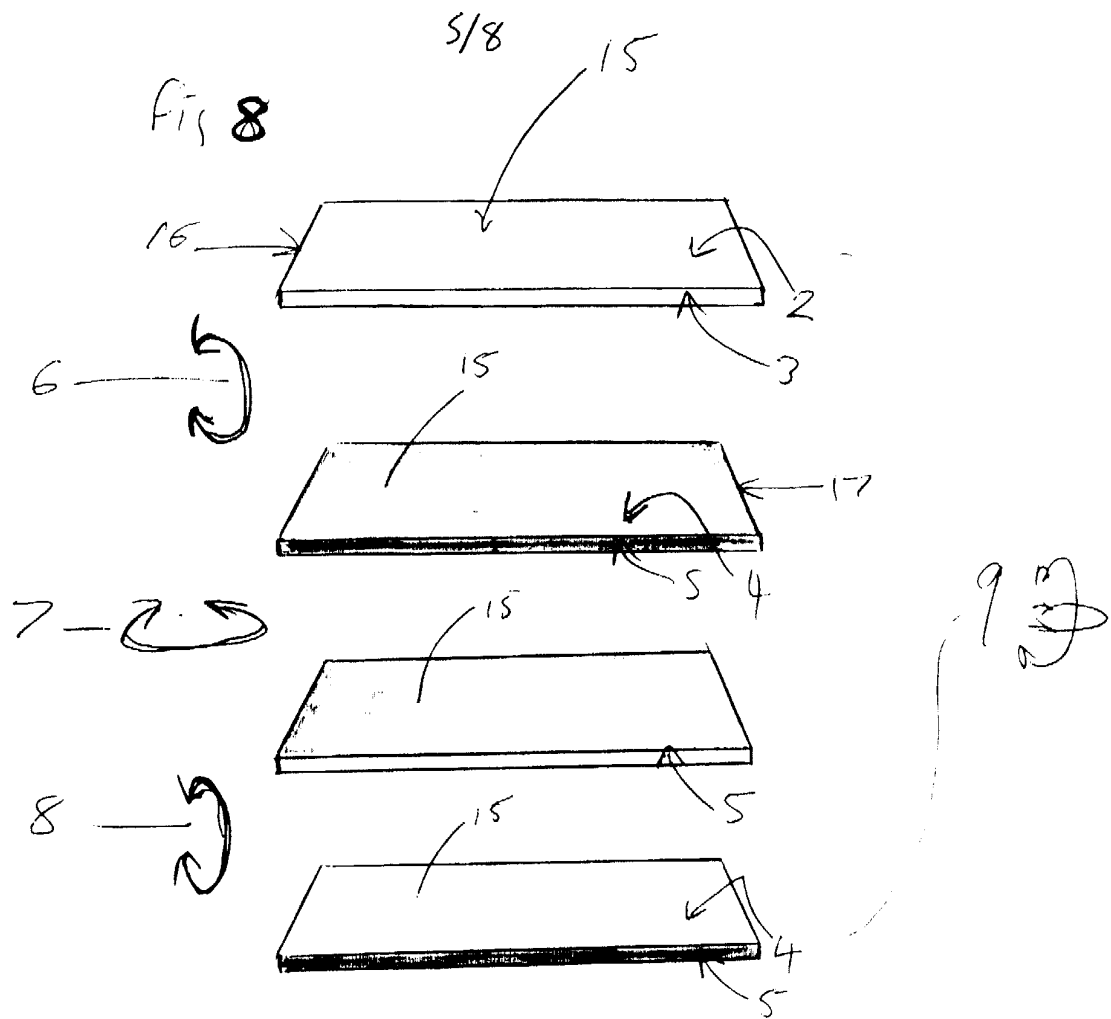
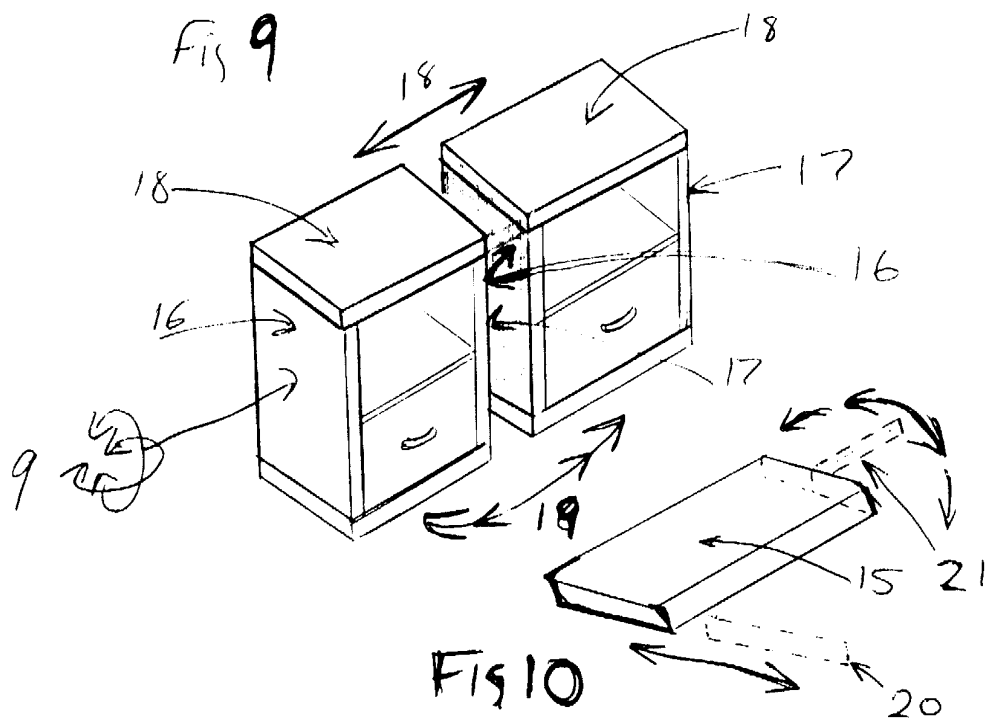
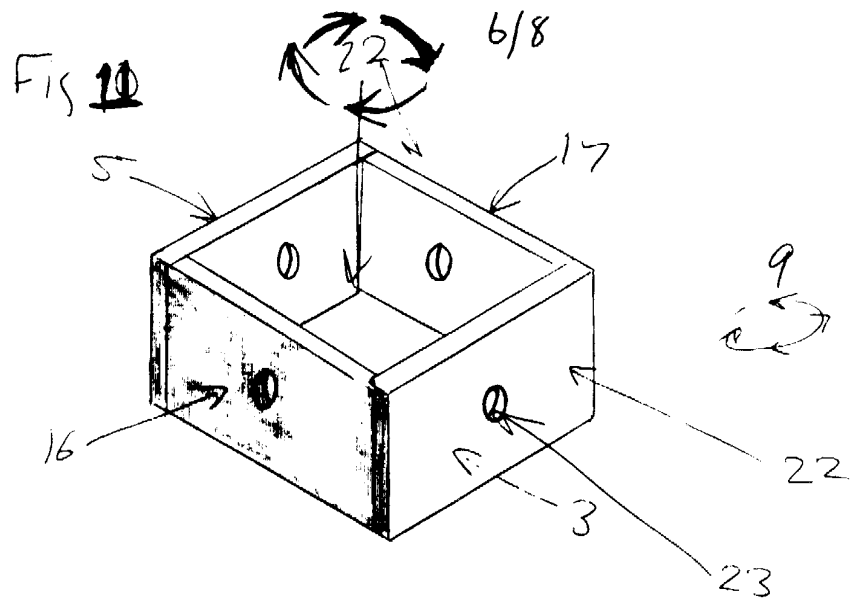
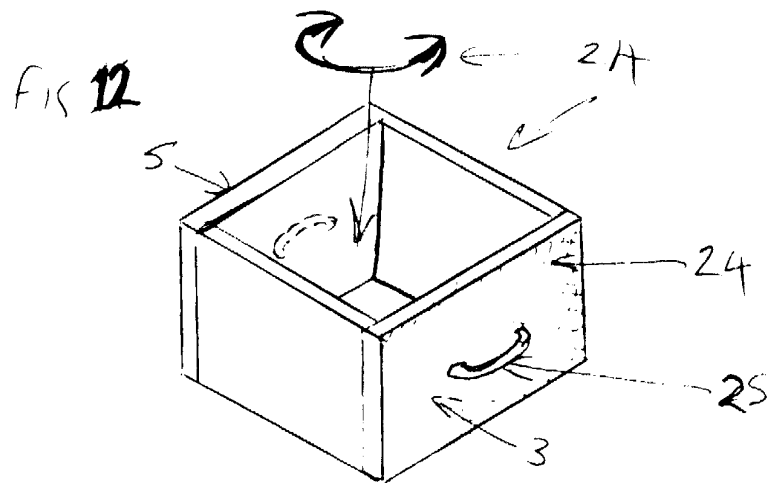
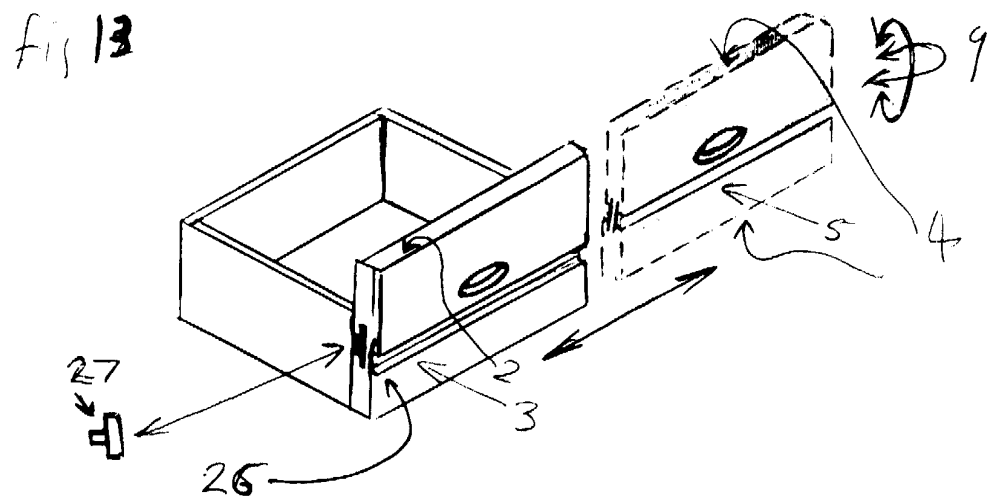
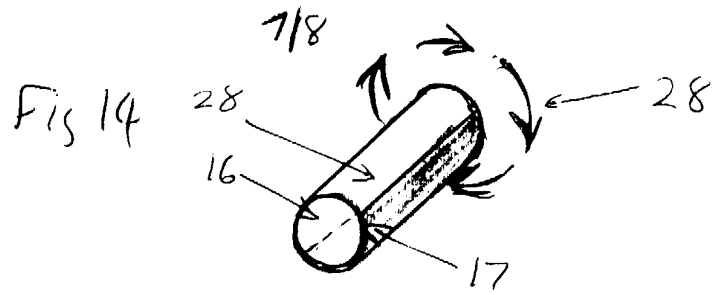
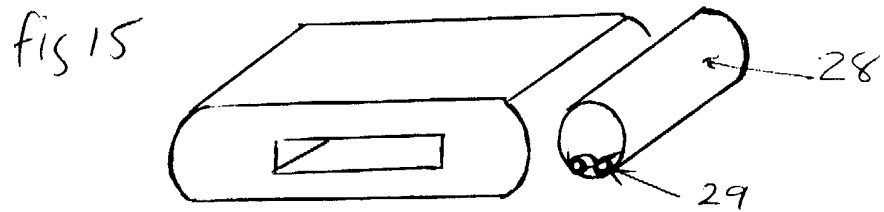
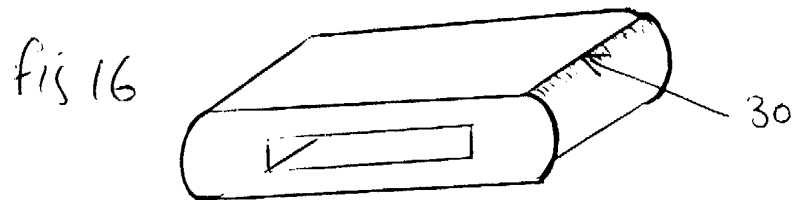
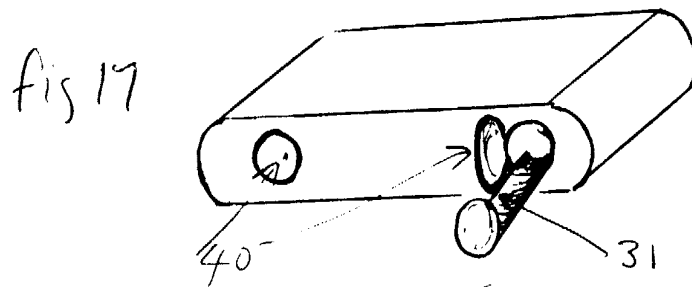
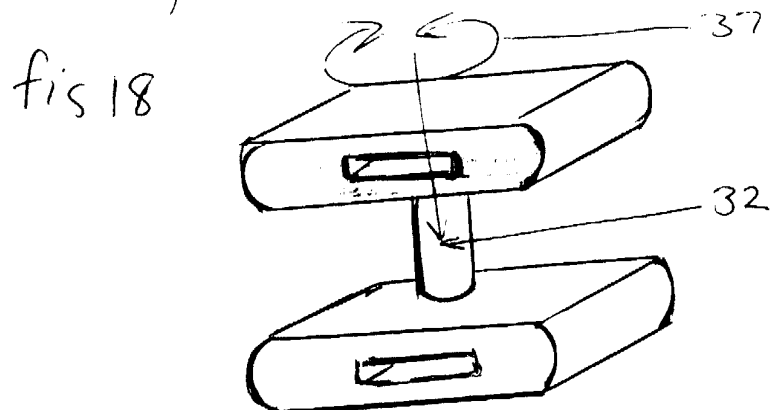


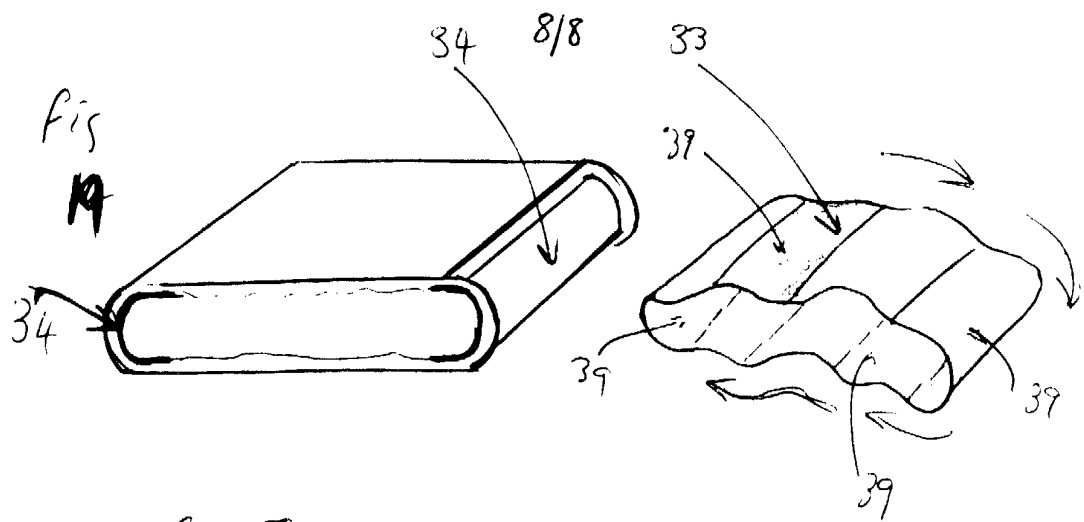
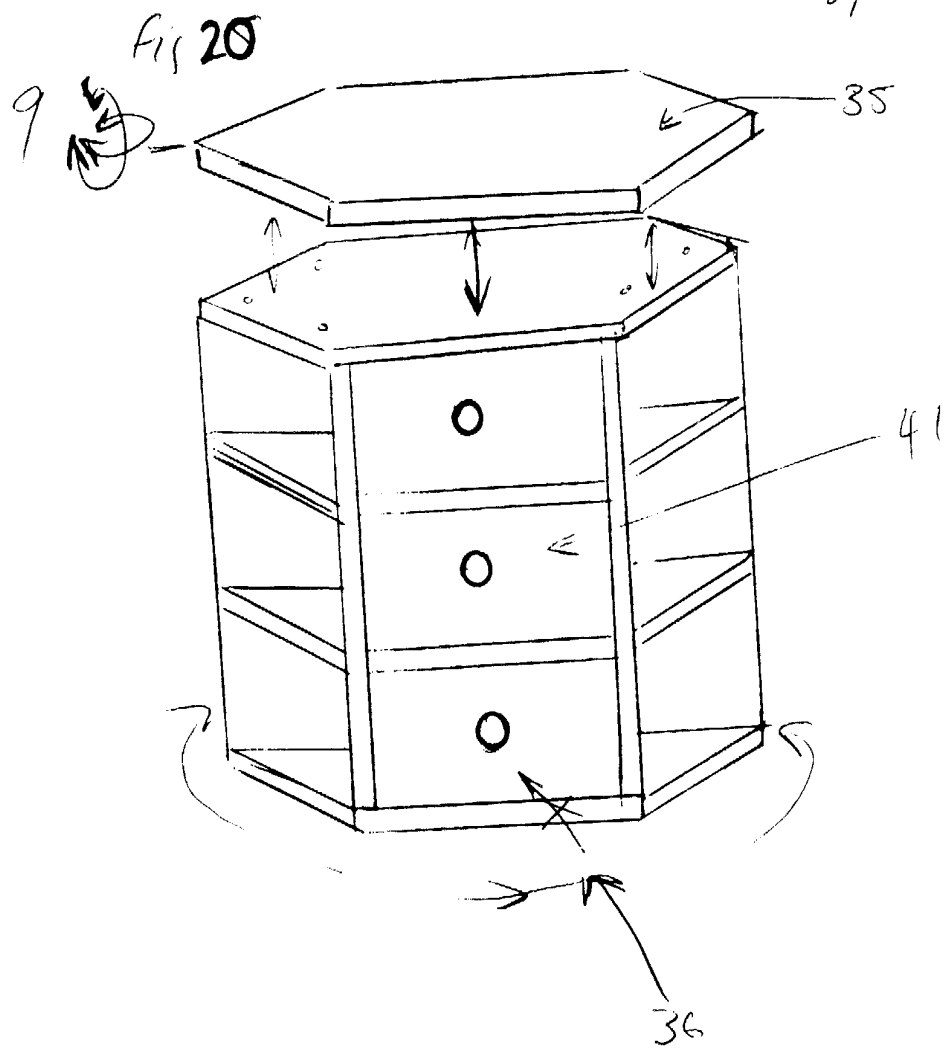
Fig 7











HOUSEHOLD FURNITURE

Technical field; This invention relates to general household furniture for the home including Living room, bedroom, kitchen & office furniture that is a free standing structure which may be placed anywhere within the home for convenience. Such general household furniture pieces are well known, but from mine and other people's experiences changing this furniture decor within the home can become time consuming looking for new pieces, & Expensive, with new furniture replacements.

How easy it would be, if we were to have a system where we could change the decor colours of furniture & Furnishings whenever we pleased. Giving a easy colour changeable decor system for household furniture around the home. An object of this invention is to provide home users with a variety of individual furniture designs that change colour as simply as possible, to suit users own personnel preferences.

Accordingly, this inventions features will be provided as a free standing furniture body. Which is designed, produced & moved in such a way that each furniture piece is rotated & reversed in certain numerous directions to produce an illusion of colour changing sequences. Therefore when the furniture body is moved it is capable of producing 2-colour change sequences from one to another & 2- mixture changing sequences from one to another hence 4- way sequences in all. Preferably, the furniture body will be made of wood being, medium density fibreboard or chipboard & Decorated with alternative coloured laminates during production. Alternatively the furniture body may be made from natural resources such as pine & stained with the appropriate varnish. Alternatively a plastic or metal furniture body may be an optional with optional usage of fabric material, or a combination of all these materials.

A preferred embodiment of the invention will now be described with reference to the accompanying drawings in which;

Fig 1 shows a hexagonal shelf & side view, illustrating the principle applied features of the invention.

Fig 2 shows a hexagonal shelf with the inventions applied movements resulting in a 4-way system of sequences.

Fig 3 shows the above colour & movement features applied to hexagonal furniture body unit.

Fig 4 shows a hexagonal body units optional 4-way system detachable swap over sides.

Fig 5 shows the hexagonal unit body side view. (Includes the same principal as swap over sides)

Fig 6 shows the square shelf with the same colour principles applied.

Fig 7 shows the effect in the corner of the room & the way it's placed in opposite corner of room.

Fig 8 shows the invention principle colours & movements applied to a square shelf.

Fig 9 shows optional 4-way system detachable swap over units.

Fig 10 shows two options, a slide in side or flap sides.

Fig 11 shows a 4-way system, reversing drawer with no handles.

Fig 12 shows a 2-way system, reversing drawer with handles.

Fig 13 shows a sliding on/off, 4- way system detachable drawer front.

Fig 14 illustrates a 2- way, spinning cylinder side.

Fig 15 shows how optional weights can be used on the inside of the cylinder side

Fig 16 Shows optional brushes applied inside the unit body.

Fig 17 shows optional inside drawer, applied to the cylinder

Fig 18 illustrates a optional central twist movement applied to a 4-way system furniture body.

Fig 19 shows a fabric material sling for a furniture bodies sides.

Fig 20 illustrates a detachable separate 4-way system, top panel.

As shown in fig1 a hexagonal shelf 1 illustrates the principle of the furniture body panels surface areas of its tops 2 & fronts 3 applied with one colour, a surfaces pattern or shaped feature. Below this figure a side view is seen of figure 1 showing a second alternative colour, surface pattern or shaped feature. Is applied to its alternative surface areas of the hexagonal shelf 1 or furniture body panels to include its bases 4 backs 5.

Although the hexagonal shelf 1 or furniture body can be moved in alternative directions to suit users required sequence. Fig 2 shows the hexagonal shelf 1 or the furniture bodies full principle movements along with its full colour changing sequences. From the first sequence being into view with the applied colour white surfaces applied to the furniture shelf 1 Body of furniture with its tops 2 & fronts 3 surfaces in view. The hexagonal furniture shelf body then goes through its 1st movement 6, of 180 degrees rotation. In a upside down rotation rolling, forwards or backwards to Produce a visual colour surface change to the furniture body being from one colour sequence to another colour sequence bringing the bases 4 & backs 4 into view. The furniture bodies 2nd movement 7 of 180 degrees in a reversing back to front motion then brings the back 5 into view from above to produce a mixture sequence of the two colours applied to the Furniture body, shelf. With the 3rd movement 8, (the same as first) is a rotation of 180 degrees forwards or backwards upside down bringing the shelves bases 4 & backs 5 now into view. From previous sequence to produce another mixture sequence, of the two colours applied. This hexagonal shelf furniture body 1 as seen comprises of a rotating reversing furniture body. Resulting in 2 colour change sequences, from one colour to another. Plus 2 mixture changing sequences, from one mixture to another. Therefore producing the 4- way system 9 combination of sequences, of a colour changing body including that of a shelf or furniture.

Fig3 shows the same above principal features of colour application & movements of the hexagonal Shelf are applied to a 4- way system 9 hexagonal shaped furniture body of a TV/unit 10. (with drawer removal 11 Not shown, during the hexagonal units body 10 movements 6,7,8) From the first sequence of applied surface of an all white colour, combining of all tops 2 & fronts 3 surfaces into view. The 1st movement 6 of the hexagonal unit 10 of 180 degrees rotating forwards or backwards, brings the units underside bases 4 & backs 5 applied with another colour, now into view. Creating a full visual colour change from the two colours applied. The 2nd movement 7 of the hexagonal unit10 is then reversed back to front 180 degrees bringing the units backs 5 into view producing a mixture sequence of the two colours applied. Along with a third, colour option applied to the underside bases 4 of side shelves. The final 3rd movement 8, of the hexagonal body unit 10 is a rotation of 180 degrees forwards or backwards upside down bringing the units bases 4 & backs 5 into view producing another mixture sequence from previous. Along with another fourth colour, option applied to the underside bases 4 of the opposite units 10 sides shelf. As seen Fig3 also shows an example how four optional colours 14 can be applied to the units 10 out of sight side shelves, which is better seen in fig 5.

As shown in figs1-2-3 using this principle of two-colour application (four colours on some features) combined with rotating & reversing movements, applied to certain designed Furniture bodies. This then produces a optical illusion effect to furniture resulting in 2 colour changes from one to another, plus 2 mixtures changes from one to another, hence the 4 -way system 9 sequence of rotating, reversing furniture system. The following figures will now demonstrate optional features applied to furniture's Unit body, in order to improve the overall effect of this 4- way colour changing furniture system 9.

Fig4 shows the optional 4 - way system 9, of separate detachable hexagonal swap over sides 11. Such separate sides 11 comprise of two built in shelves 12 on either side 12 of the unit 11 with A centre panel 12 split down the centre 12. Comprising of the same principles of earlier figures 1-3 of colour & movement combination applied to the detachable sides when rotated from 1st movement the separate sides 11 Are then swapped over 19 to achieve the visual colour change effect. Such detachable units also add many more colour changing sequences, to the hexagonal body unit 10.

Fig5 illustrates a close up view of fig 4, 4 -way system 9 detachable separate sides 11. Moreover this is a close up side view of fig3, 4- way system 9 hexagonal units 10. Which clearly both have the same characteristics. Fig5 also clearly shows how four optional rather than two colours could be applied to the side shelves 13 of a hexagonal TV unit 10 in fig3, as the same as the detachable side shelves 13 in fig4. Such a feature of four colour change 14, sides 13, works by applying the 1st colour to the front shelves tops 2 & fronts 3. A 2nd colour is applied to the opposite shelf built into the back of the unit shelves underside backs 5 & bases 4. The optional 3rd & 4th colours are applied to the bases 4 underside of both the shelves 13 on either side 13 of the unit as seen. An example of this is if two colours are applied to one shelf, then four colour can be applied to two shelves using opposite shelves on either side 12 of the unit 10.

Fig6 illustrates a square shelf 15 based on the same principle 4 way- system 9 from earlier fig 1-3. With one colour, surface pattern of shaped feature being applied to the square shelf's tops 2 & fronts 3, Along with its left side 16 as seen in fig 7. In fig7 the square shelf is now also placed in the corner of the room along with its first movement 6 being rotated 180 degrees forwards or backwards revealing the underside applied colour, surface pattern or shaped feature of the shelves Base 4 & back 5 into view. Plus the square shelf's 15 right side 17 colour is also brought into view through being placed in the alternative corner of the room. Showing how a square body of furniture would work in the corner of a room. The following movements of second 7 & third 8 movements can then be used to provide the alternative mixtures sequences as seen earlier. So combining, the whole 4- way system 9 to the square shelf or square body of furniture as seen in fig8.

Fig9 shows how instead of using a square furniture body or shelf 15 in the corner of a room, two square detachable separate square units 18 which swap over 19 can be used instead. These detachable separate units Also offer again the same principle as with a 4 -way system rotating reversing body as seen in the square shelf 15 with opposite colours applied to its left 16 & right 17 sides this allows the detachable units to interact & swap over 19 to reveal there hidden left 16 & right 17 side to help achieve the overall colour change & to provide more colour changing combinations.

Fig10 shows another two optional examples to achieve the colour changing effect to body of a square furniture left 16 & right 17 side instead of using the corner of the room or detachable separate square units 18. In this case, a slide in sides 20, forming a thin slide like feature which is seen used on the left 16 side of the square shelf 15. Alternatively a flap side 21 can be seen applied to the shelf's right 17 side. Both may be applied with alternative colours to create the colour change around the square shelf's sides.

Fig11 Fig10 shows a colour changing 4- way system 360 degrees reversing drawer body 22. This drawer body 22 will comprises of four alternative opposite applied colours, surface patterns or shaped features. Resulting in four-equal length sides being its front 3 is applied with one colour, Its back 5 applied with the second colour, plus its left side 16 applied with a third colour & its right side 17 applied with its fourth colour. This 4 -way drawer body then sits within a hexagonal furniture units 10 as seen in fig3 & is then pulled out & reversed when required to either of its four 90 degrees alternate sides producing a full 360 degrees reversibility with a four colour changing effect. The drawer body 22 will also include drilled holes 23 on either of its four sides acting as handle replacement & enabling the drawer to sit within a units body as seen in fig 3 hexagonal Tv unit.

Fig12 shows a colour changing 2-way 180 degrees reversing drawer body 24, showing of its front 3 applied with one colour, surface pattern or shaped feature with a handle included or alternatively a drilled hole. Plus its alternate back 5 opposite side is applied with another second colour, surface pattern or shaped feature, with another handle or drilled hole . This 180 degrees drawer body 24 then reverses to produce two colour changing features.

Apart from the above two above reversing drawer body of fig 11 & 12. fig 13 shows an alternative of a slide on/off 4- way system 9 reversing rotating drawer front 26. Here again alternative colours are applied on opposite sides. With its tops 2 & fronts 3 surfaces applied with one colour, surface pattern or shaped feature. Along with all its bases 4 & backs 5 applied with another colour, surface pattern or shaped feature as seen when slid off a T shaped rivet 27 from which the drawer front 26 is then rotated & reversed

Optional features will now be applied to 4-way system rotating reversing circular furniture body Which can be in fig14 which illustrates a rotating spin round cylinder side 28. Which has alternative Applied Colours, surface patterns or shaped features applied to each of its left 16 & rights 17 sides. Such a circular cylinder side 28 will then rotate spinning around a full 360 degrees from either a central pivot or its inner shell.

Fig 15 then shows how optional fixed weights 29 inside the cylinder side 28 can be used to produce a self perpetual colour changing motion as the whole 4 way system 9 circular furniture body is rotated in a forwards or backwards motion. Fig16 shows how optional brushes 30 on the inside of the furniture body 30 will give a self cleaning effect when contact is made by the spinning rotating cylinder sides 28 either by the hand or inside fixed weights 29. Fig17 shows how the circular cylinder sides 28 can also be used to store & hold music CDs etc. These cylinder sides 28 would inside hold drawer storage systems 31 within the cylinder. Including Doors 40 added to the fronts 3 & backs 5 panels of the furniture body. Fig18 illustrates a central circular pillar 32 applied with opposite alternative colours on its front 3 & back 5 this will also enable a 180 degrees central reversing twist motion 37 to the entire 4 way system 9 body so therefore producing a doubling effect of the sequences form 4 to an 8-way 38 system rotating reversing furniture body.

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Fig19 shows how the body of the circular furniture sides 34, can be applied with an optional sling of fabric material 33. This sling material 33 could be made up of eight colours as an example & applied with different colours made up at opposite interval sections, 39 to match each other at the units left 16 & right 17 sides. which would be hand pushed to preferred applied colour, surface pattern or shaped Feature .

Fig20 shows a 4 -way system 9 chest of drawers 41, this furniture body would difficult to rotate & reverse especially for a elderly individual, therefore to adapt an easier changeable option a detachable separate

4-way system rotating, reversing top panel 35 can be removed, & changed when needed, reducing the need to rotate the whole unit forwards 180 degrees as seen in previous first movements 6. This therefore makes the First colour change sequence easier by simply removing the top 35 & reversing the unit 41 back to front 180 degrees 36 bringing all the units 41 backs 5 into view.

CLAIMS

- 1, The inventions body mainly of free standing furniture will comprise of applying alternative colours, Surface patterns or shaped features to all opposite asymmetric areas of its body, these being its tops & fronts, with alternatives applied to its backs & bases, & left & right sides of the body to correspond.
- 2, The inventions body mainly of free standing furniture will comprise of a ^{360° Degrees} 4- way rotating reversing system body resulting in three numerous 180 degrees movements producing 2 colour changes sequences plus 2 mixture changes sequences.
- 3, The inventions body mainly of free standing furniture may comprise of a optional 360 degrees reversing drawer body which alternates at 90 degrees of its applied colours, surface patterns or shaped features of its asymmetric opposite surface these being the drawer body front, back & left & right, producing a four colour change drawer body.
- 4, The inventions body mainly of free standing furniture may comprise of a optional 180 degrees reversing drawer body that will alternate at 180 degrees showing its applied colours, surface patterns or shaped features of its asymmetric opposite surface sides, these being the drawer body front & back, producing a two colour change drawer body
- 5, A 360 degrees reversing drawer body as claimed in claim 3 may comprise of drilled holes acting as handles applied to each of its asymmetric opposite surface sides, these being the drawer body front, back & left & right, sides.
- 6, A 180 degrees reversing drawer body as claimed in claim 4 may comprise of a combination of drilled holes or handles applied to each of its asymmetric opposite surface sides, these being the drawer body front & back applied colours, surface patterns or shaped features to handles.
- 7, Apart from the optional reversing drawer body as claimed in claims 3 & 4 another option is a 4-way system 360 degrees slide on/off drawer front from a T shaped feature may being applied to say a kitchen drawer as an example.
- 8, The invention body as described in claim 1 & 2 may comprise of optional 4-way system separate detachable swap over units or side panels consisting of applied alternative colours, surface patterns or shaped features to all opposite asymmetric areas of their body these being their tops & fronts, along with their backs & bases, & left & right sides to correspond when revealed through swapping over units.
- 9, The inventions body as claimed in claim 1,2 & 8 may comprise of four colour change side shelves by using hidden shelves built into the back of a unit with a centre panel used to separate them through applied alternative colours, surface patterns or shaped features on all opposite undersides of the shelves these being an example of which is if two colours are applied to one shelf, then four colours can be applied to two shelves.

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CLAIMS

10, The inventions body as described in claim 1 & 2 may comprise of optional 4-way system separate detachable swap over unit sides consisting of the same features of ~~claim 9~~ ^{maybe,} with 4 applied alternative colours, surface patterns or shaped features to all opposite asymmetric areas of their body these being their tops & fronts, along with their backs & bases, & left & right sides to correspond when revealed through swapping over units.

11, The inventions body mainly of free standing furniture may comprise of optional side features of a slide in side or alternatively a optional flap motion side both being applied with alternative colours, Surface patterns or shaped features to all opposite asymmetric areas of its body being its left & right sides of the body to correspond.

12, The inventions body mainly of free standing furniture as claimed in 1 & 2 may have a feature of 360 degrees rotating cylinder sides that are applied with alternative colours, surface pattern or shaped features to the opposite sides of its outer shell within optional weights may be included giving self- perpetual colour change motion as the inventions body is rotated.

13, The inventions body mainly of free standing furniture comprising of rotating cylinder side as claimed in claim 11 may also feature built in drawer system inside the cylinders sides along with optional brush fibres applied the inventions furniture body so producing a self-cleaning effect when the cylinder side is rotated either by hand weights or even a motor.

14, The inventions body mainly of free standing furniture may feature a central twist motion to the inventions body by 180 degrees so doubling the original number of sequences of 360 degrees 4-way system to an 8-way rotating reversing system.

15, The inventions body mainly of free standing furniture may feature optional sling side made of a fabric material applied alternative colours, surface patterns or shaped features to all opposite areas of its sling body to correspond with alternate side of sling ~~to~~ inventions furniture body.

16, The inventions body mainly of free standing furniture may comprise of a optional 4- way rotating reversing system detachable top comprising of applied alternative colours, surface patterns or shaped features to all opposite Asymmetric areas of its panel these being its tops & fronts, along with its backs & bases, or optional left & right sides of the top panel to correspond with the body reducing the need to rotate the inventions 4-way body.

17, The inventions body mainly of free standing furniture may also use a simple reversible back panel applied with alternative colours, surface patterns or shaped features to opposite sides front & back to help achieve the overall effect to the furniture body.

18, The invention body mainly of free standing furniture as claimed in any proceeding claim may be made from the materials of wood composite boards applied with coloured effect laminates or natural resources such as pine applied with appropriate stains Finnish alternatively plastics, metal or fabric may be used or a combination of all of these five materials may be adopted.

19, The inventions body mainly of free standing furniture with extra optional features as herein described & Illustrated with reference in the accompanying drawing's & claims.



INVESTOR IN PEOPLE

Application No: GB 0209725.1
Claims searched:

Examiner: Hal Young
Date of search: 5 September 2003

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		GB 2239389 A (REGENCY) see whole document.
X		US 3186027 (MERILLAT) see whole document especially lines 66-69 of column 1
X		GB 2034177 A (HYDE) see lines 47-62 of page 1.
X		FR 2481342 A (NAWFAL) see figs and abstract.
X		EP 0527681 A (MANUF) see figs 1,2 and abstract.

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^v:

A4B; A4L

Worldwide search of patent documents classified in the following areas of the IPC⁷:

A47B

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

WPI, EPODOC, JAPIO