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(54) Jigsaw puzzle assembly board.

(57) A board for use in assembling a jigsaw puzzle comprising a rectangular panel having an upwardly disposed planar assembly surface and top, bottom, and side edges, upstanding walls fixedly secured to said assembly surface contiguous to said bottom and one of said side edges. Said walls have inwardly disposed edges disposed orthogonally to said assembly surface and intersecting adjacent one corner of said assembly surface. Said bottom wall includes two wall sections disposed in longitudinally spaced-apart relationship and said panel is hinged along lines orthogonal to said wall and adjacent the proximal ends of said wall sections, whereby said panel may be folded.

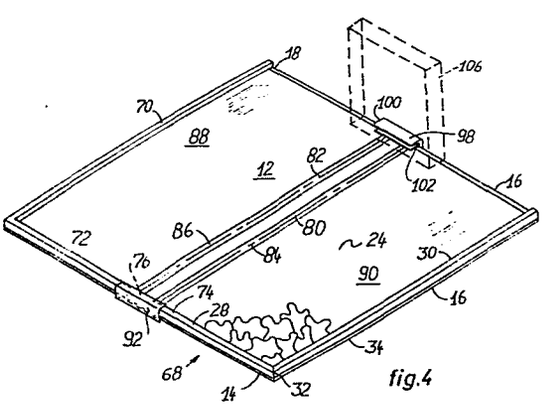


fig.4

EP 0 083 294 A1

JIGSAW PUZZLE ASSEMBLY BOARD

Assembling jigsaw puzzles is a popular and widespread pastime. However, assembling such puzzles requires the use of a large flat surface such as the top of a table and, particularly in the case of larger or more complex puzzles, requires a considerable period of time. Heretofore, various structures have been proposed in the form of specially fabricated folding tables, boards, and the like, to enable the assembler of a jigsaw puzzle to transport and/or store a partially or fully assembled puzzle thereby alleviating the need to preempt other uses of the surface being used to assemble the puzzle or to avoid disassembly of the puzzle. Such prior art devices, however, have been relatively complex and expensive rendering them unavailable to the average puzzle assembler. Such devices have also failed to provide a means for transporting and/or storing partially assembled puzzles.

Broadly, the present invention is a board structure including a flat, rectangular panel having a planar assembly surface bounded along at least the bottom and one side thereof by an upstanding wall and including a foldable stand. The planar panel and upstanding wall support, the assembled puzzle in either the horizontal or angularly upstanding position, and permits transporting of the puzzle for storage when not in use. Preferably, the board is fabricated from a corrugated material having bound edges such that the board is light in weight, inexpensive, and can be easily handled without damage.

In one embodiment of the invention, the board and walls are articulated along a bisecting line to enable folding of the assembly board with the assembly surface disposed inwardly. Locking means are provided for rigidly holding the board in its open position. The assembly board may also include a stand for holding the box lid of a puzzle in a convenient position for viewing when the board is in use.

It is therefore an object of the invention to

provide an improved board structure for use in assembling jigsaw puzzles.

It is another object of the invention to provide such a board of simple and light weight construction.

Yet another object of the invention is to provide such a board which is rigid and durable yet incorporates inexpensive materials.

Still another object of the invention is to provide such a board including a foldable stand.

Another object of the invention is to provide such a board which can be folded for more compact storage when not in use.

Yet another object of the invention is to provide such a board including a stand for holding the box lid of a puzzle in a convenient position for viewing.

The above-mentioned and other features and objects of this invention and the manner of attaining them will be best understood by reference to the following description of an embodiment of the invention taken in conjunction with the accompanying drawings wherein:

Fig. 1 is a perspective view of a puzzle assembly board in accordance with the present invention;

Fig. 2 is a perspective view of the puzzle board from the reverse side thereof showing details of the stand;

Fig. 3 is a cross-section of the board taken along section line 3-3 of Fig. 1;

Fig. 4 is perspective view of an alternative embodiment of a puzzle assembly board in accordance with the invention;

Fig. 5 is a fragmentary sectional view of the locking means used in the embodiment of Fig. 4;

Fig. 6 is a perspective view of the lid holding means of the embodiment of the invention of Fig. 4; and

Fig. 4 shown in its folded position.

Referring now to the drawings, there is shown a puzzle board in accordance with the invention indicated generally at 10.

The board 10 comprises a rectangular, planar panel 12 having a bottom edge 14, top edge 16, and side edges 18,20.

Panel 12 is preferably made of a double wall corrugated paper material of 240 pounds test and having a cross-sectional dimension A (Fig. 3 only) of 0,48 cm. To accommodate most standard puzzles comprising up to one thousand pieces, the board has perimeteral dimensions of 71,12 cm by 66,04 cm.

The perimeteral edges 14, 16, 18, and 20 are further bound with a strong fabric tape as at 22. The tape is wraped about the edges and partially overlies both the top and the bottom surfaces 24, 26 of panel 12. The tape substantially reduces the possibility of chafing, indentation or other damage to the edge of the board without adding significantly to the weight or the cost thereof.

A pair of upstanding walls 28, 30 having length dimensions equal to the dimensions of edges 14 and 20 are fixedly secured to the top surface 24 of board 12 along the edges 14, 20.

The walls 28, 30 intersect in a smooth mitered joint 32 at the corner 34 of board 12. The vertical dimension B (Fig. 3 only) on the walls 28, 30 is preferably greater than the vertical dimension C of a conventional puzzle piece 40 and in a specific embodiment is 0,64 cm . The walls 28, 30 are secured to surface 24 of the board by means of staples as at 42.

As seen in Fig. 2 only, the surface 26 of board 12 has secured thereto a folding stand indicated generally at 44. The stand is made from a smooth stock, rigid paper material. The stand 44 includes an elongated rectangular section 46 which is secured to the surface 26 by means such as glue and a generally triangular portion 48. Section 48 can be moved from a folded position wherein it lies flat against the surface 26 or outwardly such that it lies in a planar substantially perpendicular to the surface 26. The bottom edge 50 of trianglar portion 48 is cut at an angle such that the board 10 can be placed in an upwardly angled position with the surface 24 thereof being disposed at an angle of about 20 degrees from the vertical.

In one specific embodiment of the invention, a pair of elongated strips 52, 54, may be secured to the surface 26 adjacent edges 18 and 20. The strips 22 have the same cross-section as the material used for the stand 44 to thereby provide a more stable resting surface for the board when it is placed in a horizontal position as shown in Fig. 1. Preferably, the surface 24 of the board 12 is coated with a soft white coating to facilitate observation of the parts of a conventional puzzle such as shown at 60.

Referring now to Fig. 4, there is illustrated an alternative embodiment 68 of a puzzle assembly board in accordance with the present invention. Embodiment 68 is adapted to be folded from a flat configuration as shown in Fig. 4 to folded configuration as shown in Fig. 7. In this embodiment, like elements are denominated with like numerals. Preferably, the board 68 is further provided with an additional wall 70 mounted and secured in the same manner as walls 28, 30 and contiguous with side 18.

Wall is formed into two sections 72, 74 which are longitudinally spaced apart to define an opening 76 therebetween. Opening 76 has a longitudinal dimension at least equal to twice the vertical (as viewed in Fig. 4) dimension of the assembly board 68. Panel 12 creased or otherwise articulated along a pair of lines 80, 82 such that the panel 12 will fold along these lines. Preferably, the creases or folds 80, 82 are reinforced with a suitable fabric tape as at 84, 86 to insure durability. Thus configured, panel 12 can be folded such that panel sections 88, 90 are disposed in parallel, spaced-apart relationship with wall sections 72, 74 being contiguous and walls 30 and 70 -being contiguous, this position or condition of the assembly board 68 being shown in Fig. 7.

When the assembly board 68 is in its open position (Fig. 4) wall sections 72, 74 are fixedly held in aligned position by means of a sliding collar 92. As best seen in Fig. 5, collar 92 has substantially a box cross-section having one corner 94 thereof removed. The collar is

typically two to three times the length of the opening 76 and is slidably engaged with one or both of the wall sections 72, 74 as shown in Figs. 7 and 4, respectively. When in the position shown in Fig. 4, collar 92 positively locks wall segments 72, 74 in axially aligned positions such that the board 12 will remain flat and rigid for use. When the collar 92 is slid into a position as shown in Fig. 7; wherein it is engaged with only one of the segments 72 or 74, the board can be folded into the position shown in Fig. 7 for more compact storage. It will also be observed that in this position, the board functions as a convenient holder for puzzle pieces 60. A suitable latch (not shown) may be provided for securing wall segments 70 and 30 to one another when in the folded position.

As also seen in Fig. 4, the top edge 16 the board may be provided with a lid holding means 98. As best seen in Fig. 6, the lid holding means 98 comprises a double "U" cross-section extruded element having legs 100, 102, 104. The spacing between legs 102, 104 is such that the element 98 can be frictionally slid over the panel 12. This positively holds the element 98 in its desired position and also allows the element 98 to further support the panel 12 in its open position as shown in Fig. 4 for added rigidity. The leg 100 of element 98 is spaced from the leg 102 by a dimension adapted to frictionally receive one side of a typical puzzle box such as box 1-6 shown in dashed lines in Fig. 4. This permits the user of the assembly board 10 or 68 to affix the lid of the puzzle box 106 to the element 98 in a position wherein the picture of the puzzle being assembled, which is typically mounted to the top face of the box 106, can be easily viewed while the user is assembling the puzzle. Element 98 can be easily slid into a storage position such as shown in Fig. 7 in which it is engaged with only one of the panels sections 88 or 90 as desired.

When the puzzle assembly board is configured as in Fig. 4, the stand means 44 will be mounted somewhat off-center to the rear of the panel 12 so that it will not interfere with folding of the board along the creases 80,

82, this off-center mounting of the stand means 44 not, however, affecting the stability of the board when it is placed in its upstanding position.

It will now be seen that the puzzle board of the present invention provides a convenient work surface for assembling conventional jigsaw puzzles. The board can be used on standard tables, in a bed, or even a chair. The walls 28, 30 provide vertical support to any portion of the puzzle that is assembled such that the board can be easily transported with the fully or partially assembled puzzle at will. The board can thus be stored under a bed, chair, or the like where it is out of the way without destroying the puzzle. The entire board is fabricated from light weight, inexpensive materials such that the puzzle board is not only functional but practical for its intended use. The soft white background helps to distinguish shapes and colors. The board is light in weight and durable because of the rigidity of the walls 14, 16, and the bound edges of the corrugated material.

When the assembly board is configured as shown in Fig. 4, the board can be folded for even more compact storage and also functions as a storage case for the puzzle pieces. The locking means and the lid clamp are, as all other elements of the assembly board, inexpensive, and light in weight.

Once a puzzle has been assembled on the board, the board may also be used as a display stand for the puzzle.

While there have been described above the principles of this invention in connection with specific apparatus, it is to be clearly understood that this description is made only by way of example and not as a limitation to the scope of the invention.

CLAIMS:

1. A board for use in assembling a jigsaw puzzle comprising: a rectangular panel having an upwardly disposed planar assembly surface and top, bottom, and side edges, upstanding walls fixedly secured to said assembly surface contiguous to said bottom and one of said side edges, said walls having inwardly disposed edges disposed orthogonally to said assembly surface and intersecting adjacent one corner of said assembly surface said bottom wall including two wall sections disposed in longitudinally spaced-apart relationship, said panel being hinged along lines orthogonal to said wall and adjacent the proximal ends of said wall sections whereby said panel may be folded.

2. The board of claim 1 wherein said panel is made of a lightweight, corrugated material.

3. The board of claim 2 further including a fabric binding fixedly secured to and enclosing said panel edges.

4. The board of claim 3 wherein said top and the other of said edges are open, and further including means for supporting said panel with said assembly surface in an upwardly angled position with said bottom edge thereof adjacent a supporting surface.

5. The board of claim 4 wherein said supporting means includes a stand hingedly secured to the surface of said panel opposite said assembly surface and adjacent the center thereof, said stand including a generally triangular portion selectively moveable between a position wherein said portion lies flat against said oppositely disposed surface and a position wherein said portion is disposed orthogonally to said oppositely disposed surface and with one edge thereof intersecting said bottom edge at an acute angle.

6. The board of claim 5 further including a pair of elongated rectangular elements fixedly secured to said oppositely disposed surface adjacent said side edges, said element having a thickness substantially equal to the section of said stand.

7. The board of claim 6 wherein said assembly surface includes a soft-white coating.

8. The board of claim 4 wherein said walls are of

generally rectangular cross-section and have a dimension vertical to said assembly surface substantially equal to the vertical section dimension of a conventional jigsaw puzzle piece.

9. The board of claim 8 further including a wall fixedly secured to the other of said side edges of said panel.

10. The board of claim 8 further including locking means slideably received on said bottom wall and moveable between a first position engaging both of said wall sections and a second position engaging only one of said wall sections.

11. The board of claim 10 including means for clamping a puzzle box lid to said board in a position with the picture of the puzzle being assembled on said board disposed for viewing by the user of said board.

12. The board of claim 10 wherein said locking means includes a rigid collar slideably received on one of said wall sections and slideably engageable with the other of said wall sections.

13. The board of claim 11 wherein said clamping means comprises an elongated element having a first longitudinal slot dimensioned to fictionally engage an open edge of said panel and a second longitudinal slot dimensioned to fictionally engage a sidewall of said puzzle box.

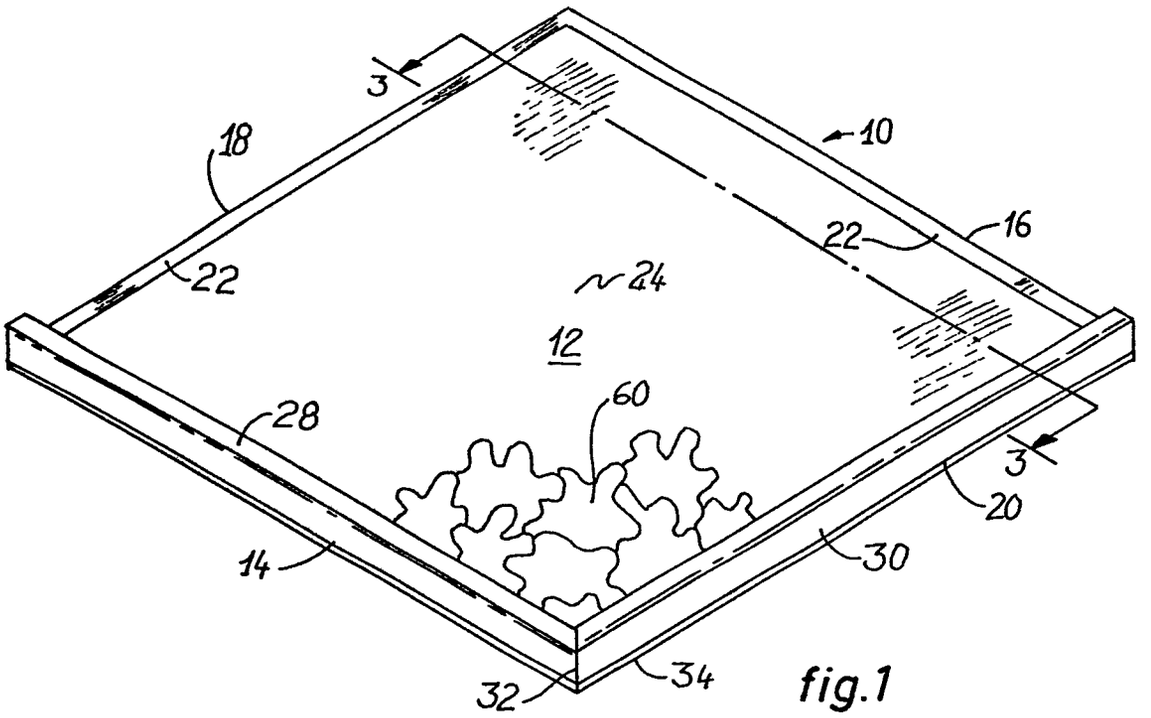

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fig.1

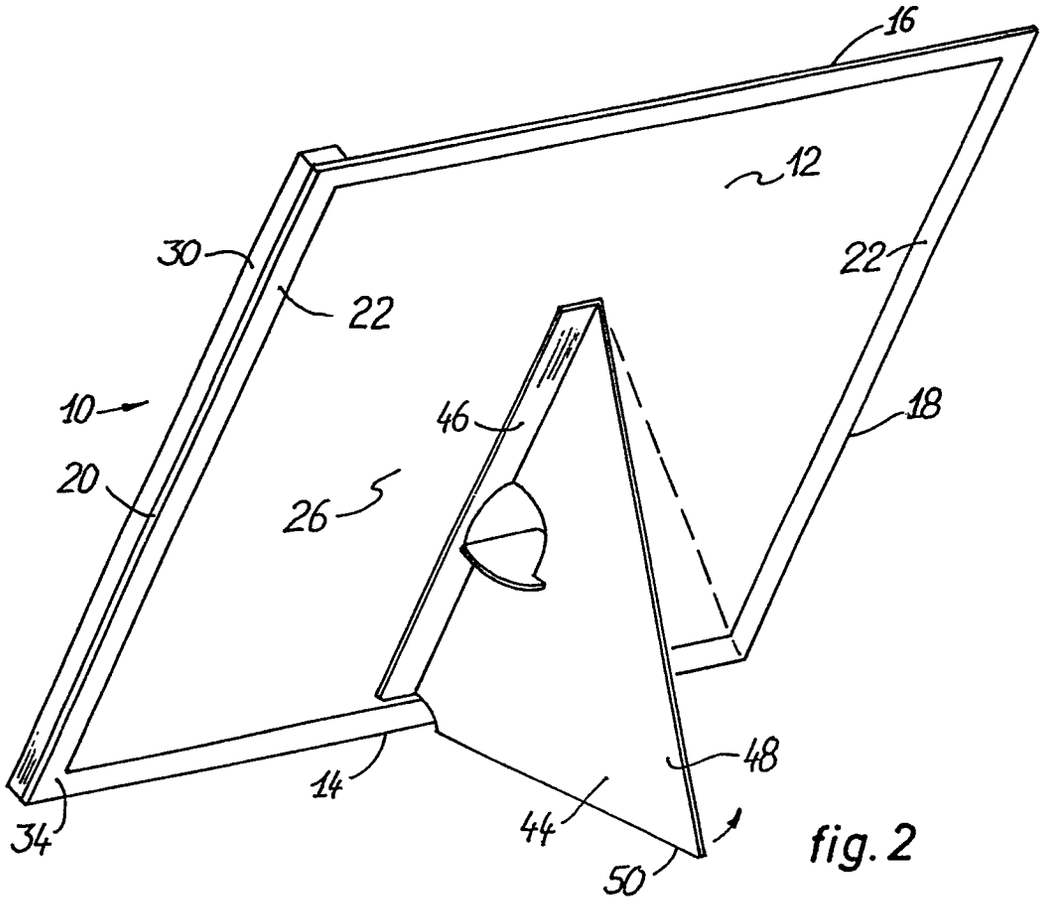

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fig.2

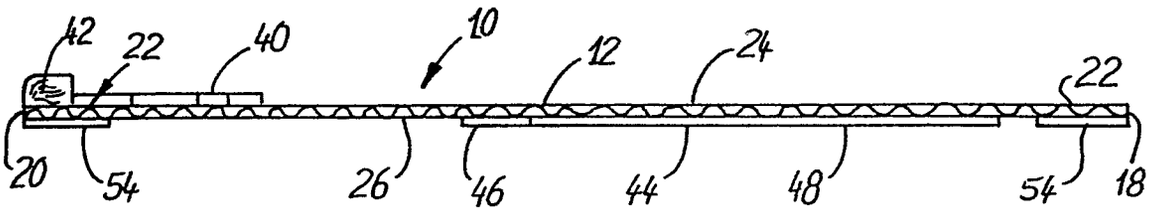


fig. 3

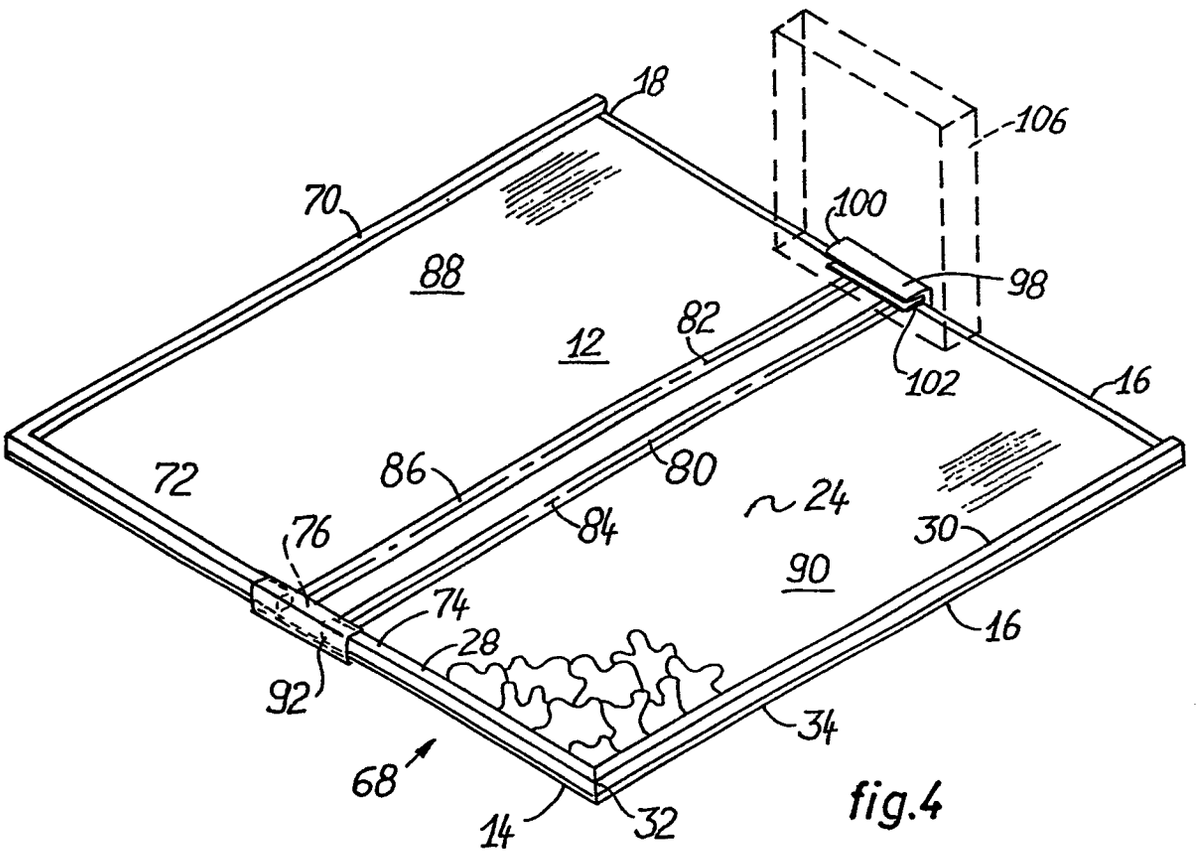


fig.4

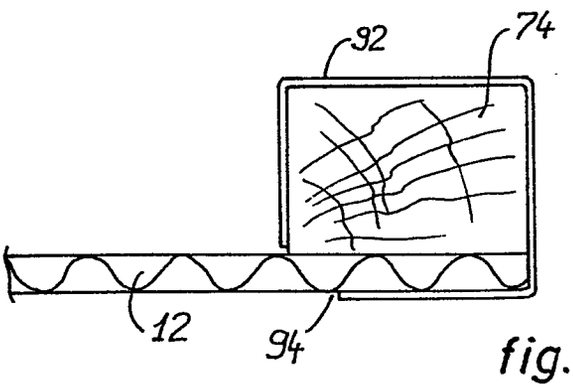


fig.5

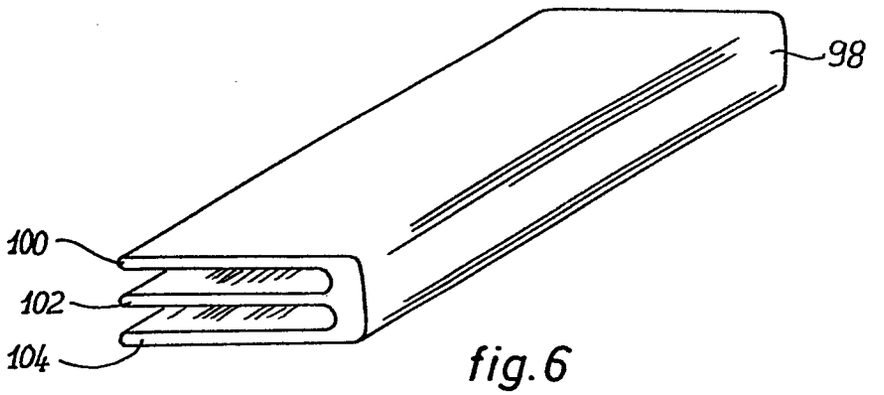


fig.6

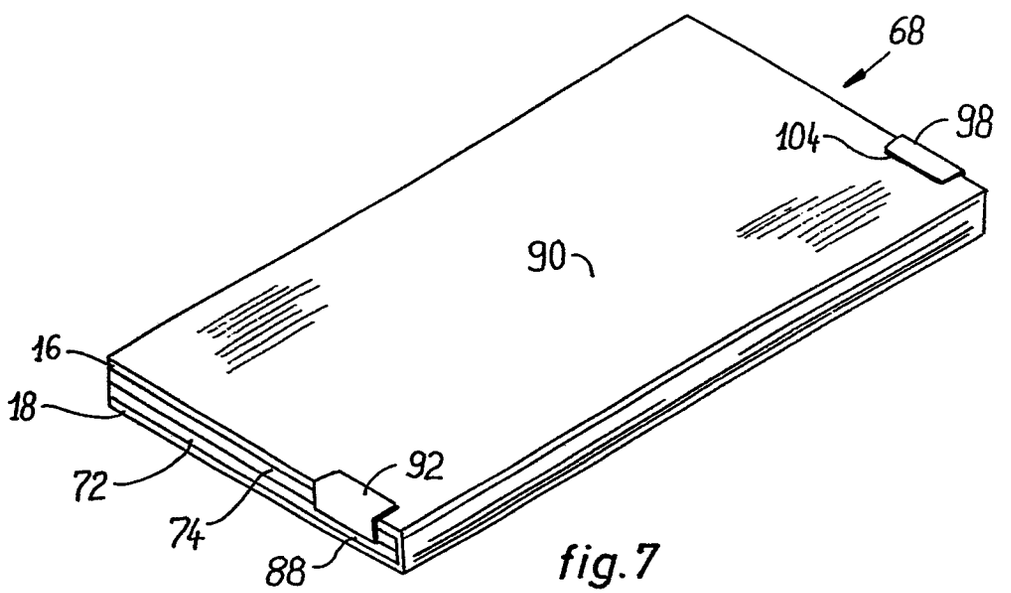


fig.7

European Patent Office

EUROPEAN SEARCH REPORT

0083294
Application number

EP 82 63 0117

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Y	FR-A- 972 577 (M.BROENS) * Figures 1,2; claim 1 *	1,2,4,5	A 63 F 9/10 A 63 F 3/00
A		3	
Y	GB-A- 743 749 (C.PHILLIPS) * Claim 5 *	1	
Y	FR-A-2 466 064 (M.RAMPAZZO) * Figures 2,6; page 1, lines 1-11 *	2,4,5	
A	FR-A- 854 717 (GALLOPAIN) * Figures 2,3,5; page 1, lines 46-52 *	3-6	
A	FR-A-2 436 593 (M.CHICHE et al.) * Figure 4 *	5	TECHNICAL FIELDS SEARCHED (Int. Cl. ³) A 63 F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	18-04-1983	LEVENBACH J.H.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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