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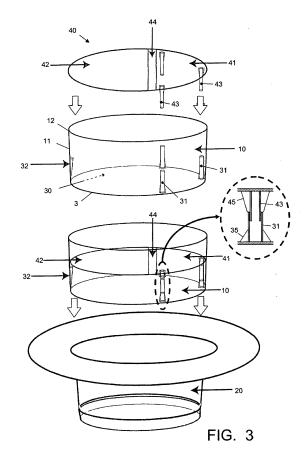
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(54) Magic hat

(57) A magic hat (1) comprises a crown (3) and a circumferential wall (2) surrounding the crown (3), the wall (2; 11) having a substantially elliptical inner contour; a plate-shaped two-part lid (40) having a substantially elliptical outer contour matching the inner contour of the hat wall, the lid comprising a fixed lid portion (41) arranged at a distance from the crown and fixed with respect to the the crown, and a hinging lid portion (42) coupled to the fixed lid portion (41) via a hinge member (44); a secret storage space (30) enclosed between the crown, the wall and the lid.

The hinging lid portion is capable of pivoting from a closed condition in which the hinging lid portion covers the storage space to an open condition in which the hinging lid portion releases the storage space, and back, driven by gravity when the hat is suitably tilted.



FIELD OF THE INVENTION

[0001] The present invention relates in general to a hat of the type suitable for performing conjurer's tricks, especially for children. Such hat should have a hidden compartment, in which objects can be placed to magically disappear and from which such objects can be made to magically reappear.

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BACKGROUND OF THE INVENTION

[0002] Hats of the above type are known in the art, but they have problems of having a complicated design and requiring relatively much raw material, with the consequence that the known hats are relatively expensive.

SUMMARY OF THE INVENTION

[0003] An object of the present invention is to provide an improved magic hat, suitable to serve as children's toy, which has a relatively simple design, can easily be assembled, requires less space during shipment, and can be manufactured easier with less material and less costs, without having a reduced performance.

[0004] To attain these objectives, the present invention proposes a hat having the characteristics of claim 1.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] These and other aspects, features and advantages of the present invention will be further explained by the following description of one or more preferred embodiments with reference to the drawings, in which same reference numerals indicate same or similar parts, and in which:

figure 1 schematically shows a perspective view of a magic hat according to the present invention; figures 2A and 2B are schematical cross sections of the hat; figure 3 is a schematic perspective view of a upper hat part placed upside-down.

DETAILED DESCRIPTION OF THE INVENTION

[0006] Figure 1 schematically shows a perspective view of a magic hat 1 according to the present invention. The hat 1 has a general shape of a top hat type, and comprises a substantially cylindrical yet slightly conical wall 2 with a crown 3 at the top and a brim 4 at the lower end. The hat 1 consists of two hat parts 10, 20: an upper hat part 10 comprises the crown 3 and an adjacent upper wall part 11, while a lower hat part 20 comprises the brim 4 and an adjacent lower wall part 21. The hat parts have relatively thin walls, but are made of a sufficiently stiff material, such as plastic.

[0007] Figures 2A and 2B are schematical cross sec-

tions of the hat 1. The hat has a transport condition, illustrated in figure 2A, in which the upper hat part 10 is positioned loosely within the lower hat part 20. The lower edge 12 of the upper wall part 11 may be at the same level as the brim 4. The overall height of the hat 1 is relatively low in this transport condition, which is advantageous. The hat also has an operational condition, illustrated in figure 2B, in which the upper hat part 10 is raised with respect to the lower hat part 20. The lower edge 12 of the upper wall part 11 has a small outside flange 14, and the upper edge 22 of the lower wall part 21 has a small inward flange 24. The upper wall part 11 and the lower wall part 21 are slightly conical, and the horizontal dimension (width) of the outward flange 14 of the lower edge 12 of the upper wall part 11 is larger than the width of the inward flange 24 of the upper edge 22 of the lower wall part 21, so that the upper hat part 10 can not leave the confinement of the lower hat part 20. Just below the upper edge 22 of the lower wall part 21, the inside of the lower wall part 21 is provided with an internal protrusion 23, capable of snapping below the outward flange of the lower edge 12 of the upper wall part 11 in the operational condition, so that the upper hat part 10 is prevented from dropping back into the lower hat part 20. Nevertheless, a user can push back the upper hat part 10 into the lower hat part 20 by exerting sufficient down-force. It is noted that said internal protrusion 23 may extend as a contiguous ridge along the entire circumference of the lower wall part 21, but it is also possible that said internal protrusion 23 comprises a series of individual protrusions. It is preferred that the said flanges of the edges 12 and 22 extend over 360°.

[0008] The upper hat part 10 is provided with a secret storage space 30. For explaining this feature, the upper hat part 10 is placed upside-down, as shown in figure 3. Figure 3 is a schematic perspective view of the upper hat part 10, shown partly transparent. Near the wall 11, a number of hollow mounting pillars 31 are placed on the crown 3. This number is preferably equal to 3. The cross section of the hat, in top view, is not cylindrical but is more elongate, ellipse-shaped, and the mounting pillars 31 are placed close to an apex of the ellipse, where the radius of curvature of the wall 11 is smallest. Near the opposite apex, a support projection 32 is provided at the inner surface of the wall 11. The upper hat part 10 together with the hollow mounting pillars 31, which are open at their free end, and together with the support projection 32 are preferably formed as a one-piece whole by injection molding.

[0009] The upper part 10 is provided with a plate-shaped lid 40, having an elliptical contour matching the contour of the wall 11. The elliptical lid is divided in two portions, a fixed lid portion 41 and a hinging lid portion 42. The fixed lid portion 41 is provided with fixation means 43 matching with the mounting pillars 31; for instance, the fixation means 43 with the mounting pillars 31 may provide a snap-fit or a clamp-fit. It is also possible that the fixation means 43 are glued to the mounting pillars 31.

[0010] In an embodiment, the fixation means 43 are also formed as pillars, which may be hollow to save on material, and which may be open-ended to allow the fixed lid portion 41 together with the fixation pillars to be injection molded as a one-piece whole. The outer diameter of the pillar-shaped fixation means 43 corresponds to the inner diameter of the mounting pillars, and a very small taper of the outer surface of the pillar-shaped fixation means 43 and/or a very small taper of the inner surface of the mounting pillars 31 will assure clamping of the pillar-shaped fixation means 43 within the mounting pillars 31. The upper ends of the fins 45 of the pillar-shaped fixation means 43 will form a stop for defining the final destiny position of the pillar-shaped fixation means 43 with respect to the mounting pillars 31 and hence for defining a distance between the fixed lid portion 41 and the crown 3.

[0011] At their bottom ends, i.e. at the end connected to the crown 3 or the fixed lid portion 41, the pillars 32, 43 may be provided with stiffening fins 35, 45, respectively.

[0012] The hinging lid portion 42 is coupled to the fixed lid portion 41 via a hinge member 44. In an advantageously simple embodiment, this hinge member 44 is an adhesive strip.

[0013] In figure 3, the lid 40 is shown above the upper hat part 10 for sake of convenience. In reality, the lid 40 is located inside the upper hat part 10, with the fixed lid portion 41 fixed with respect to the crown 3 via the mounting pillars 31 and fixation means 43. The space defined between the crown 3 and the lid 40 is the storage space 30. In a closed condition, the hinging lid portion 42 is resting on the support projection 32: the storage space 30 is closed. In an open condition, the hinging lid portion 42 has hinged over about 180° to release an access to the storage space 30.

[0014] The hinging lid portion 42 may be smaller than the fixed lid portion 41 to assure that the hinging lid portion 42 can lie flat on the fixed lid portion 41. The hinging lid portion 42 may also be slightly larger, so that in the open condition the hinging lid portion 42 will be resting against the wall 11; this will prevent the hinging lid portion 42 from sticking in use.

[0015] The use is as follows. In the operational condition, the hat 1 is placed on a table or other supporting surface with the hinging lid portion 42 in the open condition; the conjurer can now place an object into the storage space 30.

[0016] The conjurer picks up the hat, tilting the hat so that gravity makes the hinging lid portion 42 hinge from the open condition to the closed condition; the conjurer can now show the inside of the hat towards the audience, who can not see the object because this is hidden from view by the closed lid 40. To assist in obtaining a magical effect, the lid 40, the hinge member 44, and the inside of the hat 1 are preferably implemented in black colour, so that the audience can not see details.

[0017] The conjurer now manipulates the hat so that

gravity makes the hinging lid portion 42 hinge from the closed condition to the open condition, and places the hat back on the table; he is now able to take out the magically reappearing object.

- [0018] It should be clear to a person skilled in the art that the present invention is not limited to the exemplary embodiments discussed above, but that several variations and modifications are possible within the protective scope of the invention as defined in the appending claims.
- For instance, the pillars 31 and the fixation means 43 may be interchanged.

[0019] Even if certain features are recited in different dependent claims, the present invention also relates to an embodiment comprising these features in common.

Any reference signs in a claim should not be construed as limiting the scope of that claim.

Claims

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- Magic hat (1) comprising a crown (3), a circumferential wall (2) surrounding the crown (3), and a brim (4):
 - wherein the hat is divided into an upper hat part (10) that comprises the crown (3) and an adjacent upper wall part (11) of the wall (2), and a lower hat part (20) that comprises the brim (4) and an adjacent lower wall part (21) of the wall (2), the upper hat part (10) being separate from the lower hat part (20);
 - wherein the upper wall part (11) and lower wall part (21) are slightly conical;
 - wherein the hat has a transport condition in which the upper hat part (10) is positioned loosely within the lower hat part (20);
 - wherein the hat has an operational condition in which the upper hat part (10) is raised with respect to the lower hat part (20) and is held by the lower hat part (20).
- 40 2. Magic hat according to claim 1, wherein the width of the lower edge (12) of the upper wall part (11) is larger than the width of the upper edge (22) of the lower wall part (21).
- 45 3. Magic hat according to claim 2, wherein the lower edge (12) of the upper wall part (11) has an outward flange (14) and wherein the upper edge (22) of the lower wall part (21) has an inward flange (24).
- Magic hat according to any of claims 1-3, wherein just below the upper edge (22) of the lower wall part (21), the inside of the lower wall part (21) is provided with an internal protrusion (23) capable of snapping below the lower edge (12) of the upper wall part (11) in the operational condition.
 - Magic hat (1), preferably according to any of claims
 1-4, comprising a crown (3), a circumferential wall

(2; 11) surrounding the crown (3), and a brim (4), said circumferential wall (2; 11) having a substantially elliptical inner contour;

a plate-shaped two-part lid (40) having a substantially elliptical outer contour matching the inner contour of the hat wall (2; 11), the lid (40) comprising a fixed lid portion (41) arranged at a distance from the crown (3) and fixed with respect to the the crown (3), and a hinging lid portion (42) coupled to the fixed lid portion (41) via a hinge member (44); a secret storage space (30) enclosed between the

a secret storage space (30) enclosed between the crown (3), the hat wall (2; 11) and the lid (40); wherein the hinging lid portion (42) is capable of pivoting from a closed condition in which the hinging lid portion (42) covers the storage space (30) to an open condition in which the hinging lid portion (42) releases the storage space (30), and back, driven by gravity when the hat is suitably tilted.

- **6.** Magic hat according to claim 5, wherein the hinge member (44) is an adhesive strip.
- 7. Magic hat according to claim 5 or 6, further comprising mounting pillars (31) arranged on the inner surface of the crown (3), wherein the fixed lid portion (41) is attached to the mounting pillars (31).
- **8.** Magic hat according to claim 7, wherein the mounting pillars (31) are provided with support fins (35).
- 9. Magic hat according to claim 7 or 8, wherein the mounting pillars (31) are hollow and open-ended, and wherein the fixed lid portion (41) is provided with pillar-shapes fixation means (43) having an outer diameter corresponding to the inner diameter of the mounting pillars (31).
- **10.** Magic hat according to claim 9, wherein the pillar-shapes fixation means (43) are provided with support fins (45) also forming a stop for defining an operative position of the fixed lid portion (41) with respect to the crown (3).
- 11. Magic hat according to any of the previous claims 5-10, further comprising a support projection (32) provided at the inner surface of the wall (11), wherein the hinging lid portion (42) in the closed condition is resting on the support projection (32).

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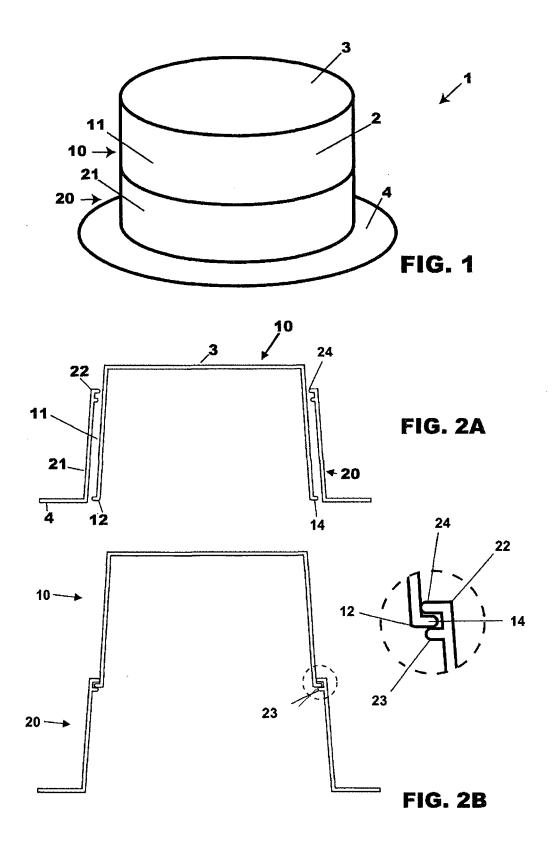
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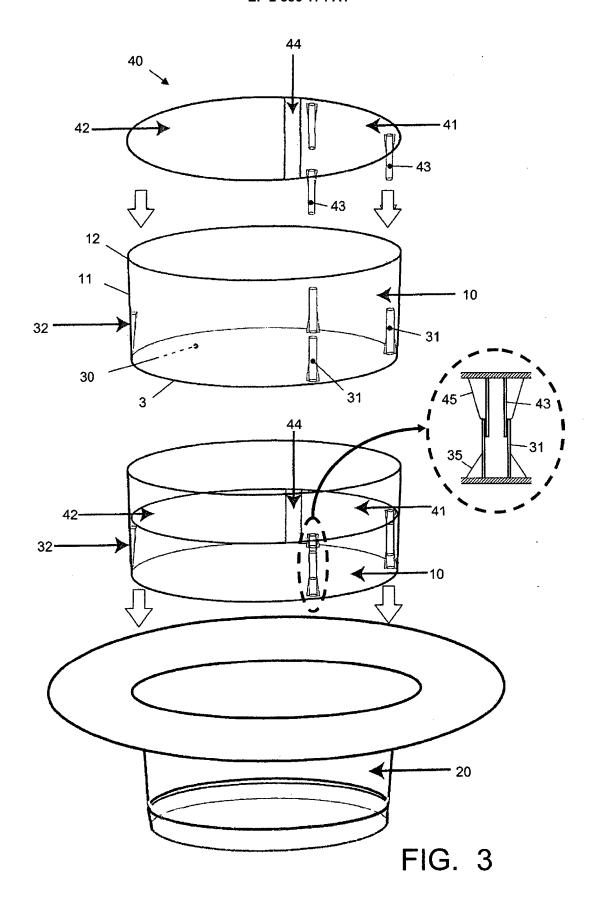
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PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 13 00 5957

	DOCUMENTS CONSID	ERED TO BE RELEVANT]	
Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages	CLASSIFICATION OF THE APPLICATION (IPC)		
Х	DE 10 2005 036203 A [DE]) 17 August 200 * claims 1-5; figur		1-4	INV. A63J21/00 A42B1/20	
Х	GB 11469 A A.D. 191 27 January 1916 (19 * page 2, paragraph figures 1-8 *				
Х	US 1 035 209 A (MAT 13 August 1912 (191 * claims 1,2; figur	1-4			
Х	US 3 353 188 A (JOH 21 November 1967 (1 * claims 1,2; figur	1-4			
X	US 2 855 604 A (AUS 14 October 1958 (19 * claims 1,2; figur	58-10-14)	1-4	TECHNICAL FIELDS SEARCHED (IPC) A63J A42B	
The Searce not compl	MPLETE SEARCH sh Division considers that the present y with the EPC so that only a partial so arched completely:				
Claims se	arched incompletely :				
Claims no	t searched :				
	or the limitation of the search: sheet C				
	Place of search	Date of completion of the search	, ,,	Examiner	
	Munich	10 September 2014	4 Shn	nonin, Vladimir	
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot unent of the same category nological background written disclosure mediate document	E : earlier patent doc after the filing date ner D : document cited in L : document cited in	T: theory or principle underlying the in E: earlier patent document, but publis after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, document		



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INCOMPLETE SEARCH SHEET C

Application Number

EP 13 00 5957

40	Claim(s) completely searchable: 1-4
10	Claim(s) not searched: 5-11
	Reason for the limitation of the search:
15	In reply to the invitation to indicate the claims on which the search is to be based, the applicant failed to supply the requested indication in due time.
20	Thus, the search report has been drawn up on the basis of the first independent claim of each category (Rule 62a(1) EPC): claims 1-4. The applicant's attention is drawn to the fact that the application will be further prosecuted on the basis of subject-matter for which a search has been carried out and that the claims should be limited to that subject-matter at a later stage of the proceedings (Rule 62a(2) EPC).
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent family

Publication

10-09-2014

Publication

I	U	

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Patent document

	cited in search report		date	member(s)		date	
	DE	102005036203	A1	17-08-2006	NONE		
	GB	191511469	Α	27-01-1916	NONE		
	US	1035209	Α	13-08-1912	NONE		
	US	3353188	Α	21-11-1967	NONE		
	US	2855604	Α	14-10-1958	NONE		
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82