

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 348 472 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
01.10.2003 Bulletin 2003/40

(51) Int Cl.7: **A63G 21/00**

(21) Application number: **03380044.2**

(22) Date of filing: **27.02.2003**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT SE SI SK TR**
Designated Extension States:
AL LT LV MK RO

(71) Applicant: **Rodriguez Martinez, S.C.**
03440 Ibi, Alicante (ES)

(72) Inventor: **Rodriguez Ferre, Jose Manuel**
03440 Ibi (Alicante) (ES)

(30) Priority: **22.03.2002 ES 200200715 U**

(74) Representative: **Canadell-Isern, Roberto**
Travessera de Gracia 30-1o C
08021 Barcelona (ES)

(54) **Collapsible slide**

(57) COLLAPSIBLE SLIDE, made up of a set of exchangeable molded material parts amongst which are a grooved ramp (1) and an access platform (2), which are joined by groove and tongue means, with the ramp able to rotate, to parts (3) forming the handrail of said platform. These are extended underneath and backwards forming the sides (3a) of the slide ladder. The slide has two frames (4, 5) joined between the lower and upper

zones of the sides (3a) of said ladder so that its bolsters form the ladder steps. At the same time, the end of a rotating double T part (6) is coupled between both frames constituting a central step of the ladder, whilst its other end is fastened by means of screw caps (9) to the lower intermediate zone of the ramp (1). This ensures assembling of the slide whilst the unscrewing of said screw caps permits folding of the double T part and the ramp on the ladder of the slide, facilitating its folding.

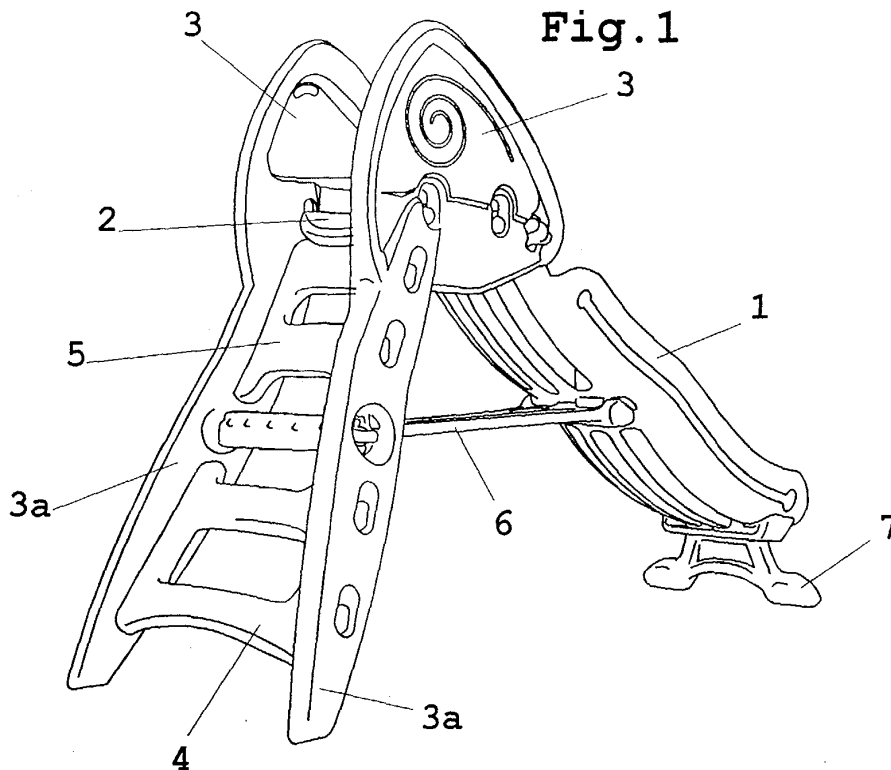
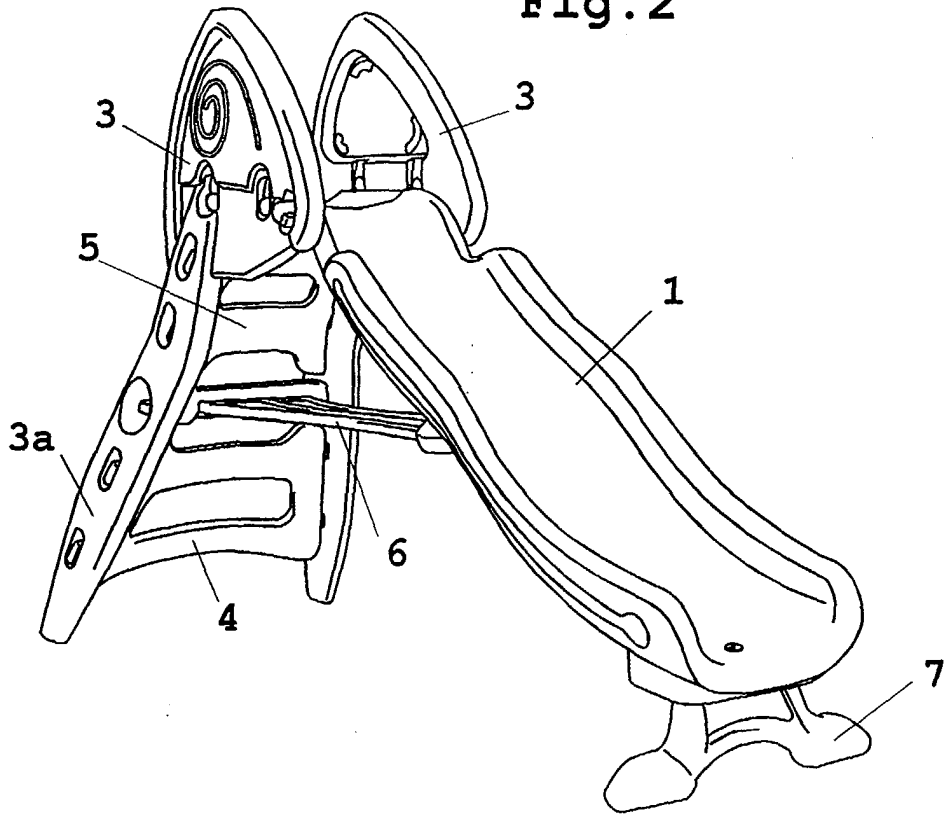


Fig. 1

EP 1 348 472 A1

Fig. 2



Description**PURPOSE**

[0001] The purpose of this Invention Patent request is a collapsible slide that provides for the function for which it is intended various advantages to be detailed later on, apart from others inherent to its organization and constitution.

HISTORY

[0002] At present there are multiple and diverse types of slides on the market, the majority of which are made up of integral sets installed permanently in public parks and gardens. They consist of a ramp that is accessed by a ladder so that children can slide down said ramp.

DESCRIPTION OF THE INVENTION

[0003] The collapsible slide, purpose of this invention, is made of exchangeable molded material parts so that it can be mounted and folded in numerous places.

[0004] This collapsible slide includes a grooved ramp and an access platform that are joined by tongue and groove means, with the ramp able to rotate, to parts forming the handrail of said platform. These are extended underneath and backwards forming the sides of the slide ladder.

[0005] The invention has two frames joined between the lower and upper zones of the sides of said ladder, so that its bolsters form the steps. At the same time, the end of a double T rotating part is coupled between both frames constituting a central step of the ladder, whilst its other end is attached by screw caps to the lower intermediate zone of the ramp. This ensures assembling of the slide whilst the unscrewing of said screw caps permits folding of the double T part and the ramp on the ladder of the slide, facilitating its folding.

[0006] The slide also includes a support in the shape of two lateral support feet, which is attached under the end of the ramp by screw caps.

[0007] In order to complement the description that follows and to help with a better understanding of the characteristics of the invention, this descriptive report includes a set of drawings in which the most significant details are represented in an illustrative but not limiting way.

BRIEF DESCRIPTION OF THE DRAWINGS**[0008]**

Figures 1 and 2 shows posterior and front perspective views of the collapsible slide in a position to be used.

Figures 3 to 13 show views corresponding to the respective mounting phases of said slide.

PERFORMANCE EXAMPLE DESCRIPTION OF THE INVENTION

[0009] In view of the figures commented above and in accordance with the numbering used, a performance example of the invention can be seen. This consists of a collapsible slide made up of a set of exchangeable molded material parts amongst which are a grooved ramp -1- and an access platform -2-, which are joined by groove and tongue means, with the ramp able to rotate, to parts -3- forming the handrail of said platform. These are extended underneath and backwards forming the sides of the slide ladder.

[0010] The slide has two frames -4- and -5- that, by means of respective L-shaped lateral projections -4a- and -5a- are coupled between the lower and upper zones of the sides of said ladder, so that its bolsters form the steps of the ladder. At the same time, the end of a rotating double T part -6- is coupled between both frames by means of T-shaped lateral projections -6a-, constituting a central step of the ladder. Meanwhile, the platform -2- is joined by means of widened end stubs between the handrails corresponding to the part -3-. Thus the platform -2- is located on the upper frame -5-, as indicated in the successive mounting phases represented in figures 3 to 8.

[0011] Figure 9 shows a support -7- made up of lateral support feet, which is fastened under the end of the ramp -1- by means of a screw cap -8- screwed on to a screwed stud of the support -7-.

[0012] Figure 10 shows the coupling of the rotating upper part of the ramp -1- to the handrails of the part -3- by means of L-shaped projections -1a- provided on the sides of said ramp, which, thanks to the rotating nature of the double T part -6-, the folding arrangement of the slide shown in figure 11 can be adopted. In said figure folding of the ramp -1- and the double T part -6- on to the slide ladder, thus occupying minimum space that facilitates its transportation, can be seen.

[0013] Figure 12 shows how the slide is put into use, which is obtained after turning the ramp -1- then the double T part -6- and fastening of the free end of this part to the lower intermediate zone of the ramp -1- by means of screw caps -9- screwed on to screwed studs provided in said zone of the ramp -1-, thus ensuring the slide is assembled (figure 13). On the other hand, when said screw caps are unscrewed, the double T part and the ramp can be folded on to the slide ladder, facilitating its folding and the reverse action is taken when it is to be later assembled.

Claims

1. COLLAPSIBLE SLIDE, basically **characterized by** the fact it is made up of exchangeable molded material parts consisting essentially in a grooved ramp (1) and an access platform (2), which are joined by

groove and tongue means, with the ramp able to rotate, to parts (3) forming the handrail of said platform. These are extended underneath and backwards forming the sides of the slide ladder. The slide has two frames (4, 5) joined between the lower and upper zones of the sides (3a) of said ladder so that its bolsters form the ladder steps. At the same time, the end of a rotating double T part (6) is coupled between both frames constituting a central step of the ladder, whilst its other end is fastened by means of screw caps (9) to the lower intermediate zone of the ramp (1). This ensures assembling of the slide whilst the unscrewing of said screw caps permits folding of the double T part and the ramp on the ladder of the slide, facilitating its folding.

2. COLLAPSIBLE SLIDE, according to the above claim, **characterized by** the fact it includes a part constituting a support (7) in the shape of two lateral support feet, which is attached under the end of the ramp by a screwed cap (8).

25

30

35

40

45

50

55

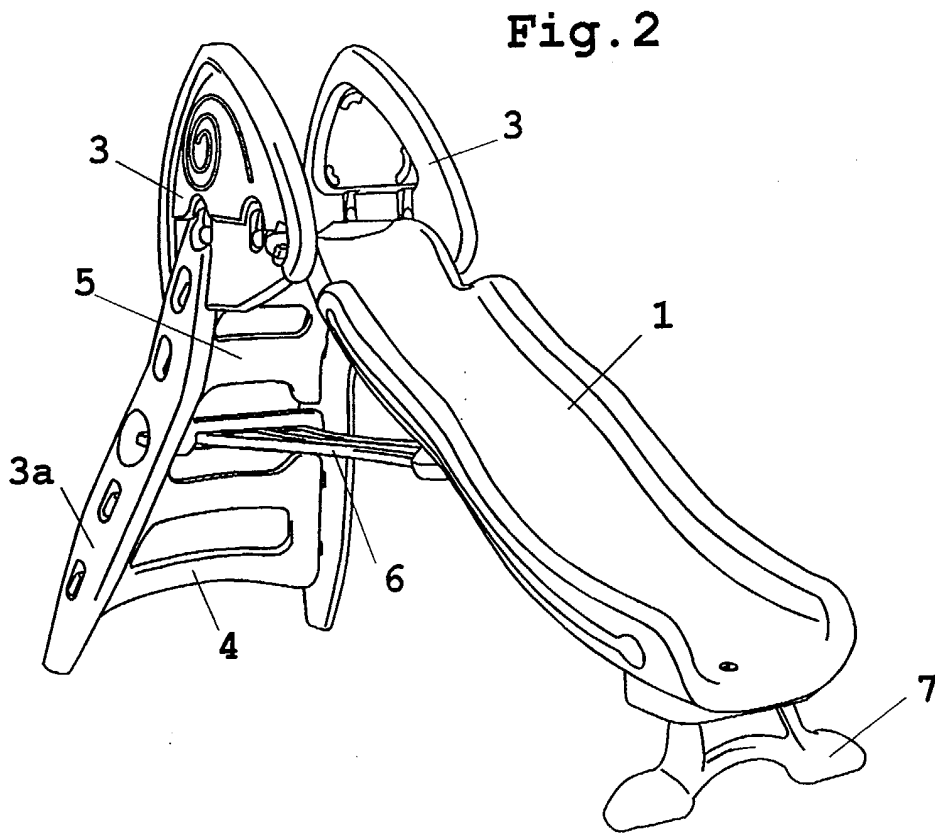
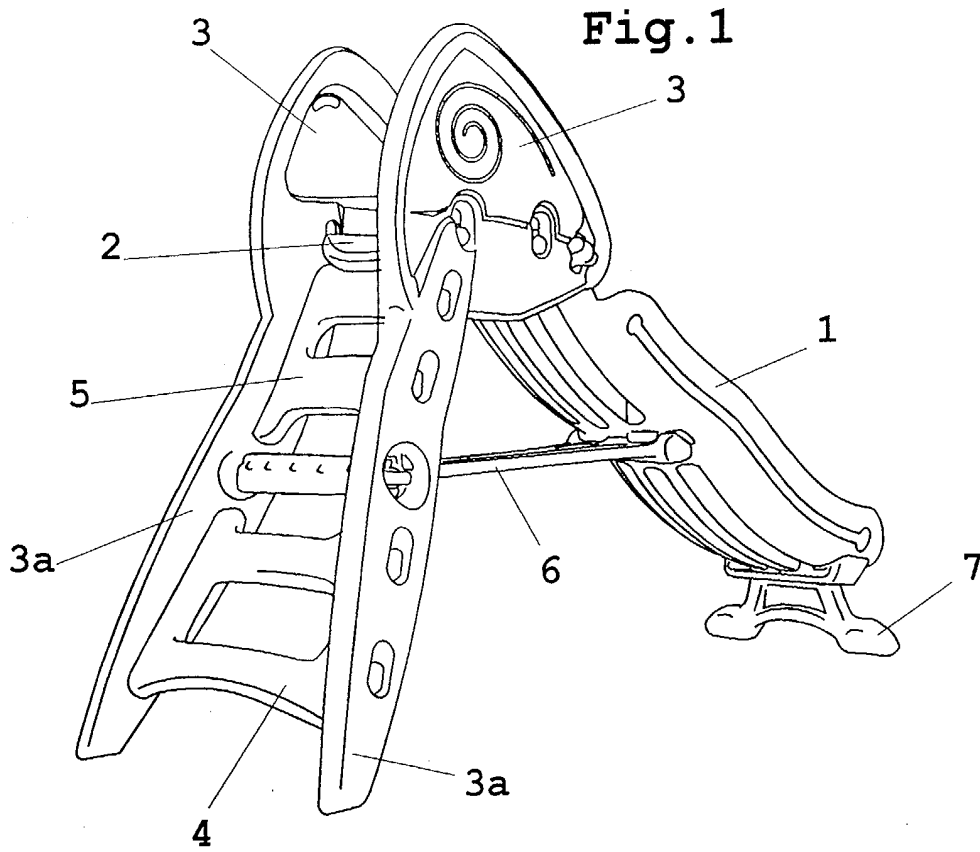


Fig. 3

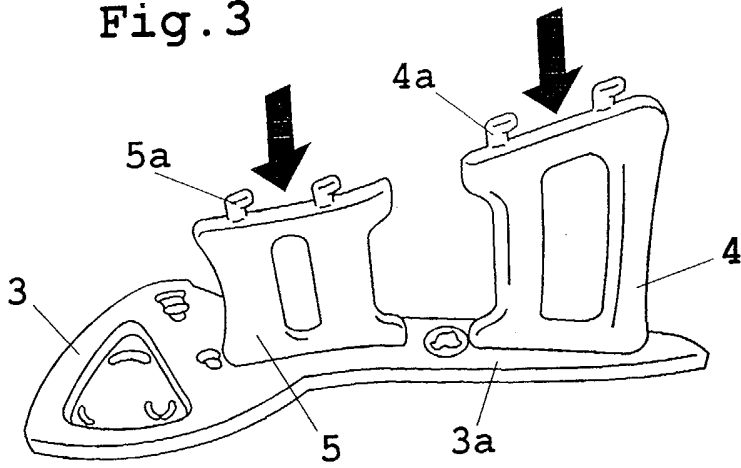


Fig. 4

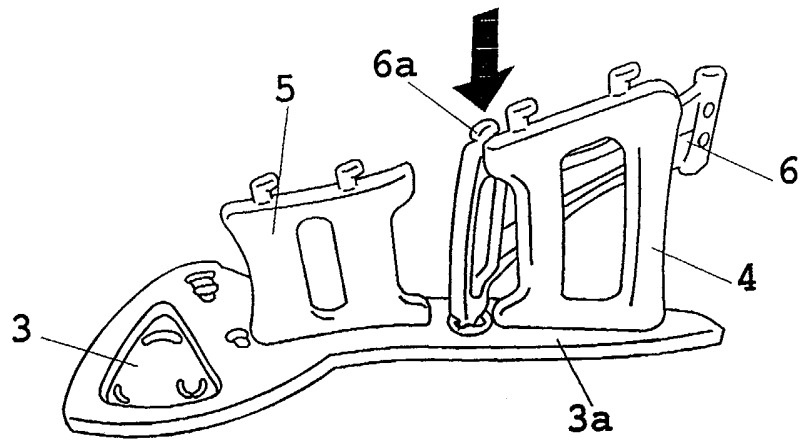


Fig. 5

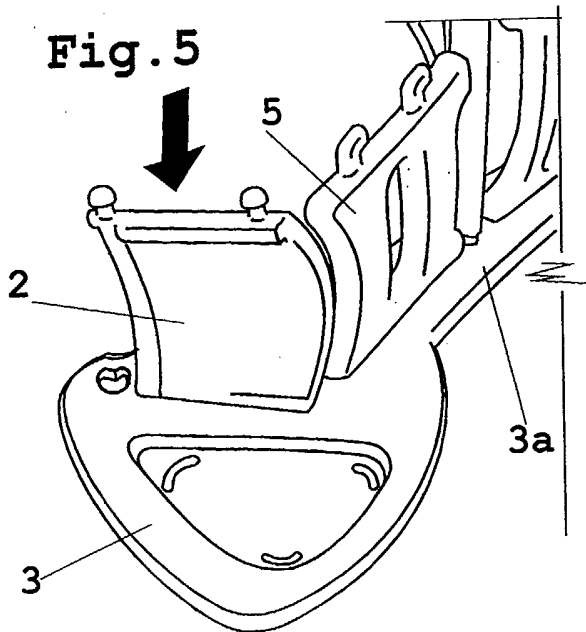


Fig. 6

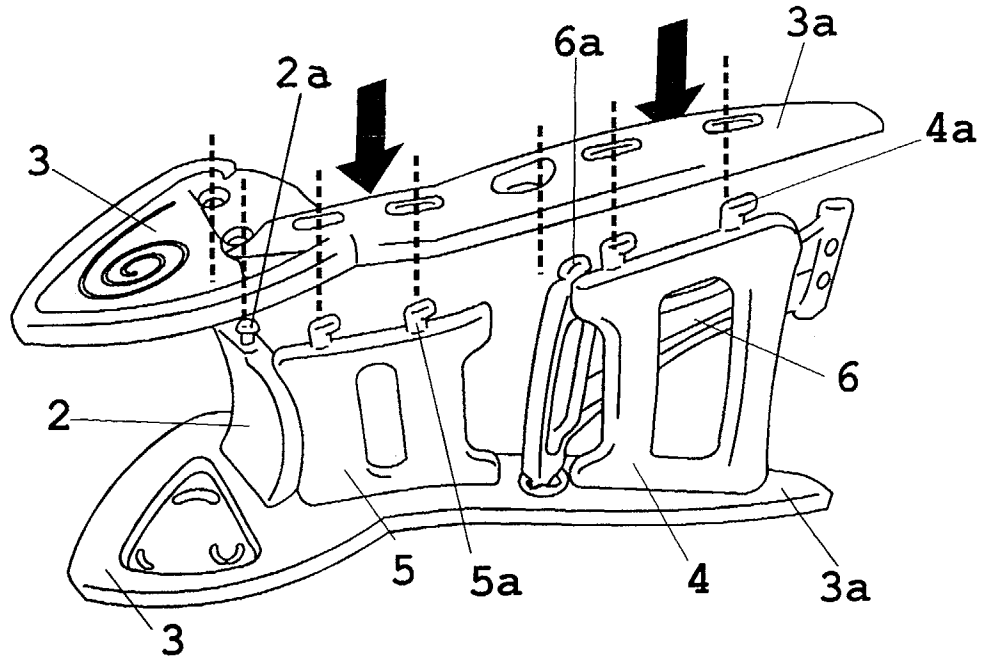


Fig. 7

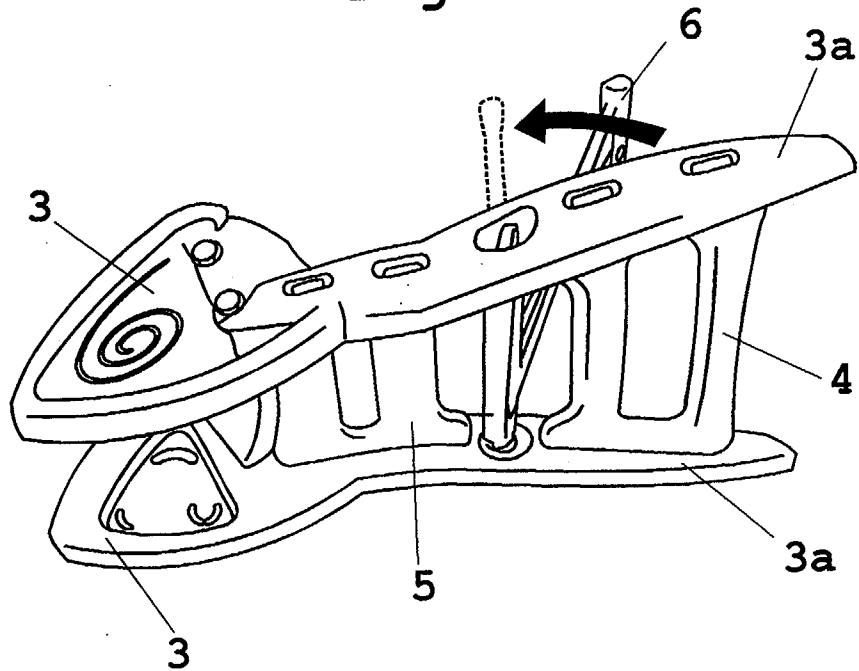


Fig. 8

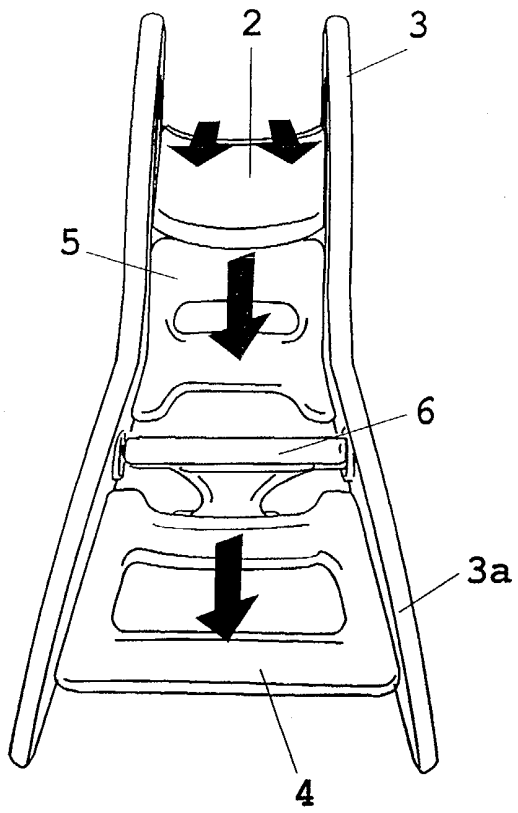


Fig. 9

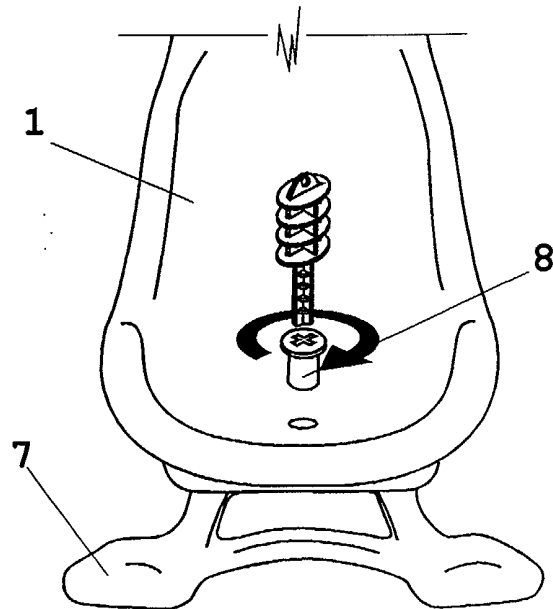


Fig. 10

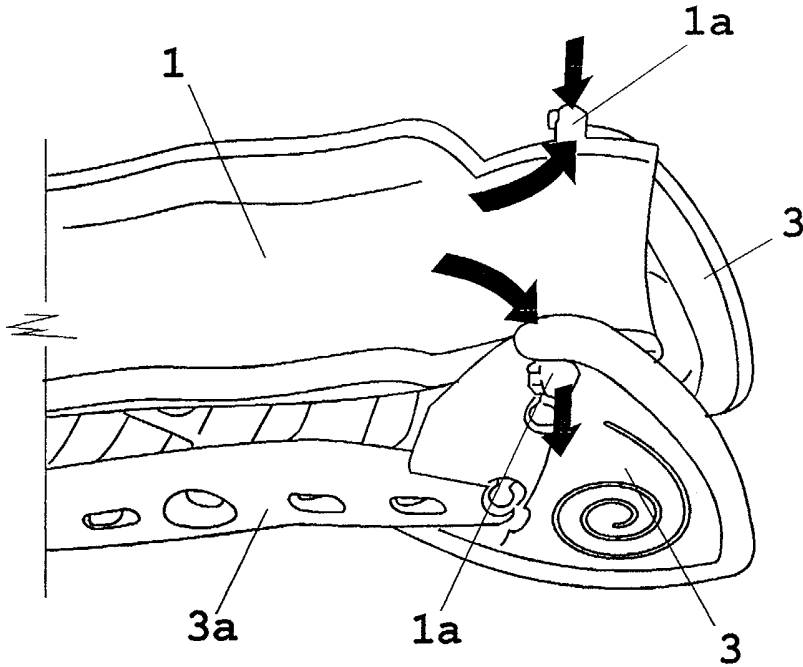
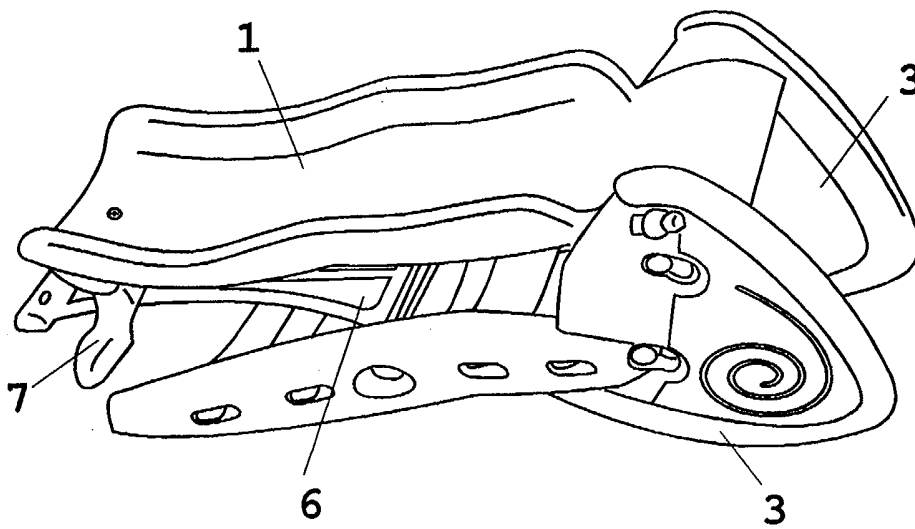
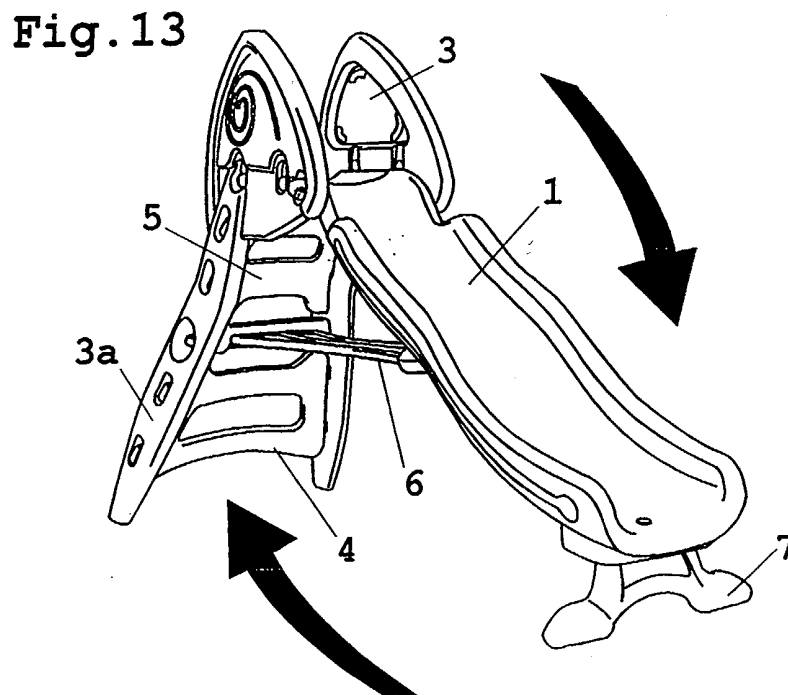
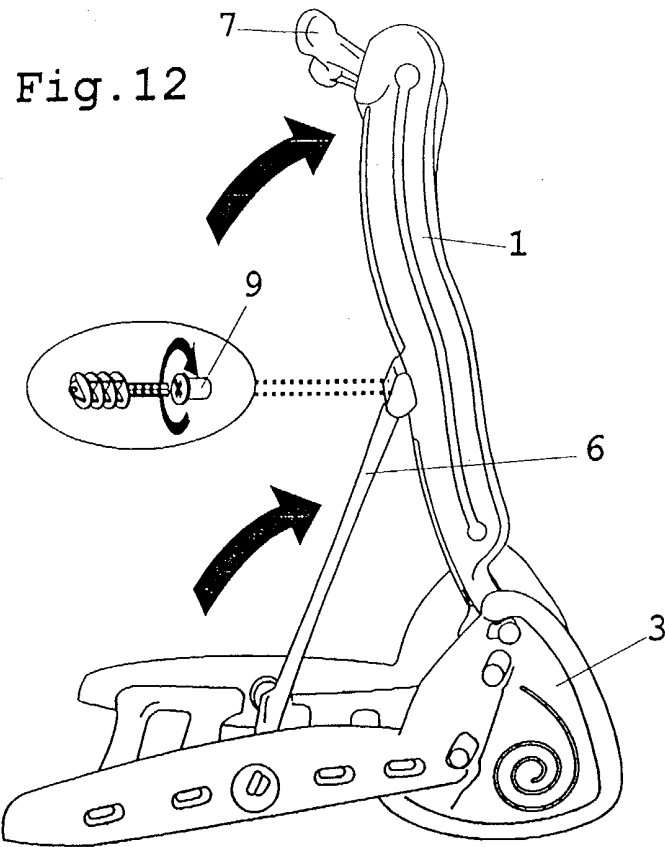


Fig. 11







European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 38 0044

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.7)
A	EP 0 744 202 A (RODRIGUEZ FERRE JOSE MANUEL) 27 November 1996 (1996-11-27) * column 2, line 31 - column 3, line 23; figures 1-7 * ---	1,2	A63G21/00
A	US 5 387 158 A (BERTRAND VICTOR J) 7 February 1995 (1995-02-07) * column 3, line 60 - column 4, line 10; figures 2-4 * ---	1	
A	EP 0 766 982 A (RODRIGUEZ FERRE JOSE MANUEL) 9 April 1997 (1997-04-09) * the whole document * -----	1,2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A63G
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 2 July 2003	Examiner Brumme, I
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (PC4001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 38 0044

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.

02-07-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0744202	A	27-11-1996	ES 1031146 U1	01-12-1995
			DE 69611055 D1	04-01-2001
			DE 69611055 T2	05-04-2001
			EP 0744202 A2	27-11-1996

US 5387158	A	07-02-1995	CA 2024854 A1	08-03-1992
			WO 9204091 A1	19-03-1992

EP 0766982	A	09-04-1997	ES 1032221 U1	16-04-1996
			AU 717992 B2	06-04-2000
			AU 6213296 A	10-04-1997
			BR 9603607 A	19-05-1998
			CN 1150551 A ,B	28-05-1997
			DE 69607714 D1	18-05-2000
			DE 69607714 T2	03-08-2000
			EP 0766982 A1	09-04-1997
			JP 9108448 A	28-04-1997
			US 5718637 A	17-02-1998

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82