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(71) Applicant: **JANE**, **S.A**.

08184 Palau Solità i Plegamans Barcelona (ES)

- (72) Inventor: Jané Santamaria, Manuel 08184 Palau Solità i Plegamans Barcelona (ES)
- (74) Representative: Morgades y Manonelles, Juan Antonio
 Morgades, Del Rio Renter, S.L.P.
 Rector Ubach, 37-39 bajos 2<u>a</u>
 08021 Barcelona (ES)

(54) Folding highchair

(57) Folding highchair with a framework (1) that allows the folding of the front legs (7), the rear legs (9), the backrest (2), the seat (3), the footrest (4) and the tray (5), all in the same plane, enabling it to be stored in tight spaces and, in addition, includes detachable elements such as the backrest (2), the tray (5) and the armrests, which are the support for the tray (5), which makes stor-

age and transport easy forming a very compact unit.

This highchair is characterized by comprising of a framework (1) consisting of a front frame (6) that determines the backrest (2) and the front legs (7), which is articulated in the middle, a support constituting the rear legs (9), the lower half of the front frame (6) presenting the attachments for the seat (3) and the footrest (4).

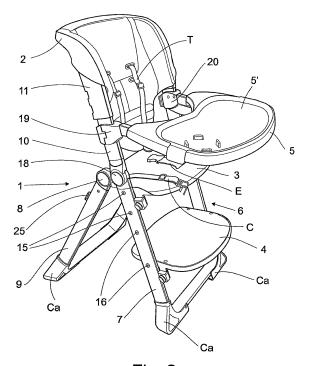


Fig. 2

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Description

OBJECT OF THE INVENTION

[0001] Folding highchair.

FIELD OF THE INVENTION

[0002] Different models of folding highchairs are known. For instance, those which fold from top to bottom in which the footrest itself acts as a catch for locking and unlocking the folding position; those having a base formed by the front and rear legs articulated at the top, to which the seat is attached; and those in which the front legs, the rear legs, the seat and the backrest are articulated on a common cross shaft.

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SUMMARY OF THE INVENTION

[0003] The purpose of this invention is a folding high-chair with a framework that allows the folding of the front legs, the hind legs, the backrest, the seat, the footrest and the tray, all in the same plane, enabling it to be stored in tight spaces and, in addition, includes detachable elements such as the backrest, the tray and the armrests, which are the support for the tray, which makes storage and transport easy forming a very compact unit.

[0004] Therefore, this highchair is characterized by comprising of a framework consisting of a front frame that determines the backrest and the front legs, which is articulated in the middle, a support constituting the rear legs, the lower half of the front frame presenting the attachments for the seat and the footrest.

[0005] The upper half of the front frame presents the telescopic assembly of the backrest with means of retention at different heights, said front frame being articulated in the middle allowing the tilting of the upper part and presenting means for locking the backrest in its various positions.

[0006] The coupling of the seat and of the footrest to the front frame is done by articulated mounting with a use position and a folded position, including means to lock and stabilize these positions.

[0007] These and other characterising features will be best made apparent by the following detailed description whose understanding will be made easier by the accompanying four sheets of drawings showing a practical embodiment being cited only by way of example not limiting the scope of the present invention.

DESCRIPTION OF THE DRAWINGS

[0008] In the drawings:

Figure 1 shows in perspective the components of the highchair which is the subject of the invention, separately,

Figure 2 illustrates in perspective this highchair un-

folded for use.

Figure 3 shows a side elevation of the folded highchair, from which the armrests have been removed, Figure 4 is a detail in perspective of the means of retention of the backrest in the upper half of the front frame, and

Figure 5 is a detail, viewed from below, of the rails of the tray by which it is attached to the armrests.

DETAILED DESCRIPTION

[0009] According to the drawings the highchair comprises a framework (1) equipped with a backrest (2), a seat (3), a footrest (4) and a tray (5).

[0010] The framework comprises a front frame (6) that determines the backrest (2) and front legs (7), which is articulated in the middle, with locking means (8), a rear support (9) constituting the rear legs, presenting the lower half of the front frame (6), which is formed by the front legs (7), the seat (3) coupling and the footrest (4) coupling.

[0011] The upper half (10) of the front frame (6) presents the telescopic assembly (11) of the backrest (2) with means of retention at different heights. In this case these means consist of elastic lugs (12) that enter selectively in holes (13-14) arranged at different heights in the telescopic part (11) of the backrest (figure 4).

[0012] The coupling of the seat (3) and of the footrest (4) in the lower half of the front frame (6) is made in articulated assembly at two heights by means of the shafts (15-16), with a use position, substantially horizontal (figure 2), and a folded position, substantially vertical (figures 1 and 3), including means (17) for locking and stabilizing these two positions.

[0013] The front frame (6) is articulated in the middle (18) where it includes locking means for the various positions of the upper half (10) bearing the backrest (2).

[0014] The tray (5) is coupled to two side supports (19-20) which constitute the two armrests and which are coupled in the upper half (10) of the front frame in a detachable assembly by means of a rear clamp (21) (figure 1).

[0015] For coupling the tray (5) to these supports (19-20), the latter have at the sides and underneath, respective rails (22) with a lug (23) on the side corresponding to a manually operated lever (26), articulated and elastically biased, which engages in a recess (24) in the supports (19-20) to retain the tray in the position of use (figure 5).

[0016] The backrest (2) and the seat (3) include padded upholstery and include shoulder straps (T), belt (C), crotch strap (E), and the means of coupling them together

[0017] The front (7) and rear (9) legs form separate, rectangular U shaped elements, the base including non-slip corner (Ca) parts which expand the base of support.

[0018] Reference (25) indicates the attachments to engage the tray (5) when the highchair (figure 3) is folded,

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and reference (5') indicates a detachable accessory of the tray (5).

[0019] The invention can within its essentiality be put into practice in other embodiments differing only in detail from the one having been described above only by way of example, said other embodiments also falling within the scope of the protection being claimed. This folding highchair may thus be manufactured in any shape and size, with the most suitable means and materials and with the most convenient accessories, and the components may be replaced by others that are technically equivalent, as all of this is contained within the spirit of the claims.

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Claims

 Folding highchair, comprising a framework equipped with a backrest, a seat, a footrest and a tray, characterised in that the framework comprises a front frame that determines the backrest and front legs, which is articulated in the middle a rear support, presenting the lower half of the front frame, the seat coupling and the footrest coupling.

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2. Folding highchair according to claim 1, characterised in that the upper half of the front frame presents the telescopic assembly of the backrest with means of retention at different heights.

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3. Folding highchair according to claim 1, characterised in that the coupling of the seat and of the footrest to the front frame is done by articulated mounting with a use position and a folded position, including means to lock and stabilize these two positions.

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4. Folding highchair according to claim 1, **characterised in that** the front frame is articulated in the middle allowing the tilting of the upper half bearing the backrest, presenting means for locking it in its various positions.

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5. Folding highchair according to claim 1, **characterised in that** the tray is coupled to two side supports which constitute the two armrests and which are coupled in the upper half of the front frame in a detachable assembly.

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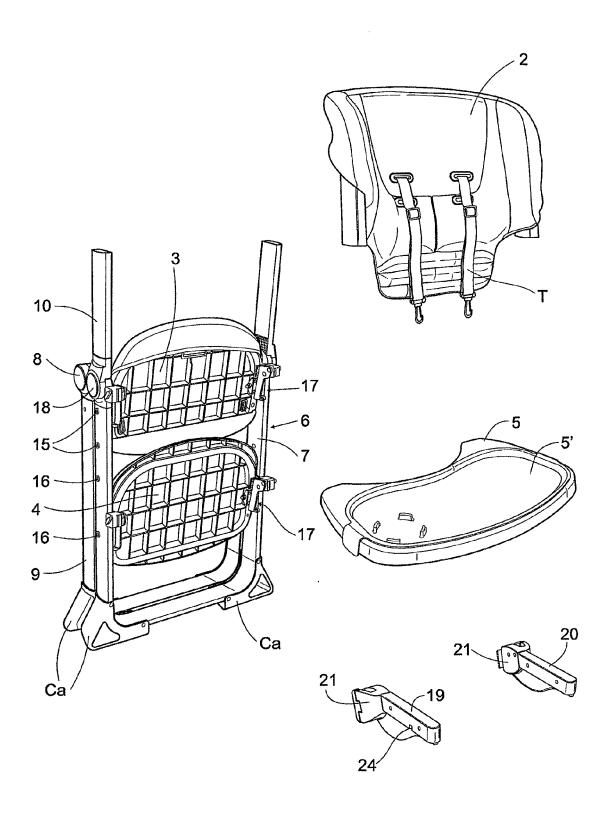


Fig. 1

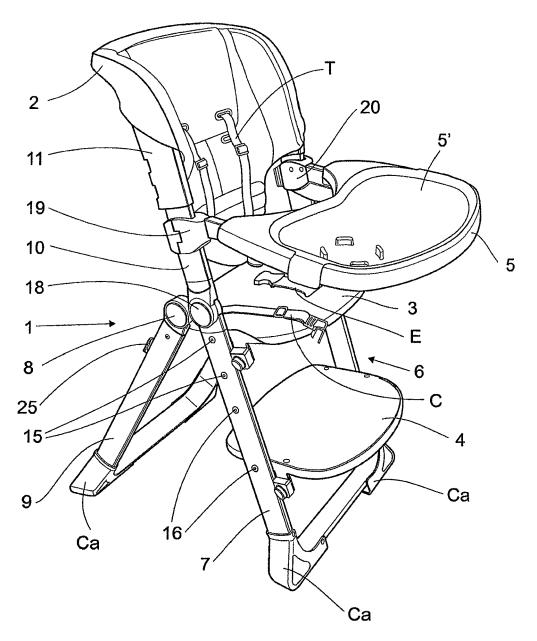


Fig. 2

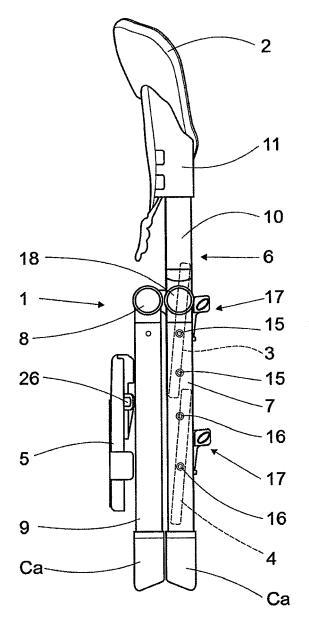
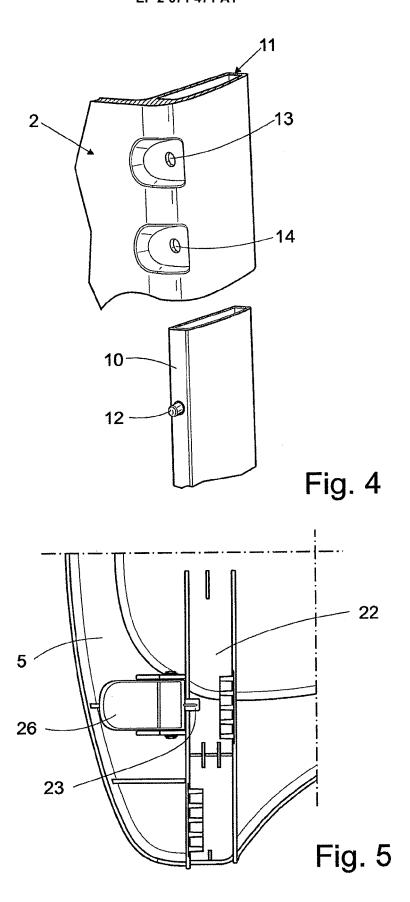


Fig. 3





EUROPEAN SEARCH REPORT

Application Number EP 13 16 3248

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	ANDREAS [DE]; REICH	h 2008 (2008-03-13)	1,3-5 2	INV. A47D1/02
Х	CO LTD) 14 March 20	000BABY CHILD PRODUCTS 12 (2012-03-14) - paragraph [0047];	1-4	
Х	8 February 2007 (20	FIEDL JOHN [US] ET AL) 107-02-08) - paragraph [0054];	1-4	
Х	GB 2 474 422 A (WEI	GUAN HARWAEW [CN])	1,3-5	
Υ	20 April 2011 (2011 * page 3, line 19 - figures 1-15 *		2	
Y	US 2011/309658 A1 (ASCANIO [US] ET AL) 22 December 2011 (2 * paragraph [0098];	2011-12-22)	2	TECHNICAL FIELDS SEARCHED (IPC) A47D
	The present search report has Place of search The Hague ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone	Date of completion of the search 9 September 2013 T: theory or principle E: earlier patent door after the filing date	underlying the in ument, but publis	Examiner , Slawomir nvention shed on, or
Y : particularly relevant if combined with anoth document of the same category A : technological background O : non-written disclosure P : intermediate document		D : document cited in the application L : document cited for other reasons & : member of the same patent famil document		

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

EP 13 16 3248

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.

09-09-2013

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2008028598	A1	13-03-2008	DE 102006041249 A1 EP 2056698 A1 WO 2008028598 A1	20-03-200 13-05-200 13-03-200
CN 202161038	U	14-03-2012	NONE	
US 2007029845	A1	08-02-2007	CN 1907182 A FR 2889430 A1 GB 2428566 A US 2007029845 A1	07-02-200 09-02-200 07-02-200 08-02-200
GB 2474422	Α	20-04-2011	FR 2951921 A3 GB 2474422 A	06-05-201 20-04-201
US 2011309658	A1	22-12-2011	NONE	

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m O}{ ext{th}}$ For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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