



APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/685,235	07/05/2016	9380887	ERGO1110-4	7364

44654 7590 06/15/2016
 Sprinkle IP Law Group
 1301 W. 25th Street
 Suite 408
 Austin, TX 78705

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
 (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Karin Annette Frost, Makawao, HI;
 The ERGO Baby Carrier, Inc., Los Angeles, CA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

44654 7590 03/07/2016
 Sprinkle IP Law Group
 1301 W. 25th Street
 Suite 408
 Austin, TX 78705

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Janice Pampell	(Depositor's name)
<i>Janice Pampell</i>	(Signature)
6-7-16	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/685,235	04/13/2015	Karin Annette Frost	ERGO1110-4	7364

TITLE OF INVENTION: Baby Carrier

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	06/07/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
SKURDAL, COREY NELSON	3782	224-160000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Sprinkle IP Law Group

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: The ERGO Baby Carrier, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY) Los Angeles, CA

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

Issue Fee

Publication Fee (No small entity discount permitted)

Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

A check is enclosed.

Payment by credit card. Form PTO-2038 is attached.

The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 503183 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29

Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____
 Typed or printed name Ari G. Akmal

Date 6/7/16
 Registration No. 51,388

Electronic Patent Application Fee Transmittal

Application Number:	14685235
Filing Date:	13-Apr-2015
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Filer:	Ari G. Akmal/Janice Pampell
Attorney Docket Number:	ERGO1110-4

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	1501	1	960	960

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				960

Electronic Acknowledgement Receipt

EFS ID:	25994944
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Janice Pampell
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	07-JUN-2016
Filing Date:	13-APR-2015
Time Stamp:	16:41:17
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$960
RAM confirmation Number	060816INTEFSW00003262503183
Deposit Account	503183
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	ERGO1110-4_Transmittal_of_Payment_of_Issue_Fee.pdf	523353 5e4a5df92f1db3520bc51cf9884ea6a075e71cfb	no	1

Warnings:

Information:

2	Issue Fee Payment (PTO-85B)	ERGO1110-4_PTOL-85.pdf	997678 45b251cc6611b1333f53d9d4c66b976cf95bdfo	no	1
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Warnings:

Information:

3	Fee Worksheet (SB06)	fee-info.pdf	30346 cb246d0ef57a4d4f03d328a116ea87ca7b08fa56	no	2
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Warnings:

Information:

Total Files Size (in bytes):			1551377		
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

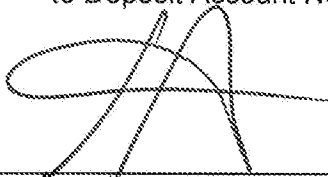
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

TRANSMITTAL OF PAYMENT OF ISSUE FEE (LARGE Entity) 37 C.F.R. 1.311)				Docket No. ERGO1110-4
First Named Inventor Karin Annette Frost				
Application No. 14/685,235	Filing Date 04/13/2015	Examiner Skurdal, Corey Nelson	Group Art Unit 3782	Confirmation No. 7364
Title: Baby Carrier				

**Mail Stop: Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**

Transmitted herewith are the following items in reference to the above-identified application:

- Issue Fee Transmittal Form PTOL-85
- Issue Fee: \$960.00
- The Director is hereby authorized to charge Deposit Account No. 50-3183 of Sprinkle IP Law Group.
- The Director is hereby authorized to charge any deficiencies or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.



Ari G. Akmal
Reg. No. 51,388

Customer No. 44654
Sprinkle IP Law Group
1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on 6/7/16


Janice Pampell

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/685,235
				Filing Date	April 13, 2015
				First Named Inventor	Karin Annette Frost
				Group Art Unit	3782
				Examiner Name	SKURDAL, Corey Nelson
Sheet	1	of	1	Atty Docket Number	ERGO1110-4

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
/C.N.S./	C24	Notice of Allowance for U.S. Patent Application No. 14/862,933, mailed 03/01/2016, 2 pgs.	

Examiner Signature	/COREY N SKURDAL/	Date Considered	04/18/2016
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO., EXAMINER, ART UNIT, PAPER NUMBER, MAIL DATE, DELIVERY MODE. Includes application details for Karin Annette Frost and examiner SKURDAL, COREY NELSON.

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Corrected
Notice of Allowability**

Application No.
14/685,235

Applicant(s)
FROST, KARIN ANNETTE

Examiner
COREY SKURDAL

Art Unit
3782

**AIA (First Inventor to File)
Status**
No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to IDS filed 4/7/16.
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
2. An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. The allowed claim(s) is/are 1 and 3-19. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some *c) None of the:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 4/7/16
3. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
4. Interview Summary (PTO-413),
Paper No./Mail Date _____.
5. Examiner's Amendment/Comment
6. Examiner's Statement of Reasons for Allowance
7. Other _____.

/COREY SKURDAL/
Examiner, Art Unit 3782

Electronic Patent Application Fee Transmittal

Application Number:	14685235
Filing Date:	13-Apr-2015
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Filer:	Ari G. Akmal/Delia Narvaiz
Attorney Docket Number:	ERGO1110-4

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
Total in USD (\$)				180

Electronic Acknowledgement Receipt

EFS ID:	25430201
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Delia Narvaiz
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	07-APR-2016
Filing Date:	13-APR-2015
Time Stamp:	16:42:09
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	3329
Deposit Account	503183
Authorized User	AKMAL, ARI G.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)

Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ERGO1110-4_IDS_040716.pdf	1281589 6e3d250c137c315f20687a87d02a33caf596c026	yes	3
Multipart Description/PDF files in .zip description					
	Document Description		Start		End
	Transmittal Letter		1		2
	Information Disclosure Statement (IDS) Form (SB08)		3		3
Warnings:					
Information:					
2	Non Patent Literature	ERGO1110_REF_C24.pdf	131421 f480e1bf484b52ad55b4cf155e1a3ce694a560d3	no	2
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30405 563eb1dbf878ac5a30869179ee53b0c185335659	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			1443415		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

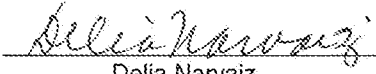
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Atty. Docket No. (Opt.) ERGO1110-4
	First Named Inventor Karin Annette Frost
Application Number 14/685,235	Date Filed April 13, 2015
Title BABY CARRIER	
Group Art Unit 3782	Examiner SKURDAL, Corey Nelson
Confirmation Number 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<u>Certification of Transmission Under 37 C.F.R. 1.8</u>
I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on <i>April 7</i> , 2016.
 Delia Narvaiz

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application.

This Information Disclosure Statement is being submitted before the mailing of a first Office action on the merits.

This Information Disclosure Statement is being submitted before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(c) and on or before payment of the issue fee and is accompanied by:

- The statement specified in 37 C.F.R. § 1.97(e); and
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Pursuant to 37 C.F.R. § 1.97(e), Applicant hereby states:

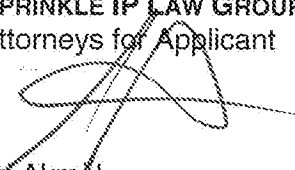
That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the information disclosure statement.

Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Respectfully submitted,

SPRINKLE IP LAW GROUP
Attorneys for Applicant


An Akmal
Reg. No. 51,388

Dated: April 7, 2016
1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 317-9088



NOTICE OF ALLOWANCE AND FEE(S) DUE

44654 7590 03/07/2016
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

Table with 2 columns: EXAMINER (SKURDAL, COREY NELSON), ART UNIT (3782), PAPER NUMBER (7364)

DATE MAILED: 03/07/2016

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

TITLE OF INVENTION: Baby Carrier

Table with 7 columns: APPLN. TYPE, ENTITY STATUS, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies. If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above. If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)". For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

44654 7590 03/07/2016
Sprinkle IP Law Group
 1301 W. 25th Street
 Suite 408
 Austin, TX 78705

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/685,235	04/13/2015	Karin Annette Frost	ERGO1110-4	7364

TITLE OF INVENTION: Baby Carrier

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	06/07/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
SKURDAL, COREY NELSON	3782	224-160000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) The names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1</p> <p>(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2</p> <p>_____ 3</p>
---	---

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY and STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent) : Individual Corporation or other private group entity Government

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
---	--

5. **Change in Entity Status** (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29

Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
14/685,235 04/13/2015 Karin Annette Frost ERGO1110-4 7364

44654 7590 03/07/2016
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER

SKURDAL, COREY NELSON

ART UNIT PAPER NUMBER

3782

DATE MAILED: 03/07/2016

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability

Application No. 14685235	Applicant(s) FROST, KARIN ANNETTE	
Examiner COREY SKURDAL	Art Unit 3782	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to RCE filed 2/29/16
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
2. An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. The allowed claim(s) is/are 1, 3-19. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some *c) None of the:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 2/29/16
3. Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. Interview Summary (PTO-413), Paper No./Mail Date _____.
5. Examiner's Amendment/Comment
6. Examiner's Statement of Reasons for Allowance
7. Other _____.

/COREY SKURDAL/
Examiner, Art Unit 3782




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
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BIB DATA SHEET

CONFIRMATION NO. 7364

SERIAL NUMBER 14/685,235	FILING or 371(c) DATE 04/13/2015 RULE	CLASS 224	GROUP ART UNIT 3782	ATTORNEY DOCKET NO. ERGO1110-4	
APPLICANTS The ERGO Baby Carrier, Inc., Los Angeles, CA; INVENTORS Karin Annette Frost, Makawao, HI; ** CONTINUING DATA ***** This application is a CON of 14/047,892 10/07/2013 PAT 9022260 which is a CON of 11/949,324 12/03/2007 PAT 8590757 which is a CON of 10/937,193 09/09/2004 PAT 7322498 which claims benefit of 60/501,396 09/10/2003 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 04/22/2015					
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Verified and /COREY NELSON SKURDAL/ Acknowledged Examiner's Signature	<input type="checkbox"/> Met after Allowance Initials	STATE OR COUNTRY HI	SHEETS DRAWINGS 6	TOTAL CLAIMS 19	INDEPENDENT CLAIMS 1
ADDRESS Sprinkle IP Law Group 1301 W. 25th Street Suite 408 Austin, TX 78705 UNITED STATES					
TITLE Baby Carrier					
FILING FEE RECEIVED 1600	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		

Search Notes 	Application/Control No. 14685235	Applicant(s)/Patent Under Reexamination FROST, KARIN ANNETTE
	Examiner COREY SKURDAL	Art Unit 3782

CPC- SEARCHED		
Symbol	Date	Examiner
A47D13/025	5/18/2015	CNS


CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
224	155, 159, 160, 259, 627	5/18/2015	CNS
24	301, 302	5/18/2015	CNS
2	920	5/18/2015	CNS
224	638	5/18/2015	CNS

SEARCH NOTES		
Search Notes	Date	Examiner
inventor name search	5/18/2015	CNS
updated above	11/24/2015	CNS
updated above	3/3/2016	CNS

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
A47D13/025		3/3/2016	CNS

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<i>Index of Claims</i> 	Application/Control No. 14685235	Applicant(s)/Patent Under Reexamination FROST, KARIN ANNETTE
	Examiner COREY SKURDAL	Art Unit 3782

✓	Rejected
=	Allowed

-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected


Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
Final	Original	03/03/2016							
1	1	=							
	2	-							
2	3	=							
3	4	=							
4	5	=							
5	6	=							
6	7	=							
7	8	=							
8	9	=							
9	10	=							
10	11	=							
11	12	=							
12	13	=							
13	14	=							
14	15	=							
15	16	=							
16	17	=							
17	18	=							
18	19	=							

EAST Search History**EAST Search History (I nterference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	259	A47D13/025.cpc.	US-PGPUB	OR	OFF	2016/03/03 12:02
L3	2	(child waistband padded main panel).clm.	US-PGPUB	AND	OFF	2016/03/03 12:03
S16	0	(child carrier waistband panel).clm.	US-PGPUB; USPAT	AND	OFF	2012/09/30 17:32
S17	0	(child carrier waistband).clm.	US-PGPUB; USPAT	AND	OFF	2012/09/30 17:32
S18	1072	(child carrier).clm.	US-PGPUB; USPAT	AND	OFF	2012/09/30 17:32
S19	63	(child carrier waist).clm.	US-PGPUB; USPAT	AND	OFF	2012/09/30 17:33
S20	24	(child carrier sling).clm.	US-PGPUB; USPAT	AND	OFF	2012/09/30 17:33
S21	134	(224/159,160).CCLS.	US-PGPUB	OR	OFF	2012/09/30 17:33
S32	2	(child carrier waistband main panel).clm.	US-PGPUB; USPAT	AND	OFF	2014/12/23 08:39
S33	159	(224/159,160).CCLS.	US-PGPUB	OR	OFF	2014/12/23 08:39

3/ 3/ 2016 12:03:16 PM**C:\ Users\ cskurdal\ Documents\ EAST\ Workspaces\ 14047892.wsp**

Issue Classification 	Application/Control No. 14685235	Applicant(s)/Patent Under Reexamination FROST, KARIN ANNETTE
	Examiner COREY SKURDAL	Art Unit 3782

<input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant																<input type="checkbox"/> CPA		<input checked="" type="checkbox"/> T.D.		<input type="checkbox"/> R.1.47	
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original						
1	1	16	17																		
	2	17	18																		
2	3	18	19																		
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15	16																				

(Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 18	
/COREY SKURDAL/ Examiner.Art Unit 3782		O.G. Print Claim(s) O.G. Print Figure	
(Primary Examiner) _____ (Date) _____		1 1	

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
 (Submitted Only via EFS-Web)**

Application Number	14/685,235	Filing Date	2015-04-13	Docket Number (if applicable)	ERGO1110-4	Art Unit	3782
First Named Inventor	Karin Annette Frost			Examiner Name	SKURDAL, Corey Nelson		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
 Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, to any international application that does not comply with the requirements of 35 U.S.C. 371, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV.

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- Other _____
- Enclosed
- Amendment/Reply
- Information Disclosure Statement (IDS)
- Affidavit(s)/ Declaration(s)
- Other _____

MISCELLANEOUS

- Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- Other _____

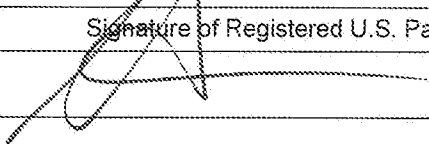
FEES

- The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
 The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to
 Deposit Account No 503183

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

- Patent Practitioner Signature
- Applicant Signature

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature		Date (YYYY-MM-DD)	2016-02-29
Name	Ari Akmal	Registration Number	51388

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO OFFICE ACTION DATED 11/27/2015	Atty. Docket No. ERGO1110-4
First Named Inventor Karin Annette Frost	
Application Number 14/685,235	Date Filed April 13, 2015
Title BABY CARRIER	
Group Art Unit 3782	Examiner Skurdal, Corey Nelson
Confirmation Number 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on **February 29, 2016**.


Shenise Ramdeen

This paper is submitted in response to the Official Action mailed on November 27, 2015. Please reconsider the above-identified application in view of the following amendments and remarks. Applicant submits that this application is now in condition for full allowance.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS:

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently Amended) A child carrier adapted to be worn by a human wearer for carrying a child, the child carrier comprising:

a waistband comprising a padded section, the waistband having an adjustable length positioned to be securely worn about the waist of the wearer and rest on the hips of the wearer;

a flexible main panel having, a bottom edge and opposing side edges, the flexible main panel adapted to form a child carrying area in cooperation with the wearer's torso that is open to the wearer's torso the main panel having the bottom edge affixed to the waistband along at least a portion of the bottom edge, the main panel so dimensioned to form a sling adapted to support the child in a seated position such that the child's legs are flexed and spread apart;

a first shoulder strap having an adjustable length forming a loop along a first of the opposing side edges, wherein an upper end of the first shoulder strap is coupled to the main panel to a first side of a vertical axis of the main panel and a lower end of the first shoulder strap is coupled to the main panel ~~to the first side of the vertical axis of the main panel~~; and

a second shoulder strap having an adjustable length forming a loop along a second of the opposing side edges, wherein an upper end of the second shoulder strap is coupled to the main panel to a second side of the vertical axis of the main panel and a lower end of the second shoulder strap is coupled to the main panel ~~to the second side of the vertical axis of the main panel~~, wherein:

the width of the bottom edge of the main panel is greater than a distance between the upper ends of the first and second shoulder straps, and

the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front side of the wearer's torso or in a position facing a back side of the wearer's torso and wherein the child carrier is configured to distribute at least a portion of the child's weight to the wearer's hips through the waistband.

2. (Cancelled)

3. (Original) The child carrier of Claim 1, wherein the child carrier is configured to distribute at least a majority of the child's weight to the wearer's hips through the waistband.

4. (Original) The child carrier of Claim 3, wherein the child carrier is adapted to support a majority of the child's weight through the child's hips and thighs.

5. (Original) The child carrier of Claim 1, wherein the child carrier further comprises a head panel positioned to cover the child's head.

6. (Original) The child carrier of Claim 5, further comprising a first restraining strap coupled to a first corner of the head panel and a second restraining strap coupled to a second corner of the head panel.

7. (Original) The child carrier of Claim 6, wherein the child carrier is adapted such that the first restraining strap detachably couples to the child carrier at the first shoulder strap over a first shoulder of the wearer and the second restraining strap detachably couples to the child carrier at the second shoulder strap over the second shoulder of the wearer.

8. (Original) The child carrier of Claim 1, further comprising a chest strap adapted to cross the wearer's chest or back from the first shoulder strap to the second shoulder strap on the opposite side of the wearer from the main panel.

9. (Original) The child carrier of Claim 8, wherein the chest strap has an adjustable length.

10. (Original) The child carrier of Claim 9, wherein the chest strap has an adjustable height.

11. (Original) The child carrier of Claim 1, wherein the main panel is substantially rectangular.

12. (Original) The child carrier of Claim 1, wherein the child carrier weighs less than

three pounds.

13. (Original) The child carrier of Claim 1, wherein the child carrier is machine washable.

14. (Original) The child carrier of Claim 1, wherein the child carrier is adapted to support the child with only substantially deformable materials.

15. (Original) The child carrier of Claim 1, wherein the first shoulder strap and second shoulder strap each comprise a section of padding.

16. (Original) The child carrier of Claim 1, wherein the child carrier is adapted to allow the wearer to select whether to support the child in a position facing the front side of the wearer's torso or the back side of the wearer's torso without modifying the configuration of the shoulder straps and waistband relative to the main panel.

17. (Original) The child carrier of Claim 1, wherein the child carrier configured to distribute 70-90% of a child's weight to the wearer's hips through the waistband.

18. (Original) The child carrier of Claim 1, wherein the waistband at the padded section has a vertical length that is approximately 1/3 of the vertical length of the main panel.

19. (Original) The child carrier of Claim 18, wherein the lower end of the first shoulder strap and the lower end of the second shoulder strap are coupled to the main panel approximately 2/3 of vertical length of the main panel away from the bottom edge.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed November 27, 2015. Claim 1 has been amended and now includes the allowable subject matter of Claim 2. The amendments are made without any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action and no new matter has been added. This Reply encompasses a bona fide attempt to place the present application in condition for full allowance. Claims 1 and 3-19 recite subject matter not reached by the art of record and are therefore allowable. Accordingly, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Rejections under 35 U.S.C. §§ 102, 103

Claims 1, 3, 4, 11 and 13-17 stand rejected as anticipated by U.S. Patent No. 4,469,259 ("Krich"). Claims 5-7 stand rejected as anticipated by Krich in view of U.S. Patent No. 5,848,741 ("Fair"). Claims 8-10 stand rejected as obvious over Krich in view of U.S. Publication No. 2002/0011503 ("Hwang"). Claim 12 stands rejected as obvious over Krich in view of Official Notice. Claim 18 stands rejected as obvious over Krich in view of U.S. Patent No. 6,182,873 ("Christopher"). Claim 19 stands rejected as obvious over Krich in view of Christopher and U.S. Patent No. 4,492,326 ("Storm"). Without any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action, Applicant has amended Claim 1 and respectfully submits these rejections are now moot.

Allowable Subject Matter

Claim 2 stands currently objected to but would be allowable if rewritten in independent format. Applicant thanks the Examiner for the allowable subject matter. Applicant has incorporated the allowable subject matter of Claim 2 into Claim 1 and respectfully submits that the claims are now in condition for full allowance.


Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1 and 3-19. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant




Ari G. Akmal
Reg. No. 51,388

Date: February 29, 2016

1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Atty. Docket No. (Opt.) ERGO1110-4
First Named Inventor Karin Annette Frost	
Application Number 14/685,235	Date Filed April 13, 2015
Title BABY CARRIER	
Group Art Unit 3782	Examiner Skurdal, Corey Nelson
Confirmation Number 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<u>Certification of Transmission Under 37 C.F.R. 1.8</u>
I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on February <u>29</u> 2016.
 Shenise Ramdeen

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application.

This Information Disclosure Statement is being submitted before the mailing of a first Office action on the merits.

This Information Disclosure Statement is being submitted before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(b) and before the mailing date of any of a final action under 37 C.F.R. § 1.113, a notice of allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in the application, and is accompanied by one of:

- The statement specified in 37 C.F.R. § 1.97(e); or
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Applicant does not believe any fees are due and owing at this time. If Applicant is in error, the Director is hereby authorized to deduct any and all appropriate fees from Deposit Account 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

SPRINKLE IP LAW GROUP
Attorneys for Applicant

Ari Akmal
Reg. No. 51,388

Dated: February 24, 2016
1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 317-9088

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/685,235
				Filing Date	April 13, 2015
				First Named Inventor	Karin Annette Frost
				Group Art Unit	3782
				Examiner Name	Skurdal, Corey Nelson
Sheet 1		of	1	Attorney Docket Number	ERGO1110-4

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		US	Number-Kind Code (if known)			
	A110	US	9185993	11-17-2015	Telford et al.	
		US				
		US				
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FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Country Code-Number-Kind Code (if known)				

Examiner Signature		Date Considered	
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Electronic Patent Application Fee Transmittal

Application Number:	14685235
Filing Date:	13-Apr-2015
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Filer:	Ari G. Akmal/Shenise Ramdeen
Attorney Docket Number:	ERGO1110-4

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Request for Continued Examination	1801	1	1200	1200
Total in USD (\$)				1200

Electronic Acknowledgement Receipt

EFS ID:	25053392
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Shenise Ramdeen
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	29-FEB-2016
Filing Date:	13-APR-2015
Time Stamp:	16:36:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1200
RAM confirmation Number	4022
Deposit Account	503183
Authorized User	AKMAL, ARI G.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)
 Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)
 Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	ERGO1110-4_RCE02-29-16.pdf	434536 f15b17c89ab82154efadbea6024a3a5e8333cfd8	no	2

Warnings:

This is not a USPTO supplied RCE SB30 form.

Information:

2	Amendment Submitted/Entered with Filing of CPA/RCE	ERGO1110-4_ROA02-29-16.pdf	1031555 8c678e1c4ed36e1775efca85c84d196b626ae851	no	6
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Warnings:

Information:

3		ERGO1110-4_IDS02-29-16.pdf	1211870 ad831e14a2ea8fa23c05ea4dfa60593cb458f335	yes	4
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Multipart Description/PDF files in .zip description

Document Description	Start	End
Transmittal Letter	1	2
Information Disclosure Statement (IDS) Form (SB08)	3	4

Warnings:

Information:

4	Non Patent Literature	ERGO1110_REF_C22.pdf	199433 90fb696771a7d47e1abcf93bd30d35173ae06e1	no	5
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Warnings:

Information:

5	Fee Worksheet (SB06)	fee-info.pdf	30185 ef90508fdd0ec40e640f7de01fc0e6662c7cf9c95	no	2
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Warnings:

Information:

Total Files Size (in bytes): 2907579

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/685,235	Filing Date 04/13/2015	<input type="checkbox"/> To be Mailed
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ENTITY: LARGE SMALL MICRO

APPLICATION AS FILED – PART I

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
AMENDMENT	02/29/2016	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR			
	Total (37 CFR 1.16(i))	* 18	Minus	** 20	= 0	X \$80 = 0
	Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	X \$420 = 0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR			
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	


* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
 *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/SHARON HARRIS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Application Number 	Application/Control No. 14/685,235	Applicant(s)/Patent under Reexamination FROST, KARIN ANNETTE

Document Code - DISQ	Internal Document – DO NOT MAIL
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TERMINAL DISCLAIMER	<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED
Date Filed : 08/24/2015	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:
/MANUEL SALDANA/



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes sub-tables for EXAMINER, ART UNIT, PAPER NUMBER, MAIL DATE, DELIVERY MODE.

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 14/685,235	Applicant(s) FROST, KARIN ANNETTE	
	Examiner COREY SKURDAL	Art Unit 3782	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 8/24/15
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/9/15, 8/24/15, 10/20/15.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 11, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Krich et al. (US 4,469,259).

Regarding claims 1, 3, 4, 16, and 17, Krich discloses a child carrier comprising: a waistband 14 comprising a padded section (col. 1 lines 63-68) and having an adjustable length; a substantially rectangular and flexible main panel 11 adapted to support a child in an area between the panel and the wearer's torso, the main panel having a bottom edge affixed to the waistband along at least a portion of the bottom edge (col. 3 lines 59-61, and Figures 1, 1A, and 5); a first shoulder strap 12R having an adjustable length forming a loop along a first of the opposing side edges, wherein an upper end of the first shoulder strap is coupled to the main panel to a first side of a vertical axis of the main panel (Figure 1) and a lower end 17R of the first shoulder strap is coupled to the main panel to the first side of the vertical axis of the main panel; and a second shoulder strap 12L having an adjustable length forming a loop along a second of the opposing side edges, wherein an upper end of the second shoulder strap is coupled to the main panel

Art Unit: 3782

to a second side of the vertical axis of the main panel (Figure 1) and a lower end 17L of the second shoulder strap is coupled to the main panel to the second side of the vertical axis of the main panel; and wherein the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front or back side of the wearer's torso as claimed. The initial statement of intended use and all other functional implications have been carefully considered but are deemed not to impose any patentably distinguishing structure over that disclosed by Krich which is capable of being used in the intended manner, i.e., as either a front or back carrier and adjusting the various straps such that 70-90% of the weight is distributed to the wearer's hips through the waistband, and to support a majority of the child's weight through the child's hips and thighs (see M.P.E.P. 2111).

Regarding claim 11, panel 11 is substantially rectangular as in Figure 1.

Regarding claims 13 and 14, the carrier is made from flexible materials such that it is inherently machine washable and support the child by only deformable materials.

Regarding claim 15, each shoulder strap may comprise padding as claimed (col. 1 lines 63-68).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3782

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krich in view of Fair (US 5,848,741). Krich discloses the invention substantially as claimed, and as noted above, but does not disclose a head panel. However, Fair teaches a child carrier having a head panel 28 including first and second restraining straps 98/100 attached at respective corners of the head panel, wherein the restraining straps detachably couple shoulder straps 24/26 by buckles 52/54. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the carrier of Krich with the head panel and restraining straps of Fair in order to cover the child's head from the elements.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krich in view of Hwang (US 2002/0011503). Krich discloses the invention substantially as claimed, and as noted above, but does not disclose a chest strap as claimed. However, Hwang teaches a child carrier having a chest strap 201 that is adjustable in length and height, the chest strap secured between two shoulder straps of the baby carrier. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the carrier of Krich with an adjustable chest strap as taught by Hwang in order to better secure the carrier on the user and prevent the shoulder straps from slipping off the user's shoulders.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krich in view of Official Notice. Krich discloses the invention substantially as claimed but does not specify that the carrier is less than three pounds or that the shoulder straps are padded. However, Examiner takes Official Notice that it is well known to those of

Art Unit: 3782

ordinary skill in the art that it is desirable to reduce the weight of a carrier by selecting appropriate lightweight materials. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the carrier of Krich less than three pounds in weight in order to make the carrier more comfortable to the wearer.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krich in view of Christopher (US 6,182,873). Krich disclose the invention as claimed but does not have the padded section of the waistband with a vertical length approximately 1/3 of the vertical length of the main panel. However, Christopher teaches a waist belt 14 and main panel 15 with the approximate claimed dimensions. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the waistband of Krich with a larger vertical height in order to distribute the weight applied thereto over a larger surface area thus making the carrier more comfortable.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krich in view of Christopher, as applied to claim 18, and in further view of Storm (US 4,492,326). Krich discloses the invention as claimed but does not have the second end of the shoulder straps coupled to the main panel 2/3 of the vertical length of the main panel away from the bottom edge. However, Storm (Figure 1) discloses a carrier with the claimed spacing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to move connection between the shoulder straps and main panel on Krich up a little more to the claimed 2/3 distance spacing, in order to make the carrier more comfortable to some users.

Allowable Subject Matter

9. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3782

Any inquiry concerning this communication or earlier communications from the examiner should be directed to COREY SKURDAL whose telephone number is (571)272-9588. The examiner can normally be reached on M-Th 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Pickett can be reached on 571-272-4560. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Corey N Skurdal/
Examiner, Art Unit 3782

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/685,235
				Filing or 371 (c) Date:	April 13, 2015
				First Named Inventor	Karin A. Frost
				Group Art Unit	3782
				Examiner Name	Corey N. Skurdal
Sheet	1	of	1	Attorney Docket Number	ERGO1110-4

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Number-Kind Code (if known)				
/CS/	A108	20040238579		12-02-2004	KROGH	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Country Code-Number-Kind Code (if known)				

Examiner Signature				Date Considered	
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**INFORMATION
DISCLOSURE
STATEMENT**


Application Number	14/685,235
Filing or 371 (c) Date:	April 13, 2015
First Named Inventor	Karin A. Frost
Group Art Unit	3782
Examiner Name	Corey N. Skurdal
Atty Docket Number	ERGO1110-4

Sheet 1 of 1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
/CS/	C20	Notice of Allowance issued for US Appl. No. 14/209,580, mailed 06/26/2015, 8 pgs.	

Examiner Signature	/COREY SKURDAL/	Date Considered	11/24/2015
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Search Notes 	Application/Control No. 14685235	Applicant(s)/Patent Under Reexamination FROST, KARIN ANNETTE
	Examiner COREY SKURDAL	Art Unit 3782

CPC- SEARCHED		
Symbol	Date	Examiner
A47D13/025	5/18/2015	CNS

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
224	155, 159, 160, 259, 627	5/18/2015	CNS
24	301, 302	5/18/2015	CNS
2	920	5/18/2015	CNS
224	638	5/18/2015	CNS

SEARCH NOTES		
Search Notes	Date	Examiner
inventor name search	5/18/2015	CNS
updated above	11/24/2015	CNS

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/685,235
				Filing or 371 (c) Date:	April 13, 2015
				First Named Inventor	Karin A. Frost
				Group Art Unit	3782
				Examiner Name	Corey N. Skurdal
Sheet	1	of	7	Attorney Docket Number	ERGO1110-4

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Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Number-Kind Code (if known)			
	A1	4009808	03-01-1977	SHARP	
	A2	4234229	11-18-1980	ARNOLD	
	A3	4333591	06-08-1982	CASE	
	A4	D266800	11-09-1982	KULA ET AL.	
	A5	4434920	03-06-1984	MOORE	
	A6	D277811	03-05-1985	MOORE	
	A7	D324607	03-17-1992	NELSON	
	A8	D334253	03-23-1993	BALZARINI	
	A9	5246152	09-21-1993	DOTSETH	
	A10	D357800	05-02-1995	ROAN ET AL.	
	A11	D370996	06-25-1996	SHIMURA ET AL.	
	A12	5570823	11-05-1996	LINDY	
	A13	D377116	01-07-1997	SHIMURA ET AL.	
	A14	5678739	10-21-1997	DARLING ET AL.	
	A15	D385105	10-21-1997	FAIR	
	A16	D395161	06-16-1998	FAIR ET AL.	
	A17	5791535	08-11-1998	ROAN ET AL.	
	A18	D397867	09-08-1998	FAIR ET AL.	

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Examiner Initials	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Country Code-Number-Kind Code (if known)			
	B1	FR2806279	09-21-2001	TENNESSEE	
	B2	EP0662292	07-12-1995	TRUBEND MANUFACTURING LIMITED	
	B3	WO200189978 A1	11-29-2001	MAUN ET AL.	
	B4	CA1332928	11-08-1994	PETTERSEN	
	B5	EP1055382	11-29-2000	DUCRUET	
	B6	JP11046938	02-23-1999	LUCKY IND	

Examiner Signature		Date Considered	
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				Examiner Name	Corey N. Skurdal
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		Number-Kind Code (if known)			
	A19	5848741	12-15-1998	FAIR	
	A20	5934528	08-10-1999	HIGUCHI	
	A21	D414032	09-21-1999	HOWELL	
	A22	D453066 S	01-29-2002	NORMAN	
	A23	D455546 S	04-16-2002	NORMAN	
	A24	6415969 B1	07-09-2002	HIGUCHI	
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	A26	5224637	07-06-1993	COLOMBO	
	A27	4579264	04-01-1986	NAPOLITANO	
	A28	20030106916	06-12-2003	BOONE	
	A29	6409060	06-25-2002	DONINE	
	A30	6772925	08-10-2004	O'HARE	
	A31	3327914	06-27-1967	ABRAM	
	A32	4986458	01-22-1991	LINDAY	
	A33	20040149790	08-05-2004	KASSAI ET AL.	
	A34	5692655	12-02-1997	FAIR ET AL.	
	A35	6763983	07-20-2004	NORMAN	
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		Country Code-Number-Kind Code (if known)			
	B7	JP2003225119	08-12-2003	APRICA KASSAI KK	
	B8	GB2260687	04-28-1993	MIN-CHAO	
	B9	GB2028633	03-12-1980	MERLET	
	B10	JP2004154468	06-03-2004	LUCKY IND	
	B11	JP2004000687	01-08-2004	APRICA KASSAI KK	
	B12	DE20116046	01-03-2002	TANJA	

Examiner Signature		Date Considered	
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				First Named Inventor	Karin A. Frost
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				Examiner Name	Corey N. Skurdal
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		Number-Kind Code (if known)			
	A37	5690258	11-25-1997	KATAOKA ET AL.	
	A38	3229873	01-18-1966	HERSHMAN	
	A39	4492326	01-08-1985	STORM	
	A40	5813580	09-29-1998	FAIR	
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	A42	20050279785	12-22-2005	LIISTRO ET AL.	
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	A45	4467945	08-28-1984	SCHAAPVELD	
	A46	6520391	02-18-2003	YEN	
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	A48	D509056	09-06-2005	SHIRAIISHI ET AL.	
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		Country Code-Number-Kind Code (if known)			
	B13	EP1707082	10-04-2006	APRICA IKUJIKENKYUKAI APRICA K	
	B14	GB2314026	12-17-1987	NOTTINGHAMSHIRE AMBULANCE SERVICES NHS TRUST	
	B15	WO9505952A1	03-02-1995	MERCIA CENTRE LIMITED	
	B16	EP0046672	03-03-1982	LITTLE ROCK LIMITED	
	B17	EP0662292	07-12-1995	TRUBEND MANUFACTURING LIMITED	
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Examiner Signature		Date Considered	
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			First Named Inventor	Karin A. Frost	
			Group Art Unit	3782	
			Examiner Name	Corey N. Skurdal	
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		Number-Kind Code (if known)			
	A57	20040155078	08-12-2004	HWANG	
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	A59	20020011503	01-31-2002	HWANG	
	A60	20020175194	11-28-2002	NORMAN	
	A61	4651366	03-24-1987	LANDE ET AL.	
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	A63	6055686	05-02-2000	KNIGHT	
	A64	20060130220	06-22-2006	MORGAN ET AL.	
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	A66	3481517	12-02-1969	AUKERMAN	
	A69	6415969	07-09-2002	HIGUCHI	
	A72	8590757	11-26-2013	FROST	
	A73	4469259	09-04-1984	KRICH ET AL.	
	A74	8042869	10-25-2011	MCCLINTOCK ET AL.	
	A75	6499165	12-31-2002	MORGILLO	
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		Country Code-Number-Kind Code (if known)			
	B19	DE29519530U1	04-04-1996	WAGNER	
	B20	EP1765123	06-15-2011	FROST	
	B21	JP09099842	10-06-1995	LAI ET AL.	
Examiner Signature				Date Considered	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/685,235
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				First Named Inventor	Karin A. Frost
				Group Art Unit	3782
				Examiner Name	Corey N. Skurdal
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Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Number-Kind Code (if known)			
	A80	6499165	12-31-2002	Morgillo	
	A81	20140069968	03-13-2014	Frost	

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		Country Code-Number-Kind Code (if known)			

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				First Named Inventor	Karin A. Frost
				Group Art Unit	3782
				Examiner Name	Corey N. Skurdal
Sheet	6	of	7	Atty Docket Number	ERGO1110-4
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published			T²
	C1	Office Action issued for US Appl. No. 10/937,193, mailed 08/14/2007, 9 pgs.			
	C2	Office Action issued for US Appl. No. 11/949,324, mailed 10/06/2009, 9 pgs.			
	C3	Office Action issued for US Appl. No. 11/949,324, mailed 04/28/2010, 9 pgs.			
	C4	International Search Report and Written Opinion for PCT Application No. PCT/US2004/029614, completed on February 11, 2005, mailed on March 3, 2005, 9 pgs. (ERGO1110-WO)			
	C5	International Preliminary Report on Patentability for PCT/US2004/029614, issued on March 13, 2006, 7 pgs. (ERGO1110-WO)			
	C6	Examination Report issued in European Application No. 04 783 725.7, mailed September 21, 2007, 3 pgs. (ERGO1110-EP)			
	C7	Examination Report issued in European Application No. 04 783 725.7, mailed September 9, 2008, 4 pgs. (ERGO1110-EP)			
	C8	Examination Report issued in European Application No. 04 783 725.7, mailed September 10, 2009, 3 pgs. (ERGO1110-EP)			
	C9	Examination Report issued in European Application No. 04 783 725.7, mailed December 21, 2009, 5 pgs. (ERGO1110-EP)			
	C10	Examination Report issued in European Application No. 04 783 725.7, mailed June 1, 2010, 6 pgs. (ERGO1110-EP)			
Examiner Signature				Date Considered	

INFORMATION DISCLOSURE STATEMENT				Application Number	14/685,235
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				Examiner Name	Corey N. Skurdal
Sheet	7	of	7	Atty Docket Number	ERGO1110-4

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Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	C11	Office Action issued in U.S. Application No. 11/949,324, mailed October 4, 2010, 10 pgs. (ERGO1110-2)	
	C12	Office Action for U.S. Patent Application No. 11/949,324, mailed 07/18/2011, 14 pgs.	
	C14	Notice of Opposition filed on March 13, 2012, against European Patent No. EP1765123 B1, 213 pages.	
	C15	Declaration of Judy Petterson regarding BabyTrekker with enclosures 1 and 2, dated May 26, 2011, 18 pages.	
	C18	International Search Report and Written Opinion for International Application No. PCT/US2014/026378, mailed 07/21/2014, 10 pgs.	
	C19	Office Action issued for US Appl. No. 14/685,235, mailed 05/22/2015, 8 pgs.	

Examiner Signature	/COREY SKURDAL/	Date Considered	11/24/2015
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Application Number	14/685,235	
			Filing Date	April 13, 2015	
			First Named Inventor	Karin Annette Frost	
			Group Art Unit	3782	
			Examiner Name	SKURDAL, Corey Nelson	
Sheet	1	of	1	Atty Docket Number	ERGO1110-4

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	C21	International Preliminary Report on Patentability (Ch. I) for International Patent Application No. PCT/US2014/026378, issued on 09/15/2015, 6 pgs.	

Examiner Signature		Date Considered	
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference ERGO1130-WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/US2014/026378	International filing date (<i>day/month/year</i>) 13 March 2014 (13.03.2014)	Priority date (<i>day/month/year</i>) 13 March 2013 (13.03.2013)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant THE ERGO BABY CARRIER, INC.		

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																						
<input type="checkbox"/>	Box No. II	Priority																						
<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																						
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																						
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																						
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<input type="checkbox"/>	Box No. VII	Certain defects in the international application																						
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																						

<p align="center">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 15 September 2015 (15.09.2015)</p>
	<p>Authorized officer</p> <p align="center">Philippe Bécamel</p> <p>e-mail: pt03.pct@wipo.int</p>

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: JOHN L. ADAIR
SPRINKLE IP LAW GROUP
1301 W. 25TH STREET, SUITE 408
AUSTIN, TX 78705

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **21 JUL 2014**

Applicant's or agent's file reference
ERGO1130-WO

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2014/026378

International filing date (day/month/year)
13 March 2014

Priority date (day/month/year)
13 March 2013

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - A47D 13/02 (2014.01)
USPC - 224/160

Applicant **THE ERGO BABY CARRIER, INC.**

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. **571-273-3201**

Date of completion of this opinion
30 June 2014

Authorized officer:
Blaine R. Copenheaver
PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITYInternational application No.
PCT/US2014/026378

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:
- the international application in the language in which it was filed.
- a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
- a. (means)
- on paper
- in electronic form
- b. (time)
- in the international application as filed
- together with the international application in electronic form
- subsequently to this Authority for the purposes of search
4. In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/026378

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

the entire international application.

claims Nos. 4-12, 16-24

because:

the said international application, or the said claims Nos. _____ relate to the following subject matter which does not require an international search (*specify*):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 4-12, 16-24 are so unclear that no meaningful opinion could be formed (*specify*):

Claims 4-12 and 16-24 are improper multiple dependent claims not drafted in accordance with the second and third sentences of Rule 6.4(a).

the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

no international search report has been established for said claims Nos. 4-12, 16-24

a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13*ter*.1(a) or (b).

See Supplemental Box for further details.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2014/026378

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>1-3, 13-15</u>	YES
	Claims	<u>None</u>	NO
Inventive step (IS)	Claims	<u>None</u>	YES
	Claims	<u>1-3, 13-15</u>	NO
Industrial applicability (IA)	Claims	<u>1-3, 13-15</u>	YES
	Claims	<u>None</u>	NO
2. Citations and explanations:			
<p>Claims 1-3 and 13-15 lack an inventive step under PCT Article 33(3) as being obvious over Wang in view of Schachtner.</p> <p>Regarding claim 1, Wang discloses a child carrier (Fig. 3) comprising: a waist belt (waistband 5, Fig. 1A); one or more panels forming an upper torso support (main body 32, para 0044 Fig. 3) and a hammock (baby pouch 34, Fig. 3), the hammock having a first end portion coupled to the waist belt (baby pouch 34 is best described with reference to Fig. 1A wherein baby pouch 4 has a bottom edge 19 adapted to couple to waistband 5, para 0034); a thigh support strap extending to each side of the hammock (seat flaps 30), each thigh support strap having an inward end portion proximate to the hammock (each flap 30 is attached to baby pouch 34 at crotch region 35 and adapted to be positioned under each thigh of the baby, para 0044) and an outward end portion (straps 31), the outward end portion configured for selective coupling to the upper torso support in multiple positions (straps 31 are configured to couple to main body 32, para 0044; as discussed with respect to Fig. 2A, multiple points of attachment for straps to main body are contemplated to maximize comfort for the caregiver, see para 0041 where various points of attachment are discussed), the hammock and the thigh support straps adapted to form an adjustable seat to support a child in an ergonomic spread-squat position in an inward facing orientation and an outward facing orientation (the seat flap(s) and baby pouch, together form adjustable support for the baby's thighs, buttocks, and torso, para 0041 such that baby sits upright and the legs are supported at least ninety degrees from the lower portion, para 0024, "facing-out position", para 0041 ; "facing into the caregiver's body", para 0042), wherein the shape of the seat adjusts depending on the positions in which the outward end portions of the thigh support straps are coupled to the upper torso support (the straps associated with the seat flaps can be adjusted in length for better fit and support of baby when switching between facing out and facing-in positions, para 0042); and a set of shoulder straps (shoulder straps 6, Figs. 1A and 1B), each shoulder strap having a first end coupled to the upper torso support and a second end coupled to the upper torso support (shoulder straps 6 have a first end attached to the main body 32 at upper corners 22 of pouch 4 while the respective second end of each strap is configured to attach to buckles also located proximate to corners 22, para 0034, Fig. 1B)</p> <p>Wang lacks the teaching of a hammock having a second end portion coupled to the upper torso support. Schachtner is in the field of infant carrier devices and teaches a hammock (45) having a second end portion coupled to an upper torso support (43, 44; Figs. 1, 2b). It would have been obvious to one of skill in the art at the time of the invention modify baby pouch of Wang from a uniform one piece construction to include a plurality of panels as taught by Schachtner. The motivation would have been to create additional flexibility in the main body to accommodate the baby received therein as well as to enable the device to be more compactly folded for storage when not in use.</p> <p>Regarding claim 2, modified Wang discloses the invention with respect to Claim 1, and further discloses wherein the upper torso support comprises a plurality of attachment points for each of the thigh support straps (seat flap straps can be attached somewhere around the upper region of the carrier to maximize comfort of the caregiver, para 0041).</p> <p>Regarding claim 3, modified Wang discloses the invention with respect to any one of Claim 1 or Claim 2, wherein the outward end of each thigh support strap comprises an opening for receiving a mechanical fastener on the upper torso support (straps 3, which extend from seat flap 1, may include D-rings for attachment to main body 23, para 0035).</p>			
(Continued in Supplemental Box)			

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2014/026378

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box V

Regarding claim 13, Wang discloses a method of positioning a child in a child carrier, comprising: fastening a waist belt around a waist of a user (waistband 5 is wrapped around the waist of the caregiver, para 0040); positioning a child in a hammock (baby is placed in pouch 4 after waistband is secured, para 0040) having an inward end portion coupled to the belt (baby pouch 4 has a bottom edge 19 adapted to couple to waistband 5, para 0034); wrapping a first thigh support strap under a first thigh of the child and a second thigh support strap under a second thigh of the child (seat flaps 30 are positioned under each thigh of the baby, para 0044), each thigh support strap having an inward end and an outward end (Fig. 3); fastening an outward end of the first thigh strap to the upper torso support and an outward end of the second thigh support strap to the upper torso support at selected attachment points from a plurality of attachment points to adjust the shape of a seat formed by the hammock, the first thigh support strap and the second thigh support strap, the seat adapted to support the child in an ergonomic spread-squat position in an inward facing orientation and an outward facing orientation (each flap 30 is separately attached to main body 31, para 0044, multiple points of attachment thereto are contemplated based on the direction the baby is facing and the comfort of the caregiver, para 0041; the seat flap(s) and baby pouch, together form adjustable support for the baby's thighs, buttocks, and torso, para 0041 such that baby sits upright and the legs are supported at least ninety degrees from the lower portion, para 0024); and inserting at least one arm into a set of shoulder straps (see Figs. 2A-2C), each shoulder strap having a first end coupled to the upper torso support and a second end coupled to the waist belt the upper torso support (shoulder straps 6 have a first end attached to the main body 23 at upper corners 22 of pouch 4 while the respective second end of each strap is configured to attach to buckles also located proximate to corners 22, para 0034, Fig. 1B).

Wang lacks the teaching of a hammock having a second end portion coupled to the upper torso support. Schachtner is in the field of infant carrier devices and teaches a hammock (45) having a second end portion coupled to an upper torso support (43, 44; Figs. 1, 2b). It would have been obvious to one of skill in the art at the time of the invention modify baby pouch of Wang from a uniform one piece construction to include a plurality of panels as taught by Schachtner. The motivation would have been to create additional flexibility in the main body to accommodate the baby received therein as well as to enable the device to be more compactly folded for storage when not in use.

Regarding claim 14, modified Wang discloses the method of claim 13, and further discloses the step of orienting the child in an inward facing orientation, wherein the seat supports the child in the ergonomic spread squat position in the inward facing orientation (Fig. 2B shows the baby facing into the caregiver's body with buttocks and thighs equally supported such that the bay's legs are held at a 90-degree or greater angle, para 0042).

Regarding claim 15, modified Wang discloses the method of any one of claim 13 or claim 14, and further discloses the step of readjusting the shape of the seat using the first thigh support strap and second thigh support; and reorienting the child in an outward facing orientation, wherein the seat supports the child in the ergonomic spread squat position in the outward facing orientation (Fig. 2A shows the baby in a facing-out position, pulling on straps 3 orients the seat flap 1 to properly support the baby's buttocks and thighs, para 0041).

Claims 1-3 and 13-15 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

Electronic Acknowledgement Receipt

EFS ID:	23834933
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Delia Narvaiz
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	20-OCT-2015
Filing Date:	13-APR-2015
Time Stamp:	13:47:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ERGO1110-4_IDS_102015.pdf	1366946 <small>98c728afed695db75e40d0215aff0b74685e ec60</small>	yes	3

Multipart Description/PDF files in .zip description			
	Document Description	Start	End
	Transmittal Letter	1	2
	Information Disclosure Statement (IDS) Form (SB08)	3	3

Warnings:

Information:

2	Other Reference-Patent/App/Search documents	ERGO1110_REF_C21.pdf	281522 414e25b16afedcc3f12a7e85e698d3959fc6658c	no	6
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Warnings:

Information:

Total Files Size (in bytes):		1648468
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371


If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Atty. Docket No. (Opt.) ERGO1110-4
First Named Inventor Karin A. Frost	
Application Number 14/685,235	Filing or 371(c) Date April 13, 2015
Title BABY CARRIER	
Group Art Unit 3782	Examiner SKURDAL, Corey Nelson
Confirmation Number 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<u>Certification of Transmission Under 37 C.F.R. 1.8</u>
I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on October <u>20</u> , 2015.
 Delia Narvaiz

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application.

This Information Disclosure Statement is being submitted before the mailing of a first Office action on the merits.

This Information Disclosure Statement is being submitted before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(b) and before the mailing date of any of a final action under 37 C.F.R. § 1.113, a notice of allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in the application, and is accompanied by one of:

- The statement specified in 37 C.F.R. § 1.97(e); or
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Pursuant to 37 C.F.R. § 1.97(e), Applicant hereby states:

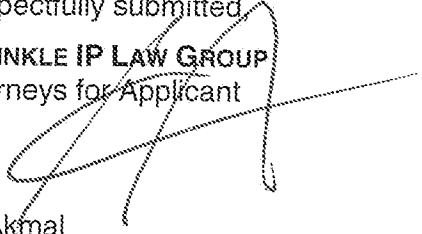
That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the information disclosure statement.

Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Applicant does not believe any fees are due and owing at this time. If Applicant is in error, the Director is hereby authorized to deduct any and all appropriate fees from Deposit Account 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,
SPRINKLE IP LAW GROUP
Attorneys for Applicant


Ari Akmal
Reg. No. 51,388


Dated: October 20, 2015

1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 317-9088

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO OFFICE ACTION DATED 05/22/2015	Atty. Docket No. ERGO1110-4
First Named Inventor Karin Annette Frost	
Application Number 14/685,235	Date Filed 04/13/2015
Title BABY CARRIER	
Group Art Unit 3782	Examiner Skurdal, Corey Nelson
Confirmation Number: 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

<u>Certificate of Transmission Under 37 C.F.R. § 1.8</u>
I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on August 24 , 2015.
 Shenise Ramdeen

This paper is submitted in response to the Official Action mailed on May 22, 2015. Please reconsider the above-identified application in view of the following amendments and remarks.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS:

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently Amended) A child carrier adapted to be worn by a human wearer for carrying a child, the child carrier comprising:

a waistband comprising a padded section, the waistband having an adjustable length positioned to be securely worn about the waist of the wearer and rest on the hips of the wearer;

a flexible main panel having, a bottom edge and opposing side edges, the flexible main panel adapted to form a child carrying area in cooperation with the wearer's torso that is open to the wearer's torso the main panel having the bottom edge joined affixed to the waistband along at least a portion of the bottom edge, the main panel so dimensioned to form a sling adapted to support the child in a seated position such that the child's legs are flexed and spread apart;

a first shoulder strap having an adjustable length forming a loop along a first of the opposing side edges, wherein an upper end of the first shoulder strap is coupled to the main panel to a first side of a vertical axis of the main panel and a lower end of the first shoulder strap is coupled to the main panel to the first side of the vertical axis of the main panel; and

a second shoulder strap having an adjustable length forming a loop along a second of the opposing side edges, wherein an upper end of the second shoulder strap is coupled to the main panel to a second side of the vertical axis of the main panel and a lower end of the second shoulder strap is coupled to the main panel to the second side of the vertical axis of the main panel[[:]], wherein:

the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front side of the wearer's torso or in a position facing a back side of the wearer's torso, ~~wherein the upper ends of the first and second shoulder straps are coupled to the main panel at a position that is on a side of the child carrying area that is away from the wearer when the child carrier is worn and~~ wherein the child carrier is configured to distribute at least a portion of the child's weight to the wearer's hips through the waistband.

2. (Original) The child carrier of Claim 1, wherein the width of the bottom edge of the

main panel is greater than a distance between the upper ends of the first and second shoulder straps.

3. (Original) The child carrier of Claim 1, wherein the child carrier is configured to distribute at least a majority of the child's weight to the wearer's hips through the waistband.

4. (Original) The child carrier of Claim 3, wherein the child carrier is adapted to support a majority of the child's weight through the child's hips and thighs.

5. (Original) The child carrier of Claim 1, wherein the child carrier further comprises a head panel positioned to cover the child's head.

6. (Original) The child carrier of Claim 5, further comprising a first restraining strap coupled to a first corner of the head panel and a second restraining strap coupled to a second corner of the head panel.

7. (Original) The child carrier of Claim 6, wherein the child carrier is adapted such that the first restraining strap detachably couples to the child carrier at the first shoulder strap over a first shoulder of the wearer and the second restraining strap detachably couples to the child carrier at the second shoulder strap over the second shoulder of the wearer.

8. (Original) The child carrier of Claim 1, further comprising a chest strap adapted to cross the wearer's chest or back from the first shoulder strap to the second shoulder strap on the opposite side of the wearer from the main panel.

9. (Original) The child carrier of Claim 8, wherein the chest strap has an adjustable length.

10. (Original) The child carrier of Claim 9, wherein the chest strap has an adjustable height.

11. (Original) The child carrier of Claim 1, wherein the main panel is substantially rectangular.

12. (Original) The child carrier of Claim 1, wherein the child carrier weighs less than three pounds.

13. (Original) The child carrier of Claim 1, wherein the child carrier is machine washable.

14. (Original) The child carrier of Claim 1, wherein the child carrier is adapted to support the child with only substantially deformable materials.

15. (Original) The child carrier of Claim 1, wherein the first shoulder strap and second shoulder strap each comprise a section of padding.

16. (Original) The child carrier of Claim 1, wherein the child carrier is adapted to allow the wearer to select whether to support the child in a position facing the front side of the wearer's torso or the back side of the wearer's torso without modifying the configuration of the shoulder straps and waistband relative to the main panel.

17. (Original) The child carrier of Claim 1, wherein the child carrier configured to distribute 70-90% of a child's weight to the wearer's hips through the waistband.

18. (Original) The child carrier of Claim 1, wherein the waistband at the padded section has a vertical length that is approximately 1/3 of the vertical length of the main panel.

19. (Original) The child carrier of Claim 18, wherein the lower end of the first shoulder strap and the lower end of the second shoulder strap are coupled to the main panel approximately 2/3 of vertical length of the main panel away from the bottom edge.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed May 22, 2015. Claim 1 has been amended. The amendments are made without any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action and no new matter has been added. This Reply encompasses a bona fide attempt to address the rejections raised by the Examiner and places the present application in condition for allowance. Claims 1-19 recite subject matter not reached by the art of record and are therefore allowable. Accordingly, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Double Patenting Rejection

Claims 1-9 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-8 of U.S. Patent No. 7,322,498 and 8,590,757 and Claims 1-20 of U.S. Patent No. 9,022,260. Applicant is including with this reply a timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(c). U.S. Patent Nos. 7,322,498, 8,590,757 and 9,022,260 and the current Application are commonly owned. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. §§ 102, 103

Claims 1-4, 8-11, 13, 14, 16 and 17 stand rejected as anticipated by U.S. Publication No. 2002/0011503 ("Hwang"). Claims 5-7 stand rejected as obvious over Hwang in view of U.S. Patent No. 5,848,741 ("Fair"). Claims 12 and 15 stand rejected as obvious over Hwang in view of Official Notice. Claim 18 stands rejected as obvious over Hwang in view of U.S. Patent No. 6,182,873 ("Christopher"). Claim 19 stands rejected as obvious over Hwang in view of Christopher and U.S. Patent No. 4,492,326 ("Storm").

Claim 1 recites:

A child carrier adapted to be worn by a human wearer for carrying a child, the child carrier comprising:
a waistband comprising a padded section, the waistband having an adjustable length positioned to be securely worn about the waist of the wearer and rest on the hips of the wearer;
a flexible main panel having, a bottom edge and opposing side edges, the flexible main panel adapted to form a child carrying area in cooperation with the wearer's torso that is open to the wearer's torso the main panel having the bottom edge affixed to the waistband along at least a portion of the

bottom edge, the main panel so dimensioned to form a sling adapted to support the child in a seated position such that the child's legs are flexed and spread apart;

a first shoulder strap having an adjustable length forming a loop along a first of the opposing side edges, wherein an upper end of the first shoulder strap is coupled to the main panel to a first side of a vertical axis of the main panel and a lower end of the first shoulder strap is coupled to the main panel to the first side of the vertical axis of the main panel; and

a second shoulder strap having an adjustable length forming a loop along a second of the opposing side edges, wherein an upper end of the second shoulder strap is coupled to the main panel to a second side of the vertical axis of the main panel and a lower end of the second shoulder strap is coupled to the main panel to the second side of the vertical axis of the main panel, wherein:

the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front side of the wearer's torso or in a position facing a back side of the wearer's torso and wherein the child carrier is configured to distribute at least a portion of the child's weight to the wearer's hips through the waistband.

Hwang Does Not Teach a Bottom Edge of the Main Panel Affixed to the Waistband

As shown in Figure 3 of the present application, an embodiment of a baby carrier can include a main panel (23) having a bottom edge (24) that is affixed to a waistband (20) along at least a portion of the bottom edge (24).

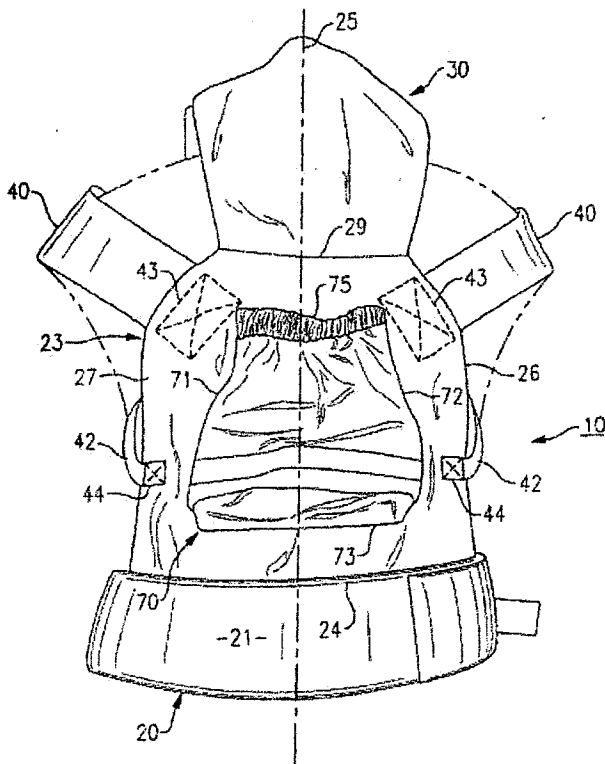
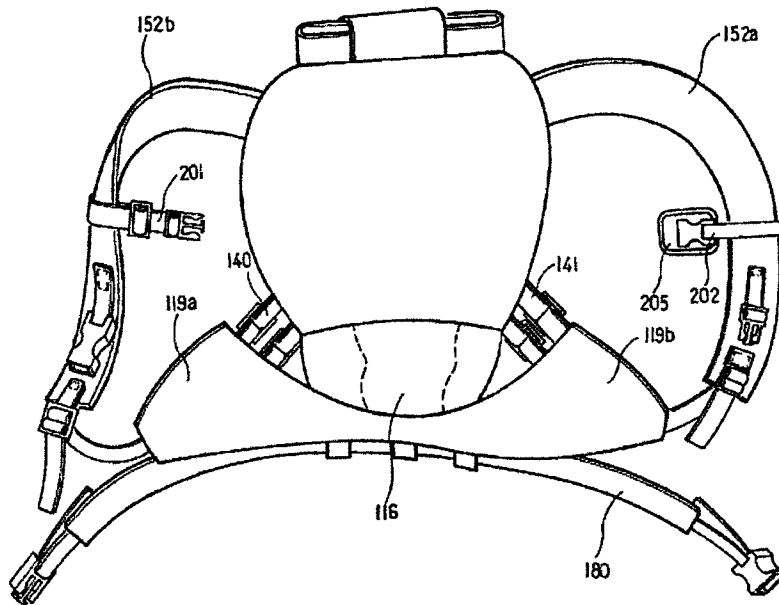


FIG.3

Hwang teaches a child carrier in which a waist belt (180) appears to be joined to auxiliary support (119) using loops joined to the auxiliary support (119). Specifically, waist belt (180) appears to be passed through these loops such that it is not affixed to the auxiliary support (119):

FIG. 7



In fact, one could remove the waist belt (180) from these loops. Hwang therefore does not teach a main panel and waistband arrangement in which the bottom edge of the main panel is affixed to the waistband. Therefore, Hwang does not anticipate Claim 1.

Hwang Does Not Teach Distributing a Child's Weight to the Wearer's Hips

As shown in Figure 3 of the present application (reproduced above), an embodiment of a baby carrier can include shoulder straps coupled to the sides of the main panel. The top ends of the shoulder straps are coupled to the main panel at the top corners while the bottom ends of the shoulder straps are coupled to the main panel some distance away from the bottom edge of the main panel. Additionally, as shown in Figure 3, a waistband is affixed to the bottom edge of the main panel.

During use, the shoulder straps pull the sides of the main panel towards the wearer while the waistband pulls the bottom edge of the main panel towards the wearer. The waistband is part of the weight distributing structure of the carrier so that weight is redistributed from the wearer's shoulders to the wearer's hips:

...the carrier includes a waist band 20 having a wide padded section 21 that encircles the hips of the wearer when the carrier is in either a front or a rear carry position. The waist band 20 is designed to take a good deal of strain away from the wearer's lumbar region, particularly when the carrier is worn in a front carry position.

'324 Application, ¶23.

When the child is seated in the child carrier, at least about seventy percent to ninety percent of the child's weight is transmitted directly through waist band 20 to the wearer's hips, and not through the wearer's shoulders or upper spine, thereby promoting wearer comfort and diminishing wearer fatigue.

'324 Application, ¶ 35. In Figure 3, the harness arrangement of shoulder straps and waistband means that the waistband provides support and therefore distributes the child's weight to the wearer's hips. This relieves pressure from the wearer's back.

Turning to Claim 1, it recites in part:

a waistband comprising a padded section, the waistband having an adjustable length positioned to be securely worn about the waist of the wearer and rest on the hips of the wearer . . .

a first shoulder strap ...a lower end of the first shoulder strap is coupled to the main panel away from the bottom edge of the main panel to the first side of the vertical axis of the main panel;

a second shoulder strap ...a lower end of the second shoulder strap is coupled to the main panel away from the bottom edge of the main panel...

the child carrier is configured to distribute the at least a portion of the child's weight to the wearer's hips through the waistband;

(emphasis added). In embodiments according to Claim 1 the shoulder straps do not directly support the bottom of the carrier, but instead couple to the carrier higher up. The waistband provides the support at the bottom edge of the main panel and rests on the wearer's hips such that the child's weight is distributed to the wearer's hips.

In contrast, Hwang teaches a child carrier in which the user's shoulders bear the child's weight. The carrier of Hwang has shoulder straps that are coupled at the bottom sides of the baby carrier to pull the bottom edge of sheet 114 toward the wearer. As shown in Figure 6, the

entire force supporting the child is provided by the shoulder straps and will be borne by the wearer's shoulders and back. Figure 7 of Hwang does illustrate a thin waistband 180. However, as also shown in Figure 7, the shoulder strap arrangement remains essentially the same as in Figure 5 such that the child is fully supported by the shoulder straps. The waistband is simply provided "to prevent movement of the baby carrier." See Hwang paragraph 50. Hwang does not teach a strap and waistband arrangement in which the waistband distributes the child's weight to the wearer's hips. Thus, Hwang does not anticipate Claim 18.

Hwang Does Not Teach A Carrier Adapted to be Worn in Front and Rear Carrying Positions

Child carriers of the present application are designed to allow the wearer to wear a child in a front carry and back carry position. As described in the present application:

This invention relates a lightweight child carrier that can be worn by an adult with the child being positioned either in the front of the wearer or behind the wearer.

'324 Application, ¶2.

The present carrier, unlike some of the more complex devices, is not only simply and light-weight, but can be reversed in the mode of carry from front to back or vice versa without any major readjustment of the harness.

'324 Application, ¶22.

... the carrier includes a waist band 20 having a wide padded section 21 that encircles the hips of the wearer when the carrier is in either a front or a rear carry position.

'324 Application, ¶23. Thus, embodiments of carriers described herein are adapted to carry children in front carry and back carry positions while distributing weight to the wearer's hips.

Claim 1 recites, in part:

the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front side of the wearer's torso or in a position facing a back side of the wearer's torso.

Hwang does not teach this claim limitation as Hwang only teaches a back carrier:

As shown in FIG. 4B, the baby carrier 100 becomes a state where a baby can be taken on a baby caretaker's back . . .

Hwang, ¶23. See also, Hwang, Figures 5 and 8. Therefore, Hwang does not anticipate Claim 1.

Accordingly, withdrawal of the rejection of Claims 1-19 is respectfully requested.

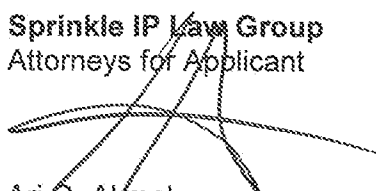
Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-19. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant


Ari G. Almal
Reg. No. 51,388

Date: August 24, 2015

1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

**INFORMATION
DISCLOSURE
STATEMENT**

Application Number	14/685,235
Filing or 371 (c) Date:	April 13, 2015
First Named Inventor	Karin A. Frost
Group Art Unit	3782
Examiner Name	Corey N. Skurdal
Atty Docket Number	ERGO1110-4

Sheet **1** of **1**

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	C20	Notice of Allowance issued for US Appl. No. 14/209,580, mailed 06/26/2015, 8 pgs.	

Examiner Signature		Date Considered	
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Electronic Patent Application Fee Transmittal

Application Number:	14685235
Filing Date:	13-Apr-2015
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Filer:	Ari G. Akmal/Shenise Ramdeen
Attorney Docket Number:	ERGO1110-4

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
Statutory or Terminal Disclaimer	1814	1	160	160
Total in USD (\$)				340

Electronic Acknowledgement Receipt

EFS ID:	23295346
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Shenise Ramdeen
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	24-AUG-2015
Filing Date:	13-APR-2015
Time Stamp:	17:19:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$340
RAM confirmation Number	5072
Deposit Account	503183
Authorized User	AKMAL, ARI G.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ERGO1110-4_ROA08-24-15.pdf	869426 0e0fe16cadca7b4b741bd3aa35caa7b5c070d27b	yes	10
Multipart Description/PDF files in .zip description					
Document Description		Start	End		
Amendment/Req. Reconsideration-After Non-Final Reject		1	1		
Claims		2	4		
Applicant Arguments/Remarks Made in an Amendment		5	10		
Warnings:					
Information:					
2	Terminal Disclaimer Filed	ERGO1110-4_TerminalDisclaimer.pdf	563885 73cc767d00b2a80ccabd312f3d4c713042069c22	no	3
Warnings:					
Information:					
3		ERGO1110-4_IDS08-24-15.pdf	444950 574847cc686c3eb3592836f32873a87d2e1b293c	yes	5
Multipart Description/PDF files in .zip description					
Document Description		Start	End		
Transmittal Letter		1	3		
Information Disclosure Statement (IDS) Form (SB08)		4	5		
Warnings:					
Information:					
4	Non Patent Literature	ERGO1110_REF_C20.pdf	445461 12e544694e3ba86e3445f78cf15d4241e7d2249d	no	8
Warnings:					
Information:					

5	Fee Worksheet (SB06)	fee-info.pdf	31686 1f6801621abc7ab88f7fca195e06a9f8c8261 232	no	2
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Warnings:

Information:

Total Files Size (in bytes):	2355408
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

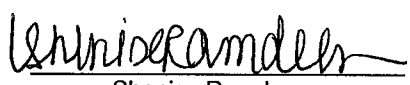
New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
TERMINAL DISCLAIMER	Atty. Docket No. ERGO1110-4
First Named Inventor Karin Annette Frost	
Application Number 14/685,235	Date Filed 04/13/2015
Title BABY CARRIER	
Group Art Unit 3782	Examiner Skurdal, Corey N.
Confirmation Number 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

<u>Certificate of Transmission Under 37 C.F.R. § 1.8</u>
I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on August <u>24</u> , 2015.
 Shenise Ramdeen

The Ergo Baby Carrier, Inc., the owner of one hundred percent (100%) interest in the instant application hereby disclaims, except as provided below:

(i) The terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. § 154 and 173 of U.S. Patent No. **7,322,498**, as presently shortened by any terminal disclaimer. In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. § 154 and 173 of U.S. Patent No. **7,322,498**, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term, as presently shortened by any terminal disclaimer.

(ii) The terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. § 154 and 173 of U.S. Patent No. **8,590,757**, as presently shortened by any terminal disclaimer. In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. § 154 and 173 of U.S. Patent No. **8,590,757**, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term, as presently shortened by any terminal disclaimer.

(iii) The terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. § 154 and 173 of U.S. Patent No. **9,022,260**, as presently shortened by any terminal disclaimer. In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. § 154 and 173 of U.S. Patent No. **9,022,260**, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term, as presently shortened by any terminal disclaimer..

The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it, the above-referenced patents are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

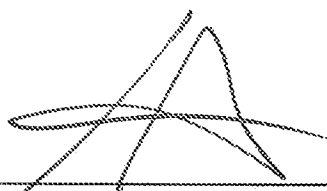
Check box 1, 2, 3, or 4 as appropriate.

1. For submission on behalf of an organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Statement under 37 C.F.R. 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

2. The undersigned is an attorney or agent of record.
3. Terminal disclaimer fee of \$160.00 under 37 C.F.R. 1.20(d) included.
4. Terminal disclaimer fee under 37 C.F.R. 1.20(d). The Commissioner is hereby authorized to deduct \$160.00 representing the above-noted filing fee from Deposit Account No. 50-3183 of Sprinkle IP Law Group. The Commissioner is hereby further authorized to deduct any deficiencies or credit any overpayments regarding this application from the same account.



Ari G. Akmal
Reg. No. 51,388

08/24/2015
Dated

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Atty. Docket No. (Opt.)
ERGO1110-4

Applicant Karin A. Frost	
Application Number 14/685,235	Filing or 371 (c) Date: April 13, 2015
For Baby Carrier	
Group Art Unit 3782	Examiner Corey N. Skurdal
Confirmation Number: 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on August 24, 2015.



Shenise Ramdeen

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application;

This Information Disclosure Statement is being submitted before the mailing of a First Office Action on the merits; or

This Information Disclosure Statement is being submitted before the mailing of a First Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(b) and before the mailing date of any of a Final Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

- The statement specified in 37 C.F.R. § 1.97(e); or
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(c) and on or before payment of the issue fee and is accompanied by:

- The statement specified in 37 C.F.R. § 1.97(e); and
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Pursuant to 37 C.F.R. § 1.97(e), Applicant hereby states:

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the information disclosure statement.

Applicant respectfully submits that the claims of Applicant's above-referenced patent application are patentably distinguishable from the listed information. Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Respectfully submitted,

SPRINKLE IP LAW GROUP
Attorneys for Applicant



Ari G. Akmal
Reg. No. 51,388

Dated: Aug. 24, 2015

1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 317-9088

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/685,235	Filing Date 04/13/2015	<input type="checkbox"/> To be Mailed
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ENTITY: LARGE SMALL MICRO

APPLICATION AS FILED – PART I

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	08/24/2015	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR			
	Total (37 CFR 1.16(i))	* 19	Minus ** 20	= 0	X \$80 =	0
	Independent (37 CFR 1.16(h))	* 1	Minus ***3	= 0	X \$420 =	0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
					TOTAL ADD'L FEE	0

AMENDMENT	(Column 1)	(Column 2)	(Column 3)	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR			
	Total (37 CFR 1.16(i))	*	Minus **	=	X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus ***	=	X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))					
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
 *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/ALA HUNTER/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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UNITED STATES DEPARTMENT OF COMMERCE
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Table with 4 columns: APPLICATION NUMBER (14/685,235), FILING OR 371(C) DATE (04/13/2015), FIRST NAMED APPLICANT (Karin Annette Frost), ATTY. DOCKET NO./TITLE (ERGO1110-4)

CONFIRMATION NO. 7364

PUBLICATION NOTICE



44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

Title:Baby Carrier

Publication No.US-2015-0208821-A1
Publication Date:07/30/2015

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/685,235
				Filing or 371 (c) Date:	April 13, 2015
				First Named Inventor	Karin A. Frost
				Group Art Unit	3782
				Examiner Name	Corey N. Skurdal
Sheet	1	of	7	Attorney Docket Number	ERGO1110-4

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Number-Kind Code (if known)			
	A1	4009808	03-01-1977	SHARP	
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Application Number	14/685,235
Filing or 371 (c) Date:	April 13, 2015
First Named Inventor	Karin A. Frost
Group Art Unit	3782
Examiner Name	Corey N. Skurdal
Attorney Docket Number	ERGO1110-4

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Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
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Examiner Name	Corey N. Skurdal
Attorney Docket Number	ERGO1110-4

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**INFORMATION DISCLOSURE
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Examiner Name	Corey N. Skurdal
Attorney Docket Number	ERGO1110-4

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		Country Code-Number-Kind Code (if known)			

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**INFORMATION
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First Named Inventor	Karin A. Frost
Group Art Unit	3782
Examiner Name	Corey N. Skurdal
Atty Docket Number	ERGO1110-4

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INFORMATION DISCLOSURE STATEMENT				Application Number	14/685,235
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				First Named Inventor	Karin A. Frost
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				Examiner Name	Corey N. Skurdal
Sheet	7	of	7	Atty Docket Number	ERGO1110-4

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**Espacenet****Bibliographic data: FR2806279 (B3) — 2002-02-15**

Baby carrier has pouch on which cover for baby is mounted which has leg sections on either side, remainder covering baby like hooded cloak

No documents available for this priority number.

Inventor(s): FALLOURD TOUNRARA LAURENCE ± (FALLOURD TOUNRARA LAURENCE)

Applicant(s): TENNESSEE [FR] ± (TENNESSEE)

Classification: - international: **A47D13/02; A47D15/00**; (IPC1-7): A47D13/08
- cooperative: **A47D13/025**

Application number: FR20000003506 20000315

Priority number (s): FR20000003506 20000315

Also published as: FR2806279 (A3)

Abstract of FR2806279 (A3)

The baby carrier has a pouch (10) on which a cover (12) for the baby is mounted. This has leg sections (12b) on either side, the remainder (12a) covering the baby like a hooded cloak.

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A3

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43 Date de mise à la disposition du public de la demande : 21.09.01 Bulletin 01/38.

56 Les certificats d'utilité ne sont pas soumis à la procédure de rapport de recherche.

60 Références à d'autres documents nationaux apparentés : Certificat d'utilité résultant de la transformation volontaire de la demande de brevet déposée le 15/03/00.

71 Demandeur(s) : TENNESSEE Société anonyme — FR.

72 Inventeur(s) : FALLOURD TOUNRARA LAURENCE.

73 Titulaire(s) :

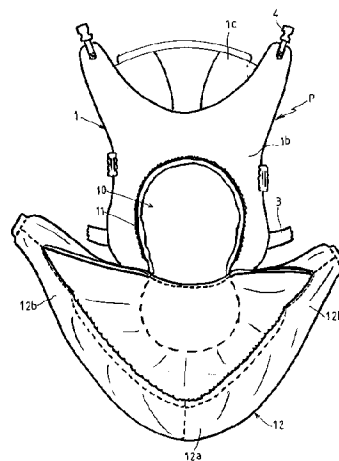
74 Mandataire(s) : CABINET LAURENT ET CHARRAS.

54 DISPOSITIF DE PROTECTION D'UN ENFANT AUX INTEMPERIES SUR UN PORTE BEBE.

57 Le porte-bébé est remarquable en ce qu'il est agencé dans la face avant de la partie assise avec une poche (10) agencée pour recevoir intérieurement une forme (12) constituant un abri ou vêtement anti-froid, anti-pluie, et permettant, lors de son déploiement, de protéger et d'envelopper l'enfant de la tête aux pieds et ses flancs latéraux par un simple enfillement par l'extérieur en entourant ainsi la partie avant du porte-bébé,

et en ce que la partie supérieure du dispositif est destinée à configurer une capuche (12a) susceptible d'entourer et de protéger la tête de l'enfant, tandis qu'elle se prolonge latéralement formant enveloppe pour entourer le corps de l'enfant,

et en ce que, dans sa partie inférieure, le dispositif présente une configuration tubulaire (12b) permettant le passage des pieds de l'enfant.



FR 2 806 279 - A3



DISPOSITIF DE PROTECTION D'UN ENFANT
AUX INTEMPERIES SUR UN PORTE-BEBE

5 L'invention se rattache au secteur technique des porte-bébés qui sont tout particulièrement utilisés par des personnes susceptibles de transporter l'enfant en bas âge.

10 A ce jour et à la connaissance du Demandeur, les porte-bébés sont constitués par un ensemble unique et monobloc en matériau matelassé ou autre, pour assurer le confort de l'enfant et sont agencés avec des bretelles et ceintures permettant leur positionnement autour des bras du porteur et de sa taille.

15 Ces porte-bébés sont agencés et profilés en permettant le maintien de l'enfant dans une position face au porteur ou dans le sens de la marche.

20 On a ainsi représenté figure 1 un porte-bébé selon l'art antérieur, dont la configuration et mise en œuvre incluant à partir d'une bande matelassée (1) une pièce d'assise (1a), une pièce avant (1b) prolongée ou non par une tête (1c) et une pièce arrière (1d) en appui ventral sur le porteur à partir de laquelle sont disposées les bretelles (2) et la sangle de ceinturage (3) à la taille.

25 La pièce avant (1b) est agencée pour recevoir des moyens d'attache (4) rapide coopérant avec des moyens d'attache (5) rapides complémentaires disposés sur la bretelle afin de permettre par bouclage le maintien ferme de l'enfant.

30 On connaît également selon l'art antérieur, des porte-bébés incluant un élément support qui peut être enfilé par le porteur, cet élément porteur étant agencé avec des moyens du type bretelle ou sangle de ceinturage à la taille, ledit élément porteur étant susceptible de recevoir une assise réversible en position, permettant le positionnement du bébé soit en situation ventrale soit en situation dorsale.

35 Tous ces porte-bébés réalisés selon l'art antérieur, très divers les uns des autres et existants sur le marché, répondent essentiellement à des exigences de sécurité pour le portage de l'enfant ainsi qu'à des exigences de confort.

Lesdits porte-bébés ainsi agencés, de tout type connu sur le marché, sont essentiellement adaptés pour répondre aux problèmes de sécurité et de confort.

5 Par contre, un des problèmes rencontrés réside dans leur absence totale d'adaptation au portage de l'enfant en toutes situations climatique de beau temps, mais également de mauvais temps, pluie, vent et autre. Dans ce cas, le porteur doit habiller l'enfant d'un vêtement ou d'une protection complémentaire pour éviter d'être mouillé par la pluie par exemple. Ce vêtement est indépendant du porte-bébé. Il peut s'agir d'un coupe-vent, anorak ou autre. Cela nécessite
10 pour l'enfilement de ce vêtement, soit de sortir le bébé du porte-bébé et mettre le vêtement en place, soit de tenter de mettre le vêtement alors que le bébé est positionné dans le porte-bébé et en entraînant des manoeuvres pas très pratiques à réaliser. Il faut en particulier que le bas du vêtement ou dos soit enfilé entre la face arrière de la partie assise et le dos de l'enfant.

15

Dans cette hypothèse particulière, si le corps de l'enfant et la tête peuvent être protégés, la partie jambes ne l'est pas, sauf à faire enfiler un pantalon, mais dans ces conditions, l'enfilement est très difficile.

20 Face aux problèmes posés de protection de l'enfant in situ sur le porte-bébé, la démarche du Demandeur a été de s'orienter sur la conception d'un abri intégré dans le porte-bébé et pouvant répondre aux problèmes posés, pouvant être utilisé en cas de besoin et être rangé en l'absence de besoin.

25 Ainsi, selon une première caractéristique, le porte-bébé est agencé dans la face avant de la partie assise avec une poche agencée pour recevoir intérieurement une forme constituant un abri ou vêtement anti-froid, anti-pluie, et permettant, lors de son déploiement, de protéger et d'envelopper l'enfant de la tête aux pieds et ses flancs latéraux par un simple enfilement par l'extérieur
30 en entourant ainsi la partie avant du porte-bébé.

Selon une autre caractéristique, le dispositif de protection formant abri des vêtements pour l'enfant est réalisé sous forme d'un tissu en matériau léger de type coupe-vent qui, une fois déployé, est de nature à entourer le corps et la tête
35 de l'enfant, et en se prolongeant latéralement et jusqu'aux pieds de l'enfant pour permettre la protection de ceux-ci, ledit dispositif restant solidarisé à la partie basse de la poche pour assurer la tenue de l'ensemble.

Ces caractéristiques et d'autres encore ressortiront bien de la suite de la description.

Pour fixer l'objet de l'invention illustrée de manière non limitative aux dessins où :

- 5 - La figure 1 est une vue de côté illustrant un porte-bébé en place sur un porteur avec représentation de l'enfant, et ce, en situation normale ;
- La figure 2 est une vue de face du porte-bébé représenté figure 1 en situation d'usage normal ;
- La figure 3 est une vue de profil illustrant le porte-bébé et le bébé in situ,
10 celui-ci étant protégé par le dispositif de protection, objet de l'invention ;
- La figure 4 est une vue en position dépliée, et sensiblement en perspective montrant le déploiement du dispositif de protection de l'enfant adapté sur le porte-bébé ;
- La figure 5 est une vue de devant du porte-bébé, lorsque le dispositif de
15 protection vestimentaire est déployé.

Afin de rendre plus concret l'objet de l'invention, on le décrit maintenant d'une manière non limitative illustrée aux figures des dessins.

20 De manière connue, le porte-bébé, référencé par (P), comprend une bande matelassée comprenant une partie assise (1a), une partie avant (1b), et une partie arrière (1c), l'ensemble incluant des bretelles et ceinture disposées autour de la taille et un moyen de fixation d'attache rapide classique pour assurer la tenue de l'enfant. Selon l'invention, la partie apparente de la pièce avant du porte-bébé
25 comprend une poche (10) de grand volume qui présente une zone supérieure arrondie pour recevoir un moyen de fermeture à glissière (11) de tout type connu, cette poche étant solidarisée dans sa partie basse (10a) sur une ligne de contour par couture ou autrement. Ladite poche, lorsqu'elle est ouverte, est rabattable le cas échéant. A l'intérieur de ladite poche, est disposé et fixé un
30 dispositif de protection vestimentaire (12) réalisé en un tissu ou toile en matériau léger et présentant une configuration sensiblement triangulaire. Dans sa base, ledit dispositif est fixé par couture ou autrement au fond de la poche précitée.

35 La partie supérieure du dispositif est destinée à configurer une capuche (12a) susceptible d'entourer et de protéger la tête de l'enfant, tandis qu'elle se prolonge latéralement formant enveloppe pour entourer le corps de l'enfant.

Dans sa partie inférieure, le dispositif présente une configuration tubulaire (12b) permettant le passage des pieds de l'enfant et le cas échéant, la sortie de ceux-ci hors du dispositif vestimentaire. En d'autres termes, ledit dispositif vestimentaire présente une forme en housse enveloppant le corps de l'enfant, la tête, les flancs et les pieds, avec une ouverture sensiblement triangulaire continue permettant le passage de l'enfant. Dans la mise en œuvre illustrée aux dessins, ledit dispositif de protection vestimentaire n'inclut pas de manches pour permettre le passage des bras de l'enfant.

10 Dans une variante de réalisation, le dispositif de protection vestimentaire peut inclure lesdites manches, en prévoyant une modification dans la fabrication de cette protection.

15 L'invention répond de manière très satisfaisante aux problèmes posés en ce qu'elle propose un dispositif de protection vestimentaire simple à plier ou à déplier et à ranger dans la poche, pouvant être mis en place très rapidement par le porteur sur l'enfant, sans difficulté majeure de manipulation.

REVENDICATIONS

5 -1- Porte-bébé caractérisé en ce qu'il est agencé dans la face avant de la partie assise avec une poche (10) agencée pour recevoir intérieurement un dispositif de protection vestimentaire (12) constituant un abri ou vêtement anti-froid, anti-pluie, et permettant, lors de son déploiement, de protéger et d'envelopper l'enfant de la tête aux pieds et ses flancs latéraux par un simple enfilement par l'extérieur en entourant ainsi la partie avant du porte-bébé.

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-2- Porte-bébé, selon la revendication 1, caractérisé en ce que le dispositif de protection (12) formant abri des vêtements pour l'enfant est réalisé sous forme d'un tissu en matériau léger de type coupe-vent qui, une fois déployé, est de nature à entourer le corps et la tête de l'enfant, et en se prolongeant latéralement et jusqu'aux pieds de l'enfant pour permettre la protection de ceux-ci, ledit dispositif restant solidarisé à la partie basse (10a) de la poche (10) pour assurer la tenue de l'ensemble.

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-3- Porte-bébé, selon la revendication 2, caractérisé en ce que la partie supérieure du dispositif est destinée à configurer une capuche (12a) susceptible d'entourer et de protéger la tête de l'enfant, tandis qu'elle se prolonge latéralement formant enveloppe pour entourer le corps de l'enfant,

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et en ce que, dans sa partie inférieure, le dispositif présente une configuration tubulaire (12b) permettant le passage des pieds de l'enfant.

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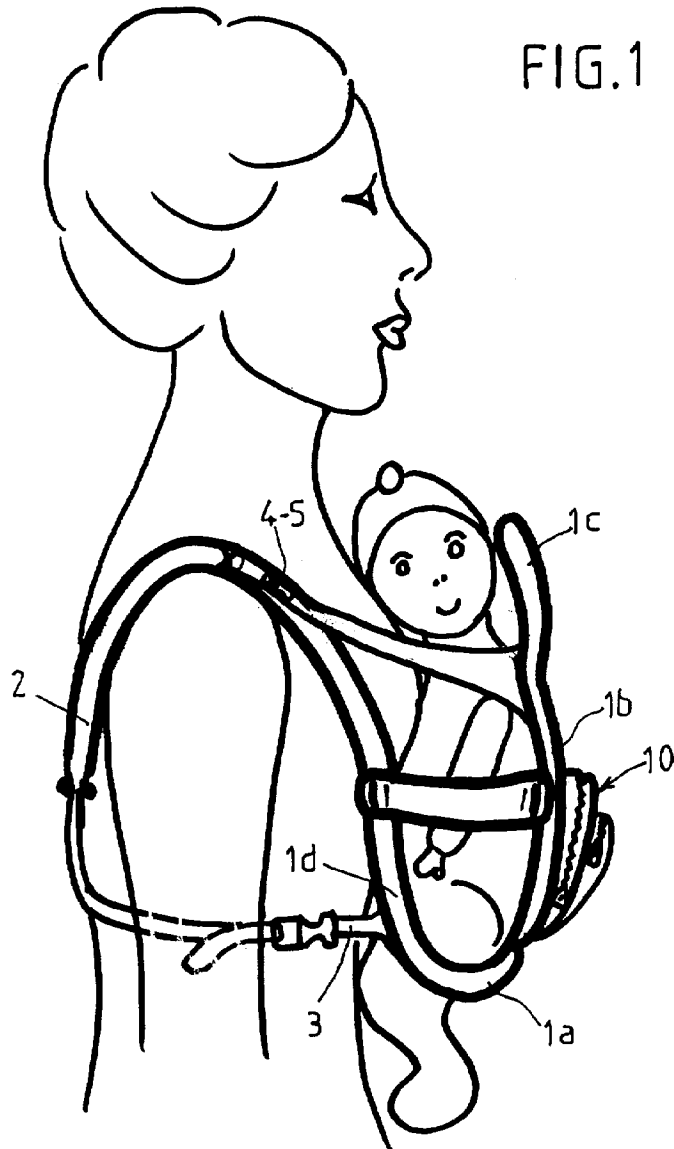
-4- Porte-bébé, selon l'une quelconque des revendications 1 à 3, caractérisé en ce que le dispositif de protection comprend des manches pour le passage des bras de l'enfant.

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FIG.1



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FIG. 2

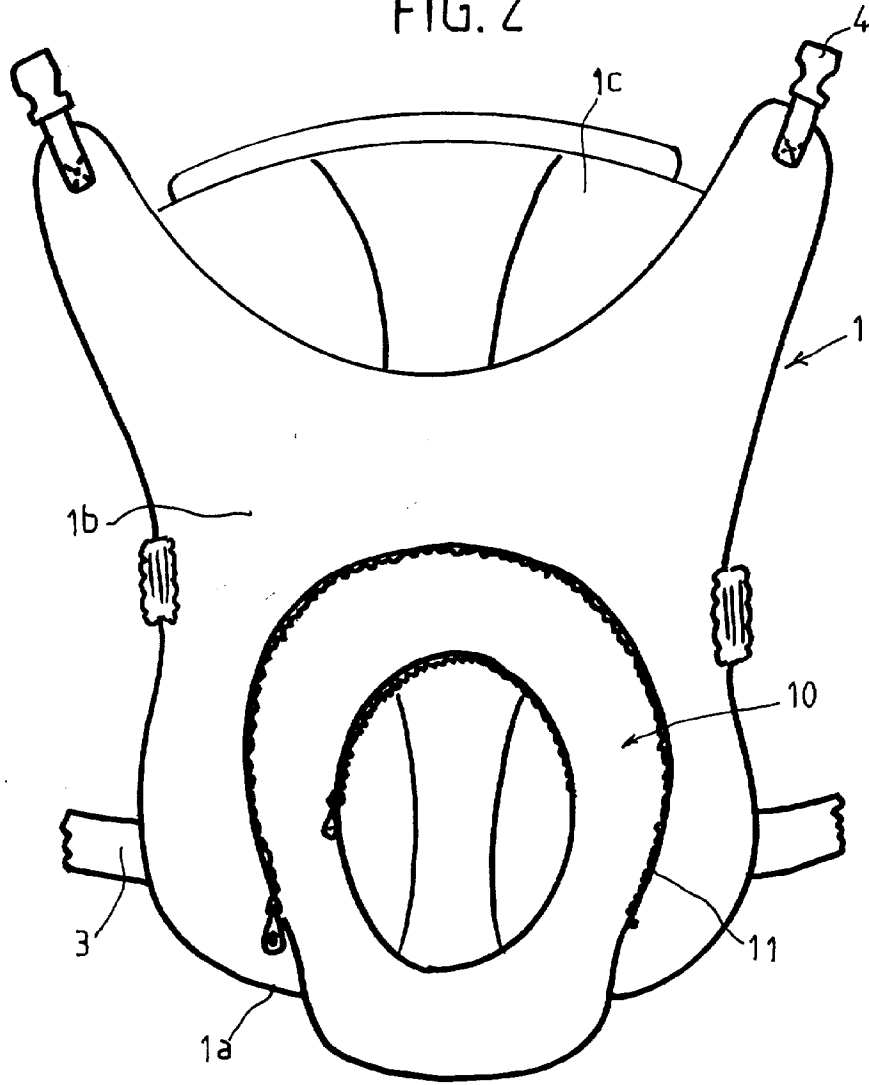
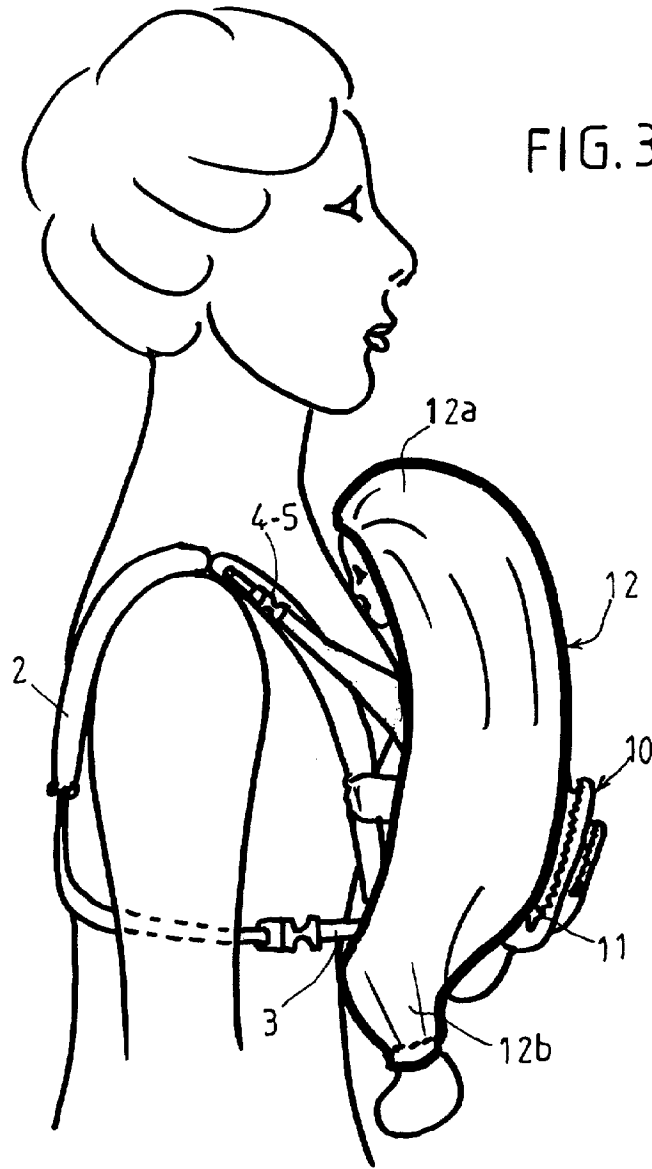
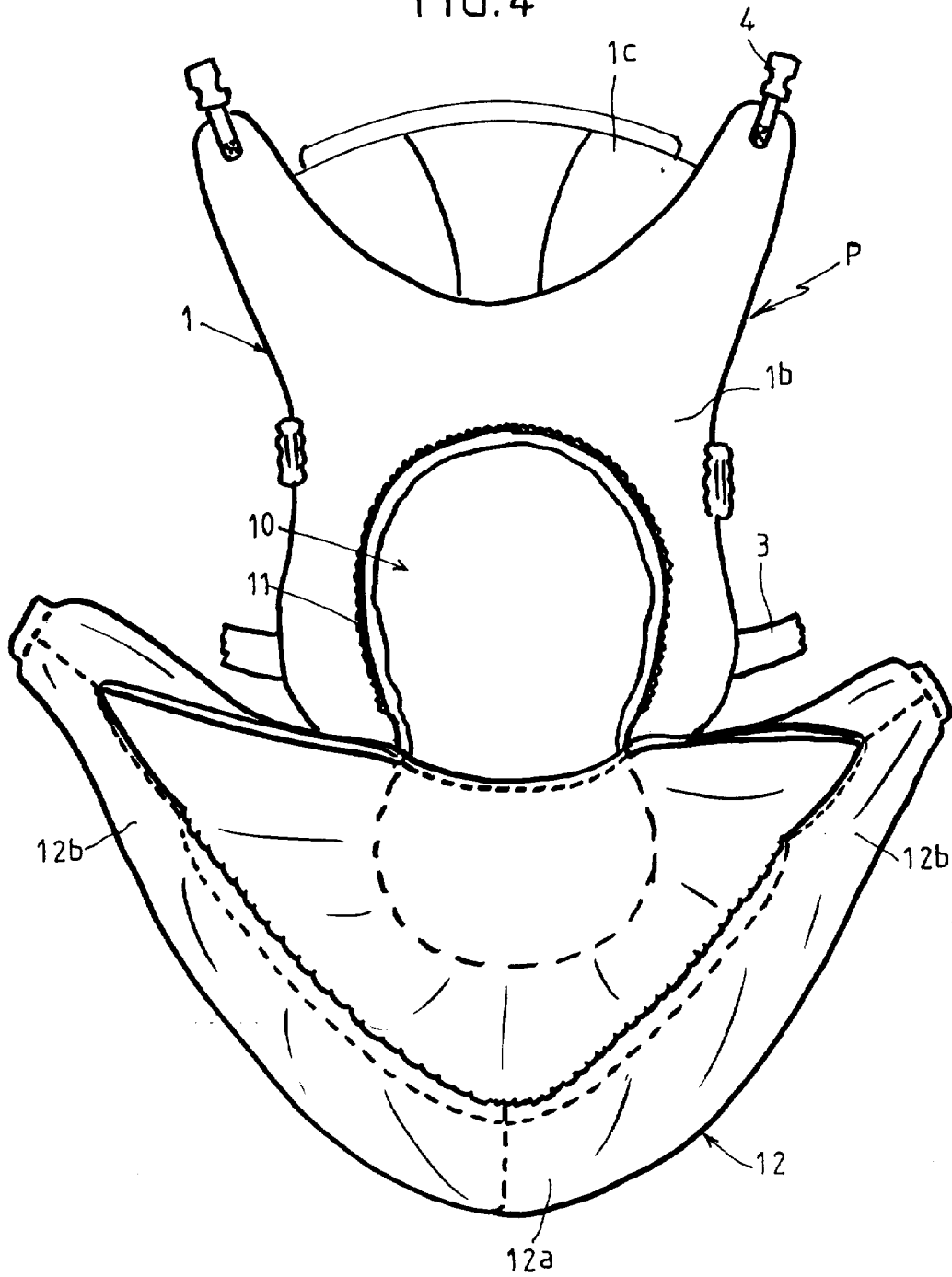


FIG. 3



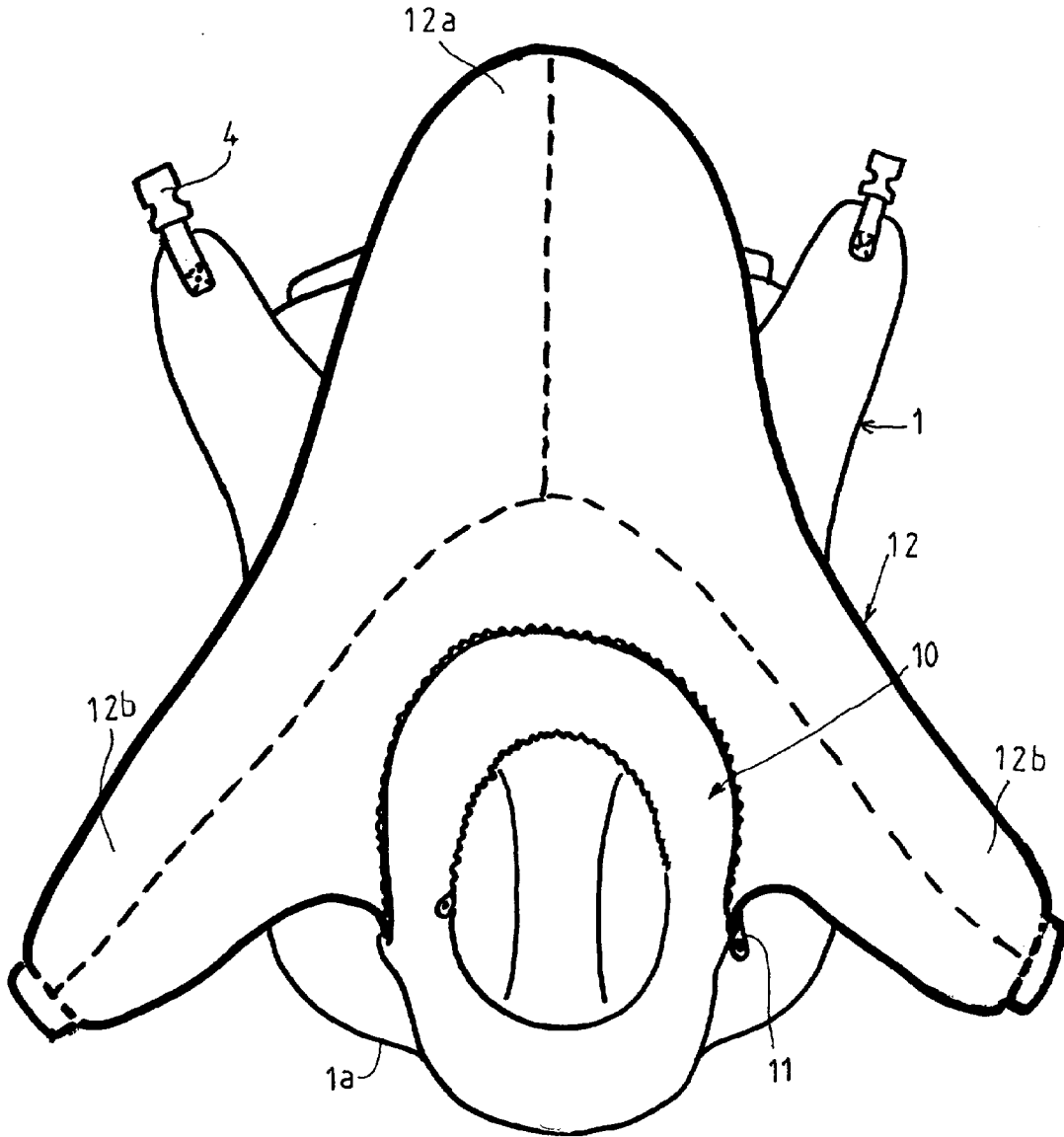
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FIG. 4



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FIG. 5





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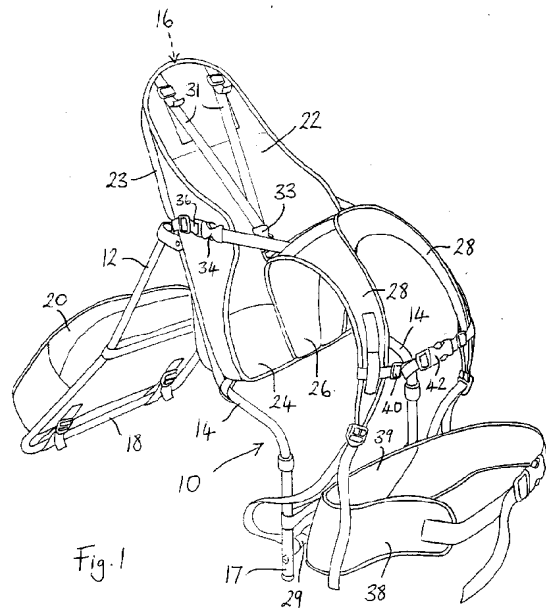
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54 **Baby/child carrier.**

57 The baby carrier has a substantially rigid frame (10) including an upper U-shaped portion (16) extending from respective side frame members (14), a seat (22, 24) for a baby suspended from said U-shaped portion, and straps (28) for mounting the carrier on a user's back. The upper U-shaped portion (16) extends upwards in alignment with or at an obtuse angle to the respective side frame members (14) and the seat (22, 24) for the baby is suspended from the U-shaped portion at the front thereof, in the orientation in which the carrier is to be used. Preferably, the seat for the baby is front loading in that it is provided with a releasable frontal flap (26). Preferably, also, the seat for the baby has a seat position proper (24) incorporating a rigid or semi-rigid element.



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This invention concerns a baby or child carrier (hereinafter referred to as a baby carrier) of the type having a substantially rigid frame, e.g. typically of metal tubing, and straps whereby it is mountable on a user's back.

In one known baby carrier of this type the tubing providing the frame is configured to include an upper U-shaped portion which extends from and at an acute angle to respective side frame members. In the intended orientation of use of the carrier the said U-shaped portion projects forwardly from the top of the side frame members and forms the front of the carrier which lies between a baby seated therein and the user when the carrier is mounted on the user's back. In this respect, a fabric seat for reception of the baby is suspended to the rear of the U-shaped portion and the straps to go over the user's shoulders are also attached to the U-shaped portion.

Conventionally, the fabric seat is in the style of a pouch or hammock, with holes provided for the baby's legs to project through and, optionally, with side adjustment by means of straps whereby the bottom of the pouch can be raised or lowered relative to the top of the frame (i.e. the U-shaped portion).

A back rest may be provided in the form of a padded board at the rear of the pouch and extending upwardly therefrom so as to support and/or shelter the head of a baby, particularly when sleeping. Additional fabric is usually suspended from the U-shaped portion of the frame and attached to other portions of the frame to provide an enclosure for the baby's body and legs. The U-shaped portion is padded in order to safeguard the baby who may tilt forwards and bump said portion.

Lower ends of the side frame members may, in simple versions, be connected by a further, lower U-shaped portion, which usually projects rearwardly therefrom in use. In this respect the side frame members generally extend obliquely between upper and lower U-shaped portions so that the frame, when viewed from the side, approximates to a reversed Z-shape.

Alternatively, in more complex versions, the lower ends of the side frames members may provide feet whereby the carrier can be supported on a surface, with one or more additional frame elements being pivotally connected to the rear of the side frame members to provide two further legs, the lower ends of which will also make contact with such surface. In this respect the additional pivotally connected legs are movable between a first "closed" position lying closely adjacent the respective side frame members and a second "open" position where their lower ends are swung out to provide additional supportive feet for the carrier. Stable support of such a carrier on a surface is particularly advantageous to the user when initially placing the baby therein and also immediately upon lowering the carrier from the shoulders.

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One object of the present invention is to effect improvements to a back-mounted baby carrier whereby it may be manufactured more cost effectively and whereby a baby may be more easily positioned therein or removed therefrom.

Additionally or alternatively, the invention may provide alternative means for stable support of the carrier upon a surface with the baby seated therein, which support means is easier for the user to position while the carrier is mounted on his/her back compared to the known pivotal legs and which is preferably adjustable in position so that the carrier may also be safely supported upon a sloping or uneven surface.

According to one aspect of the invention there is provided a baby carrier having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, and shoulder straps positioned for extending over a user's shoulders for mounting the carrier rearward of the user's back, characterised in that the seat for the baby has a back rest portion and is suspended from the U-shaped portion facing towards the user's back in use.

With such a construction no part of the frame intervenes between the baby and the shoulders of the user when the carrier is in use. In other words, there is no frontal part of the frame against which the baby may bump.

Preferably, the upper U-shaped portion extends generally upwards in the orientation in which the carrier is to be used, with a middle portion thereof being located adjacent a baby's head in use. Preferably, the upper U-shaped portion extends generally in alignment with the side frame member.

Equally importantly, the seat for the baby may be constructed more simply than hitherto from a production viewpoint with a back rest portion including a fabric pocket whereby it can readily be located over the U-shaped frame portion during manufacture. It may, in the same way, be removable by the user, for cleaning and repair.

A further simplification in the construction of the seat, both from the point of view of its production and as regards the manner of positioning a baby therein, is that it may now be fabricated with a releasable frontal flap, held at each side by e.g. conventional child proof releasable fastenings. Thus, with the carrier laid flat and the flap released and folded downwards or forwards a baby can be placed in the seat, lying on its back, before the flap is folded back over the baby and secured at both sides. This contrasts with the procedure necessary for positioning a baby in previously known carriers of this general back-mountable type where the legs of the baby had to be guided into the respective holes in the suspended pouch, often with some difficulty.

A further advantageous proposal in respect of the

carrier of the invention is that the seat should be provided with a seat portion proper incorporating a rigid or semi-rigid element whereby the bottom of the baby will have positive support from below, in contrast to the previous arrangement of the baby hanging in a pouch. Thus, according to a further aspect of the invention, a baby carrier of the type having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, and straps for mounting the carrier in a user's back is characterised in that the seat has a seat or base portion (or seat bottom) incorporating a rigid or semi-rigid element for support of the baby from below when the carrier is in its upright carrying position.

In respect of a further object of the invention, a separate aspect of the invention is a baby carrier of the type having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, straps for mounting the carrier on a user's back and support means which is pivotally connected to the respective side frame members and swingable relative thereto to an open position for supporting the carrier on a surface, characterised in that said support means is connected to at least one of the side frame members by way of a releasable locking mechanism whereby it may be positionally adjusted and locked in any selected open position for supporting the carrier on a surface or in a closed position adjacent the side frame members.

Preferably, a respective locking mechanism is provided at each side of the carrier frame, with both mechanisms requiring release to enable adjustment of the position of the support means. This safeguards against failure of one mechanism, although in most circumstances a single such locking mechanism would suffice.

For ease of release of the locking mechanism(s), particularly when the carrier is mounted on a user's back with a baby seated therein, a mechanism with a push button release is preferably employed. With the button or buttons depressed the position of the support means can be readily adjusted to that required, then, upon release of pressure from the button or buttons, the support means is automatically locked in the selected position. In this way angular positions for the support means can be selected whereby the carrier can be stably placed on rough, uneven or sloping ground.

In a preferred embodiment the support means is in the form of a further U-shaped member having end portions which are pivotally connected at or near ends of the respective side frame members. However, this is not essential, and in other embodiments the support means could be in the form of a U-shaped member having end portions which are pivotally connected to the side frame members at locations remote from

the ends of the latter. Alternatively, the support means could take the form of two separate legs or other supports, pivotally connected to the respective side frame members at or adjacent the lower ends of the latter, or remote from the lower ends of the latter. Yet another possibility is that the support means is unitary, and connected between the side frame members, but is not in the form of a U-shaped member.

Two specific embodiments of baby carriers in accordance with the various aspects of the invention will be described further, by way of example, by reference to the accompanying drawings, in which:

Fig. 1 is a front perspective view of a first embodiment in a condition for placement on a surface;

Fig. 2 is an identical view of the same embodiment with the frontal flap of the seat shown released and folded forwards; and

Fig. 3 is a corresponding view of a second embodiment of carrier in accordance with the invention.

Referring firstly to Figs. 1 and 2, this embodiment consists of a substantially rigid frame, conveniently fabricated from tubular aluminium, onto which a seat for reception of a baby is mounted. The frame is made up of two generally U-shaped elements, namely a main frame portion, designated by reference numeral 10, and a support portion 12.

For the purposes of the description, the main frame 10 is conveniently divided into two side frame members or limbs 14, which are each of kinked or jogged configuration, as shown, and are symmetrically formed, and an upper U-shaped portion 16 (not visible, but its position is indicated) which links the two side frame members 14 and extends in alignment with upper regions of the side frame members 14, as a continuation therefrom.

Ends of the support frame 12 are pivotally connected to the main frame at or about the regions where the respective side frame members 14 merge into the upper U-shaped portion 16. The support frame 12 is freely pivotal and can be swung between a closed or folded condition lying adjacent the side frame members 14 and an open condition, as shown, enabling the carrier to stand in an upright position on a substantially flat surface. One or more retainers or clips may be provided on either or both of the main frame and support frame which is/are usable to lock the support frame in either or both of the open and closed positions.

In this respect the ends of the side frame members 14 provide front feet 17 (only one is visible) and a connecting portion or crosspiece 18 of the support frame 12 provides a rearward support. As shown, a bag 20 may optionally be mounted onto the support frame 12.

The seat for the baby is made of fabric, typically textile fabric of a washable and weatherproof type, and comprises a back rest portion 22 with integral

side portions, a seat bottom 24 (which may be referred to as seat portion proper), and a frontal flap 26. Straps 28 for extending over a user's shoulders (not shown) whereby the carrier is mounted on the user's back are, in this case, provided as integral extensions from the frontal flap 26. Other ends of these straps 28 are connected at 29 to a crosspiece extending between end regions of the side frame members 14.

As is readily apparent from the drawings, the seat is suspended from the front of the main frame so that when the carrier is mounted on a user's back, a baby can be carried therein at a location between the frame and the user's back. In other words, no parts of the frame intervene between the baby and the user's back.

The back rest portion 22 of the seat has a downwardly open pocket or flap 23 on its rear side, which, in assembly of the carrier during manufacture, is located over the upper U-shaped portion 16 of the main frame, so that the seat is suspended therefrom in the illustrated manner.

The seat portion proper 24 incorporates a rigid or semi-rigid core to provide a firm base for the seat for supporting a baby from below. In this respect, the core may be a piece of hardboard or polypropylene or the like slipped between upper and lower layers of fabric and stitched or glued or otherwise fastened therein during manufacture.

As best shown in Fig. 2 two straps 31 extend from the top of the backrest 22 and one strap 32 extends centrally from the front of the seat bottom 24 and these straps 31, 32, which together provide a harness for the baby, are securable at a central location by means of a childproof fastening 33 on the end of one of them so as to retain a child in the seat. The straps 31, 32 are adjustable in length.

The frontal flap 26 is an additional device for holding a child in the seat. It also serves to properly position the child in the centre of the seat, as openings for the legs of the child are defined more narrowly at each side thereof, and to shelter the child to some extent. At each side the flap 26 is secured by conventional childproof releasable fastenings 34, comparable to the fastening 33. As shown, one portion of each fastening 34 is provided on a respective strap 36, connected to the edge of the backrest 22 or directly to the main frame, which is adjustable in length. In modified embodiments such adjustable straps could be used between the flap 26 itself and the respective fastening portions connected thereto, instead of or in addition to those in the illustrated embodiment.

As shown, a hip belt 38 for the user, which may or may not incorporate a lumbar pad 39, is mounted onto the lower ends of the side frame members 14 and/or the above mentioned crosspiece which extends therebetween. Also, straps 40 for holding the main shoulder straps 28 in a comfortable position at the front of the user's body are provided on the said

straps 28 for fastening across the chest of a user, again by means of a conventional fastening 42.

In use, with the frontal flap 26 released and drawn forwards, as in Fig. 2, and with the straps 31, 32 also released, a child may be placed in the seat 22, 24 and then secured therein upon reattachment of the respective features 33, 34. This may be accomplished with the support frame 12 folded into its closed position adjacent the side frame members 14 and the entire carrier laid flat on a convenient surface, in which respect the child will be positioned while lying on its back. Thereafter, the carrier can be lifted directly onto a user's back, or the support frame 12 may be swung out, as shown, and the carrier disposed as shown in Fig. 1 for a while before being lifted onto the user's back, whereupon the support frame should be swung to its closed position again.

Alternatively, the child may in some cases be positioned in the seat 22, 24 while the carrier is supported in an upright position, as shown in the drawings.

When the carrier is to be lowered from a user's back, the user will generally wish to reach behind and swing the support frame 12 to an open position so that, when lowered, the carrier can straightaway be supported on the ground, or any other convenient approximately flat surface, before the child is removed.

Turning now to the embodiment of Fig 3, the details of the main frame and the seat are identical to those just described for the first embodiment, so they will not be repeated. The corresponding parts are indicated by the same reference numerals elevated by 100.

This embodiment differs in respect of the support frame. With the previous embodiment, the user may have some trouble in manipulating the support frame 12 to swing it between closed and open positions while the carrier is actually on his/her back. Also, with only one fully open position, the carrier is only stably supported when placed down on a relatively flat surface. These problems are obviated with the support frame of this further embodiment, which is designated by reference numeral 52.

As shown, this support frame 52 is also of U-shaped configuration, but in this case, ends thereof are pivotally connected to lower ends 117 of the side frame members 114 by way of respective locking devices 54 (only one of which is visible). Each device 54 includes a push button 56 and, upon depression of both at the same time, the support frame 52 is released to pivot freely. The frame 52 can then be positioned at any described angle relative to the main frame 110, and, upon release of the buttons 56, it will be locked in the selected position. Depression or release of the buttons 56 is readily accomplished by a user while the carrier is mounted on his/her back, and the selection of the angle of the support frame allows the carrier to be stably supported on a sloping or un-

even surface.

In Fig. 3, although the frontal flap 126 is connected to the front of the seat portion proper 124, as in the first embodiment, there is a lower extension, designated 127, providing an additional pad for the comfort of the user.

The details, shown in Fig. 3, of construction of the support frame could, of course, vary in other embodiments, while still retaining the feature of releasable locking devices to connect it to the main frame. Also so long as the support frame is a unitary element (or one piece) only a single such releasable locking device would suffice. In modified embodiments, the locking device or devices could be released by actuation by the user of a lever operated cam instead of a push button, or one or more pressure locks could be used in place of the illustrated type of releasable locking devices. Other variations are possible.

More generally, the invention is not limited to the details of the illustrated embodiments and many variations are possible. For example, the main frame 10, 110, could include additional crosspieces, such as a crosspiece in the vicinity of the front of the seat bottom 24, 124 to which the latter and/or the frontal flap 26, 126 could be enclosed. Also, the straps 28 need not be extensions of the flap 26 and could be connected thereto at some other position, or connected to another suitable and/or point in the frame or seat.

Claims

1. A baby carrier having a substantially rigid frame (10) including an upper U-shaped portion (16) extending from respective side frame members (14), a seat (22, 24) for a baby suspended from said U-shaped portion, and shoulder straps (28) positioned for extending over a user's shoulders for mounting the carrier rearward of the user's back, characterised in that the seat for the baby has a back rest portion (22) and is suspended from the U-shaped portion facing towards the user's back in use.
2. A baby carrier according to claim 1 wherein the back rest portion of the seat includes a fabric pocket (23) whereby it is mounted over the U-shaped portion of the frame.
3. A baby carrier according to claim 1 or 2 wherein the seat for the baby is provided with a releasable frontal flap (26).
4. A baby carrier according to claim 3 wherein the frontal flap is securable at each side by releasable fastenings (34).
5. A baby carrier according to claim 4 wherein the

straps for mounting the carrier on a user's back are provided as extensions of the frontal flap.

- 5 6. A baby carrier according to any preceding claim wherein the seat for the baby has a seat portion (24) (or seat bottom) incorporating a rigid or semi-rigid element for support of the baby from below when the carrier is in its upright carrying position.
- 10 7. A baby carrier according to any preceding claim further including support means (12, 52) pivotally connected to the respective side frame members and swingable relative thereto to an open position for supporting the carrier on a surface, said support means being connected to at least one of the side frame members by way of a releasable locking mechanism (54) whereby it may be positionally adjusted and locked in a selected open position for supporting the carrier on a surface or in a closed position adjacent the side frame members.
- 15 8. A baby carrier according to claim 7 wherein the or each locking mechanism is releasable by a push-button (56).
- 20 9. A baby carrier according to claim 7 or 8 wherein the support means is in the form of a further U-shaped member (52) having end portions which are pivotally connected at or near ends of the respective side frame members.
- 25 10. A baby carrier according to any preceding claim wherein the upper U-shaped portion extends generally upwards in the orientation in which the carrier is to be used, with a middle portion thereof being located adjacent a baby's head in use.
- 30 11. A baby carrier according to any preceding claim wherein the upper U-shaped portion extends generally in alignment with the side frame members.
- 35 12. A baby carrier of the type having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, and straps for mounting the carrier on a user's back, characterised in that the seat has a seat portion proper (or seat bottom) incorporating a rigid or semi-rigid element for support of the baby from below when the carrier is in its upright carrying position.
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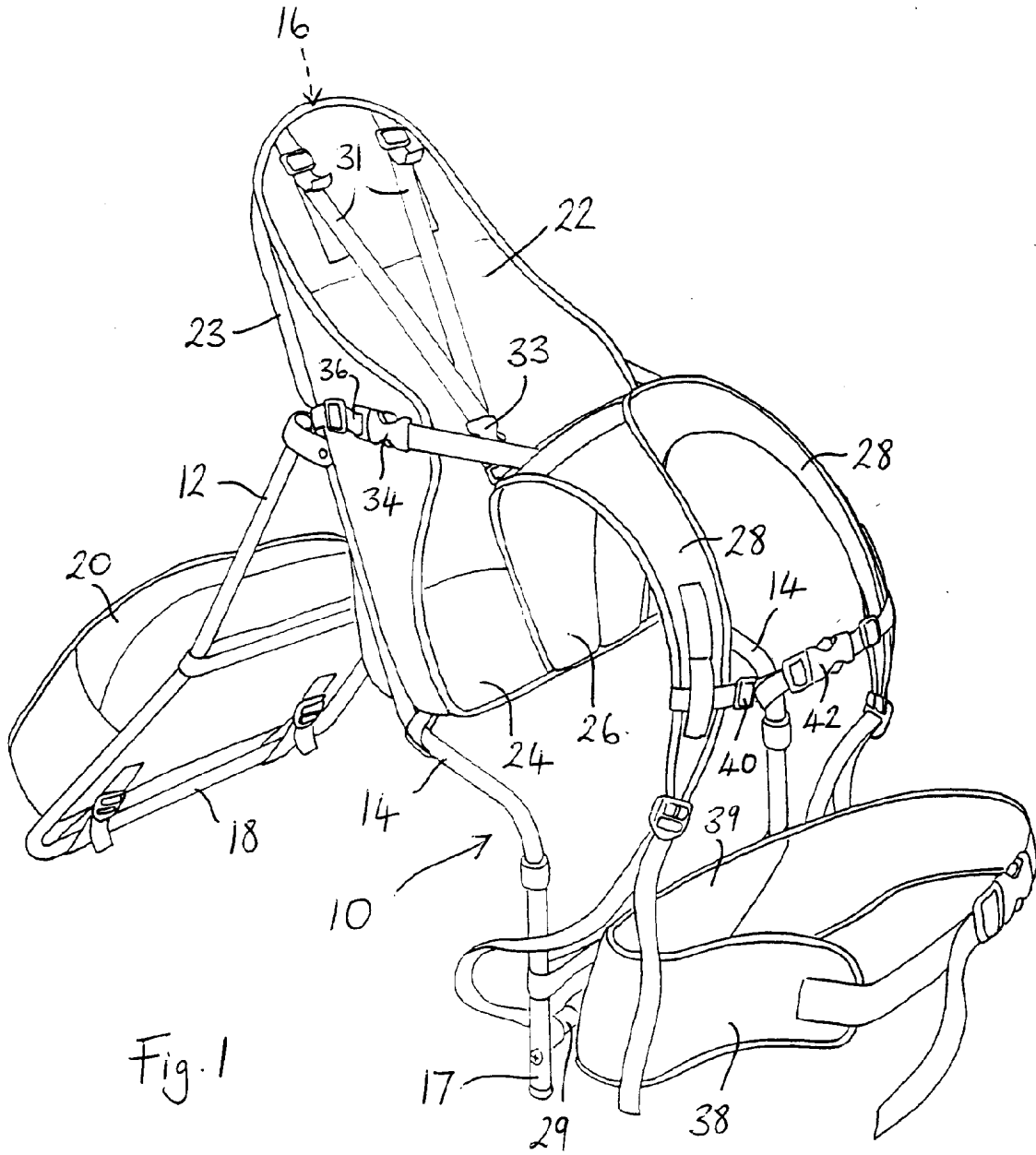


Fig. 1

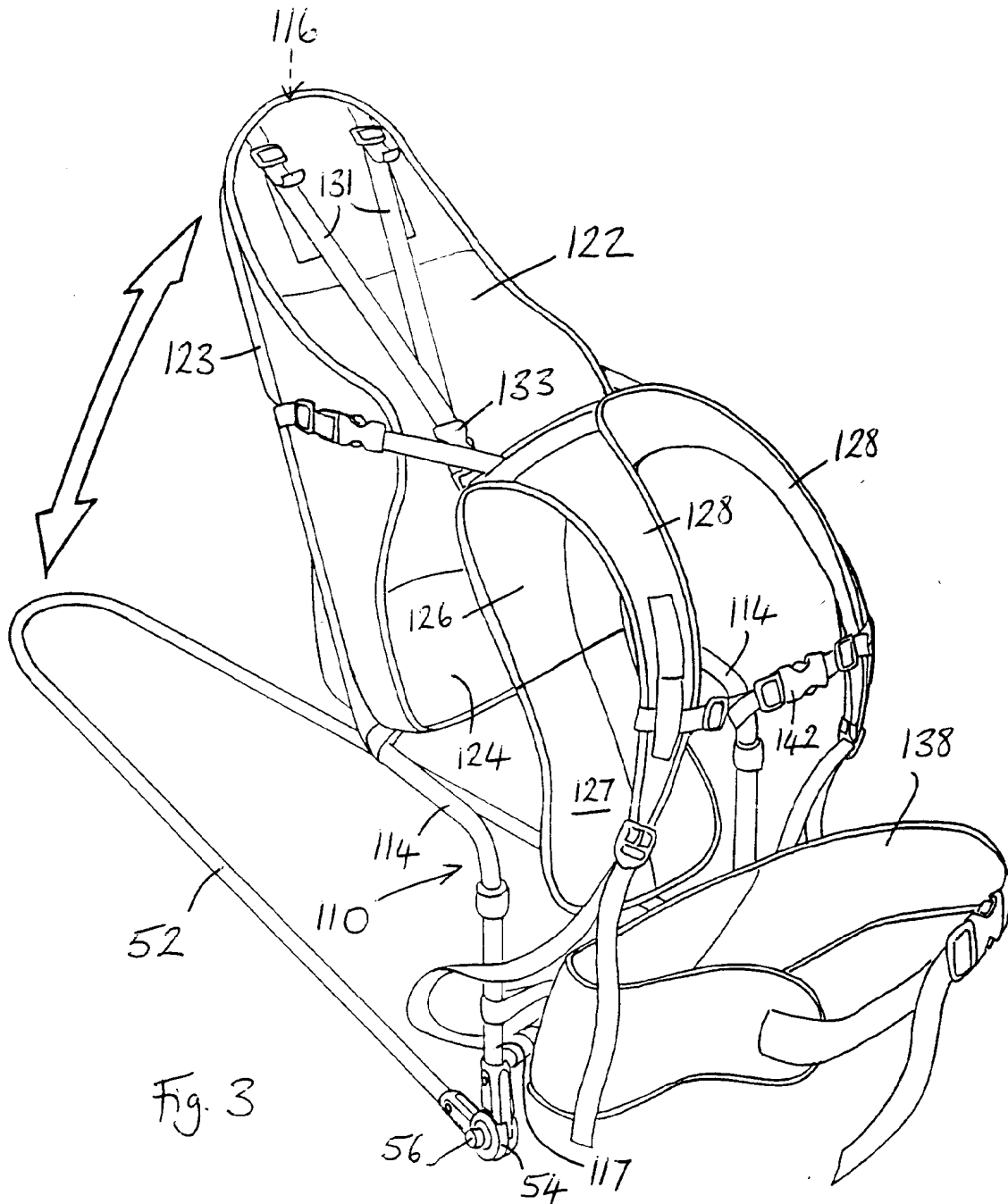


Fig. 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
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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.6)
X	EP-A-0 509 107 (INTERNATIONAL DESIGN/MANUFACTURING INC.)	1,10,11	A47D13/02
Y	* column 4, line 45 - column 7, line 45; figures 4-6 *	2	
A	---	7,9,12	
Y	FR-A-2 321 251 (SALINO)	2	
A	* page 1, line 36 - page 2, line 30; figures 1-3 *	12	
A	FR-A-2 571 238 (CLERC) * figures 1-3 * -----	10,11	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A47D
Place of search	Date of completion of the search	Examiner	
THE HAGUE	3 April 1995	Mysliwetz, W	
CATEGORY OF CITED DOCUMENTS		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	
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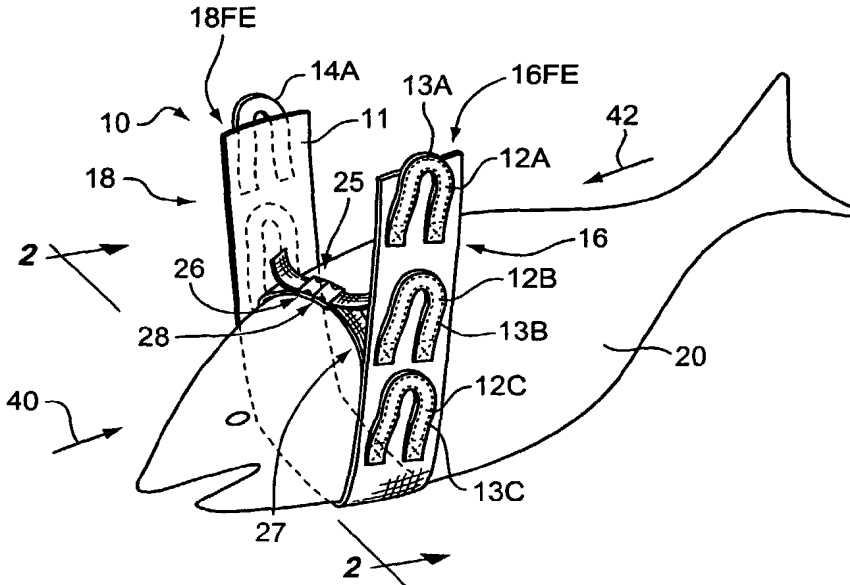
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AN AID FOR LIFTING AND CARRYING A MASS/OBJECT



(57) Abstract: A device (10) having a flexible elongated support member (11) having an upsideside, an undersideside, and a first and second extension (16, 18) on either side of a central-portion, each of the first and second extensions have a free-end. A first and second strap portion (26, 27) affixed to and extending from the upsideside between the free-ends of the support member (11). These strap portions are employed for positioning around the mass (20). A matable first and second coupling (28A, 28B) is attached to a free end-section of each of the first and second strap portions. The strap portions (26, 27) may be adjustable in length with each respective coupling being slidably attached to its respective free end-section. Extending from the undersideside of

the support member and along each of the first and second extensions, is a respective first and second plurality of handles (12A, 12B, 12C, 14A, 14B, 14C) affixed to at least the undersideside. Also, a method of lifting to carry a mass (20) employing a device (10) comprising a flexible elongated support member (11) characterized herein. The method includes: placing the support member (11) under the mass (20) and positioning the first and second strap portion (26, 27) therearound; engaging a first and second coupling (28A, 28B) such that the mass fits snug within the strap portions; and grasping and applying a force to at least one handle from each of a first and second plurality of handles extending from, and affixed to, the undersideside along a respective one of the first and second extensions, to aid in the lifting.



WO 01/89978 A1

An Aid for Lifting and Carrying a Mass/Object

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Background of the Invention

This application claims priority under 35 U.S.C. 119(e) and 37 C.F.R. §1.78 to Provisional Patent Application US 60/205,747 filed 19 May 2000.

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In general, the present invention relates to aids used by individuals to assist them in lifting and moving large, heavy objects (packages and other large, awkward to lift-and-carry objects without handles or hand-holds) and other masses (including sedated, injured or unconscious mammals, large fish, and so on). Although many devices have been designed and are currently in use to lift sedated, injured, or unconscious patients from the ground or other surface on which they are lying helplessly into a stationary chair, wheelchair, bed, cot or other patient transport device, operating table, *etc.*, these known devices are bulky, heavy, and awkward to handle in-and-of themselves, and difficult if not possible to utilize in confined spaces (such as a damaged vehicle, behind furniture, in a bathtub, *etc.*). Here, more particularly, the invention relates to a novel, lightweight, easy to operate lifting and carrying device made of a strong webbing or fabric-type material and associated technique for aiding in lifting and carrying large objects and masses.

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The ingenious device and associated technique provide medical personnel, common carriers of packages, shipping company docking crews, moving company drivers, marine biologists, construction/highway workers, carpet layers, and other individuals engaged in the lifting and/or moving of objects and masses, with a flexible, multi-use device with portable, reusable hand-holds/handles. As one will better appreciate after viewing the figures and Exhibit A, incorporated herein by reference, unlike the available large, bulky, full-body sized patient transporters (scoop cots, scoop stretchers, backboards, spine boards, netting, basket type stretchers, and the like), the handy lifting device of the invention has (1) a plurality of tiered hand-holds along the underside of each of two extensions of a flexible elongated support member, plus (2) an adjustable strap/belt having at least two strap portions, integrally as a unitary strap or individually attached to the upperside of the flexible elongated support member such that the mass contacts the upperside of the elongated support member and the strap/belt can be wrapped around the object/mass to temporarily anchor it to the flexible elongated support member while being

lifted, moved, and positioned. Within the spirit and scope of the contemplated design goals, many different suitable flexible materials, temporary and permanent attachment mechanisms, suitable structure alternatives, *etc.*, may be incorporated.

5 More particularly, within the medical care and biomedical research fields (human, veterinarian, marine biology, and so forth), health care and personnel and researchers frequently are called upon to lift a patient or research subject, who has fallen, been sedated, injured or otherwise incapacitated, and move the patient/subject to a destination whereby medical assistance or procedures can be administered, or where the patient/
10 subject can safely rest, and so on. The traditional method of lifting and moving human patients, especially in an emergency situation requiring immediate assistance, is to do so *without* aid of one of the currently-available, bulky patient transporters (cot, stretcher, rigid backboard, netting) – as it is often quicker and in certain circumstances where space is limited, necessary (as these available patient transporters are simply too large in size to
15 fit). Lifting without such an aid is often referred to as the “extremity lift” and involves one person squatting down to ‘bear-hug’ the patient’s upper body under the armpits, while at least one additional person lifts the patient’s legs. This makes for unequal weight distribution between the two persons doing the lifting, as the person bearing the upper-body weight has most of the load. Further, it is awkward to put the patient down again as it involves a twisting motion of the persons doing the lifting (and he/she can be injured
20 in the process). Additionally, the patient can slip from the arms of those performing the extremity lift. It is also difficult to perform the extremity lift when a patient is in tight quarters, such as between a bed and a wall, or between a bathtub and a toilet, in the bathtub, pinned within a damaged vehicle, and so on.

25 Within the emergency medical services (ambulance services, fire departments, extended-care facilities) category, the following problems are frequently encountered:

(A) Ambulance service or fire department is called upon to assist a patient who has fallen but is uninjured, to get back into a chair, wheelchair, or bed;

30 (B) Ambulance service or fire department needs to move a patient from the floor to a cot or stair chair in preparation for transportation to a treatment facility;

(C) In an extended-care facility, a patient needs to be lifted back into a chair, wheelchair, or bed after a fall; and so on.

35 Therefore, a new and useful lifting aid is needed to: prevent/minimize risk of injury to the individuals doing the lifting as well as risk of further injury to a patient/

person in need of repositioning; make lifting heavy objects/masses less stressful– including lifting patients from confined spaces and awkward positions; be less difficult to position under a mass (especially an unconscious or sedated mammal) and later removed from under the mass once moved and positioned at a destination. Unlike the transporters and lifting techniques currently available, the technique of the invention employs a unique, safe and handy to operate device, as designed requiring less space to store and lighter (making it easier to carry into a rescue situation) than conventional transporters.

Summary of the Invention

It is a primary object of this invention to provide an aid for lifting and carrying a mass such as a mammal or object, that includes a flexible device with a plurality of tiered handles, or hand-holds, along an underside of each of a first and second extension of a flexible elongated support member. Adjustable-length first and second strap portions of a strap/belt member (fabricated as one unitary or multiple integral, or separated, sections) are affixed to extend from an upperside of the flexible support member. These first and second strap portions are employed for positioning around the mass – to temporarily anchor the mass to the support member while being lifted and/or moved and repositioned. It is a further object to provide a technique, utilizing a lifting device of the invention, to lift, and/or move and reposition awkward, heavy masses (including mammals and objects).

The advantages of providing the new lifting aid and associated new method, as described and supported hereby, include the following:

(A) **Reduce potential for further injury**– The new device helps avoid injury to personnel utilizing it to lift heavy objects/masses as well as avoiding further injury to or damaging an object/mass undergoing movement, aids in making the lifting process less strenuous and more comfort patients on which it is being used.

(B) **Labor cost reduction**– Lifting of patients/objects can be readily accomplished with two people; and in a time when labor cost is a driving concern in every service field, overall labor costs may be reduced utilizing the device and technique of the invention.

(C) **Use simplicity and versatility**– Available patient transporters/cots/stretchers/backboards/netting/*etc.* require a great deal of patient manipulation to place the patient on the device, whereas no preliminary manipulation of the patient is required to use the device–making the lifting process more comfortable. Thus, patient movement is minimized, reducing risk of injury and making it useful in tight spaces/quarters. Additionally, several (*e.g.*, three) of the lifting devices of the invention can be used (with

the second and third under the hips and calves, allowing the lifting to be accomplished with a minimum of patient movement). The device can be used in conjunction with existing carrying boards, such as spine boards, etc. The technique of the invention, as discussed above, can be employed on a wide variety of objects/masses.

5 (D) **Production cost reduction**– The device has few components, is not brittle or bulky, is compact, and lightweight, thus saving valuable storage space on rescue units, hospital wards, research labs, trucks, and so on. Further, reducing the weight of the lifting device, reduces the total amount of weight that must lifted and moved. By way of example, a device of the invention can be rolled up to a compact six-inch by six-inch
10 bundle and weighs just three pounds.

(E) **Design simplicity** – Most available patient transporters/cots/stretchers/backboards/netting/etc. are so much more awkward and complicated to use than just using the extremity lift (i.e., muscling a patient off the floor), no device is used at all. The simplicity of the device of the invention will be conducive to its repeated use; and design
15 simplicity reduces the amount of time needed to train personnel to use it.

Briefly described, once again, the device of the invention includes: a flexible elongated support member having an upperside, an underside, and a first and second extension on either side of a central-portion, each of the first and second extensions have a free-end. A first and second strap portion are affixed to and extend from the upperside
20 between the free-ends of the support member. These strap portions are employed for positioning around the mass. A matable first and second coupling (for example, designed for releasable-engagement thereof) is attached to a free end-section of each of the first and second strap portions. Extending from the underside of the support member and along
25 each of the first and second extensions, is a respective first and second plurality of handles affixed to at least the underside (and can extend through the extension thickness). The strap portions may be adjustable in length with each respective coupling being slidably attached to its respective free end-section. Each of the handles are preferably affixed at a permanent location along the underside, for stability when using the device. Each of the
30 handles can comprise a cord section (for reinforcement, added comfort for users, and strength) interposed within a length of flexible tubing.

As will be appreciated, there are numerous additional features that *further* distinguish this invention from known lifting apparatuses and techniques. For example,
35 the tiered handle layout along the underside may be as follows: a first and second end of a first handle of the first plurality are each located a distance $d/1$ from a central-area of the

central-portion, a first and second end of a first handle of the second plurality are each located a distance d_{r1} from the central-area, a first and second end of a second handle of the first plurality are each located a distance $d/2$ from the central-area, a first and second end of a second handle of the second plurality are each located a distance d_{r2} from the central-area, a first and second end of a third handle of the first plurality are each located a distance $d/3$ from the central-area, and a first and second end of a third handle of the second plurality are each located a distance d_{r3} from the central-area. In this configuration (see FIG. 4 for reference), distances $d_{r1} \approx d_{r2}$ and $d/2 \approx d_{r2}$, with distance $d/2$ being greater than distance d_{r1} and distance $d/3$ being greater than distance $d/2$. Also, where elongated support member has an overall length defined as L_0 , one may choose to place the first handles of each plurality of handles such that the difference of the two quantities, $L_0/2 - d_{r1}$, is greater than or equal to approximately a value $L_0/6$ to $L_0/5$.

The first and second strap portions may be integral with a center strap portion having a length, L_{CSP} , a periphery of the center strap portion being affixed by way of a plurality of stitches (with or without an additional fastening mechanism, such as an adhesive) through at least the upperside of the support member. Alternatively, the first and second strap portions may be affixed to the upperside in spaced relationship, for example, a spacing therebetween being generally less than or equal to the length of the central-portion of the support member. Further, defining the support member overall length as L_0 : the first strap portion can be affixed so that it extends from a first area of the upperside located a distance at least equal to approximately a value $L_0/6$ to $L_0/5$ from the free-end of the first extension. Likewise, the second strap portion can be affixed so that it extends from a second area of the upperside located a distance at least equal to approximately a value $L_0/6$ to $L_0/5$ from the free-end of the second extension. The central-portion of the support member may include a pocket (closed at one end) or a sleeve-pocket (both ends open) adapted for receipt of an end of a stabilizing panel.

The elongated support member may be made of a flexible, pliable material such as fabric, webbing, and flat cording, allowing for the strap portions to be affixed with a plurality of stitches through at least the upperside and each handle to be, likewise, affixed with a plurality of stitches through at least the underside. To accommodate lifting and carrying of larger-sized masses, an extender-strap having a third free end-section to which a third coupling is slidably attached and a fourth free end-section to which a fourth coupling is slidably attached, can be included: the third coupling of the extender-strap being adapted for releasable-engagement with a coupling of the first strap portion and the fourth coupling being adapted for releasable-engagement with a coupling of the second strap portion. A relatively-rigid structure, such as a contoured board adapted for

supporting the mass, can be employed. Such a structure preferably has a left and right aperture through which a respective one of the first and second strap portions is threaded.

5 The invention also includes a method of lifting to carry a mass employing a device comprising a flexible elongated support member characterized herein. The method includes: placing the support member under the mass and positioning a first and second strap portion, each affixed to and extending from the upperside between the free-ends, around the mass; engaging a first and second coupling, each of which is attached to a respective free end-section of the first and second strap portions, such that the mass fits snug within the strap portions (generally taut); and grasping and applying a force to at least one handle from each of a first and second plurality of handles extending from, and affixed to, the underside along a respective one of the first and second extensions, to aid in the lifting. With the support member made of a flexible, pliable material such as fabric, webbing, and flat cording the strap portions may be affixed by stitching.

15 Many of the additional novel features set forth above in connection with the device, also *further* distinguish the method of the invention characterized herein. For example, a mass (such a patient) is preferably carried by having a first user hold at least one handle from the first plurality, a second user hold at least one handle from the second plurality, with both users, together, repositioning the mass from an original position. Once the mass has been repositioned, the coupling may be released from engagement to remove the strap portions from the snug fit around the mass. In the event a stabilizing panel is employed, it can be handily inserted into a pocket (closed at both ends or open at both ends, as a sleeve) located within the central-portion of the flexible support member – here, the panel is placed together with the support member, under the mass. In the event an extender-strap is employed, each of its third and fourth couplings can be releasably engaged with a respective coupling of the first and second strap portions. Adjustments can be made to one or more of the first and second strap portions and/or either end of the extender-strap to accomplish a snug fit around the mass. In the event a relatively-rigid structure is employed, the mass is placed atop the structure with the support member thereunder.

Brief Description of the Drawings and Exhibit A

35 For purposes of illustrating the innovative nature, as well as the flexibility of design and versatility, of the preferred device and method (and alternative embodiments), the invention is hereby disclosed and more particularly described by referencing the accompanying drawings of the invention (in which like numerals in the various figures designate like parts). Each figure has been included to communicate the features of the

innovative system and method of the invention by way of example, only, and are *in no way* intended to unduly limit the disclosure hereof.

FIG. 1 is an isometric of a preferred device 10 of the invention, employed around a mass such as the identifiable fish-shape, outlined for reference only, at 20.

5 FIG. 2 is a sectional view of mass 20 taken along 2-2 (through, only, the mass 20) of FIG. 1 to include a side view of device 10.

FIG. 3 is an isometric of alternative device 30 of the invention, with coupling pair 38A, 38B in mating engagement such that strap portions 36, 37 are joined.

10 FIG 4 and 5 are, respectively, plan views of an upperside and the 'flip' underside of a preferred device of the invention illustrating several novel features including the strap/belt adapted for positioning around a mass, tiered hand-hold, and stabilizing panel features.

FIG. 6 is a top plan view of an extender-strap 65 feature of the invention.

15 FIG. 7 depicts device 10 employed by a first and second user (each user, here, having grasped two handles in one hand) to aid in lifting mass 100 (*e.g.*, the human outlined) from a position lying on the floor.

FIG. 8 is a sectional view of mass 120 (here, by way of example, a roll of fencing) atop a contoured structure 170 employed as part of device 130 to aid in lifting and carrying the mass.

20 Exhibit A is a copy of several photos illustrating a device (*e.g.*, that at 10) of the invention employed as an aid to lift and carry, to reposition, a mass such as the patient shown as being lifted from a position lying on the floor to a position sitting in a chair.

Detailed Description of Preferred and Alternative Embodiments

25 The device 10 of the invention in FIG. 1 is employed around a mass such as the identifiable fish-shape, outlined for reference only, at 20. One can appreciate the very many types of masses (from mammals to inanimate objects) on which device 10 can be used to aid in lifting and carrying. Mass 20 may be placed atop elongated support member 11, or the mass lifted and support member 11 placed under mass 20, from either of the
30 directions labeled 40 and 42. Elongated support member 11 (see, also, details depicted in FIGs. 4 and 5) has two extensions identified and labeled 16, 18 on either side of a central-portion identified and labeled 15. At each end of extensions 16, 18 a respective free-end has been identified and labeled 16FE and 18FE for purposes of describing the
35 features of device 10. Along extension 16, in a three-tiered hand-hold fashion, are handles 12A, 12B, 12C and along extension 18 one can see the top of handle 14A and another handle (not labeled, in phantom). Interposed within each handle at 12A, 12B, 12C is a length of cord 13A, 13B, 13C; in such a case, handles 12A, 12B, 12C, 14A, etc. can be

fabricated from lengths of flexible tube stock (such as tubular webbing) and affixed, by way of suitable stitching with sturdy threading for example, to the support member. The adjustable strap/belt member 25 consists, as shown in FIG. 1, of two strap portions 26, 27 and coupling pair 28 engaged to join strap portions 26, 27. Strap portions 26, 27 can then, if desired or needed, be adjusted to create a snug fit around mass 20, thus, temporarily suitably anchoring mass 20 so it can be lifted and carried/repositioned.

In FIG 2, one can better appreciate the flexibility in design utilizing a multi-tier structure of hand-holds, here, shown as two three-tier sets labeled 12A - 12C and 14A - 14C, each set located along the underside as attached to a respective extension 16, 18 of the support member 11. As can be viewed more-easily in the plan views of FIGs. 4 - 5, each handle 12A, 12B, 12C has a respective pair of ends 22A1-22A2, 22B1-22B2, 22C1-22C2 permanently located as shown affixed to the underside along extension 16 (the right hand side of FIG. 2). Likewise, each handle 14A, 14B, 14C has a respective pair of ends 24A1-24A2, 24B1-24B2, 24C1-24C2 permanently located as shown affixed to the underside along extension 18 (the left-hand side of FIG. 2). Adjustable strap/belt 25 has a quick-release coupling pair 28A, 28B (for example, preferably, a releasable mechanism such as a buckle, quick-release clip, **VELCRO**[®] hooks-and-loops, traditional seatbelt buckle, backpack/fanny-pack buckles, spring-release or other type of suitable releasable fastener capable of being attached to a strap member) and is shown wrapped around mass 20 (*e.g.*, a mammal body) to temporarily anchor it to support member 11 while mass 20 is being lifted, moved, and positioned/repositioned.

Each end of the strap/belt 25 is preferably affixed or secured by suitable means for permanent location (stitching, adhesive, thermo-forming/heat-bonding, preforming integral with the member 11, and so on) to extend from support member 11 such that an object/mass 20 positioned along the direction of arrow 40, for example, contacts strap portions 26, 27, 29 of belt/strap 25 as well as (since the belt/strap 25 has a width smaller than support member 11) the upperside of support member 11. Preferably, the belt/strap 25 can be tightened around mass 20 using couplings 28A, 28B that are slidably attached to respective free end-sections of this strap/belt 25.

FIG. 3 further illustrates the flexibility of design of the invention. The device 30 has two-tiered hand-holds: Two sets of handles are shown, one set labeled 32A - 32B located along extension 46 (having a free-end identified as 46FE) and another set of handles 34A - 34B located along extension 48 (having a free-end identified as 48FE). The adjustable strap/belt labeled 35, by way of further example, is shown with two strap

portions 36, 37 attached to the upperside of support member 41 with a spacing 39 therebetween. Quick-release buckles labeled 38A, 38B join strap portions 36, 37. For purposes of discussion, a distance between the areas from which strap portions 36 and 37 extend from the upperside is identified and labeled L_{CSP} .

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The plan views of upperside of support member 11 shown in FIG. 4 and the underside of support member 11 in FIG. 5 provide reference details to additional novel structure of the invention. Here, the support member overall length is designated as L_0 . For example, the tiered handle layout along the underside may be as follows: the ends 24C1, 24C2 of a first handle (14C) of the first plurality are each located a distance $d/1$ as referenced from a central-area of the central-portion identified in FIG. 5 at 15, the ends 22C1, 22C2 of a first handle (12C) of the second plurality are each located a distance dr_1 as referenced from the central-area, the ends 24B1, 24B2 of a second handle (14B) of the first plurality are each located a distance $d/2$ as referenced from the central-area, the ends 22B1, 22B2 of a second handle (12B) of the second plurality are each located a distance dr_2 as referenced from the central-area, the ends 24A1, 24A2 of a third handle (14A) of the first plurality are each located a distance $d/3$ as referenced from the central-area, and the ends 22A1, 22A2 of a third handle (12A) of the second plurality are each located a distance dr_3 as referenced from the central-area. In this configuration as referenced, one can appreciate that distances $d/1 \approx dr_1$, $d/2 \approx dr_2$, $d/3 \approx dr_3$, distance $d/2$ is preferably greater than $d/1$ and distance $d/3$ is preferably greater than $d/2$. Also, where elongated support member has an overall length defined as L_0 , one may choose to place the first handles 14C, 12C such that the difference of the two quantities, $L_0/2 - d/1$, is greater than or equal to approximately a value of one-sixth to one-fifth the overall length of the support member, or $L_0/6$ to $L_0/5$.

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Turning to FIG. 4, strap portions 26, 27 each have a coupling 28A, 28B slidably attached to a respective free end-section 26E, 27E. Strap portions 26, 27 may be integral with a center strap portion 29 having a length, L_{CSP} , for reference. A periphery of the center strap portion 29, here, is shown affixed by way of a plurality of stitches 21 (with or without an additional fastening mechanism, such as an adhesive) through at least the upperside of support member 11. Alternatively, the strap portions may be affixed to the upperside in spaced relationship (see, once again, FIG. 3), a spacing 39 therebetween being generally less than or equal to central-portion 15. Referring to both FIGs. 4 and 5, (support member referenced length, L_0): each strap portion 26, 27 can be affixed so that it extends from a respective first and second area of the upperside located a distance

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(respectively D_{STP-L} , D_{STP-R}) at least equal to, for example, a value of one-sixth to one-fifth the overall length of the support member, or $L_0/6$ to $L_0/5$, from the free-end 18FE, 16FE of the respective extension 18, 16. The central-portion of the support member may be fabricated to include a pocket (closed at one end as shown in phantom 71) or a sleeve-pocket (open at both ends) adapted for receipt in the direction 78 of an end of stabilizing panel 70 (with or without hand-hold apertures such as those labeled 74, 72).

As illustrated in FIG. 6 (see also FIG. 8), to accommodate lifting and carrying of larger-sized masses, an extender-strap 65 includes a belt/strap member 61 having a free end-section 68E to which coupling 68A is slidably attached and another free end-section 66E to which coupling 68B is slidably attached. The device of the invention in FIG. 8 at 130, shows coupling 68A of extender-strap 65 in releasable-engagement with coupling 138A of strap portion 136 and coupling 68B in releasable-engagement with coupling 138B of strap portion 137. A relatively-rigid structure can be employed, such as the contoured board at 170 adapted for supporting the mass 120 (such as the roll of fencing, or carpet, illustrated in FIG. 8). Such a structure preferably has a left and right aperture (174, 172 – which may be hand-holds of a spine board, such as is currently in use) through which a respective strap portion 136, 137 has been threaded.

One can readily appreciate the advantages of the technique of the invention by way of FIG. 7 as well as attached Exhibit A, incorporated herein by reference. Here, operation of a device of the invention (such as that at 10 in other figures) in connection with a human initially lying on the ground/floor is depicted. As illustrated in FIG. 7, once the support member has been placed under the mass (100) and the strap portions positioned around the mass, the couplings 28A, 28B are engaged such that the mass fits snug within the strap portions as shown. Next, a user 80 grasps handles (including hand-hold 14A) extending from the left hand extension of device 10 and user 90 grasps two handles (hand-holds 12A and 12B in one hand) as well as an unlabeled third hand-hold extending from the right hand extension of device 10. An upwardly force can be applied by the users 80, 90 to lift the mass (patient 100) for repositioning.

Exhibit A is a copy of several photo snapshots depicting the technique of the invention, whereby a device, such as that at 10 in FIGs. 1, 2, 4, 5, is in use to lift a human, by way of example only, from an original position lying on the floor to a sitting position. See also, FIG. 7. For further reference, for further detail of unique features of the invention refer to FIGs. 4 - 5 where device 10 is illustrated in a flat-open, unengaged position (upperside and underside plan views, respectively). The device can be operated

by two people according to the following in any type of situation, by way of example *only* reference below is made to a ‘patient’ or person – but, the device can lift objects, too:

(A) Position the destination chair, wheelchair, dolly, stair chair, bed or cot near the patient/person/mammal.

5 (B) Unroll lifter and release 2-inch side-release buckle. Place device flat on the floor centered above patient’s head with the tiered-handle side (underside) down.

(C) A rescuer on each side of the patient grasps the arms (the inside of patient’s nearest elbow) and lift the shoulders just enough to slide the device under the patient's back, aligned with the patient's armpits.

10 (D) The extensions of the device are lifted/positioned (by way of sliding under the patient's arms/armpits) alongside and under the patient's chest-area.

(E) If the extender-strap is not needed for a larger-sized patient, join/connect the ends of the side-release buckles together and adjust the length of the two-inch webbing by pulling from the ends until snug on the patient's chest (*e.g.*, until belt/strap is taut with little ‘play’). If the patient is too large, connect the extender-strap to each buckle of the strap portions and adjust any of the extender-strap, and/or either strap portion extending from the support member.

(F) Each rescuer should select the handle appropriate to his or her height and lift using the leg muscles as much as possible.

20 (G) Pivot patient onto an interim or final destination/item (chair, wheelchair, or cot, or help patient to a standing position, pivot onto a bed, recliner, or other destination) alternatively, a third person can be engaged to roll the destination item under the patient.

(H) Remove the device only after the patient is securely into a chair, wheelchair, bed, or transport device.

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35 A wide variety of flexible, pliable materials of suitable strength may be used for the elongated support member (such as those ast 11, 41), belt/strap portions, the extender-strap, and the handles (especially where a flexible tubing is used) including fabrics, webbing, and cording/cord. Using a flexible material allows for strap portions to be affixed with a plurality of stitches through at least the upperside and each handle to be affixed with a plurality of stitches through at least the underside. “Fabric” as used throughout, includes any flexible material made of an individual component or combination, or layers, of cloth, canvas (heavy, course, closely-woven fabric of, usually, natural fibers such as cotton, hemp, or flax), fibers (synthetic or natural), polymeric or other synthetic film, sheeting, or foam – whether laminated or coated– including duck-fabric; “webbing” as used throughout, includes any strong closely woven fabric or cording used for example, in seatbelts, upholstery, harnesses, climbing/hiking or packing

equipment, garments, *etc.*; flat, rolled, or solid rope-like “cord”/“cording” as used throughout includes any twisted strands of fiber, braided strands of string/rope, a fabric/cloth with ribs. Coupling as used throughout include any device that serves to connect the ends of adjacent parts/pieces. By way of example, *only*, for reference a device
5 of the invention such as that at 10 illustrated in FIGs. 4 - 5 (upperside and underside plan views, respectively) can be fabricated with the following components:

(A) 861 7500# N 6"-- six-inch nylon webbing manufactured by the Murdock Webbing Co. Inc. of Tarboro, NC 27886-1197. Minimum tensile strength of 45,000 lbs.

(B) N0075-2" 7K100 -- two-inch nylon webbing manufactured by TapeCraft Corp., Anniston, Alabama 36202. Break strength rated at 4,000 lbs.
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(C) LB50RD -- two-inch, double-adjustment side-release buckles, manufactured by YKK (USA), Inc., Santa Fe Spring, CA. 90670. Not yet strength rated, however 1" buckle of same design rated at 300 lbs.

(D) N0026--1" nylon tube webbing manufactured by TapeCraft Corp., Anniston, Alabama 36202. Break strength rated at 3,000 lbs.
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(E) 5/8--inch diameter braided polyester rope, any manufacturer; and

(F) UV--resistant nylon yarn thread, any manufacturer.

Two-inch nylon webbing is attached to the six-inch nylon webbing using a straight stitch on a perimeter sewing pattern. The one-inch nylon tube webbing is attached to the six -inch nylon webbing using a box X sewing pattern. A length of 5/8-inch braided polyester rope is inserted into each handle prior to attachment to make the handles more comfortable. One end of a side-release buckle is threaded onto each extending end of the two-inch webbing using a non-slip threading pattern.
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While certain representative embodiments and details have been shown merely for the purpose of illustrating the invention, those skilled in the art will readily appreciate that various modifications may be made to the embodiments represented without departing from the novel teachings or scope of this invention. Accordingly, all such modifications are intended to be included within the scope of this invention as defined in the claims. Although the commonly employed preamble phrase “comprising the steps of” may be used herein, or hereafter, in a method claim, the applicants *in no way* intend to invoke 35 U.S.C. Section 112 ¶6. Furthermore, in any claim that is filed herewith (as well as any claim added or amended), any means-plus-function clauses used, or later found to be present, are intended to cover the structures described herein as performing the recited function and not only structural equivalents but *also* equivalent structures.
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What is claimed is:

1. An aid for lifting and carrying a mass comprising a device, the device comprising:

5 a flexible elongated support member having an upperside, an underside, and a first and second extension on either side of a central-portion, each of said first and second extensions having a free-end;

10 a first and second strap portion affixed to and extending from said upperside between said free-ends, said strap portions adapted for positioning around the mass, a first and second coupling attached to a respective free end-section of said first and second strap portions; and

15 extending from said underside and along each of said first and second extensions, is a respective first and second plurality of handles affixed to said underside.

2. The device of Claim 1 wherein said first and second strap portions are adjustable in length, each said first and second coupling being slidably attached to said respective free end-section, and each of said handles is affixed at a permanent location.

20 3. The device of Claim 1 wherein a first and second end of a first handle of said first plurality are each located a distance $d/1$ from a central-area of said central-portion, a first and second end of a first handle of said second plurality are each located a distance d/r_1 from said central-area, a first and second end of a second handle of said first plurality are each located a distance $d/2$ from said central-area, a first and second end of a second handle of said second plurality are each located a distance d/r_2 from said central-area, said distances $d/1 \approx d/r_1$ and $d/2 \approx d/r_2$, and said distance $d/2$ is greater than said distance $d/1$.

4. The device of Claim 3:

30 wherein each of said handles of said first and second plurality comprises a cord section interposed within a length of flexible tubing; and

further comprising a first and second end of a third handle of said first plurality are each located a distance $d/3$ from said central-area, a first and second end of a third handle of said second plurality are each located a distance d/r_3 from said central-area, said distance $d/3$ being greater than said distance $d/2$.

5. The device of Claim 3 wherein: the mass is a mammal, said strap portions being positioned therearound and said first and second couplings in releasable-engagement; said elongated support member has an overall length, L_0 ; and the difference, $L_0/2 - d/1$, is greater than or equal to $L_0/6$.

5

6. The device of Claim 1 wherein: said first and second strap portions are integral with a center strap portion; a length, L_{CSP} , of said center strap portion is affixed to said upperside; and each one of said first and second couplings comprises a respective one of a first and second matable fastener for releasable-engagement.

10

7. The device of Claim 6 wherein: said affixation of said center strap portion comprises a plurality of stitches through at least said upperside along a periphery of said center strap portion; said central-portion further comprising a pocket adapted for receipt of an end of a stabilizing panel; and each of said handles of said first and second plurality comprises a cord section interposed within a length of flexible tubing.

15

8. The device of Claim 1 wherein: said first and second strap portions are affixed in spaced relationship, a spacing therebetween being generally less than or equal to said central-portion; said central-portion further comprising a sleeve-pocket adapted for receipt of a stabilizing panel; and each of said handles is affixed with a plurality of stitches through said underside and to said upperside.

20

9. The device of Claim 1 wherein said flexible elongated support member is made of a material selected from the group consisting of fabric, webbing, and flat cording; and said first and second strap portions are affixed with a plurality of stitches through at least said upperside; and each of said handles is affixed with a plurality of stitches through at least said underside.

25

10. The device of Claim 9 wherein: said elongated support member has an overall length, L_0 ; said first strap portion extends from a first area of said upperside located a distance at least equal to $L_0/5$ from said free-end of said first extension, said second strap portion extends from a second area of said upperside located a distance at least equal to $L_0/5$ from said free-end of said second extension; said plurality of stitches affixing each of said handles to extend though an adhesive applied to said underside.

30

35

11. The device of Claim 10 wherein the mass is an object; and further comprising an extender-strap having a third free end-section to which a third coupling is

slidably attached and a fourth free end-section to which a fourth coupling is slidably attached, said third coupling adapted for releasable-engagement with said first coupling of said first strap portion and said fourth coupling adapted for releasable-engagement with said second coupling of said second strap portion.

5

12. The device of Claim 1 wherein: said elongated support member has an overall length, L_0 , said first strap portion extends from a first area of said upperside located a distance at least equal to $L_0/6$ from said free-end of said first extension, and each of said first and second plurality of handles comprises a first, second, and third handle; and further comprising a relatively-rigid structure, a left and right aperture through which a respective one of said first and second strap portions is threaded.

10

13. The device of Claim 12 wherein: said flexible elongated support member is made of a material selected from the group consisting of fabric, webbing, and flat cording; said first and second strap portions are each made of a material selected from the group consisting of strengthened fabric, webbing, and flat cording; each of said handles comprises a length of flexible tubing made of a material selected from the group consisting of reinforced-fabric, webbing, and cording; and said relatively-rigid structure comprises a contoured board adapted for supporting the mass.

15

20

14. A method of lifting to carry a mass employing a device comprising a flexible elongated support member having an upperside, an underside, and a first and second extension on either side of a central-portion, each of the first and second extensions having a free-end, the method comprising the steps of:

25

placing the support member under the mass and positioning a first and second strap portion, each affixed to and extending from the upperside between the free-ends, around the mass;

engaging a first and second coupling, each of which is attached to a respective free end-section of said first and second strap portions, such that the mass fits snug within said strap portions; and

30

grasping and applying a force to at least one handle from each of a first and second plurality of handles extending from, and affixed to, the underside along a respective one of the first and second extensions, to aid in the lifting.

35

15. The method of Claim 14 wherein the elongated support member has an overall length, L_0 and is made of a material selected from the group consisting of fabric, webbing, and flat cording; and further comprising, prior to said step of placing the support member under the mass, the steps of:

5 affixing said first strap portion by stitching such that a first stitched area of the upperside extends therefrom a distance at least equal to $L_0/6$ from the free-end of the first extension; and

10 affixing said second strap portion by stitching such that a second stitched area of the upperside extends therefrom a distance at least equal to $L_0/6$ from the free-end of the second extension.

16. The method of Claim 15 further comprising, after said grasping, the steps: carrying the mass by: a first user holding at least one handle from said first plurality, a second user holding at least one handle from said second plurality, and both said first and second users, together, repositioning the mass from an original position to a reposition; and

15 once said repositioning is performed, releasing an engagement of said first and second couplings to remove said first and second strap portions from said snug fit around the mass.

20 17. The method of Claim 14 further comprising, prior to said step of placing the support member under the mass, the step of inserting and locating an end of a stabilizing panel into a pocket located within the central-portion; and wherein said step of placing the support member under the mass further comprises placing the panel together with the support member under the mass.

25 18. The method of Claim 14 wherein said step of engaging a first and second coupling further comprises the steps of: engaging said first coupling of said first strap portion with a third coupling attached to a third free end-section of an extender-strap, engaging said second coupling of said second strap portion with a fourth free end-section of said extender-strap, and adjusting at least said first strap portion's length for said snug fit around the mass.

19. The method of Claim 14 further comprising, prior to said step of placing the support member under the mass, the steps of:

5 affixing a first and second end of a first handle of said first plurality by stitching to the underside a distance d_{11} from a central-area of said central-portion, affixing a first and second end of a first handle of said second plurality by stitching to the underside a distance d_{r1} from said central-area, said distances $d_{11} \approx d_{r1}$; and

10 affixing a first and second end of a second handle of said first plurality by stitching to the underside a distance d_{12} from said central-area, affixing a first and second end of a second handle of said second plurality by stitching to the underside a distance d_{r2} from said central-area; said distances $d_{12} \approx d_{r2}$, said distance d_{12} being greater than d_{11} .

20. The method of Claim 19 further comprising, prior to said step of placing the support member, the steps of affixing a first and second end of a third handle of said first plurality by stitching, and affixing a first and second end of a third handle of said second plurality by stitching; both said third handles so stitched closer to a free-end of a respective one of the first and second extensions, than said second handles.

21. The method of Claim 19 further comprising, prior to said steps of affixing a first and second end of a first handle of each of said first and second plurality, the step of producing each of said first handles by interposing a cord section within a length of flexible tubing; and wherein said step of grasping and applying a force further comprises a first user grasping, together, said first and second handle of said first plurality, and a second user grasping, together, said first and second handle of said second plurality.

22. The method of Claim 14 further comprising, prior to said step of placing the support member under the mass, the steps of threading said first strap portion through a left aperture of a relatively-rigid structure and threading said second strap portion through a right aperture of said structure; and wherein said step of placing the support member under the mass further comprises placing the mass atop said structure with the support member thereunder.

FIG. 1

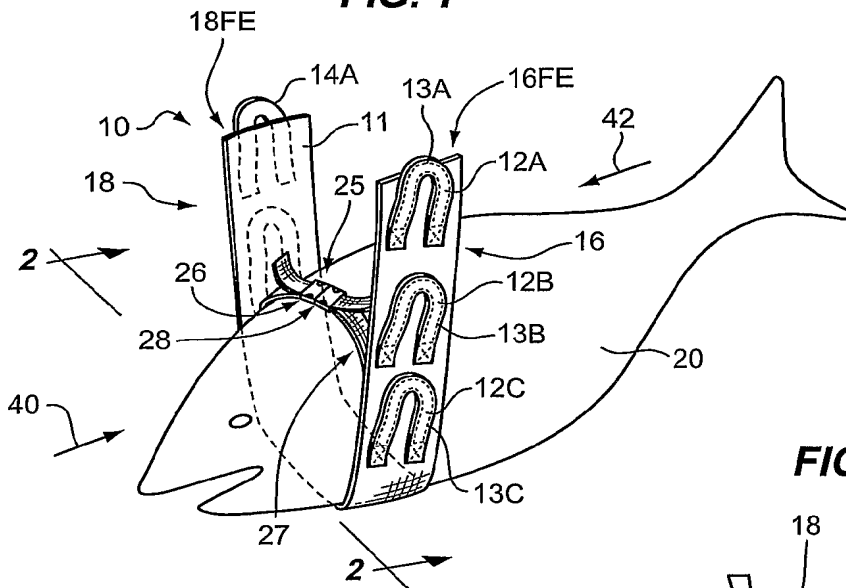


FIG. 2

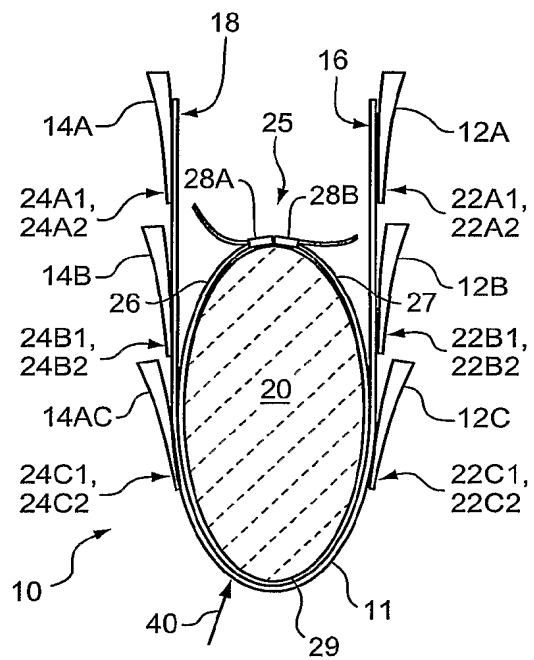


FIG. 3

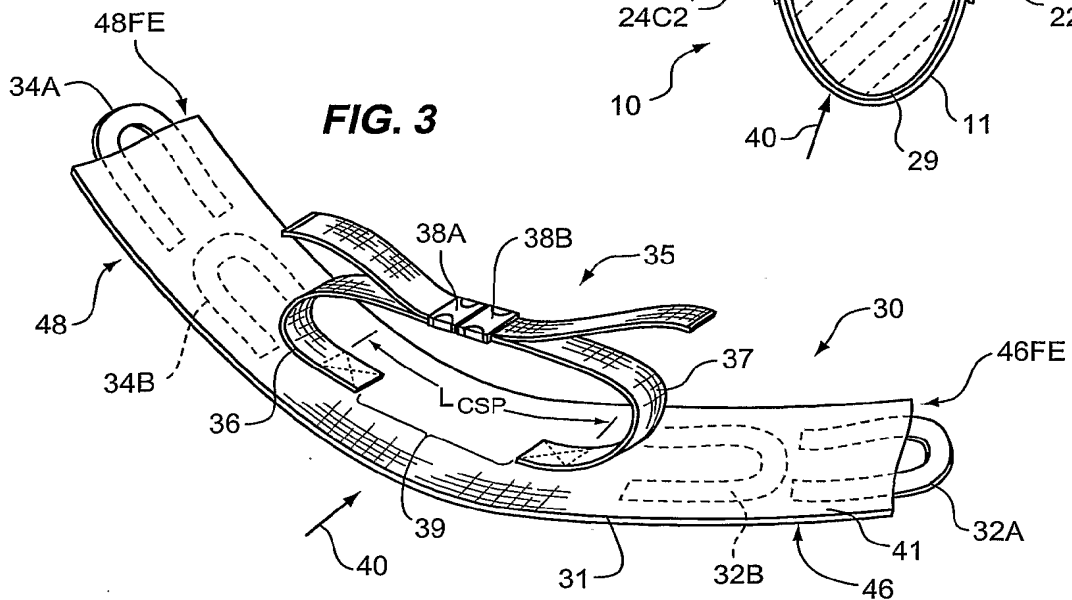
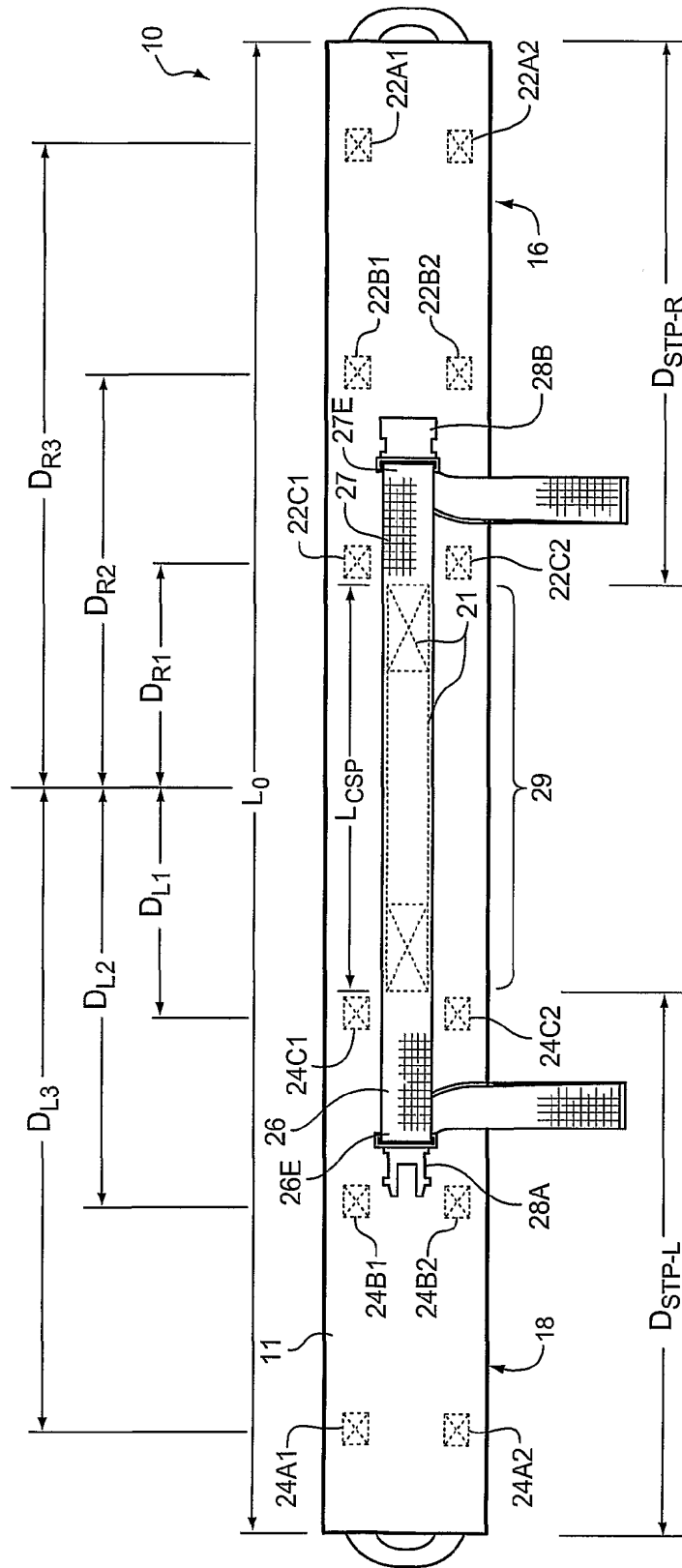


FIG. 4



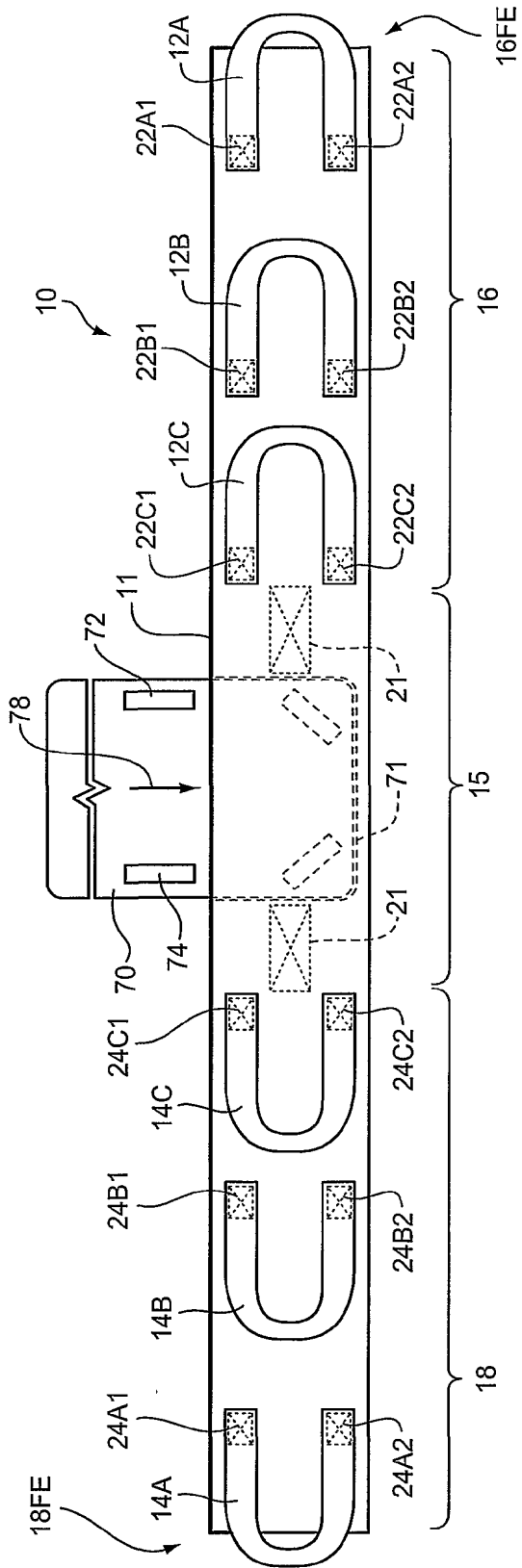


FIG. 5

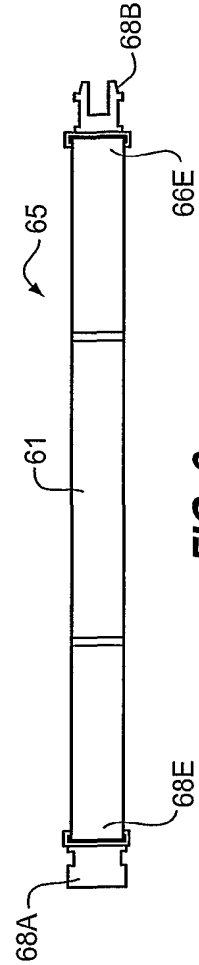


FIG. 6

FIG. 7

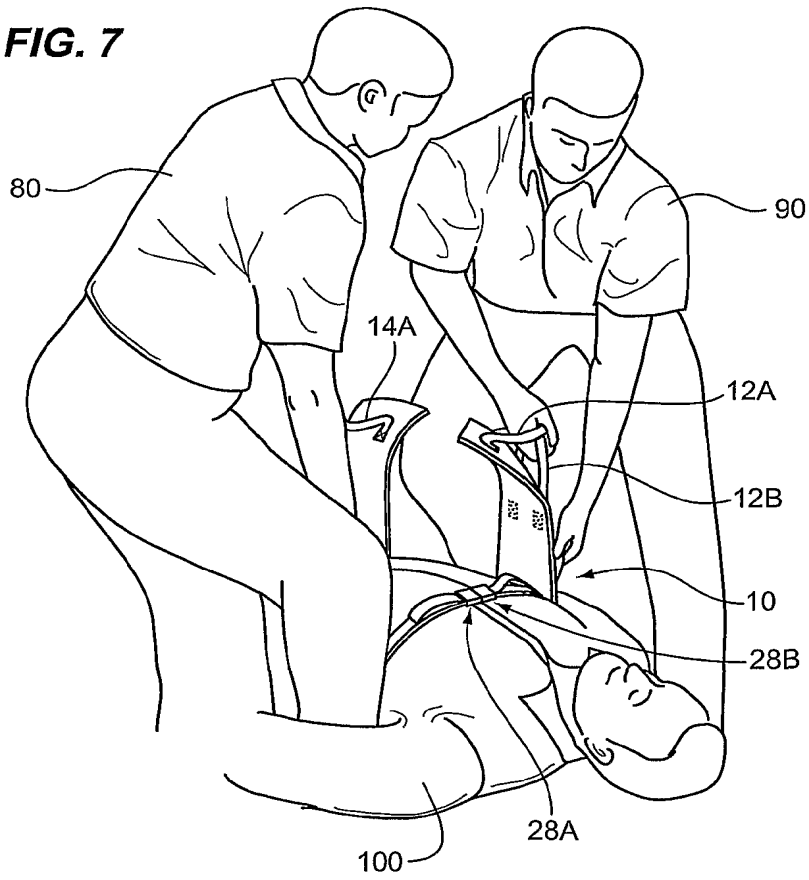
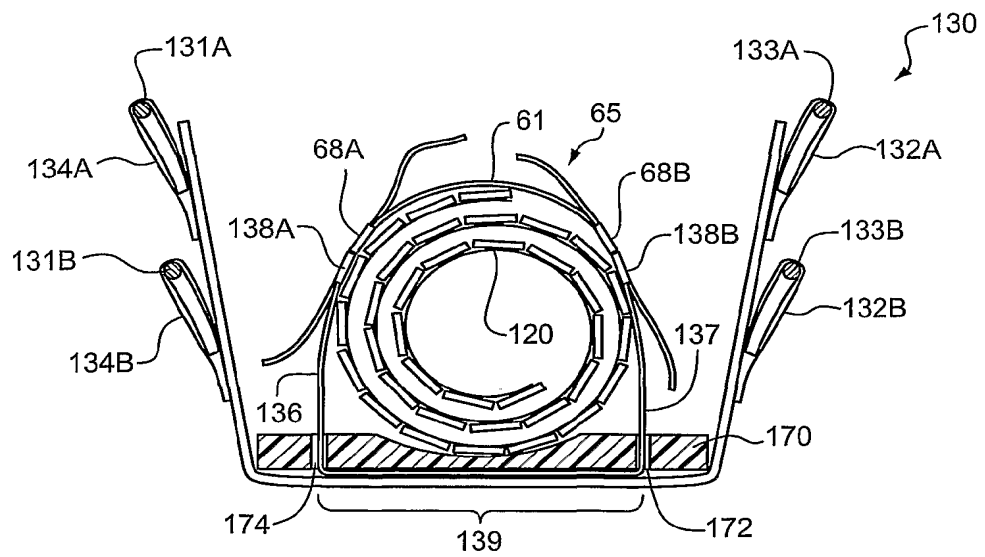


FIG. 8



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/16076

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) :B66C 1/12
 US CL : 294/74; 150, 152
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 294/74-77, 150, 152, 153

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,368,353 A (FLANDERS ET AL.) 29 NOVEMBER 1994, see Figure 1.	1,2,6,14
Y	US 5,688,011 A (GULLEY) 18 NOVEMBER 1997, see Figure 7.	3,7,8,9,12,13,15,17-19
A, P	US 6,073,280 A (FARNUM) 13 JUNE 2000.	
A, P	US 6,065,790 A (OSWALD) 23 MAY 2000.	
A	US 5,978,989 A (CHAVEZ) 09 NOVEMBER 1999.	
A	US 5,542,730 A (RIESELNANN) 06 AUGUST 1996.	
A	US 5,388,274 A (GLOVER ET AL.) 14 FEBRUARY 1995.	

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
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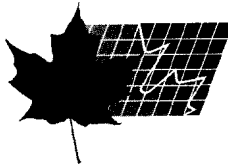
Date of the actual completion of the international search 24 JULY 2001	Date of mailing of the international search report 14 AUG 2001
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Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer EILEEN LILLIS <i>Diane Smith f</i> Telephone No. (703) 308-3248
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/16076

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,950,014 A (SMITH) 21 AUGUST 1990.	
A	US 4,737,069 A (COBLENTZ) 12 APRIL 1988.	
A	US 4,441,749 A (ST. GERMAIN) 10 APRIL 1984.	
A	US 4,431,226 A (WEILERT) 14 FEBRUARY 1984.	
A	US 2,508,795 A (NIELSEN) 23 MAY 1950.	



OTTAWA HULL KIA OC9

(11) (C) 1,332,928
(21) 604,381
(22) 1989/06/29
(45) 1994/11/08
(52) 224-5

BREVETS

MARQUES
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INDUSTRIELS

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TOPOGRAPHY

(51) INTL.CL. ⁵ A47D-013/02

(19) (CA) **CANADIAN PATENT** (12)

(54) Baby Carrier

(72) Pettersen, Judy , Canada

(73) Same as inventor

(57) 5 Claims



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NOV 8 1994

BABY CARRIER

ABSTRACT OF THE DISCLOSURE

Many baby carriers available utilize straps which are adjustable and which use a pair of slip rings through which the strap is moved or, alternatively, utilize a buckle type adjustment both of which are difficult to adjust particularly if the carrier person has to use one hand to support the baby and the other hand to adjust the straps. The present carrier uses both ring and snap swivel type adjusters together with hook and loop type fasteners such as VELCRO™. Furthermore, the crotch area is padded as are the boundaries of this area through which the legs of the baby engage. The crotch is also adjustable in width depending upon the age of the baby and whether or not it is facing to the carrier person or away. Another advantage is the relatively large pocket formed on the back of the body panel which can be used for carrying small items when the carrier is in use. However when not in use, the bottom of the pocket is grasped internally and pulled upwardly thus turning the pocket inside out whereupon the straps are folded and placed within the pocket thus enclosing the complete carrier which can then be carried from place to place by means of a small loop handle secured to the

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upper edge of the pocket.

BABY CARRIER

This invention relates to new and useful improvements in baby carriers.

5 Many soft carriers for babies are currently available. These may include a pocket or sling that engages the child and shoulder straps and a waistband that support the carrier on an adult wearing the carrier.

10 The known carriers suffer from certain disadvantages. A primary one of these is discomfort to both the adult wearer and the infant being carried. This usually arises because of high pressure points where the straps engage the wearer or, in the case of the child, along the legs, the back of the head or wherever the edges of the pocket or sling contact the child's body.

15 Another difficulty with the known carriers is that of putting on and taking off the carrier. The use of either buckles and straps or pairs of slip ring for fastening the carrier shoulder straps and waistband requires the use of both hands to adjust the strap, which can be awkward and sometimes dangerous to the baby in the carrier.

Many carriers also suffer from a lack of versatility in that they do not allow carrying the child in a number of different positions, for example, facing forwards, facing to the rear, on the back or on the front of the adult wearing the carrier.

20 The present invention aids in mitigating one or more of the disadvantages of the known carriers.

According to the present invention there is provided a baby carrier comprising:

25 a main panel formed from a soft flexible material and having a substantially quadrilateral configuration with spaced and parallel upper and lower edges, with the upper edge being longer than the lower edge whereby the side edges extend from the ends of the upper edge, downwardly and inwardly towards the ends of the lower edge, the main panel having internal padding extending along the side edges;

30 a soft flexible waistband secured to the lower edge of the main panel and having end portions extending outwardly upon either side thereof, the waistband having internal padding across the lower edge of the main panel;

fastening means on the end portions of the waistband for adjustable connection of the end portions;

a soft shoulder strap extending across and secured to the upper edge of said main panel with end portions of the shoulder strap extending outwardly from the

respective ends of the upper edge of the main panel, the shoulder strap having internal padding across the upper edge of the main panel;

a plurality of first shoulder strap fastener components secured to each end portion of the shoulder strap in spaced relationship along the length thereof; and

5 second shoulder strap fastener components secured to the respective side edges of the main panel for selectively engaging any one of the first shoulder strap fastener components.

With this arrangement, all of the edges of the carrier that contact the child are fully padded, including the side edges of the main panel, the shoulder strap where it crosses the top of the main panel and contacts the child at the back of the head, on the neck or in the lower face and chin area.

In preferred embodiments of the invention, the lower portion of the main panel includes a wrap-around fastening tabs that will gather this part of the main panel and hold it in a somewhat gathered state. This part of the main panel serves as a crotch support for the infant. When the infant is facing inwards towards the wearer, a wide crotch support is appropriate, but with the child facing in the opposite direction, the main panel extends between the child's legs, from the rear to the front. The extended panel will cause outward pressure on the legs and consequent chafing.

Another characteristic of the invention is the use of hook and loop fastener material to fasten the waistband in place. This ensures that the waistband can be fitted as desired to the wearer regardless of its position on the wearer's body and regardless of the size of the wearer. It can also be fastened in place quickly and with a minimum of manipulation and effort on the part of the wearer, thus minimizing the difficulty of putting on the carrier and taking it off.

25 A carrier constructed according to the preferred embodiment of the invention allows a baby to be carried at the front of the wearer either facing in or out. The baby can be worn on either hip either in front of the hip or behind. The carrier can be worn with the baby in a nursing position. The baby can also ride on the back of the wearer facing either in or out.

30 With the foregoing in view, and other advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, the invention is herein described by reference to the accompanying drawings forming a part hereof, which includes a description of the best mode known to the applicant

and of the preferred typical embodiment of the principles of the present invention, in which:

DESCRIPTION OF THE DRAWINGS

5 Figure 1 is a rear elevation of the baby carrier extended in a planar position to show the various components and configurations thereof.

 Figure 2 is a reverse view of Figure 1 showing the inside of the carrier.

 Figure 3 is a view similar to Figure 1 but showing the crotch adjustment straps or tabs engaged.

 Figure 4 is a reverse view of Figure 3.

10 Figure 4A is a fragmentary isometric view of the crotch area unrestricted.

 Figure 5 shows a view of the carrier attached

to the front of a carrier person shown schematically.

Figure 6 shows a rear view of Figure 5 with the shoulder straps criss-crossing the back of the carrier person.

Figure 7 is a view similar to Figure 5 but showing the carrier on one hip with one shoulder strap disengaged.

Figure 8 is a rear view of Figure 7.

Figure 9 is a side elevation of Figure 5 and appears with Figures 3, 4 and 4A.

Figure 9A is a view similar to Figure 9 but with the baby at the rear of the carrier person and appears with Figures 10-12.

Figure 10 is a view of the carrier suspended by the upper edge thereof and ready for moving to the storage position.

Figure 11 shows the bag formed by the carrier panel and the pocket panel turned inside out.

Figure 12 is the same as Figure 11 but reversed with the shoulder straps and waistband stored inside the bag formed by the carrier and pocket panel and suspended by the hand loop.

In the drawings like characters of reference indicate corresponding parts in the different figures.

DETAILED DESCRIPTION

Proceeding therefore to describe the invention

in detail, reference should first be made to Figures 1 and 2 in which reference character 20 shows the main carrier panel made of cloth or synthetic plastic fabric and having a quadrilateral configuration with the upper edge 21 being parallel to the lower edge 22 and with the upper edge being wider than the lower edge 22 so that the side edges 23 and 23A extend downwardly and inwardly from the ends of the upper edge 21 to the ends of the lower edge 22.

Internal padding, not illustrated, is indicated by reference characters 24 and 24A and extends from the upper edge to the lower edge parallel to the side edges 23 and 23A and being situated on each side of the vertical centre line indicated by reference character 25. This padding preferably terminates just to each side of the centre line 25.

A small flexible tab 26 is secured as by sewing 27 to each side edge of the panel and extends outwardly therefrom and a conventional swivel snap hook component 28 is secured to each of these tabs 26 and on the outer ends thereof as clearly shown in Figure 1.

A shoulder strap collectively designated 29 is secured by the centre thereof, to the upper edge 21 of the panel 20 and corner gussets 30 are provided for

strengthening purposes between the edges 23 and 23A and the portions 31 and 31A of the shoulder strap which extend outwardly upon each side of the central portion 32. This shoulder strap, although a flexible material, extends substantially perpendicular to the centre line 25 as clearly shown and is internally padded clear across the centre section 32 and part way along the portions 31 and 31A.

Towards the distal ends 33 and 33A of this strap there is provided a plurality of D-rings 34 in spaced relationship with one another and secured as by stitching, by the crossbar 35 of the D-rings and these D-rings are selectively snap engagable with the snap hook components 24 and 24A as will hereinafter be described.

A waistband or strap collectively designated 36, is secured by the central section or portion 37 thereof across the lower edge 22 of the panel 20 with the two outer portions 38 and 38A also extending outwardly substantially perpendicular to the centre line 25. This central portion 37 is also internally padded and this padding extends part way along the portions 38 and 38A.

The distal end portions 39 of this strap or waistband 36 are provided with hook and loop strips 40 and 41 such as manufactured under the trademark "VELCRO"

and these portions, when in overlapping relationship, selectively engage to detachably secure the end portions together.

Extending outwardly from the side edges 23 and 23A, is a further pair of flexible tabs 41 and 41A situated between the snap hook components 28 and the lower edge 22 of the panel. These tabs are also stitched to the panel as indicated by reference character 42 and the tabs are provided with hook and loop components 43 and 43A which once again may engage one another in overlapping securing relationship as will hereinafter be described.

In operation as a carrier, and assuming use in the front of the carrier person as shown in Figures 5, 6 and 9, the waistband 36 is engaged around the waist or hip area of the carrier person with the panel 20 hanging downwardly therefrom. The waistband is adjusted until it is snug around the waist or hip area with the hook and loop portions 40 overlapping one another to hold this waistband snugly in position.

The baby is then placed on the chest of the carrier person facing the carrier person whereupon the main panel is pulled upwardly between the baby's legs and over the back thereof so that he is seated in the area

indicated by reference character 44 in Figure 4A with his legs extending over the curved padded edge portions 45 of the crotch area indicated by reference character 46.

The two ends 31 and 31A of the shoulder strap are then tossed over the shoulders of the carrier person with one hand, the other hand supporting the baby, whereupon they are crossed over the back of the shoulder person and brought around to the front so that one of the D-rings 34 may snap engage the opposite snap hook component 26.

The other end is similarly adjusted and snap hook engaged with the swivel hook component on the opposite side.

Any necessary adjustments can then be made readily and easily until the baby and carrier person are in a comfortable relationship one with the other.

If it is desired to move the baby to the hip area, and assuming the baby is relatively small, it is merely necessary to swing the carrier to one side adjusting the length of the shoulder straps as this is done.

If however the baby is relatively large, the carrier person's arm on the side at which it is desired to place the baby, may be disengaged from the shoulder

strap portion and the necessary adjustments made so that the baby can be situated in front, on or just behind the hip or can be adjustably supported in a nursing position, particularly if breast feeding is being used.

To position the baby facing forwardly, it will of course be appreciated that the baby must be sufficiently mature in order to support its own head.

The procedure is the same as above except that the baby faces forwardly on your chest as the panel is brought up over the front of the baby. It is sometimes desirable to turn down the upper edge 21 of the panel so that the straps will go under the baby's arms, over the shoulders of the carrier person and then across the back to be fastened to the snap hook components 28 in a manner similar to that hereinbefore described.

Under these circumstances, the wider portion of the crotch area may place undue outward pressure upon the baby's legs extending on either side thereof and/or cause chaffing to occur so that it is desirable to narrow this area by overlapping the tabs 41 and 41A to the inside of the panel and then engage the hook and loop components 43 and 43A to hold the crotch area in the narrowed position shown in Figures 3 and 4. This also causes a further layer of padded material to engage against the legs of

the baby.

Another disadvantage of many carriers made specifically to carry the baby on the back of the carrier person, is that most of them are frame type packs and are therefore unwieldly and difficult to store. This also means that they are difficult to take along when travelling.

They also have a tendency to chafe the back and shoulders of the wearer and put strain on the lower back as the baby is usually positioned too high and relatively far away from the back of the carrier person. Also the baby is usually only restrained by a relatively thin strap and some enterprising babies can of course undo the buckle of such strap and literally climb out so that most people who buy a front pack will, at some later date, also purchase a back pack thereby doubling the costs.

One of the principal advantages of the present carrier is that it can be worn on the back of the carrier person whereby the baby is held close to the person's back which provides support for the back while at the same time the material of the pack or carrier is swaddling the baby in such a way that it would be impossible for the baby to climb out.

Also because there is no unwieldy metal or

A

plastic frame on the carrier person, the person is able to for example, work around the house, with the baby safely at the back of the carrier person away from, for example, hot stoves or sharp knives and yet there is no frame to make it awkward for the carrier person to turn quickly when necessary.

There are two methods of engaging the baby within the pack to be worn at the back of the carrier person. In both instances, the waistband is adjusted and secured and the snap hook components are engaged to the corresponding D-rings on the same side rather than on the opposite sides without crossing same.

In the first instance, and depending upon circumstances and the size of the baby, the carrier may then be moved around to the rear of the carrier person and the baby is placed on the back in the form of a piggyback position whereupon the baby's back is held with one hand and the other hand pulls the carrier up through the baby's legs and over his or her back. At this point, the carrier person's arms are slipped through the fastened shoulder straps one at a time and the necessary adjustments are made.

In the second method, the carrier person sits down on a bed or chair and moves the pack around to the

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back with of course the waist band being adjusted and secured and the snap hook components engaged as herein before described, on the same side rather than on the opposite side and without crossing same.

The sling is lying on the chair seat at this point behind the wearer whereupon the baby is stood up straddling the crotch area, the wearer then slips his or her arms through the loops of the straps thus enclosing the baby, whereupon the wearer may stand with the baby firmly engaged within the sling and snuggled to the back of the carrier person.

Reference to Figures 1 and 5 will show a pocket panel 47 having dimensions similar to the main panel 20 and secured to the outer surface of the main panel around the periphery thereof leaving the upper edge 48 open and this open upper edge may be elasticized if desired.

The pocket so formed by the main panel 20 and the pocket panel 47 may be used to carry diapers and small items when a baby is being carried by a carrier person as hereinbefore described.

However, when it is desired to store the baby carrier, this bag may be utilized and reference should be made to Figures 10 through 12.

Figure 10 shows the carrier freely supported by

the upper edge 21 of the main panel by means of hand 49 with the straps 29 and 36 hanging downwardly therefrom.

The opposite hand (not illustrated) is then engaged within the opening 50 until the crotch area 46 may be grasped whereupon the "bag" is turned inside out and takes up the position shown in Figure 11 with the straps 29 and 36 aimed downwardly therefrom as clearly shown.

The bag is then reversed and the straps folded and placed within the bag so that it can be carried by small handle loop 51 secured just inside the upper edge 48 of the pocket panel 47. Also it will be noted that the inner surface of the main panel is protected against contamination or dampness due to rain.

It will also be noted that a further small pocket panel 53 is secured to the main pocket panel 47 adjacent the upper edge 48 which can be used for keys or the like when the carrier itself is being carried as shown in Figure 12.

Advantages over conventional carriers include the following:

Comfort to the carrier person is ensured by the heavily padded width of the should strap plus the six point attachment system which distributes the weight of

the baby evenly between the shoulders, hips and back.

The attachment system allows the carrier person to don and remove the carrier in seconds, an important aspect in the case of emergency or if the baby is asleep and it is not desirable to wake him or her.

The carrier is comfortable for babies in a variety of positions. Young babies can face their mothers and receive maximum head support while older babies may face outwardly and enjoy the view. Also the versatility of the carrier is shown by its ability to be used as a back pack and a hip sling as well as a front carrier which is done by simply adjusting the straps. The carrier is also adaptable for breast feeding.

The large pocket formed by the pocket panel and the main panel is handy for carrying the carrier person's belongings such as wallets, or the baby's belongings such as diapers, wallets and the like and finally the carrier may be turned inside out so that the pocket becomes a small carrying case for the assembly with the straps stored inside and a small handle available for carrying purposes.

The leg holes of the carrier are positioned to be comfortable for babies of all ages and sizes and are padded as is the shoulder and waist strap and it should

be stressed that the hook and loop type strap fasteners and the snap hook component type fasteners can be undone in an emergency and in a hurry readily and easily.

Since various modifications can be made in my invention as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

CLAIMS:

1. A baby carrier comprising:

5 a main panel formed from a soft flexible material and having a substantially quadrilateral configuration with spaced and parallel upper and lower edges, with the upper edge being longer than the lower edge whereby the side edges extend from the ends of the upper edge, downwardly and inwardly towards the ends of the lower edge, the main panel having internal padding extending along the side edges;

10 a soft flexible waistband secured to the lower edge of the main panel and having end portions extending outwardly upon either side thereof, the waistband having internal padding across the lower edge of the main panel;

fastening means on the end portions of the waistband for adjustable connection of the end portions;

15 a soft shoulder strap extending across and secured to the upper edge of said main panel with end portions of the shoulder strap extending outwardly from the respective ends of the upper edge of the main panel, the shoulder strap having internal padding across the upper edge of the main panel;

a plurality of first shoulder strap fastener components secured to each end portion of the shoulder strap in spaced relationship along the length thereof; and

20 second shoulder strap fastener components secured to the respective side edges of the main panel for selectively engaging any one of the first shoulder strap fastener components.

2. The carrier according to claim 1 in which a lower portion of the main panel constitutes a crotch support portion, and including crotch adjustment means for adjusting the effective width of said crotch support portion.

25 3. The carrier according to claim 2 in which the crotch adjustment means includes a pair of flexible tabs secured to the main panel adjacent the side edges thereof, said tabs, when in use, wrapping around said side edges of said panel in overlapping relationship with one another, and fastening means on said tabs cooperating to detachably hold said tabs in said overlapping relationship thereby narrowing the crotch support portion of the main panel.

30 4. The carrier according to claim 1, 2 or 3 which includes a pocket panel of soft material secured to the outer side of the main panel so as to define a pocket with an open upper side extending across the main panel adjacent the upper edge thereof, and a carrying loop secured to the pocket panel adjacent the open upper side of the

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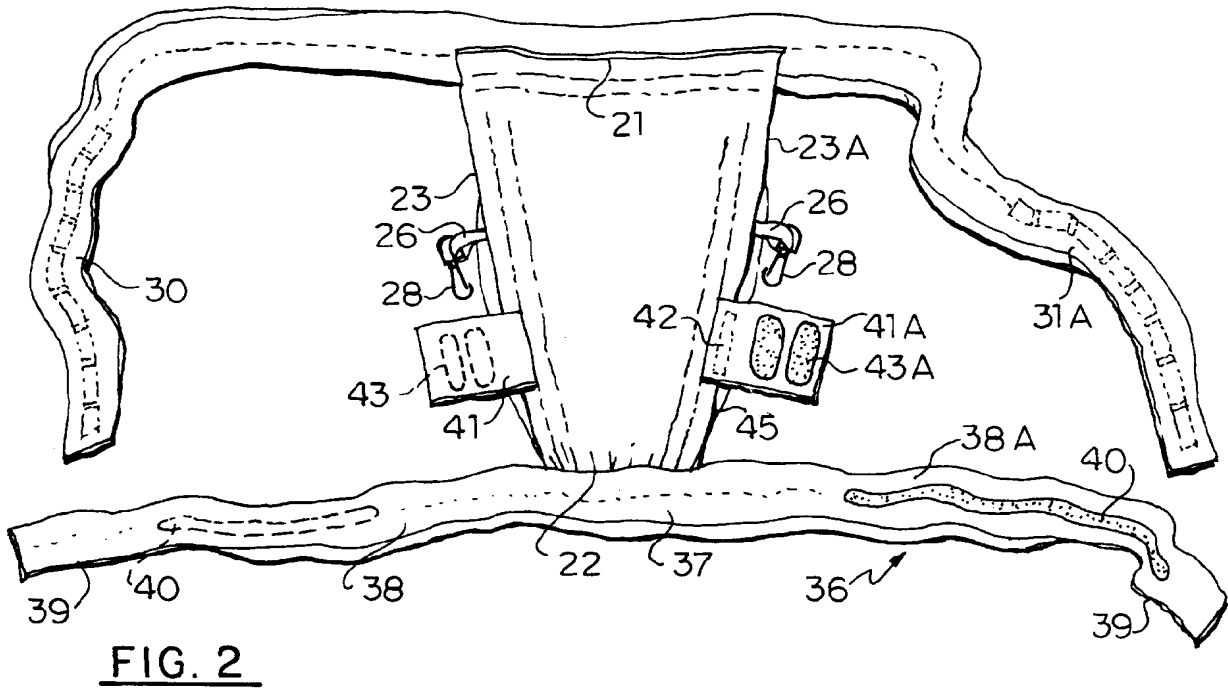
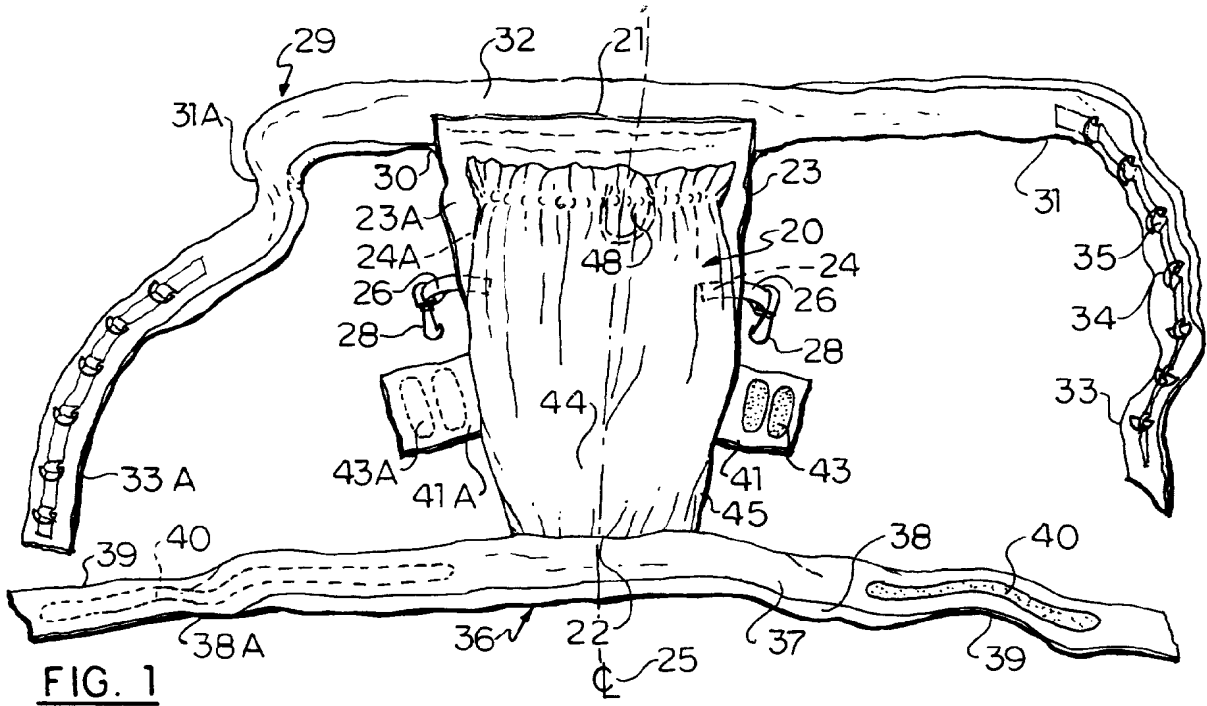
17

pocket, the pocket when turned inside out, being configured to store the waistband and shoulder strap therewithin.

- 5 5. The carrier according to claim 1, 2 or 3 wherein the fastening means on the end portions of the waistband comprise hook and loop fastening means engageable on face-to-face contact.



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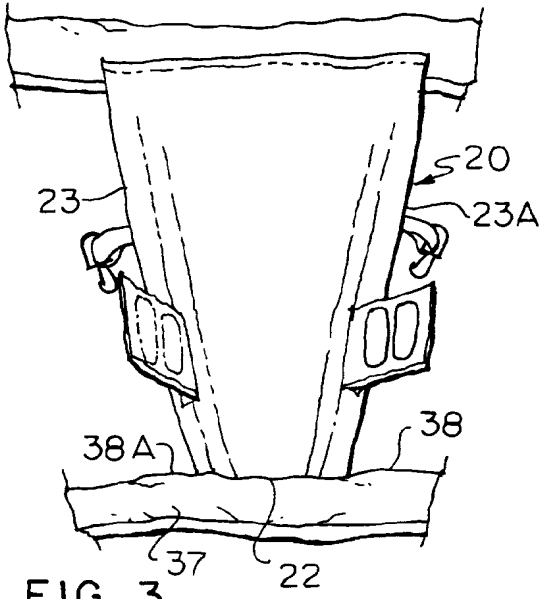


FIG. 3

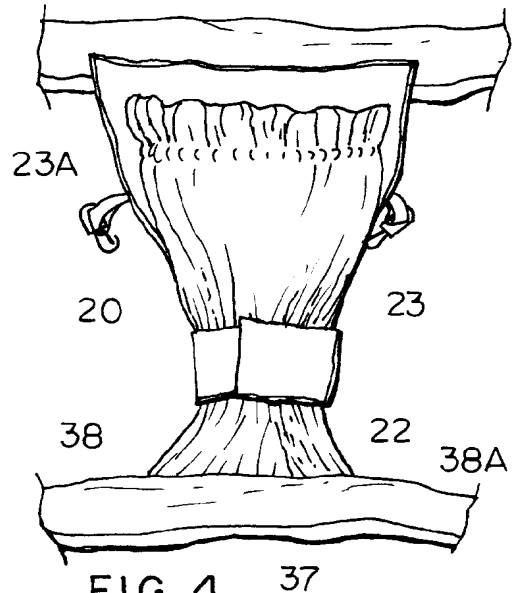


FIG. 4

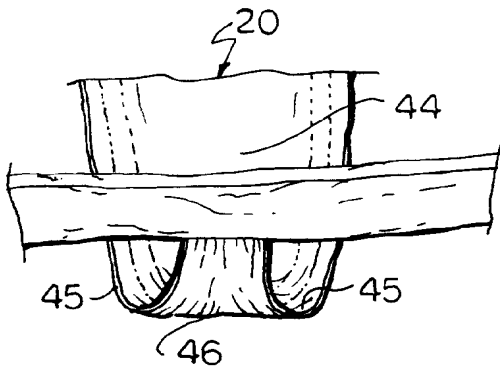


FIG. 4A

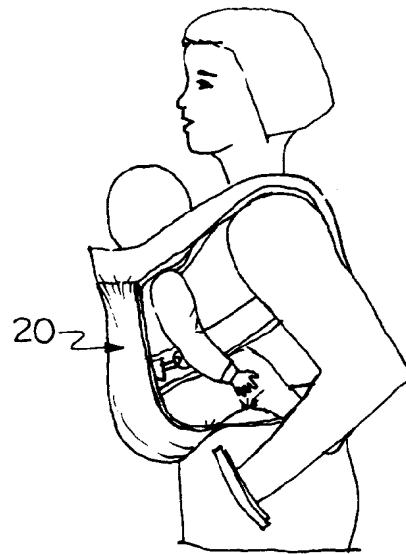


FIG. 9

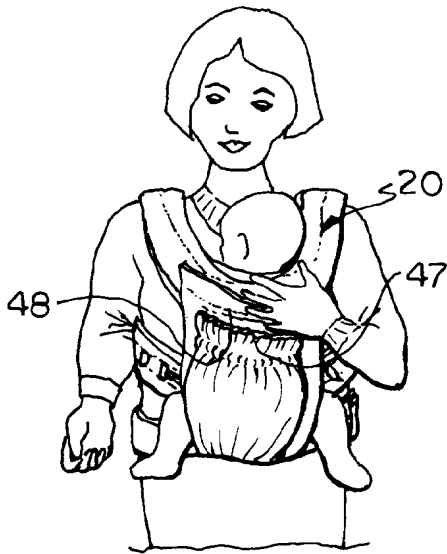


FIG. 5

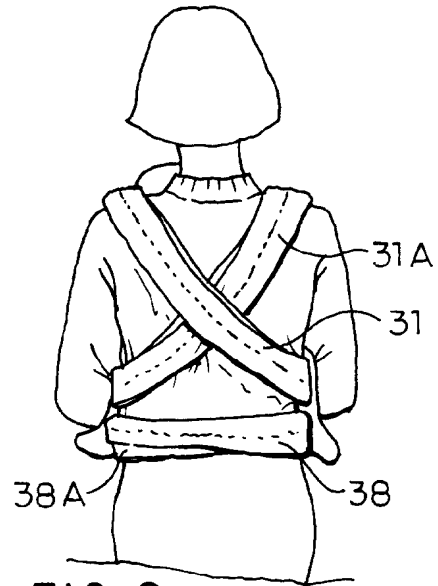


FIG. 6

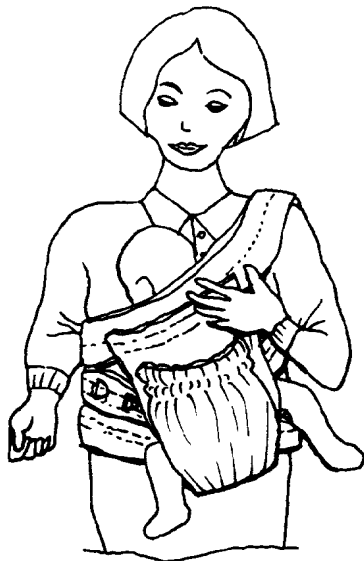


FIG. 7

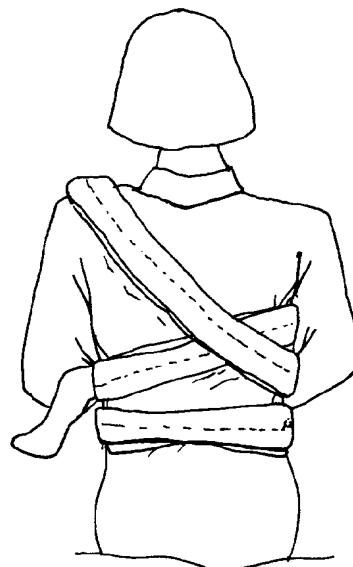


FIG. 8

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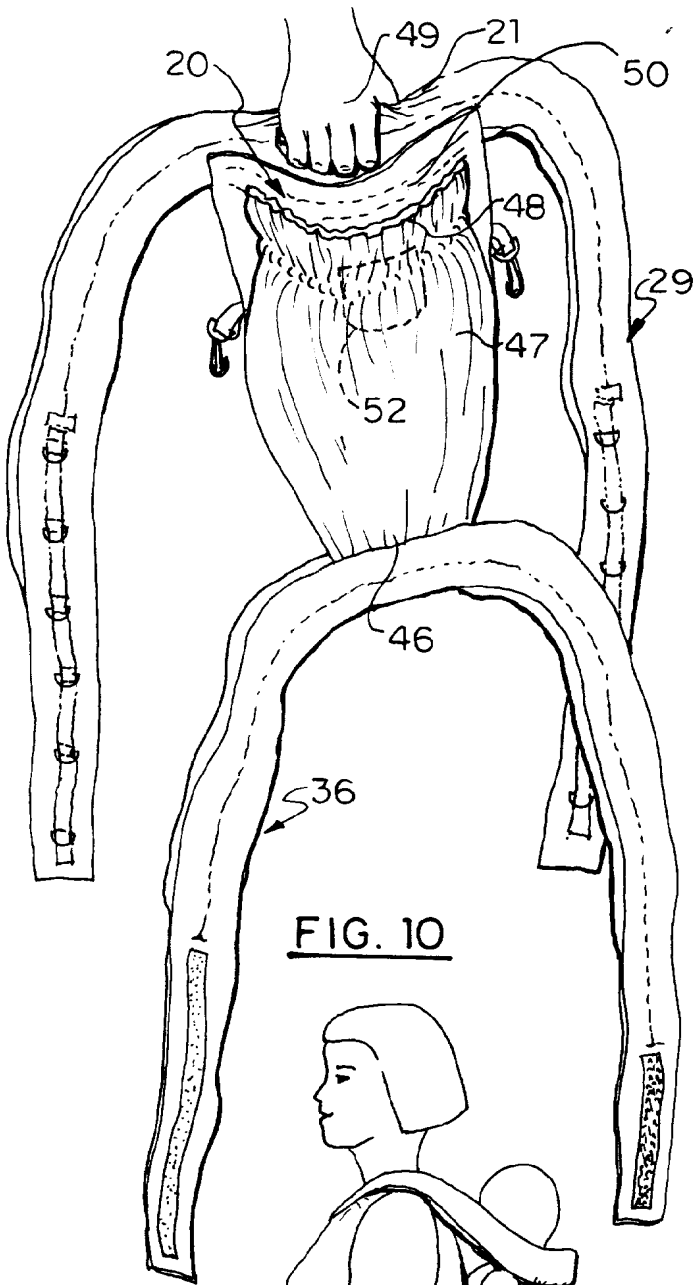


FIG. 10

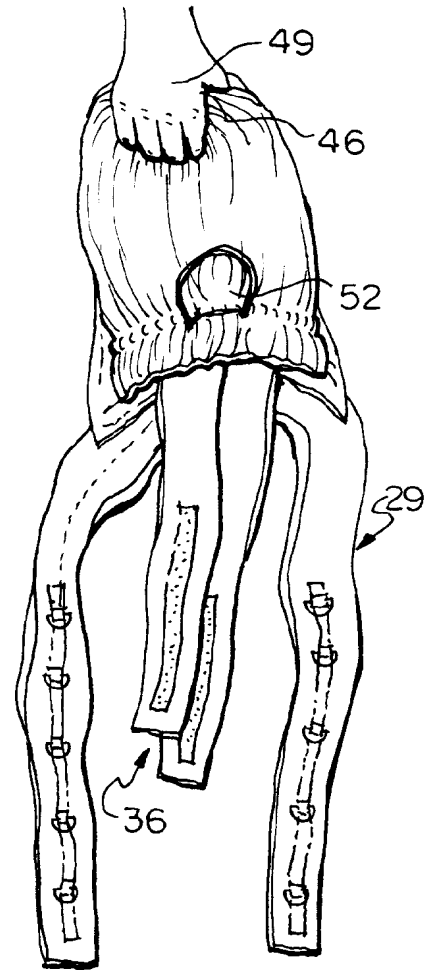


FIG. 11



FIG. 9A

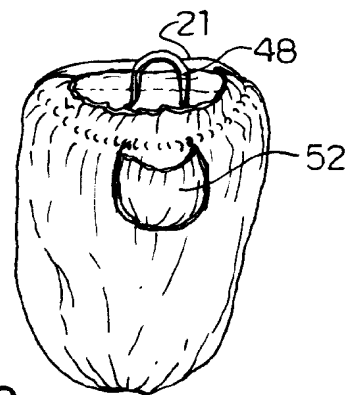


FIG. 12



Espacenet

Bibliographic data: EP1055382 (A1) — 2000-11-29

Baby backpack made of flexible cloth and based on ancestral carrying traditions

No documents available for this priority number.

Inventor(s): DUCRUET NATHALIE [FR] ± (DUCRUET, NATHALIE)

Applicant(s): DUCRUET NATHALIE [FR] ± (DUCRUET, NATHALIE)

Classification: - **international:** **A47D13/02**; (IPC1-7): A47D13/02
- **cooperative:** **A47D13/025**

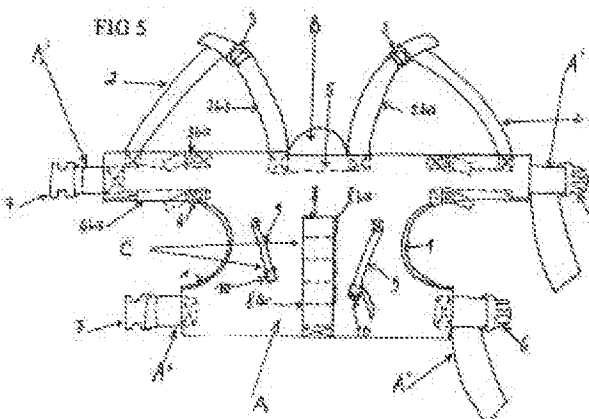
Application number: EP20000401482 20000526

Priority number(s): FR19990006648 19990526 ; FR20000006700 20000525

Abstract of EP1055382 (A1)

The carrier consists of a basic rectangle (A) of strong fabric with U-shaped cut-outs (1) at its ends forming projections to which chest and waist straps are attached.

Shoulder straps (2, 2bis) are fastened to the top of the rectangle, and a headrest (B) attached to the middle by self-adhesive strips. The central section of the rectangle is lined, and the top edge adjacent to the rest is padded with foam. The waist and chest straps are fastened by buckles (6, 7), and the carrier has an inner harness (8, 9) support the baby.



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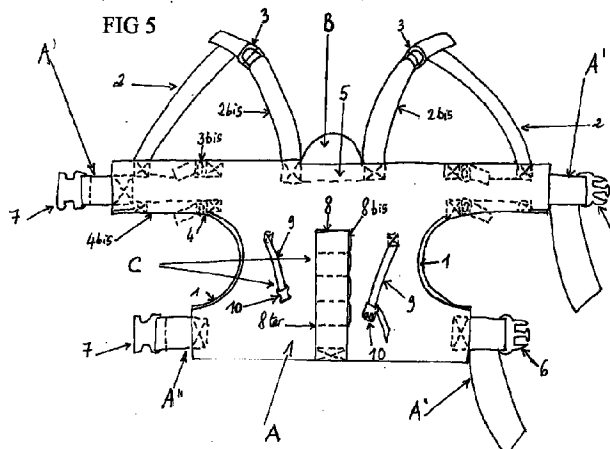
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(54) Porte-bébé dorsal en tissu inspiré des traditions ancestrales de portage.

(57) La présente invention concerne un porte-bébé dorsal en tissu permettant de porter les bébés de un mois à deux ans environ, assis "à cheval" sur le dos du porteur. Il est composé d'une structure (A+ A'+ A'') en tissu, dont les bandes d'attaches matelassées (A', A'') sont munies à leurs extrémités de boucles à fermeture rapide. Il comporte deux bretelles larges réglables (2, 2 bis), permettant de mieux répartir le poids du bébé sur le dos. Un appui-tête matelassé amovible (B) se fixe à l'aide de bandes auto-agrippantes. Des sangles de res-

serrage réglables (4, 4 bis) sur les côtés permettent au porte-bébé de s'adapter à la taille de l'enfant et à celle du porteur. Un harnais intérieur (C) pour attacher le bébé est constitué d'une double-bande de tissu (8, 8 bis) passant entre les jambes de l'enfant et remontant sur son ventre. Un lien (9), glissé dans un passage de la double-bande, rejoint un autre lien par un système de boucles à fermeture rapide (10) au niveau du ventre de l'enfant.



Description

[0001] La présente invention concerne un porte-bébé dorsal en tissu, léger, dépourvu d'armatures métalliques et inspiré des traditions ancestrales de portage. Il permet de porter les bébés de un mois à deux ans environ, assis (« à cheval ») sur le dos du porteur, les jambes de l'enfant relevées et reposant sur les hanches de celui-ci.

[0002] Ce mode de portage ancestral, très pratique, est celui qui respecte au mieux la stature et la morphologie de la mère et de son enfant.

[0003] Cette position est reconnue par les pédiatres occidentaux comme étant très bonne pour la circulation du sang des jambes du bébé, ainsi que pour le bon maintien de son dos. Elle évite par ailleurs les luxations de la hanche.

[0004] Depuis toujours, dans beaucoup de civilisations, les bébés sont portés sur le dos de leur mère de cette manière, dans un simple tissu rectangulaire, noué sur le devant du corps à la taille et au-dessus de la poitrine.

[0005] Mais cette technique présente plusieurs inconvénients :

- Le bébé glisse sur le bas du dos du porteur et se tasse au fond du tissu (d'où l'inconfort pour l'enfant), au fur et à mesure que le porteur marche. Cela nécessite de refaire les noeuds et de repositionner le bébé vers le haut du dos régulièrement.
- Le poids du bébé porte sur la poitrine de la femme, tend à l'affaïsser et à la rendre douloureuse. De plus, ce système ne se prête pas à l'anatomie masculine, empêchant les hommes qui le désirent de porter leur bébé sur le dos de cette manière.
- La tête du bébé n'est pas maintenue lorsqu'il est encore nourrisson et ballote lorsqu'il s'endort, ceci quel que soit son âge.

[0006] Le porte-bébé selon l'invention permet de remédier à ces inconvénients.

[0007] En voici les caractéristiques : il est constitué d'une structure de base en tissu résistant fait d'une seule pièce et doublée en partie, ceci contrairement au dépôt de brevet français du 26 mai 1999 n° 9906648 dans lequel le porte-bébé était doublé entièrement.

[0008] A partir d'un rectangle de tissu nous avons ôté de chaque côté, au niveau de sa largeur, l'équivalent d'un « U », formant ainsi deux arrondis, et permettant de créer quatre bandes d'attache, dont des bandes ventrales qui sont raccourcies, contrairement au dépôt de brevet n° 9906648 dans lequel les quatre bandes étaient de même longueur. Ceci permet de faciliter l'attache du porte-bébé au niveau de la poitrine et à la taille du porteur.

[0009] Un biais, remplaçant la surpiqûre sur la doublure présentée dans le dépôt de brevet n° 99 06648, est cousu au niveau des deux arrondis et renforce les

coutures.

[0010] Ce porte-bébé comporte deux larges bretelles, matelassées en partie, réglables dans leur longueur et reposant sur les épaules du porteur. Elles maintiennent le tissu dans lequel le bébé est installé, et sont reliées aux bandes d'attache nouées au niveau de la poitrine. Le bébé est donc maintenu relativement haut sur le dos du porteur et son poids ne porte plus sur la poitrine mais est réparti sur les épaules et le bas du dos, améliorant ainsi le confort du porteur et du bébé.

[0011] Le porte-bébé est donc facile à utiliser puisqu'il suffit d'enfiler les bretelles une à une comme un sac à dos, ceci quelle que soit la technique utilisée pour se servir du porte-bébé.

[0012] Ce porte-bébé comporte, d'autre part, un appuie-tête matelassé amovible se fixant grâce à des bandes auto-agrippantes ou tout autre système d'attaches rapides à l'intérieur de la structure, et permettant ainsi à l'enfant de dormir en ayant la tête soutenue.

[0013] Par rapport au dépôt de brevet n° 9906648, nous ajoutons des sangles de resserrage sur les côtés qui permettent au porte-bébé de s'adapter à la taille du bébé et à celle du porteur, et qui expliquent la nécessité de bandes d'attache supérieures plus longues. Il convient alors aussi bien aux femmes qu'aux hommes et en toutes saisons.

[0014] Enfin, une bande de mousse est cousue dans la doublure du porte-bébé entre les bretelles afin d'apporter au niveau du cou et de la tête du bébé un confort supplémentaire.

[0015] L'invention à ce stade sera nommée dans les figures « porte-bébé dans sa forme simple ». Les caractéristiques qui suivent lui donneront l'appellation de « porte-bébé dans sa forme élaborée ».

[0016] Selon des modes plus élaborés de réalisation, nous envisageons :

- des moyens de fixation du type boucles à fermeture rapide remplaçant les noeuds traditionnels pour un aspect plus pratique et sécurisant du porte-bébé pour le porteur.
- de matelasser les bandes d'attaches pour éviter notamment d'avoir le ventre serré et libérer la poitrine, et améliorer ainsi le confort du porteur.
- de doubler entièrement le porte-bébé.
- de coudre un harnais à l'intérieur du porte-bébé, qui remplace le système présenté dans le dépôt de brevet n° 9906648, permettant de positionner et attacher l'enfant avant de le mettre sur le dos, afin de lui apporter le maximum de sécurité.

[0017] Ce dispositif comporte une double-bande de tissu passant entre les jambes du bébé et remontant sur son ventre. Des coutures horizontales à intervalles réguliers sur la hauteur de la double-bande créent alors plusieurs passages. On fait alors glisser dans l'un d'eux (en fonction de la taille de l'enfant) un lien, qui rejoint un autre lien par un système de boucles à fermeture rapide

au niveau du ventre de l'enfant. La base des liens est cousue sur l'intérieur du porte-bébé de chaque côté au niveau des arrondis.

[0018] Dans cette forme de réalisation la structure du porte-bébé est faite en plusieurs pièces : les bandes d'attaches, plus étroites que dans la forme simple, sont rattachées au rectangle par une forte couture.

[0019] Les dessins annexés illustrent l'invention et représentent :

- Figure 1 : le porte-bébé dans sa forme simple vu de profil.
- Figure 2 : le porte-bébé dans sa forme simple ou élaborée vu de dos.
- Figure 3 : le porte-bébé dans sa forme élaborée vu de face,
- Figure 4 : l'extérieur du porte-bébé déployé dans sa forme simple.
- Figure 5 : l'intérieur du porte-bébé déployé dans sa forme élaborée

[0020] Dans les explications détaillées qui suivent, les dimensions sont données selon un mode de réalisation préférentiel et non-limitatif.

[0021] En référence à la figure 4, nous constatons que le porte-bébé est constitué d'une structure de base en tissu (A + A' + A''), de 200 cm de longueur sur la partie supérieure (A') et de 175 cm de longueur sur la partie inférieure (A''). Le rectangle (A), formé en enlevant les bandes d'attache (A', A''), mesure 55 cm de largeur sur 57 cm de hauteur.

[0022] Cette structure (A + A' + A'') est faite d'une seule pièce et est doublée au niveau du rectangle (A) afin d'améliorer sa résistance, mais garder une souplesse de tissu au niveau des bandes d'attache, pour que les noeuds restent faciles à faire.

[0023] Un biais (1) est cousu au niveau des deux arrondis afin de les consolider et se prolonge jusqu'au bout de chacune des bandes d'attaches.

[0024] Les bretelles (2, 2 bis) passant sur les épaules du porteur sont chacune constituées de deux parties. Celle partant de l'avant de l'épaule (2) rejoint la partie matelassée en provenance du dos (2 bis) grâce à une boucle coulissante (3), afin d'en faire une bretelle réglable. Les deux parties (2, 2 bis) sont larges et cousues à leur base sur le bord supérieur du porte-bébé dans la doublure par une forte surpiqûre en X.

[0025] Un appuie-tête matelassé amovible (B), en forme de demi-cercle, et muni de deux bandes auto-agrippantes ou tout autre système d'attaches rapides, se fixe à l'intérieur du porte-bébé sur les deux autres bandes auto-agrippantes prévues à cet effet. entre les parties arrière des bretelles (2 bis). La tête du bébé est ainsi bien maintenue.

[0026] Deux sangles de resserrage (4, 4 bis) sont cousues à l'extérieur du porte-bébé sur chaque bande supérieure (A'), ce qui équivaut à quatre sangles de resserrage en tout, permettant au porte-bébé de s'adapter

à la taille du bébé et à celle du porteur. Elles comportent chacune deux parties : l'une (4) est munie d'une boucle coulissante (3 bis) et est cousue par une forte surpiqûre en X sur l'extérieur du porte-bébé entre les bretelles (2, 2 bis). La deuxième partie (4 bis) est aussi cousue par une forte surpiqûre en X, sur la base des bretelles (2), de façon perpendiculaire à ces dernières. Les deux parties (4, 4 bis) se rejoignent grâce à la boucle coulissante afin de former une sangle de resserrage réglable.

[0027] Une bande de mousse (5) est cousue dans la doublure entre les parties arrière des bretelles (2 bis). Elle permet d'apporter un confort supplémentaire au niveau du cou et de la tête du bébé.

[0028] Dans la forme de réalisation selon les figures 2, 3, et 5, la structure est formée de plusieurs parties : Les bandes d'attache (A', A'') sont plus étroites du fait des boucles à fermeture rapide et sont cousues sur la partie (A) du porte-bébé.

[0029] Les bandes d'attaches (A', A'') sont matelassées. Elles sont munies à leurs extrémités d'une boucle à fermeture rapide (6, 7) remplaçant les noeuds traditionnels. Cela permet d'attacher rapidement le porte-bébé et de renforcer la sécurité, en évitant l'inconvénient des noeuds plus longs à faire et qui peuvent, en outre, se relâcher.

[0030] Un harnais (C) à l'intérieur du porte-bébé comporte une double-bande de tissu (8, 8 bis) passant entre les jambes du bébé et remontant sur son ventre. Elle est cousue sur l'intérieur du porte-bébé dans la doublure grâce à une forte surpiqûre en X, sur le bord inférieur du rectangle (A), de façon centrée.

[0031] Des coutures (8 ter) horizontales à intervalles réguliers sur la hauteur de la double-bande créent alors plusieurs passages permettant de faire glisser dans l'un d'eux (en fonction de la taille de l'enfant) un lien (9), qui rejoint un autre lien (9) par un système de boucles à fermeture rapide (10) au niveau du ventre de l'enfant. La base des liens est cousue sur l'intérieur du porte-bébé de chaque côté au niveau des arrondis.

[0032] En fonction de la taille de l'enfant, la bande de tissu se replie plus ou moins sur son ventre.

[0033] Ce système facilite et sécurise la pose du porte-bébé et de l'enfant sur le dos. En effet, traditionnellement, la femme place le bébé sur sa hanche, se courbe et le fait pivoter sur son dos d'une main tout en le maintenant de l'autre. Le bébé se trouve "à cheval" sur le dos courbé de sa mère, qui place alors le tissu sur lui, puis le noue au-dessus de la poitrine et enfin le noue à la taille en passant le tissu sous les jambes du bébé.

[0034] Grâce au procédé cité selon l'invention, le porteur attache le bébé sur le porte-bébé, puis en fonction de l'âge de l'enfant et du choix du porteur, il est possible :

- soit d'asseoir le bébé attaché au porte-bébé, sur un canapé par exemple, s'asseoir dos à lui, enfiler les bretelles comme un sac à dos et bouclier les bandes d'attaches ventrales. Ensuite le porteur se

relève, boucle les autres attaches, et ajuste le porte-bébé grâce aux bretelles réglables et aux sangles de resserrage.

- soit de s'inspirer de la technique traditionnelle qui est donc de placer le bébé en étant debout, le dos courbé. L'avantage ici par rapport à la pose traditionnelle est que le bébé ne risque pas la chute puisqu'il est attaché dans le porte-bébé. La pose peut, de plus, s'exécuter sans l'aide d'une personne extérieure.

[0035] Cela permet de rassurer les parents non-habités à porter leur bébé sur le dos de façon traditionnelle.

[0036] En outre, cette caractéristique permet de placer le bébé de façon parfaitement centrée sur le tissu et de répartir ainsi équitablement le tissu au niveau de ses jambes.

[0037] Enfin, ce harnais intérieur permet de porter un bébé avant même qu'il ne puisse avoir les jambes écartées sur le dos du porteur (généralement vers deux ou trois mois). On peut donc porter les nourrissons dès un mois comme le font les femmes africaines ou chinoises, les jambes du nourrisson en position de "grenouille". Grâce à la bande de tissu remontant entre ses jambes, l'enfant est maintenu de façon sûre.

[0038] Le porte-bébé dorsal en tissu inspiré des traditions ancestrales de portage est destiné aux personnes désirant porter leur enfant sur le dos de manière simple, pratique et confortable.

Il leur évite l'inconvénient des porte-bébés dorsaux classiques à armatures métalliques qui sont lourds et encombrants. En effet le porte-bébé selon l'invention se plie et se range dans une pochette prévue à cet effet, assortie au tissu du porte-bébé.

[0039] De plus il est utilisable en position ventrale, ce qui lui permet d'être utilisé dès un mois, voire même dès la naissance. Il permet ainsi aux porteurs une totale liberté de mouvement, associée à la sécurité apportée à l'enfant, procurée par le contact étroit très important mère ou père/enfant.

Revendications

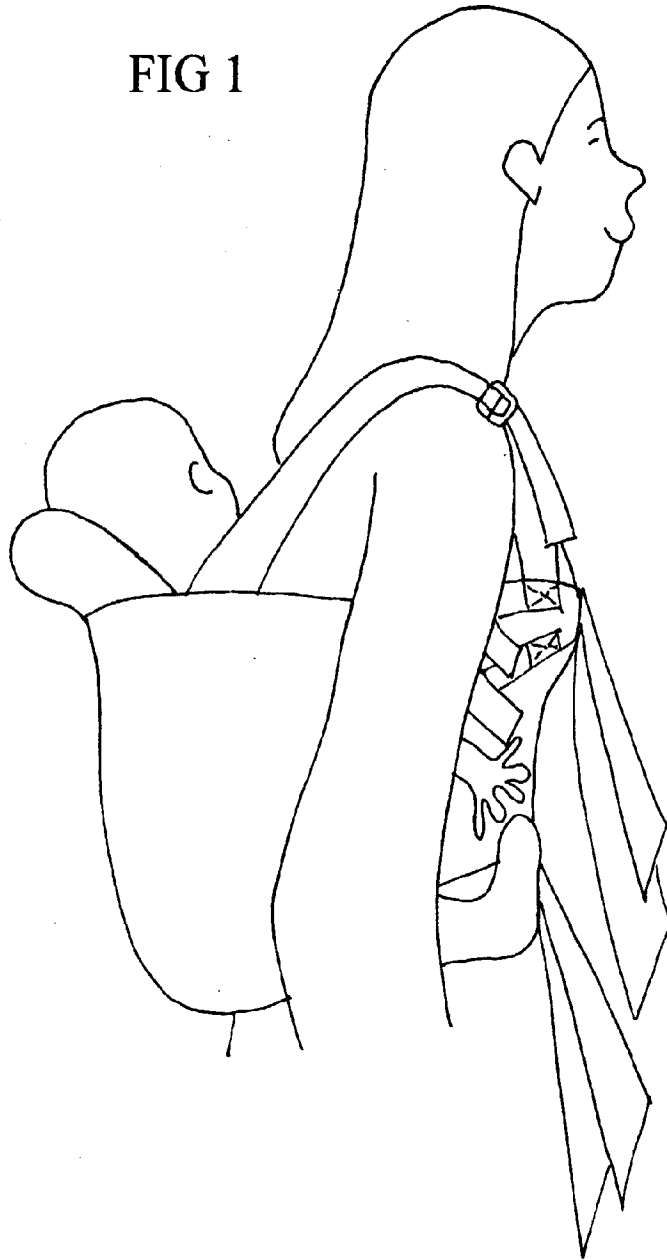
1. Porte-bébé dorsal en tissu permettant de porter les bébés "à cheval" sur le dos, les jambes écartées reposant sur les hanches du porteur, et caractérisé en ce que :
 - il est composé d'une structure de base rectangulaire (A + A' + A'') en tissu résistant fait d'une seule pièce et doublée uniquement sur la partie centrale (A) (afin de conserver une souplesse du tissu au niveau des bandes d'attache), à laquelle on a ôté au niveau de sa largeur l'équivalent d'un « U » formant deux arrondis, permettant de créer quatre bandes qui constituent les bandes d'attaches ventrales

(A''), dont la longueur a été raccourcie, et les bandes d'attaches supérieures (A'),

- il est muni de deux bretelles larges (2, 2 bis) reposant sur les épaules du porteur, qui maintiennent le tissu dans lequel le bébé est installé, et qui sont reliées aux bandes d'attache nouées au niveau de la poitrine,
- il comprend un appuie-tête matelassé amovible (B) se fixant par des bandes auto-agrippantes ou tout autre système d'attaches rapides, à l'intérieur de la structure au niveau des deux autres bandes auto-agrippantes prévues à cet effet,
- des sangles de resserrage (4, 4 bis) réglables au moyen de boucles coulissantes et cousues sur les côtés du porte-bébé permettent au porte-bébé de s'adapter à la taille de l'enfant et du porteur,
- une bande de mousse (5) est cousue dans la doublure au niveau de l'appuie-tête permettant d'apporter un confort supplémentaire au niveau du cou et de la tête du bébé.

2. Porte-bébé selon la revendication 1 caractérisé en ce que les bretelles (2, 2 bis) sont réglables dans leur longueur grâce à des boucles coulissantes. Les parties (2 bis) sont matelassées.
3. Porte-bébé selon la revendication 1 caractérisé en ce qu'il comporte un biais (1) de consolidation cousu au niveau des deux arrondis du « U » se prolongeant jusqu'au bout des bandes d'attache (A', A'').
4. Porte-bébé selon les revendications 1 à 3 caractérisé en ce qu'un mode plus élaboré de réalisation prévoit des bandes d'attaches (A' et A'') matelassées, ainsi qu'un harnais intérieur (C) permettant d'attacher le bébé au porte-bébé.
5. Porte-bébé selon la revendication 4 caractérisé en ce que les bandes d'attaches (A', A''), plus courtes que dans le mode simple de réalisation du porte-bébé, sont munies à leurs extrémités de moyens de fixation du type boucles à fermeture rapide.
6. Porte-bébé selon les revendications 4 et 5 caractérisé en ce qu'un harnais intérieur (C) comporte une double-bande de tissu (8, 8 bis) passant entre les jambes du bébé et remontant sur son ventre. Des coutures horizontales (8 ter) à intervalles réguliers sur sa hauteur permettent de faire glisser dans un des passages ainsi occasionnés (en fonction de la taille de l'enfant), un lien (9), qui rejoint un autre lien par un système de boucles à fermeture rapide (10) au niveau du ventre de l'enfant.

FIG 1



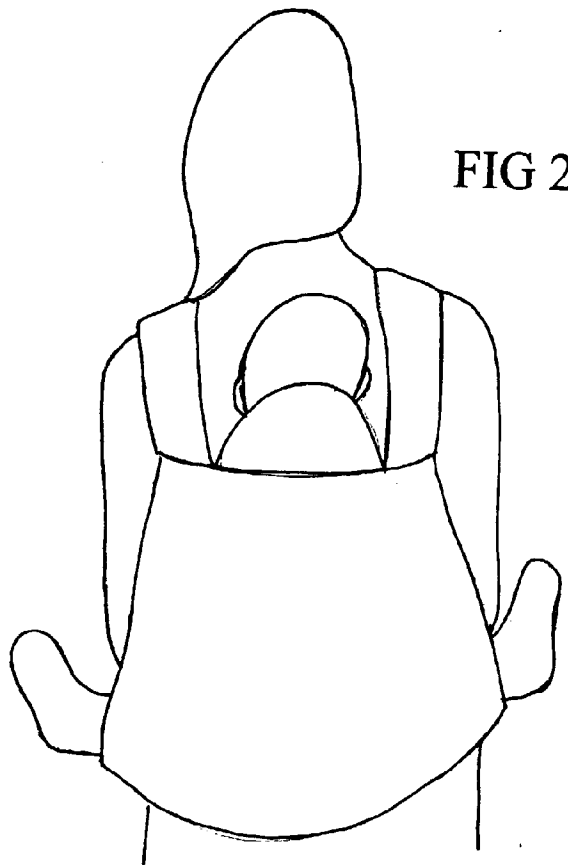
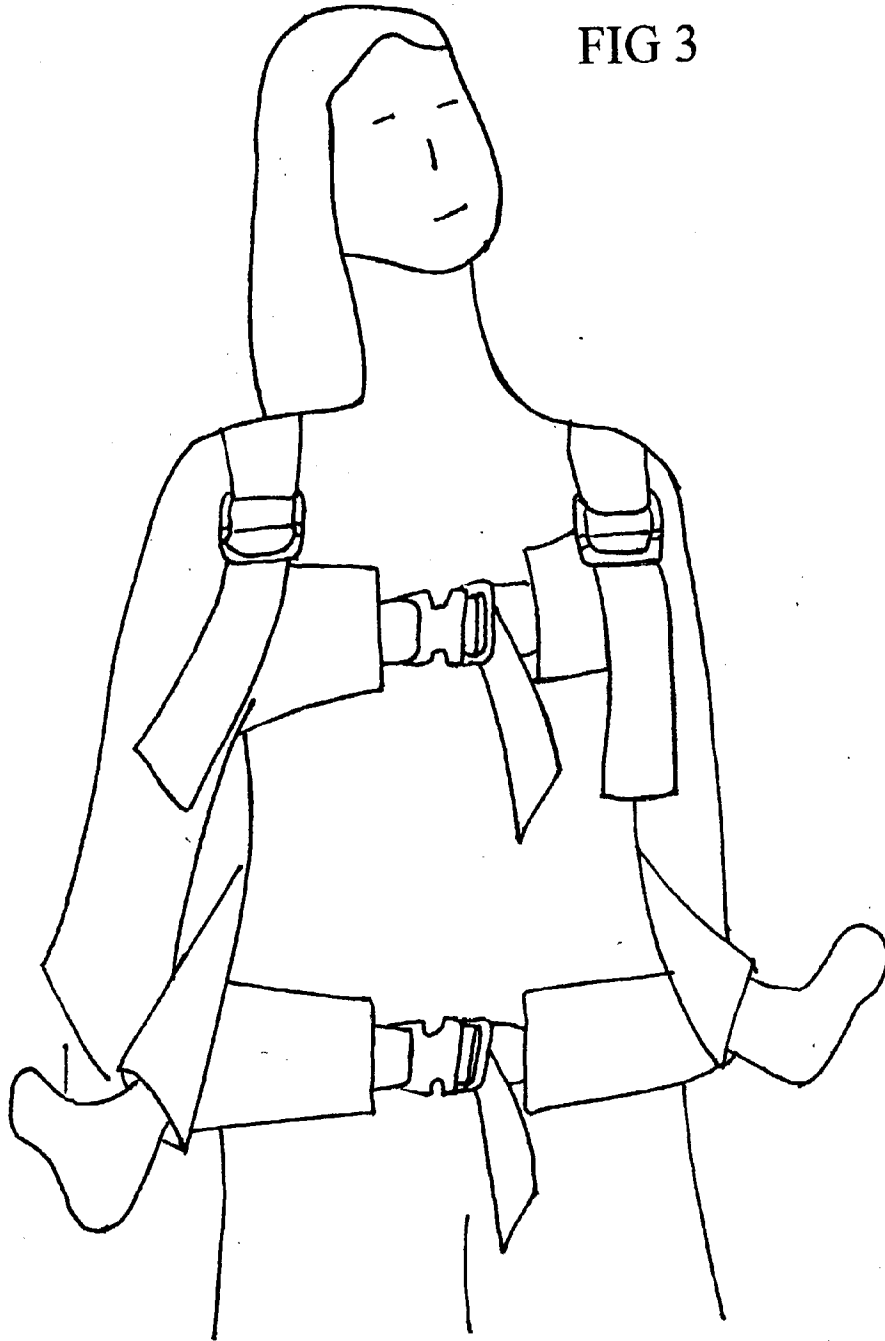


FIG 2

FIG 3



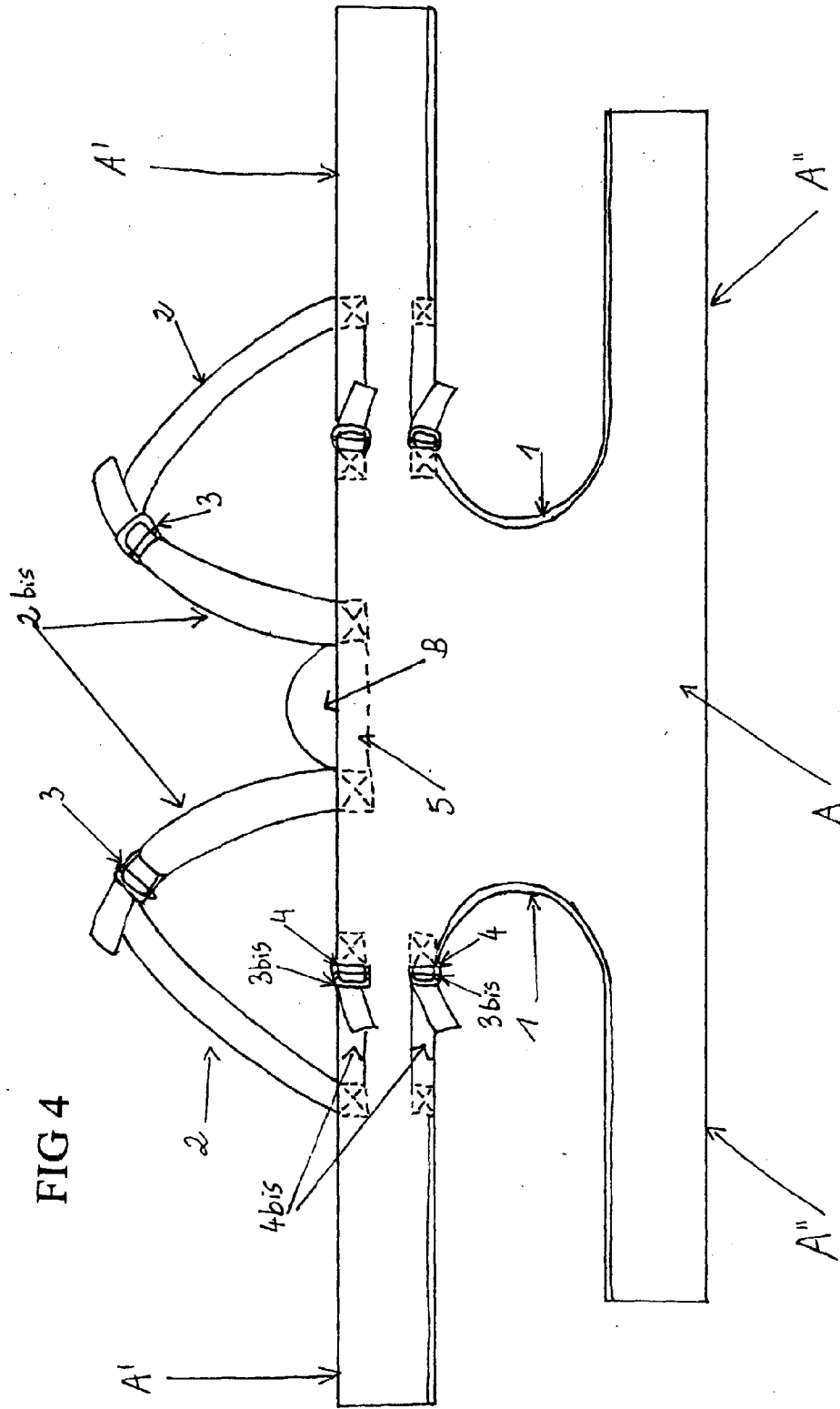
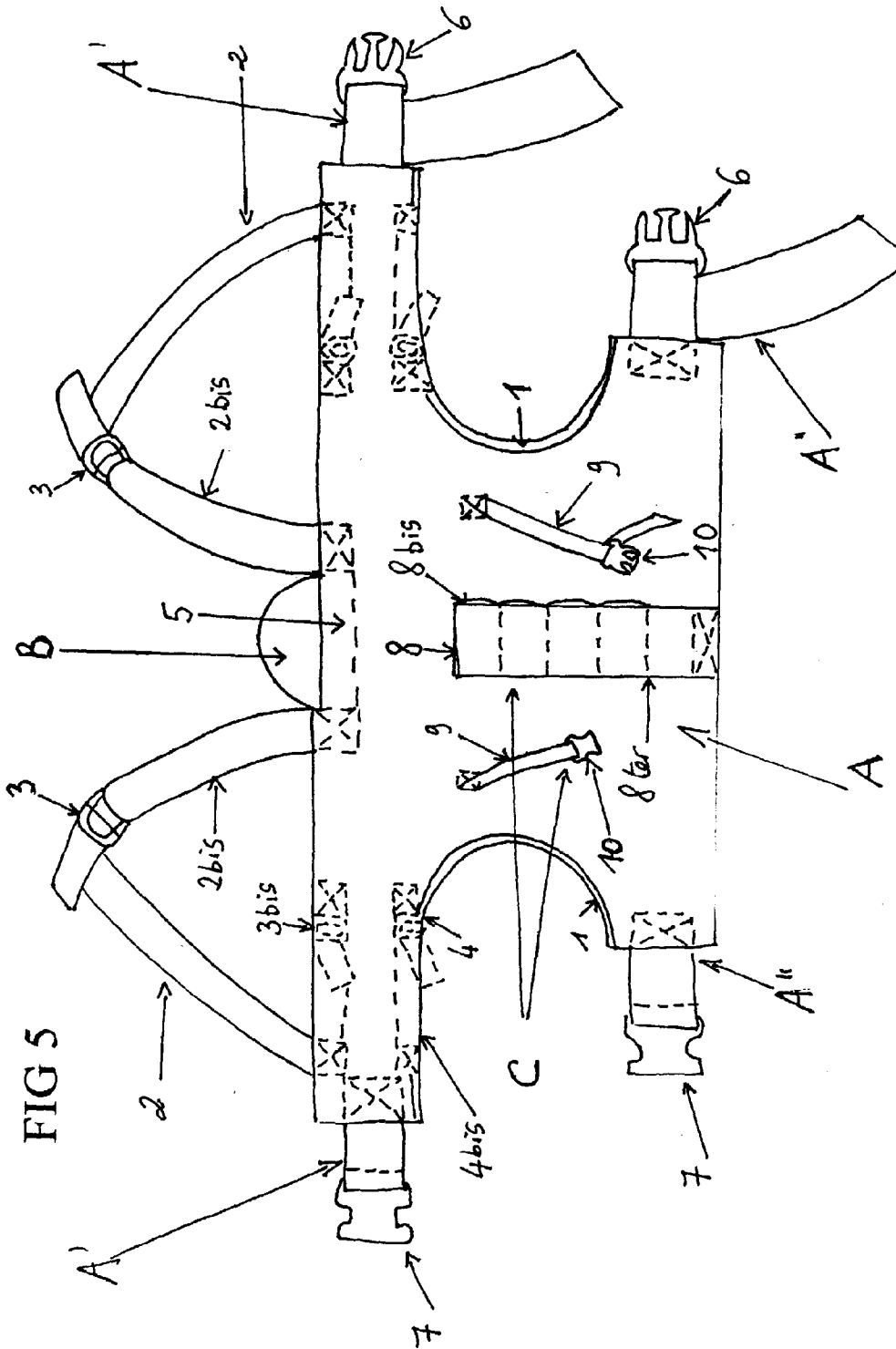


FIG 4





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RAPPORT DE RECHERCHE EUROPEENNE

Numero de la demande
EP 00 40 1482

DOCUMENTS CONSIDERES COMME PERTINENTS			
Catégorie	Citation du document avec indication, en cas de besoin, des parties pertinentes	Revendication concernée	CLASSEMENT DE LA DEMANDE (Int.Cl.7)
A	WO 95 09553 A (HEBEISEN ANGELIKA ; LARY HOFINGER JOHANNA (AT)) 13 avril 1995 (1995-04-13) * revendications 1,6,9; figures 1,2 *	1-3	A47D13/02
A	DE 295 19 530 U (WAGNER PETRA) 22 février 1996 (1996-02-22) * figure 1 *	1	
A	US 4 428 514 A (ELF JENNIFER L) 31 janvier 1984 (1984-01-31) * figure 10 *	1	
A	EP 0 763 339 A (APRICA KASSAI KK) 19 mars 1997 (1997-03-19) * figures 1,8 *	1	
Le présent rapport a été établi pour toutes les revendications			DOMAINES TECHNIQUES RECHERCHES (Int.Cl.7)
			A47D
Lieu de la recherche	Date d'achèvement de la recherche	Examineur	
LA HAYE	10 août 2000	Joosting, T	
CATEGORIE DES DOCUMENTS CITES		T : théorie ou principe à la base de l'invention E : document de brevet antérieur, mais publié à la date de dépôt ou après cette date D : cité dans la demande L : cité pour d'autres raisons & : membre de la même famille, document correspondant	
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EPO FORM 1503 03.82 (P04/C02)

**ANNEXE AU RAPPORT DE RECHERCHE EUROPEENNE
RELATIF A LA DEMANDE DE BREVET EUROPEEN NO.**

EP 00 40 1482

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10-08-2000

Document brevet cité au rapport de recherche	Date de publication	Membre(s) de la famille de brevet(s)	Date de publication
WO 9509553 A	13-04-1995	AT 199493 A	15-12-1996
DE 29519530 U	22-02-1996	AUCUN	
US 4428514 A	31-01-1984	AUCUN	
EP 0763339 A	19-03-1997	JP 9075179 A	25-03-1997
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		KR 196600 B	15-06-1999
		US 5690258 A	25-11-1997

EPO FORM P0460

Pour tout renseignement concernant cette annexe : voir Journal Officiel de l'Office européen des brevets, No.12/82

PATENT ABSTRACTS OF JAPAN

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(21)Application number : 09-202868

(71)Applicant : LUCKY KOGYO KK

(22)Date of filing : 29.07.1997

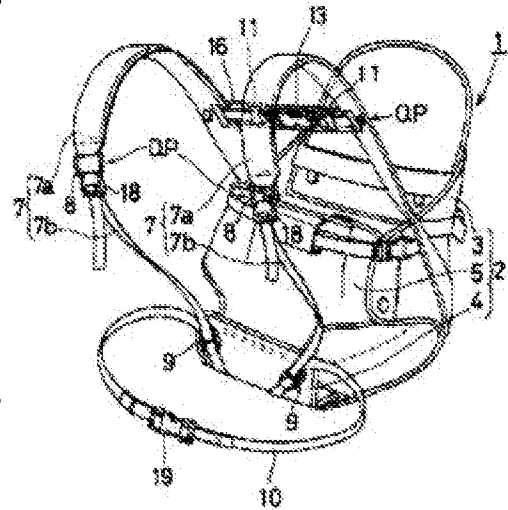
(72)Inventor : HIGUCHI JUNICHI

(54) BRIDGE BELT MOVABLE BABY CARRIER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a bridge belt movable baby carrier which securely prevents shoulder belts from dropping off the shoulders and is used comfortably for a baby.

SOLUTION: This baby carrier is designed so that a pair of right and left shoulder belts 7, 7 are extended in parallel at the top and bottom ends of a carrier main body 2 holding a baby, and a bridge belt 13 is provided across the shoulder belts 7, 7 to regulate a clearance between them. The bridge belt 13 can be detachably engaged with the shoulder belts 7, 7 either in a piggyback ride position (O.P) at the approximate top end or in a holding position (D.P) at the center to regulate a clearance between the shoulder belts 7, 7.



(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平11-46938

(43) 公開日 平成11年(1999) 2月23日

(51) Int.Cl.⁵
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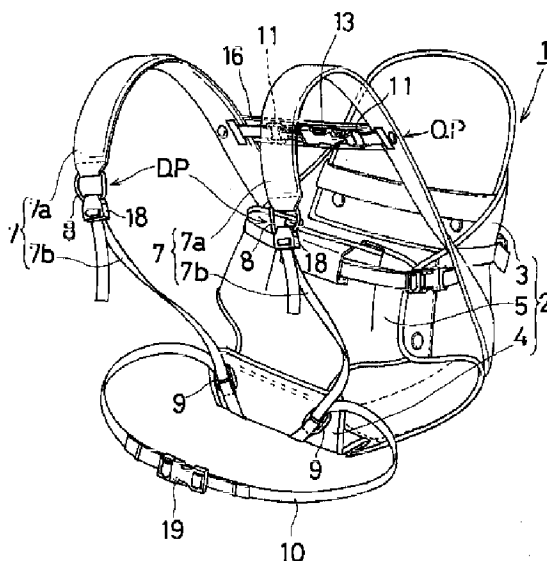
(74) 代理人 弁理士 清水 久義 (外2名)

(54) 【発明の名称】 ブリッジベルト移動式ベビーキャリア

(57) 【要約】

【課題】 低コストでショルダーベルトの肩落ちを確実に防止し、かつ幼児にとって快適な状態で使用できるブリッジベルト移動式ベビーキャリアの提供を目的とする。

【解決手段】 幼児を収容するキャリア本体2の上端部と下端部とに、左右一対のショルダーベルト7、7が並行に差し渡されるとともに、前記ショルダーベルト7、7間に架け渡してショルダーベルト7、7間隔を規制するブリッジベルト13を有するベビーキャリアであって、前記ブリッジベルト13は、前記ショルダーベルト7、7の上端部に近いおんぶ位置(O.P)および中央部のだっこ位置(D.P)のいずれの位置においても該ショルダーベルト7、7に脱着自在に係合可能とされ、係合位置におけるショルダーベルト7、7間隔を規制する。



【特許請求の範囲】

【請求項1】 幼児を収容するキャリア本体(2)の上端部と下端部とに左右一対のショルダーベルト(7)

(7)が並行に差し渡されるとともに、前記ショルダーベルト(7)(7)間に架け渡してショルダーベルト(7)(7)間隔を規制するブリッジベルト(13)を有するベビーキャリアであって、

前記ブリッジベルト(13)は、前記ショルダーベルト(7)(7)の上端部に近いおんぶ位置(O、P)および中央部のだっこ位置(D、P)のいずれの位置においても該ショルダーベルト(7)(7)に脱着自在に係合可能とされ、前記ブリッジベルト(13)の係合位置におけるショルダーベルト(7)(7)間隔を規制することを特徴とするブリッジベルト移動式ベビーキャリア。

【請求項2】 前記ブリッジベルト(13)はその両端部においてフック(14a)(14b)を有し、一方前記ショルダーベルト(7)(7)のおんぶ位置(O、P)およびだっこ位置(D、P)に係合用リング(11)(11)(8)(8)が設けられ、前記フック(14a)(14b)をいずれかの位置の前記係合用リング(11)(11)、(8)(8)に掛け止めることにより該位置におけるショルダーベルト(7)(7)間隔を規制するものとなされている請求項1に記載のブリッジベルト移動式ベビーキャリア。

【請求項3】 前記ブリッジベルト(13)は、中央部においてバックル(15)により分離・連結自在に構成されている請求項2に記載のブリッジベルト移動式ベビーキャリア。

【請求項4】 前記ブリッジベルト(20)はその両端にバックルの雌部材(21)(21)または雄部材を有し、一方前記ショルダーベルト(7)(7)のおんぶ位置(O、P)およびだっこ位置(D、P)に前記雌部材(21)(21)または雄部材に対応して連結可能な雄部材(22)(22)または雌部材が設けられ、前記ブリッジベルト(20)の雌部材(21)(21)または雄部材をいずれかの位置の雄部材(22)(22)または雌部材に連結させることにより、該位置におけるショルダーベルト(7)(7)間隔を規制するものとなされている請求項1に記載のブリッジベルト移動式ベビーキャリア。

【請求項5】 前記ブリッジベルト(20)は、その両端にバックルの雌部材(21)(21)または雄部材を有し、一方前記ショルダーベルト(7)(7)のおんぶ位置(O、P)およびだっこ位置(D、P)に前記雌部材(21)(21)または雄部材に対応して連結可能な雄部材(22)(22)または雌部材が設けられ、前記ブリッジベルト(20)の雌部材(21)(21)または雄部材をいずれかの位置の雄部材(22)(22)または雌部材に連結させることにより、該位置におけるショルダーベルト(7)(7)間隔を規制するものとなされている請求項1に記載のブリッジベルト移動式ベビーキャリア。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】この発明は、幼児を背負い(おんぶ)または前抱き(だっこ)して移動する際の補助具として用いられるベビーキャリアに関する。

【0002】

【従来技術】図10および図11に例示するこの種のベビーキャリア(50)では、おんぶの時にショルダーベルトが使用者の胸部を圧迫しないように、胸で交差させず肩から脇に並行に差し渡すリュック式のショルダー

ベルト(51)一般である。また、このようなリュック式ベビーキャリア(50)では、おんぶの時はもとより、だっこの時もショルダーベルト(51)が使用者の肩からずり落ちやすいという不都合があるため、左右のショルダーベルト(51)(51)の離反を防いで肩落ちを防止する方法が採られている。前記ベビーキャリア(50)においては、図11(イ)に示すおんぶの時に、左右のショルダーベルト(51)(51)のキャリア本体(52)の上端部に近い部分にブリッジベルト(53)を架け渡し、使用者の背面における左右のショルダーベルト(51)(51)間隔を規制することにより肩落ちを防いでいる。また、ショルダーベルト(51)(51)の間隔が規制されていると、開口部が狭くなってキャリア本体(52)への幼児の出し入れが困難であるため、前記ブリッジベルト(53)は連結具(53a)により中央部で分離可能とされている。そして、ブリッジベルト(53)を分離してキャリア本体(52)の上方を大きく開口させた状態で幼児を収容したのち、ブリッジベルト(53)の連結によりショルダーベルト(51)(51)間隔を規制する。一方、前記ブリッジベルト(53)は、図11(ロ)に示すだっこの時の肩落ち防止にはほとんど効果がないため、ショルダーベルト(51)のほぼ中央部にバックル(54a)(54b)を設け、これらのバックル(54a)(54b)の連結により背面におけるショルダーベルト(51)(51)間隔を規制している。なお、だっこの場合は、ウエストベルト(56)をしなくてもベビーキャリア(50)を安定して装着することができる。

【0003】

【発明が解決しようとする課題】しかしながら、前記ブリッジベルト(53)はだっこの時の肩落ち防止には効果がないため、だっこの際には不要である。また、このようなブリッジベルト(53)は幼児の顔前に位置し、布製のブリッジカバー(55)を配して硬いブリッジベルト(53)の連結具(53a)が直接顔に当たらないように安全に配慮がなされていると言えども、幼児にとっては異物であり存在しない方が良い。

【0004】一方、おんぶの時は、ショルダーベルト(51)中央部のバックル(54a)(54b)は不要となる。

【0005】このように、ブリッジベルト(53)とバックル(54a)(54b)とは同時に使用することはないにも拘らず、両者を備えなければならないために、コスト高になっている。

【0006】この発明は、このような背景に鑑み、低コストでショルダーベルトの肩落ちを確実に防止し、かつ幼児にとってより快適な状態で使用できるブリッジベルト移動式ベビーキャリアの提供を目的とする。

【0007】

【課題を解決するための手段】この発明のブリッジベル

ト移動式ベビーキャリアは、前記目的を達成するために、幼児を収容するキャリア本体(2)の上端部と下端部とに左右一対のショルダーベルト(7)(7)が並行に差し渡されるとともに、前記ショルダーベルト(7)(7)間に架け渡してショルダーベルト(7)(7)間隔を規制するブリッジベルト(13)を有するベビーキャリアであって、前記ブリッジベルト(13)は、前記ショルダーベルト(7)(7)の上端部に近いおんぶ位置(O、P)および中央部のだっこ位置(D、P)のいずれの位置においても該ショルダーベルト(7)(7)に脱着自在に係合可能とされ、前記ブリッジベルト(13)の係合位置におけるショルダーベルト(7)(7)間隔を規制することを基本要旨とする。

【0008】また、前記ブリッジベルト移動式ベビーキャリアにおけるブリッジベルトの一係合方法として、前記ブリッジベルト(13)はその両端部においてフック(14a)(14b)を有し、一方前記ショルダーベルト(7)(7)のおんぶ位置(O、P)およびだっこ位置(D、P)に係合用リング(11)(11)(8)(8)が設けられ、前記フック(14a)(14b)をいずれかの位置の前記係合用リング(11)(11)(8)(8)に掛け止めることにより該位置におけるショルダーベルト(7)(7)間隔を規制するものなされていることが好ましく、さらに、前記ブリッジベルト(13)は、中央部においてバックル(15)により分離・連結自在に構成されていることが好ましい。

【0009】また、前記ブリッジベルト移動式ベビーキャリアにおけるブリッジベルトの他の係合方法として、前記ブリッジベルト(20)はその両端にバックルの雌部材(21)(21)または雄部材を有し、一方前記ショルダーベルト(7)(7)のおんぶ位置(O、P)およびだっこ位置(D、P)に前記雌部材(21)(21)または雄部材に対応して連結可能な雄部材(22)(22)または雌部材が設けられ、前記ブリッジベルト(20)の雌部材(21)(21)または雄部材をいずれかの位置の雄部材(22)(22)または雌部材に連結させることにより、該位置におけるショルダーベルト(7)(7)間隔を規制するものとなされていることが好ましい。

【0010】この発明のベビーキャリアにおいて、おんぶで使用する場合はブリッジベルト(13)をショルダーベルト(7)のおんぶ位置(O、P)に係合することにより、使用者の背面でショルダーベルト(7)(7)間隔が規制されるため、ショルダーベルト(7)が肩からずり落ち傾向を生じることがない。一方、だっこで使用する場合は、ブリッジベルト(13)をショルダーベルト(7)のだっこ位置(D、P)に係合することにより、やはり使用者の背面でショルダーベルト(7)(7)間隔が規制されるため、ショルダーベルト(7)のずり落ちが防止される。このように、おんぶあるいは

だっこのいずれの使用形態であっても、確実にショルダーベルト(7)の肩落ちを防止し、安定した装着状態を実現しうる。しかも、ブリッジベルト(13)を必要位置に移動させて使用するため、ブリッジベルト(13)は1つあれば良い。特にだっこの場合は、幼児の顔前に相当するおんぶ位置(O、P)にブリッジベルト(13)が存在せず、幼児にとって快適な使用状態を作り出すことができる。

【0011】

【発明の実施の形態】図1乃至図7に示されているのは、この発明にかかるブリッジベルト移動式ベビーキャリアの一実施形態である。

【0012】図1に示すように、ベビーキャリア(1)は、柔軟で適度な強度を有する布等の汎用素材を用いて形成されるもので、キャリア本体(2)が背当て部(3)、股当て部(4)および前当て部(5)が連続した袋形に形成されているとともに、幼児の後頭部を安定させる頭当て部材(6)が前記背当て部(3)の上部から突出した状態で、スナップ留により背当て部(3)から着脱可能に設けられている。また、前記キャリア本体(2)の背当て部(3)から、左右一対のショルダーベルト(7)(7)が上方に引き出され、該ショルダーベルト(7)(7)の幅広部(7a)(7a)と先端側の帯紐部(7b)(7b)との間にだっこ係合用リング(8)(8)が介装されるとともに、帯紐部(7b)(7b)の中間位置においてラダー部材(9)(9)によりキャリア本体(2)の股当て部(4)に連結されており、実質的にキャリア本体(2)の上端部と下端部とにショルダーベルト(7)(7)が差し渡されている。そして、前記ラダー部材(9)(9)により長さ調節された帯紐部(7b)(7b)の先端側剰余部分により、使用者の腰回りに巻き留めるウエストベルト(10)が形成されている。また、図2に示すように、前記ショルダーベルト(7)(7)の幅広部(7a)(7a)においては、おんぶ係合用リング(11)(11)が細幅テープ(12)を介して幅広部(7a)(7a)から内向き突出状態に縫着されている。また、(16)は、後に詳述するブリッジベルト(13)から幼児を保護するブリッジカバーであり、スナップによりショルダーベルト(7)に対して着脱自在に構成されている。(17)は、前記細幅テープ(12)の基部部にゴムテープの上下両端を縫着して形成されたおんぶ係合用リング(11)の収納部である。

【0013】そして、前記ショルダーベルト(7)(7)において、前記おんぶ係合用リング(11)(11)の縫着位置が本発明におけるおんぶ位置(O、P)に相当し、だっこ係合用リング(8)(8)の介装位置がだっこ位置(D、P)に相当し、これらの位置のいずれに対しても図3に示すブリッジベルト(13)が脱着可能に係合される。

【0014】図3に示すように、前記ブリッジベルト(13)は、両端部にフック(14a)(14b)を有し、かつ一方のフック(14a)はバックル(15)の雌部材(15a)と一体に形成され、他方のフック(14b)は雄部材(15b)と一体に形成され、これらを雌雄部材(15a)(15b)を連結することによりブリッジベルト(13)は一つのブロックとなる。また、前記おんぶ係合用リング(11)またはだっこ係合用リング(8)に対してブリッジベルト(13)に係合させるには、図4に示すように、ブリッジベルト(13)のフック(14a)(14b)のバネ片(14c)を跳ね上げるようにしてリング(11)(8)を押し込めば良い。逆に離反させるには、バネ片(14c)を跳ね上げてリング(11)(8)を抜き取る。

【0015】前記ブリッジベルト(13)は、前記おんぶ位置(O、P)またはだっこ位置(D、P)のいずれか任意の位置の係合用リング(8)(11)に対して係合し、かつ離反させることができ、係合位置におけるショルダーベルト(7)(7)間隔をブリッジベルト(13)の長さに規制することができる。図2において、実線はおんぶ位置(O、P)における係合を示し、仮想線はだっこ位置(D、P)における係合を示す。また、前記ブリッジベルト(13)がおんぶ位置(O、P)にあるときは、ブリッジベルト(13)が幼児の顔に直接接触れないように、ブリッジカバー(16)で覆っておく。また、前記ブリッジベルト(13)がだっこ位置(D、P)に係合されているときは、おんぶ位置(O、P)のおんぶ係合用リング(11)は不要であるから、細幅テープ(12)を幅広部(7a)(7a)上で折り返し、収納部(17)に挟んでおくとともに、ブリッジカバー(16)もショルダーベルト(7)(7)から外しておく。

【0016】上述したブリッジベルト移動式ベビーキャリア(1)の使用状態を図6および図7に示す。

【0017】図6(イ)(ロ)に示すおんぶでは、ブリッジベルト(13)をショルダーベルト(7)のおんぶ位置(O、P)に係合させる。そして、ブリッジベルト(13)のバックル(15)を分離してキャリア本体(2)の上方を大きく開口させた状態で幼児を本体(2)内に収容したのち、バックル(15)を連結し、さらにブリッジカバー(16)を装着する。この状態でショルダーベルト(7)(7)を両肩に掛け、ウエストベルト(10)を腰回りに巻き留める。このおんぶの状態では、使用者の背面において、ブリッジベルト(13)によりショルダーベルト(7)(7)間隔が規制され、ショルダーベルト(7)の肩落ちを防ぐことができる。

【0018】図7(イ)(ロ)に示すだっこでは、ブリッジベルト(13)をショルダーベルト(7)(7)のだっこ位置(D、P)のだっこ係合用リング(8)

(8)に係合するとともに、おんぶ位置(O、P)の上方リング(11)(11)は収納部(17)内に収納しておく。また、ブリッジカバー(16)もショルダーベルト(7)から取り外しておく。そして、ブリッジベルト(13)のバックル(15)を分離させてキャリア本体(2)内に幼児を収納し、ショルダーベルト(7)

(7)を両肩に掛けて背中でバックル(15)を連結し、さらにウエストベルト(10)を腰回りに巻き留める。このだっこの状態においても、使用者の背面でショルダーベルト(7)(7)間隔が規制され、ショルダーベルト(7)の肩落ちを防ぐことができる。しかも、幼児の顔前にブリッジベルト(13)は存在しないため、幼児にとって快適な環境でだっこされることができる。なお、だっこの場合は、おんぶよりも帯紐部(7b)(7b)の先端側剰余部分が短くなるため、使用者の体格によってはウエストベルト(10)の長さが不足して腰回りに巻き留められないことがある。しかし、だっこの場合はウエストベルト(10)がなくてもベビーキャリア(1)を使用者の身体に安定して装着できるため、ウエストベルト(10)を装着しなくても支障はない。

【0019】なお、前記ブリッジベルト移動式ベビーキャリア(1)において、前記ショルダーベルト(7)の帯紐部(7b)やウエストベルト(10)の長さは、使用者や幼児の体格に合わせて、だっこ係合用リング(8)に接続される帯紐通し(18)、帯紐部(7b)をキャリア本体(2)に連結するラダー部材(9)、ウエストベルト(10)のバックル(19)に付設されたベルト送りにより適宜調節する。

【0020】また、前述の使用例では、キャリア本体への幼児を出入れやだっこ時のショルダーベルト(7)装着の際に、前記ブリッジベルト(13)にの中央部のバックル(15)を分離して開口部を大きくしている。しかし、バックル(15)による中央部の分離に代えて一方のフック(14a)または(14b)をリング(11)(8)から外すようにしても大きな開口部を確保することができ、バックルによる分離・連結機能を省略することも可能である。バックルを省略した場合はコスト面で有利である。一方、本実施例のようにバックルを付加した場合の有利性は、分離・連結をワンタッチで容易に行えることにあり、特にだっこ使用の場合は後ろ手での操作になるため、フック(14a)(14b)の着脱よりもバックル(15)の分離・連結の方が操作が簡単である。

【0021】なお、図1乃至図7に例示したブリッジベルト移動式ベビーキャリア(1)は、キャリア本体(2)が袋状に形成されたものであるが、本発明のベビーキャリアはショルダーベルトを胸で交差させず両肩から脇へ並行に差し渡すリュックタイプであって、おんぶ・だっこ兼用のキャリアである限り、その他の構成を限定するものではない。従って、この発明は、前当て部の

ないいわゆるオープンタイプのものでも良いし、またショルダーベルト長さの調節方法、ウエストベルトの有無等についても、これらの図に示すものに限定されるものではない。

【0022】また、ブリッジベルトの係合方法の他の例としては、図8または図9に示すものを例示できる。

【0023】図8は、バックルの分離・連結による方法である。この図において、ブリッジベルト(20)は、両端にバックルの雌部材(21)(21)が形成されている。一方、ショルダーベルト(7)の幅広部(7a)のおんぶ位置(O、P)には、前記雌部材(21)に対応する雄部材(22)が細幅テープ(23)を介して内向き突出状態に縫着されているとともに、前記細幅テープ(23)の基端部にゴムテープの上下両端を縫着することによって収納部(24)が形成されている。また、だっこ位置(D、P)においては、幅広部(7a)の先端に帯紐の縫着によりループ部(25)が形成されているとともに、前記雌部材(21)に対応する雄部材(26)が径方向外側に突出形成されたリング(27)が該ループ部(25)に回動自在に挿通されている。そして、おんぶで使用する場合は、おんぶ位置(O、P)の前記雄部材(22)(22)とブリッジベルト(20)の雌部材(21)(21)とを連結する一方、だっこ位置(D、P)の前記リング(27)を回動して雄部材(26)をループ部(25)内に収納する。また、だっこで使用する場合は、仮想線で示すように、だっこ位置(D、P)のリング(27)を回動して雄部材(26)(26)をショルダーベルト(7)(7)の内側に突出させ、雄部材(26)(26)をブリッジベルト(20)の雌部材(21)(21)に連結する一方、おんぶ位置(D、P)の雄部材(26)(26)を細幅テープ(23)を折り曲げて収納部(24)(24)内に挟んでおく。

【0024】図9は、ループ部のリングへの挿通による方法である。この図において、ブリッジベルト(30)は、ループ状の細帯(31)上に分離・連結可能なバックル(32)が設けられる一方、ショルダーベルト(7')(7')上のおんぶ位置(O、P)および抱っこ位置(D、P)にそれぞれリング(33)(34)が介装されている。そして、前記ブリッジベルト(30)のバックル(32)を分離して、所要位置のリング(33)(33)に挿通したのちバックル(32)を連結することにより、ショルダーベルト(7')(7')間隔を規制する。

【0025】

【発明の効果】以上説明したように、この発明のブリッジベルト移動式ベビーキャリアにおいて、左右のショルダーベルト間に架け渡してショルダーベルト間隔を規制するブリッジベルトを、おんぶ位置およびだっこ位置のいずれにも着脱自在に係合できるため、使用形態に応じ

てブリッジベルトの係合位置を変えることにより常に背面におけるショルダーベルト間隔を規制して肩落ちを防止し、安定した装着状態を実現できる。また、ブリッジベルトは所要位置に移動させて使用するから、ブリッジベルトは1つあれば良く、両方の位置のブリッジベルトを固定的に設ける場合よりもコスト的に有利である。特にだっここの場合は、幼児の顔前にブリッジベルトが存在せず、幼児にとって快適な使用環境となる。

【0026】また、前記ブリッジベルト移動式ベビーキャリアにおけるブリッジベルトの一係合方法として、前記ブリッジベルトはその両端部においてフックを有し、一方前記ショルダーベルトのおんぶ位置およびだっこ位置に係合用リングが設け、前記フックをいずれかの位置の前記係合用リングに掛け止める構成を採用した場合は、ショルダーベルトへのブリッジベルトの脱着が容易であり、さらにこのブリッジベルトを、中央部においてバックルにより分離・連結自在に構成した場合は、キャリア本体への幼児の出し入れや使用者の身体への着脱操作を容易に行うことができる。

【0027】また、前記ブリッジベルト移動式ベビーキャリアにおけるブリッジベルトの他の係合方法として、前記ブリッジベルトとショルダーベルトとの間のバックル機構を採用した場合も、前述のフック方式と同様にキャリア本体への幼児の出し入れや使用者の身体への脱着操作を容易に行うことができる。

【図面の簡単な説明】

【図1】この発明にかかるブリッジベルト移動式ベビーキャリアの一実施形態の斜視図である。

【図2】図1の要部拡大図である。

【図3】ブリッジベルトの斜視図である。

【図4】ブリッジベルトのフックとショルダーベルトのリングの係合を示す断面図である。

【図5】リングの収納状態を示す正面図である。

【図6】図1のベビーキャリアのおんぶでの使用状態を示す斜視図であり、(イ)は後姿、(ロ)は前姿である。

【図7】図1のベビーキャリアのだっこでの使用状態を示す斜視図であり、(イ)は前姿、(ロ)は後姿である。

【図8】この発明のブリッジベルト移動式ベビーキャリアの他の実施形態を示す部分正面図である。

【図9】この発明のブリッジベルト移動式ベビーキャリアのさらに他の実施形態を示す部分正面図である。

【図10】従来のリュックタイプのベビーキャリアの斜視図である。

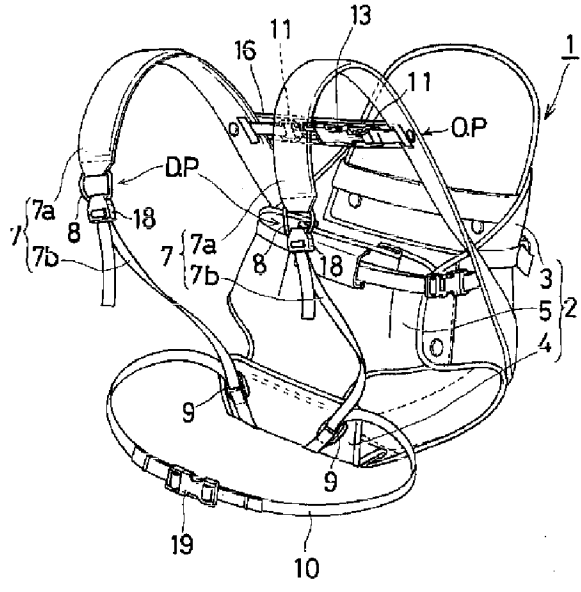
【図11】図11のベビーキャリアの使用状態を示す斜視図であり、(イ)はおんぶでの使用状態、(ロ)はだっこでの使用状態である。

【符号の説明】

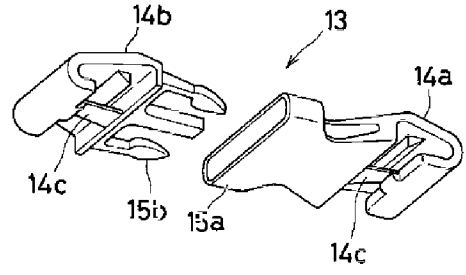
1…ブリッジベルト移動式ベビーキャリア

- 2…キャリア本体
- 7…ショルダーベルト
- 8…係合用リング (だっこ係合用リング)
- 11…係合用リング (おんぶ係合用リング)
- 13、20…ブリッジベルト
- 14 a、14 b…フック
- 15…バックル
- 21…雌部材
- 22…雄部材
- O、P…おんぶ位置
- D、P…だっこ位置

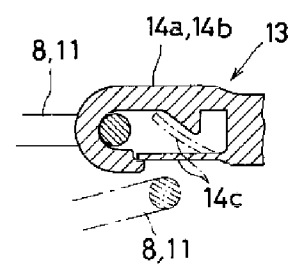
【図1】



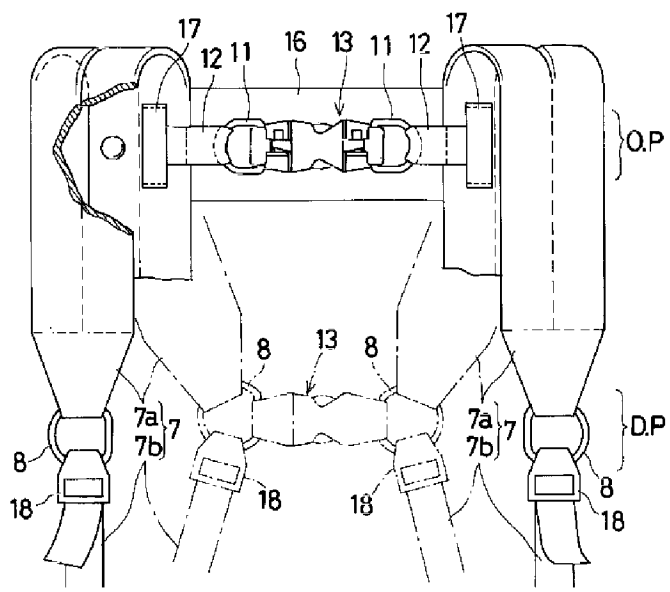
【図3】



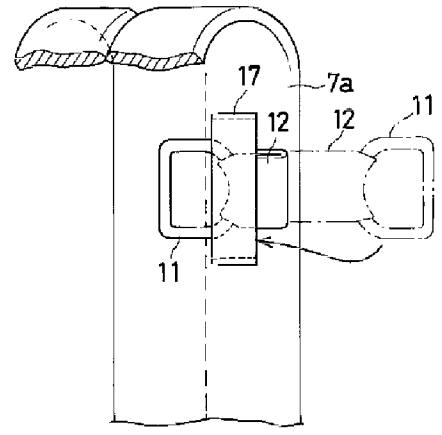
【図4】



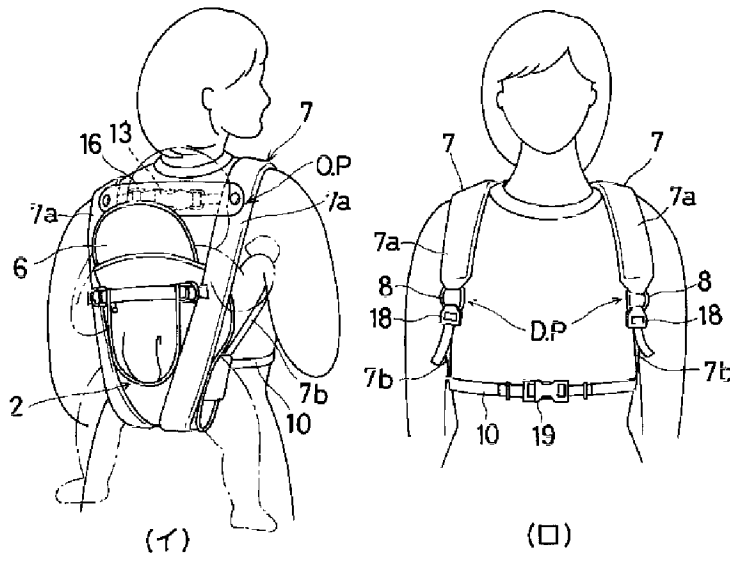
【図2】



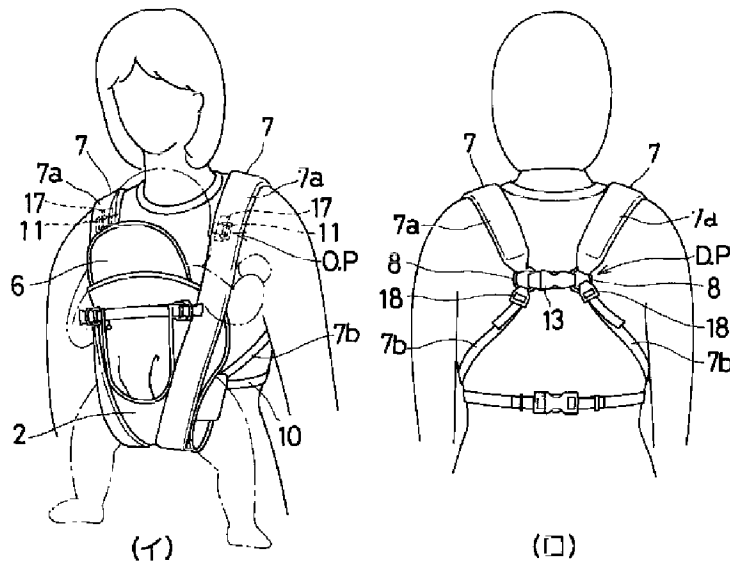
【図5】



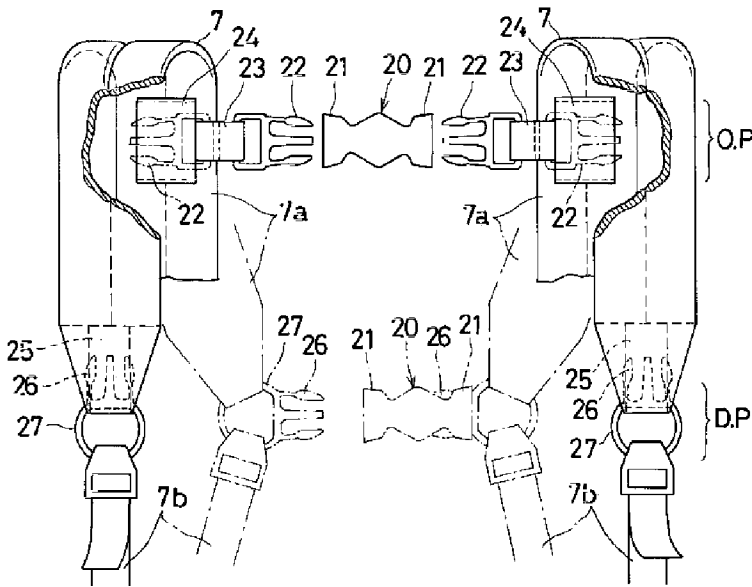
【図6】



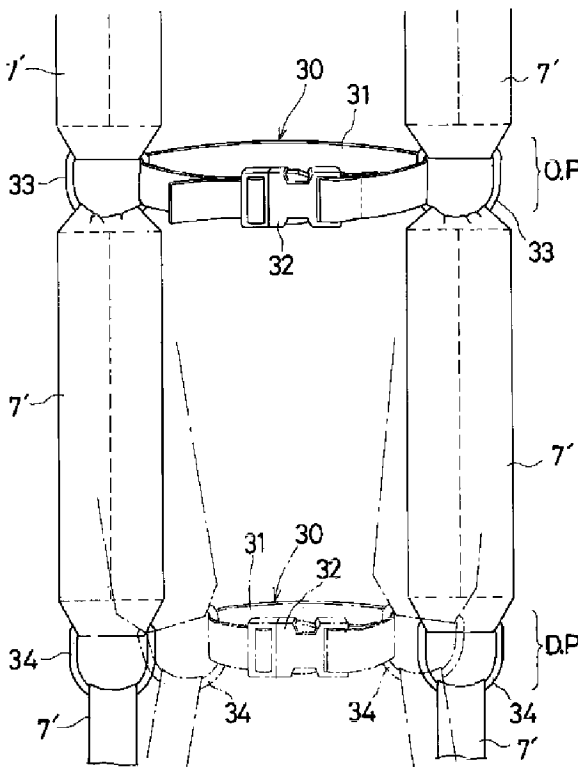
【図7】



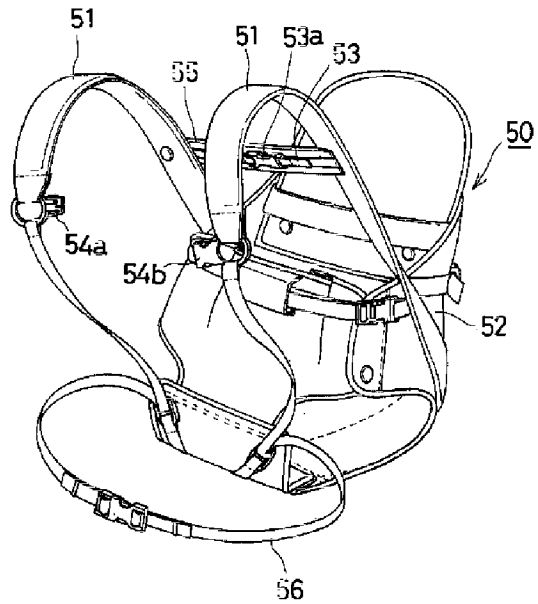
【図8】



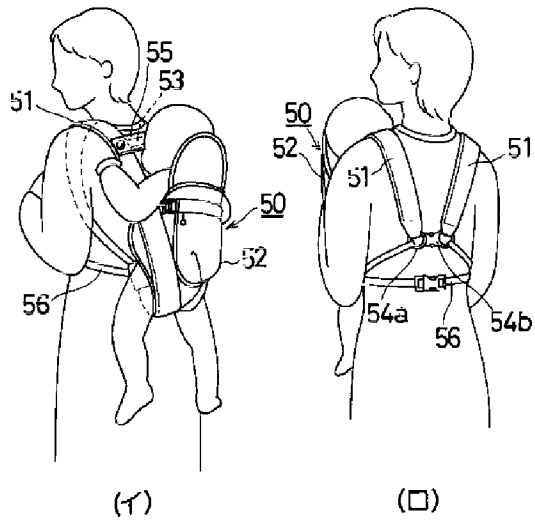
【図9】



【図10】



【図11】



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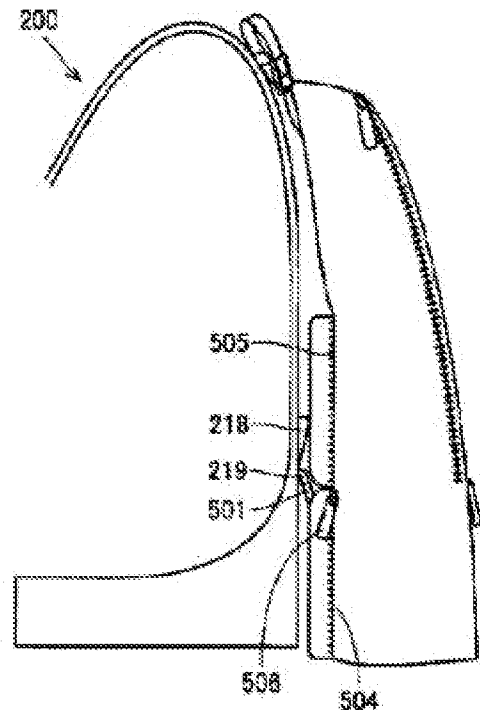
(72)Inventor : KASAI KENZO
NISHIKURA MIYUKI

(54) RUCKSACK

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a useful rucksack for a mother or the like carrying a baby in one's arms or back.

SOLUTION: The rucksack is provided with right and left shoulder loop members, a back face connecting member connecting back face sides of the right and left shoulder loop members, a front face connecting member connecting front face sides of the right and left shoulder loop members, a foldable storage bag 500, a child carrier receiving and holding a child, back side attaching and detaching means 219 and 501 for removably and selectively connecting the storage bag or the child carrier to the back face connecting member, and front side attaching and detaching means for removably and selectively connecting the storage bag or the child carrier to the front face connecting member. A U-shaped fastener rail 504 and an inverted U-shaped fastener rail 505 are provided on an outside face of the storage bag 500, and when both fasteners 504 and 505 are connected, the folded storage bag 500 can be enclosed into a bag shape.



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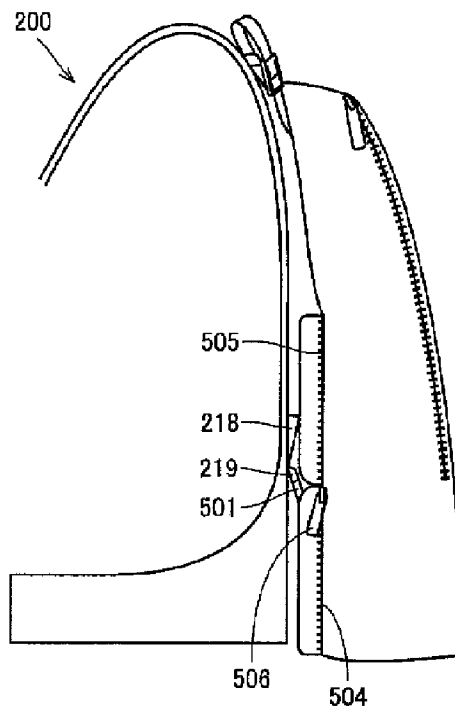
Fターム(参考) 2E181 AA05 BA03 BD02

(54) 【発明の名称】 リュックサック

(57) 【要約】

【課題】 赤ちゃんを抱いたりおんぶしたりする母親等にとって便利なリュックサックを提供する。

【解決手段】 リュックサックは、左右の肩ループ部材と、左右の肩ループ部材の背面側を連結する背面連結部材と、左右の肩ループ部材の前面側を連結する前面連結部材と、折りたたみ可能な収納袋500と、子供を受入れて保持する子供キャリアと、収納袋または子供キャリアを選択的に背面連結部材に取外し可能に連結するための背面側脱着手段219、501と、収納袋または子供キャリアを選択的に前面連結部材に取外し可能に連結するための前面側脱着手段とを備える。収納袋500の外面上には、U字状ファスナレール504と逆U字状ファスナレール505とが設けられており、これらの両ファスナ504、505を連結すると、折り畳んだ収納袋500を袋状に包囲することができる。



【特許請求の範囲】

【請求項1】 左右の肩ループ部材と、前記左右の肩ループ部材の背面側を連結する背面連結部材と、折り畳み可能な収納袋と、前記収納袋を前記背面連結部材に取外し可能に連結するための背面側脱着手段と、前記背面側脱着手段によって前記背面連結部材に連結されている前記収納袋の折り畳み状態を保持するための折り畳み状態保持手段とを備える、リュックサック。

【請求項2】 前記折り畳み状態保持手段は、折り畳んだ前記収納袋を袋状に包囲することができるような位置関係で前記収納袋の外面上に設けられているファスナを含む、請求項1に記載のリュックサック。

【請求項3】 前記背面側脱着手段は、ファスナレールである、請求項1または2に記載のリュックサック。

【請求項4】 前記背面側脱着手段とは別に、前記収納袋の上方部分と前記肩ループ部材または前記背面連結部材とを取外し可能に連結する上方連結部材をさらに備える、請求項1～3のいずれかに記載のリュックサック。

【請求項5】 前記左右の肩ループ部材の背面側部分と前記背面連結部材とは、一体的に形成されて後身頃を形成している、請求項1～4のいずれかに記載のリュックサック。

【請求項6】 前記左右の肩ループ部材の前面側を連結する前面連結部材と、前記収納袋を前記前面連結部材に取外し可能に連結するための前面側脱着手段とをさらに備える、請求項1～5のいずれかに記載のリュックサック。

【請求項7】 子供を受入れて保持する子供キャリアと、前記子供キャリアを前記左右の肩ループ部材の前面側に連結するためのキャリア連結手段とをさらに備える、請求項1～6のいずれかに記載のリュックサック。

【請求項8】 子供を受入れて保持する子供キャリアを備え、前記子供キャリアは、前記前面側脱着手段の構成要素を利用して前記前面連結部材に取外し可能に連結されることが可能であり、かつ、前記背面側脱着手段の構成要素を利用して前記背面連結部材に取外し可能に連結されることが可能である、請求項6に記載のリュックサック。

【請求項9】 左右の肩ループ部材と、前記左右の肩ループ部材の背面側を連結する背面連結部材と、前記左右の肩ループ部材の前面側を連結する前面連結部材と、折り畳み可能な収納袋と、子供を受入れて保持する子供キャリアと、前記収納袋または前記子供キャリアを選択的に前記背面連結部材に取外し可能に連結するための背面側脱着手段

と、前記収納袋または前記子供キャリアを選択的に前記前面連結部材に取外し可能に連結するための前面側脱着手段とを備える、リュックサック。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】この発明は、リュックサックに関するものであり、特に赤ちゃんを抱いたり、おんぶしたりする母親や父親にとって有用なリュックサックに関するものである。

【0002】

【従来の技術】赤ちゃんを抱いたり、おんぶしたりする手段として、子守帯がある。従来の子守帯において、赤ちゃんを前面側と背面側とに乗せ変え可能な構造を有するものとして、特開平9-121987号公報に開示される子守帯を挙げることができる。この子守帯は、使用者に装着され、ベルト部材からなる支持手段に幼児収容体を着脱可能に取付けることを特徴としている。

【0003】

【発明が解決しようとする課題】子守帯を用いて赤ちゃんを前抱きする場合、母親の両手は赤ちゃんを支えるのに使われるため、荷物等を手で持つことができない。そのような場合、リュックサックが便利である。母親は両肩で背負ったリュックサックの収納袋に荷物を入れて持ち運ぶことができる。

【0004】不便な点は、リュックサックを背負っていると、赤ちゃんを背面側で背負うことができなくなることである。また、子守帯およびリュックサックは共に肩の上を通過するベルト状部分を有しているため、赤ちゃんを前抱きしている場合には、2種類のベルト状部分が両肩の上に存在することになる。そのような状態は、母親にとって非常に煩わしいものであり、外観的な見栄えも悪い。

【0005】この発明は上記のような不便な点を考慮してなされたものであり、その目的は、特に赤ちゃんを抱いたりおんぶしたりする母親等にとって便利なリュックサックを提供することである。

【0006】この発明の他の目的は、外観的に見栄えの良いリュックサックを提供することである。

【0007】この発明のさらに他の目的は、子守帯とともに用いることができるリュックサックを提供することである。

【0008】この発明のさらに他の目的は、リュックサックを装備している状態でも、赤ちゃんを背面側で背負うことができるリュックサックを提供することである。

【0009】

【課題を解決するための手段】一つの局面において、この発明に従ったリュックサックは、左右の肩ループ部材と、左右の肩ループ部材の背面側を連結する背面連結部材と、折り畳み可能な収納袋と、収納袋を背面連結部材

に取外し可能に連結するための背面側脱着手段と、背面側脱着手段によって前記背面連結部材に連結されている収納袋の折り畳み状態を保持するための折り畳み状態保持手段とを備える。

【0010】上記構成のリュックサックによれば、収納袋を使用しないとき、収納袋を小さく折り畳んで保持することができるので、外観的な見栄えが良い。また、収納袋を背面連結部材から取外することができるので、赤ちゃんを背面側で背負うことが可能になる。

【0011】好ましくは、折り畳み状態保持手段は、折り畳んだ収納袋を袋状に包囲することができるような位置関係で上記収納袋の外面上に設けられているファスナを含む。このような構成であれば、外観的な見栄えがより一層向上する。

【0012】背面側脱着手段としては種々の構造のものを採用できるが、一つの実施形態では、ファスナレールが採用される。

【0013】収納袋をより安定して背負うために、好ましくは、背面側脱着手段とは別に、収納袋の上方部分と肩ループ部材または背面連結部材とを取外し可能に連結する上方連結部材をさらに備える。

【0014】外観的な見栄えをより向上させる手法として、左右の肩ループ部材の背面側部分と背面連結部材とを、一体的にして後身頃を形成するようにしてもよい。その延長線上として、チョッキまたはベスト状の衣服形態のものに収納袋を取外し可能に取付けたリュックサックとしてもよい。

【0015】一つの実施形態では、左右の肩ループ部材の前面側を連結する前面連結部材と、収納袋を前面連結部材に取外し可能に連結するための前面側脱着手段とをさらに備える。この構成であれば、折り畳んだ収納袋を背面連結部材から取外して前面連結部材に接続することができるので、リュックサックを背面側から見たときの外観的な見栄えを向上させることができる。また、赤ちゃんを背面側で背負う場合に、収納袋の存在が妨げになることはない。

【0016】子守帯兼用のリュックサックとするために、好ましくは、リュックサックは、子供を受入れて保持する子供キャリアと、子供キャリアを左右の肩ループ部材の前面側に連結するためのキャリア連結手段とをさらに備える。この構成であれば、赤ちゃんを前面側で抱きながら、荷物を背面側の収納袋に収納することができる。この場合、両肩の上には1種類のベルト状部分が存在しているだけであるので、母親にとって煩わしさがなく、外観的な見栄えも良い。

【0017】上記の場合、より使い勝手を良くするために、好ましくは、子供キャリアは、前面側脱着手段の構成要素を利用して前面連結部材に取外し可能に連結されることが可能であり、かつ、背面側脱着手段の構成要素を利用して背面連結部材に取外し可能に連結されること

が可能である。かかる構成であれば、折り畳んだ収納袋を前面連結部材に連結し、子供キャリアを背面連結部材に連結することができるので、適宜、赤ちゃんを前抱きにしたり、背面で背負ったりすることができる。

【0018】この発明の他の局面において、この発明に従ったリュックサックは、左右の肩ループ部材と、左右の肩ループ部材の背面側を連結する背面連結部材と、左右の肩ループ部材の前面側を連結する前面連結部材と、折り畳み可能な収納袋と、子供を受入れて保持する子供キャリアと、収納袋または子供キャリアを選択的に背面連結部材に取外し可能に連結するための背面側脱着手段と、収納袋または子供キャリアを選択的に前面連結部材に取外し可能に連結するための前面側脱着手段とを備える。

【0019】

【発明の実施の形態】以下、この発明に基づいた実施の形態における子守帯1について、図を参照しながら説明する。

【0020】(子守帯1の特徴的構成)まず、本実施の形態における子守帯1の特徴的構成としては、図1に示すように、赤ちゃん保持部材100とリュック形式の使用装着部材200とを備え、使用者であるお母さん1000の前面において、赤ちゃん2000を横抱きすることができる状態と、図2に示すように、お母さん1000の前面において、赤ちゃん2000を縦抱きすることができる状態(対面状態)と、図3に示すように、お母さん1000の前面において、赤ちゃん保持部材100の上半身領域を取外し、赤ちゃん2000を前向きの縦抱きにすることができる状態と、図4に示すように、お母さん1000の背面において、赤ちゃん2000を縦抱きすることができる状態(赤ちゃん2000は前向き)と、図5に示すように、お母さん1000の背面において、赤ちゃん保持部材100の上半身領域を取外し、赤ちゃん2000を後向きの縦抱きにすることができる状態と、が選択可能に設けられていることを特徴としている。

【0021】ここで、図1に示す状態においては、赤ちゃん保持部材100と使用者装着部材200との間には、お母さん1000の前面において、赤ちゃん保持部材100により、赤ちゃん2000を寝かせた状態で抱っこするための横抱き状態を可能にするための第1連結手段が設けられており、図2および図3に示す状態においては、お母さん1000の前面において、赤ちゃん保持部材100により、赤ちゃん2000を起こした状態で抱っこするための前面縦抱き状態を可能にするための第2連結手段が設けられており、図4および図5に示す状態においては、お母さん1000の背面において、赤ちゃん保持部材100により、赤ちゃん2000を起こした状態で抱っこするための背面縦抱き状態を可能にするための第3連結手段が設けられている。

【0022】以下、図を参照しながら、まず赤ちゃん保持部材100および使用者装着部材200の構造について説明する。

【0023】(赤ちゃん保持部材100の構造)図6から図9を参照して、赤ちゃん保持部材100の構造について説明する。なお、図6は、赤ちゃん保持部材100を内面側から見た平面図であり、図7は、赤ちゃん保持部材100を外側側から見た背面図であり、図8は、図6中V I I I - V I I I 線矢視にしたがった第1断面図であり、図9は、図6中V I I I - V I I I 線矢視にしたがった第2断面図である。

【0024】本実施の形態における赤ちゃん保持部材100は、背面保持部材101、股間部保持部材110、腹部保持部材113、および背中部保持部材118を備え、全体として縦長の帯状の形態を呈している。

【0025】図6を参照して、背面保持部材101の両側には、側部保持部材102、103が設けられ、この側部保持部材102、103の外側にはそれぞれ、耳状部材119A、119Bが設けられている。側部保持部材102、103のそれぞれの先端部分には、延長部104、105が設けられ、この延長部104、105には、上方に延びるようにベルト部材106、107が設けられている。ベルト部材106、107の先端部分には、ベルト部材106、107の長さ調節が可能な、オス型バックル108、109が連結されている。

【0026】なお、背面保持部材101、側部保持部材102、103、耳状部材119A、119B、および延長部104、105の内面部分には、赤ちゃん200が接する領域であるため、通気性のあるクッション部材が設けられている。

【0027】図7を参照して、背面保持部材101の外面部には、袋状部材101aが設けられ、側部保持部材102、103の外面部にも、袋状部材102a、103aが設けられている。各袋状部材101a、102a、103aの上部は、開放状態となるように取付けられ、袋状部材101a、102a、103aの先端部には、ギャザアGが設けられている。

【0028】背面保持部材101と袋状部材101aとの間によって形成される空間101Aには、後述する帯状支持部材128が収納可能とされ、側部保持部材102と袋状部材102aとの間によって形成される空間102Aには、延長部104、ベルト部材106、およびオス型バックル108が収納可能とされ、側部保持部材103と袋状部材103aとの間によって形成される空間103Aには、延長部105、ベルト部材107、およびオス型バックル109が収納可能とされる。

【0029】また、耳状部材119A、119Bの外面部には、リング状部材131、132がそれぞれ設けられている。

【0030】再び、図6を参照して、股間部保持部材1

10は、赤ちゃん200の股部の形状に沿うように両側が、内側に切り込まれた曲面領域111a、111bが形成され、この曲面領域111a、111bを埋めるように、補助パッド部材111、112が設けられている。なお、股間部保持部材110の内面部分は、赤ちゃん200が接する領域であるため、通気性のあるクッション部材が設けられている。

【0031】また、補助パッド部材111、112は、赤ちゃん200の股部へのパッド部材の当接を和らげるとともに、前向きおよび後向きのどちらの状態でも(図2および図3に示す状態)、赤ちゃん200の股部に与える不快感を解消することを目的としていることから、股間部保持部材110の内面部分に設けられるクッション部材よりも柔らかいクッション部材が設けられていることが好ましく、また、縫い目を、赤ちゃん200の股部には当接しない位置に配置することが好ましい。

【0032】また、図7を参照して、股間部保持部材110の外面部には、股間部保持部材110との間を通して領域を形成するようにループ134が取付けられている。

【0033】再び、図6を参照して、腹部保持部材113の先端部分には、横方向に延びる貫通路114が設けられ、この貫通路114の内部には、ベルト115が配置され、このベルト115の両側の先端部分には、ベルト115の長さ調節が可能なフック部材116、117が設けられている。なお、腹部保持部材113の内面部分は、赤ちゃん200が接する領域であるため、通気性のあるクッション部材が設けられている。

【0034】また、図7を参照して、股間部保持部材110と腹部保持部材113との境界領域の外面部には、ファスナレール133が設けられ、このファスナレール133には、ファスナ133Aが設けられこのファスナ133Aには、係合ボタン133Bが設けられている。

【0035】図6および図8を参照して、背中部保持部材118は芯材としての赤ちゃん用パッド部材118b、118cを備え、上部パッド部材118bに対して、下部パッド部材118cは、内側(後述する帯状支持部材128が設けられる側とは反対側)に向けて屈曲するように取付けられている。赤ちゃん用パッド部材118b、118cの表面は、通気性のあるクッション部材で覆われている。

【0036】赤ちゃん用パッド部材118b、118cは、背面保持部材101と袋状部材101aとの間に設けられた空間101A内に、下部パッド部材118cが収容可能に設けられ、背面保持部材101と下部パッド部材118cとの間には、面ファスナ135、136が設けられることにより、背面保持部材101と下部パッド部材118cとの着脱が可能に設けられている。

【0037】背中部保持部材118の外側には、図7に

示すように、背中部保持部材118の上端部から股間部保持部材110にかけて帯状支持部材128が設けられている。帯状支持部材128は、その上端部のみが背中部保持部材118に固定されている。また、図8に示すように、赤ちゃん用パッド部材118bの外側に位置する領域においては、使用者であるお母さん1000の手を挿入することができるように、空間128aが形成されるように、帯状支持部材128が背中部保持部材118に取付けられている。

【0038】帯状支持部材128の下方先端部分には、ベルト129が取り付けられ、このベルト129の先端部分には、ベルト129の長さ調節が可能なフック部材130Bが設けられている。

【0039】また、この帯状支持部材128の不使用时には、図9に示すように、背面保持部材101と袋状部材101aとの間に設けられた空間101A内に収容可能に形成されている。

【0040】背中部保持部材118の上端部には、赤ちゃん2000の頭部領域を保護するための扇状の頭部保護パッド127が設けられ、柔軟なクッション部材から構成されている。また、頭部保護パッド127は、図8に示すように、内側に向く位置と、図9に示すように、外側に向く位置とが選択可能に設けられている。

【0041】また、背中部保持部材118の上端部の左右両側には、図6および図7に示すようにヘッドサポート120、121が設けられている。ヘッドサポート120の先端部分には、外側に係合領域を有する係合ボタン126が2箇所設けられている。また、ベルト122が設けられ、このベルト122の先端部分には、ベルト122の長さ調節が可能なオス型バックル124が設けられている。ヘッドサポート121の先端部分には、外側に係合領域を有する係合ボタン126が2箇所設けられている。また、ベルト123が設けられ、このベルト123の先端部分には、ベルト123の長さ調節が可能なオス型バックル125が設けられている。

【0042】図7を参照して、ヘッドサポート120の外面には、ヘッドサポート120とともに空間120Aを形成する袋状部材120Bが取付けられ、袋状部材120Bの開口端部にはギャザアGが設けられている。ベルト122の不使用时には、ベルト122はこの空間120A内に収納される。ヘッドサポート121の外面には、ヘッドサポート121とともに空間121Aを形成する袋状部材121Bが取付けられ、袋状部材121Bの開口端部にはギャザアGが設けられている。ベルト123の不使用时には、ベルト123はこの空間121A内に収納される。

【0043】(使用者装着部材200の構造)次に、図10から図15を参照して、使用者装着部材200の構造について説明する。なお、図10は、使用者装着部材200を開いた状態での正面図であり、図11は、使用

者装着部材200を開いた状態での背面図であり、図12は、使用者装着部材200を閉じた状態での正面図であり、図13および図14は、図11中のXIIII-XIIII線矢視における第1および第2断面図であり、図15は、図11中XV-XV線矢視における断面図である。

【0044】図10から図12を参照して、この使用者装着部材200は、使用者であるお母さん1000に装着されることを目的としており、使用者用背中パッド部材201と、この使用者用背中パッド部材201の上端部から上方に延びるように設けられる1対の肩ベルト210、211とを備える。さらに、本実施の形態においては、使用者装着部材200の下端部領域に、お母さん1000の腰に装着される腰ベルト300が設けられている。

【0045】図13の断面図に示すように、使用者用背中パッド部材201は、芯材201aと、この芯材201aを覆うように通気性を有するクッション部材201bが設けられている。再び、図10から図12を参照して、使用者用背中パッド部材201の上端部からは、1対の肩ベルト210、211が設けられている。肩ベルト210の上方には、内側に係合領域を有する2個の係合ボタン210bと、2個の係合ボタン210cが設けられている。同様に、肩ベルト211の上方には、内側に係合領域を有する2個の係合ボタン211bと、2個の係合ボタン211cが設けられている。

【0046】肩ベルト210の外面の中央領域には、補強ベルト210Aが取付けられている。この補強ベルト210Aの中央領域には、補強ベルト210Aが延びる方向に沿ってスライド可能なように、メス型バックル214が取付けられている。また、このメス型バックル214の下方の補強ベルト210Aには、ループ218が設けられている。補強ベルト210Aの下端部には、後述する腰ベルトに設けられる補強ベルト303の長さ調節を行なうために、長さ調節用リング216が取付けられている。

【0047】肩ベルト211の外面の中央領域には、肩ベルト210と同様に、補強ベルト211Aが取付けられている。この補強ベルト211Aの中央領域には、補強ベルト211Aが延びる方向に沿ってスライド可能なように、メス型バックル215が取付けられている。また、このメス型バックル215の下方の補強ベルト211Aには、ループ219が設けられている。補強ベルト211Aの下端部には、後述する腰ベルトに設けられる補強ベルト304の長さ調節を行なうために、長さ調節用リング217が取付けられている。

【0048】また、使用者用背中パッド部材201の内面の、お母さん1000の肩部に当接する背中領域には、パッド部材202、203が設けられている。

【0049】使用者用背中パッド部材201の外面に

は、図11に示すように、肩ベルト210、211の近傍に、縦方向に通過領域を形成するループ212、213が設けられ、中間領域の外側に、横方向に通過領域を形成するループ220、221が設けられている。

【0050】使用者用背中パッド部材201の下方領域には、横方向に延びるように腰ベルト300が設けられている。この腰ベルト300は、中央領域301、側部領域302A、302Bを備え、全体として横長の帯形状を呈し、表面は通気を有するクッション部材から構成されている。

【0051】中央領域301には、図13の断面図に示すように、使用者用背中パッド部材201の下端部収容し、使用者用背中パッド部材201が上下方向に摺動可能にガイドするための案内領域を形成するための袋状ガイド部材310が設けられている。また、中央領域301は、使用者用背中パッド部材201からの力を十分受け取ることができるように、芯材301aと、この芯材301aを覆うように設けられる通気性の有るクッション部材301bとを有している。

【0052】また、使用者用背中パッド部材201と中央領域301との間には、使用者用背中パッド部材201の中央領域301からの外れを防止するために、両者を連結するための連結部材309が設けられている。その結果、図13に示す状態は、使用者用背中パッド部材201が中央領域301に最も近接している位置を示し、図14は、使用者用背中パッド部材201が中央領域301から最も離れた状態を示している。

【0053】なお、芯材301aについては、必ず必要な部材ではなく、力の分散が使用者用背中パッド部材201で十分であると考えられる場合は、設ける必要はない。

【0054】図11および図13を参照して、使用者用背中パッド部材201の外側面において、袋状ガイド部材310の上部近傍領域には、横方向に延びるファスナレール219が設けられている。また、このファスナレール219を上方から覆うようにファスナカバー218が設けられ、このファスナカバー218の外側には、外側に係合領域を有する係合ボタン218aが設けられている。

【0055】図11を参照して、腰ベルト300の側部領域302Aの外側には、補強ベルト303が取付けられている。この補強ベルト303の一端は、長さ調節用リング216に係合している。また、補強ベルト303の他端側は、お母さん1000の腹部を取り巻くために長く設けられ、先端部分に長さ調節可能な、オス型バックル305が取付けられている。

【0056】また、補強ベルト303には、補強パッド400Aが設けられている。図11および図15を参照して、この補強パッド400Aは、芯材402と、この芯材402を覆うクッション部材403と、補強ベルト

303を通過させるための空間400aを形成するためのループ部材404とを備える。さらに、ループ部材404の上端部には、ファスナレール401が設けられ、このファスナレール401を上方から覆うようにファスナカバー400が設けられ、このファスナカバー400の外側には、外側に係合領域を有する係合ボタン405が設けられている。

【0057】なお、上記実施の形態において連結部材を収納するための収納空間を設け、この収納空間に所定部材を収納可能にする理由は、上記図1から図5に示す使用状態においては、使用する部材と使用しない部材とが存在し、使用しない部材については、収納空間に部材を収納することにより意匠上の外観を向上させるため、また、あらかじめ使用しない部材を収納しておくことで、誤使用を防ぐためである。なお、本実施の形態においては、収納空間をあらかじめ設けるようにしたが、各部材を着脱可能な構成にして、使用時のみ装着し、不使用時には取外す構成を採用することも可能である。

【0058】（赤ちゃん保持部材100と使用者装着部材200との結合関係）次に、再び図1から図5を参照して、各使用形態における赤ちゃん保持部材100と使用者装着部材200との結合関係について説明する。

【0059】上述したように、本実施の形態における子守帯1の特徴的構成としては、赤ちゃん保持部材100と使用者装着部材200との結合関係を選択することにより、図1に示す、使用者であるお母さん1000の前面において、赤ちゃん2000を横抱きすることができる状態と、図2に示す、お母さん1000の前面において、赤ちゃん2000を縦抱きすることができる状態（対面状態）と、図3に示す、お母さん1000の前面において、赤ちゃん保持部材100の上半身領域を取外し、赤ちゃん2000を前向きの縦抱きにすることができる状態と、図4に示す、お母さん1000の背面において、赤ちゃん2000を縦抱きすることができる状態（赤ちゃんは前向き）と、図5に示す、お母さん1000の背面において、赤ちゃん保持部材100の上半身領域を取外し、赤ちゃん2000を後向きの縦抱きにすることができる状態とを選択することができる点にある。

【0060】（横抱き連結状態）まず、図1を参照して、赤ちゃん保持部材100により、赤ちゃんを寝かせた状態で抱っこするための横抱き状態を可能にするための第1連結手段について説明する。

【0061】横抱き状態を可能にするためには、使用者装着部材200の肩ベルト210に設けられたメス型バックル214に、赤ちゃん保持部材100のヘッドサポート120から延びるベルト122に設けられたオス型バックル124を連結させる。

【0062】また、使用者装着部材200の肩ベルト211に設けられたメス型バックル215に、赤ちゃん保持部材100のヘッドサポート121から延びるベルト

123に設けられたオス型バックル125を連結させる。

【0063】さらに、赤ちゃん保持部材100に設けられた帯状支持部材128を赤ちゃん2000の股部を通過させるとともに、帯状支持部材128の先端部に設けられたベルト129をループ134を通して、ベルト129の先端に設けられたフック部材130Bを、肩ベルト210に設けられたループ218に係合させる。

【0064】なお、メス型バックル214とオス型バックル124、およびメス型バックル215とオス型バックル125により、横抱上部連結手段を構成し、フック部材130Bとループ218とにより、横抱下部連結手段を構成する。

【0065】また、赤ちゃん2000の下腹部を保護するために、腹部保持部材113に設けられたベルト115に取付けられたフック部材117を、耳状部材119Bに設けられたリング状部材132に係合させる。図示していないが、ベルト115の反対側に設けられたフック部材116についても、同様に耳状部材119Aに設けられたリング状部材131に係合させる。ここで、上述したようにフック部材116、117にベルト115の長さを調節できるようにしておくことで、赤ちゃん2000の股ぐり寸法に適用した腹部保持部材113の位置決めを行なうことが可能になり、赤ちゃんの下腹部を適切に保護することが可能になる。

【0066】なお、図1に示す状態は、赤ちゃん2000の頭がお母さん1000の左腕側に位置する場合を示しているが、赤ちゃん2000の頭がお母さん1000の右腕側に位置する場合にも、同様の結合状態を採用することにより実現することが可能である。

【0067】また、この横抱き状態においては、赤ちゃん2000の頭部側を2点で支持し、また、頭部側から股部を通過する帯状支持部材128により、赤ちゃん2000の背面部を全体的に覆うようにして支持する、3点支持構造を採用していることから、赤ちゃん2000の横抱き状態を安定させることが可能になる。

【0068】また、赤ちゃん保持部材100に設けられた延長部104、105、ベルト部材106、107、およびオス型バックル108、109は、この使用形態では用いることがないため、空間102A、103Aに収納しておくことで、誤使用を防ぐとともに、意匠上の観点からもすっきりした印象を与えることができる。

【0069】(前面縦抱き連結状態)次に、図2を参照して、赤ちゃん保持部材100により、赤ちゃん2000をお母さん1000の前面において縦抱き状態を可能にするための第2連結手段について説明する。

【0070】前面縦抱き状態を可能にするためには、使用者装着部材200の肩ベルト210に設けられた2個の係合ボタン210bに、赤ちゃん保持部材100のヘッドサポート121に設けられた2個の係合ボタン12

6を嵌め合わせる。このとき、赤ちゃん保持部材100のヘッドサポート121から延びるベルト121は使用しないため、あらかじめ空間121Aに収納しておく。

【0071】また、使用者装着部材200の肩ベルト210に設けられたメス型バックル214に、赤ちゃん保持部材100の延長部105から延びるベルト部材107の先端に設けられるオス型バックル109を連結させる。

【0072】また、使用者装着部材200の肩ベルト211に設けられた2個の係合ボタン211bに、赤ちゃん保持部材100のヘッドサポート120に設けられた2個の係合ボタン126を嵌め合わせる。このとき、赤ちゃん保持部材100のヘッドサポート120から延びるベルト122は使用しないため、あらかじめ空間120Aに収納しておく。

【0073】また、図示していないが、使用者装着部材200の肩ベルト211に設けられたメス型バックル215に、赤ちゃん保持部材100の延長部104から延びるベルト部材106の先端に設けられるオス型バックル108を連結させる。

【0074】さらに、図示していないが、赤ちゃん保持部材100に設けられたファスナレール133と、使用者装着部材200の補強パッド400Aに設けられたファスナレール401とをファスナ133Aを用いて結合させる。なお、ファスナ133Aの移動を防止するために、ファスナ133Aに設けられた係合ボタン133Bと、ファスナカバー400に設けられた係合ボタン405aとを嵌め合わせる。

【0075】なお、肩ベルト210側における2個の係合ボタン210bと2個の係合ボタン126、および、肩ベルト211側における2個の係合ボタン211bと2個の係合ボタン126により前面縦抱上部連結手段を構成し、肩ベルト210側におけるメス型バックル214とオス型バックル109、および肩ベルト211側におけるメス型バックル215とオス型バックル108により、前面縦抱中間部連結手段を構成し、ファスナレール133、ファスナレール401およびファスナ133Aにより、前面縦抱下端部連結手段を構成する。

【0076】また、赤ちゃん2000の下腹部を保護するために、腹部保持部材113に設けられたベルト115に取付けられたフック部材117を、耳状部材119Bに設けられたリング状部材132に係合させる。図示していないが、ベルト115の反対側に設けられたフック部材116についても、同様に耳状部材119Aに設けられたリング状部材131に係合させる。

【0077】この縦抱き状態においては、赤ちゃん2000の頭部側を2点で支持し、赤ちゃん2000の腹部側面を2点で支持し、さらに赤ちゃん2000の股部を1点で支持する5点支持構造を採用していることから、赤ちゃん2000の縦抱き状態を安定させることが可能

になる。また、赤ちゃん2000の頭部側面に、ヘッドサポート120、121が配設されることから、赤ちゃん2000の頭部の振れを防止し、赤ちゃん2000の頭部および頸椎領域の保護を図ることが可能になる。

【0078】また、赤ちゃん保持部材100の背中部保持部材118の背面側には、帯状支持部材128により空間128aが形成されていることから、お母さん1000の手1001をこの空間128aに挿入して沿えることができるため、さらに安定した状態で、赤ちゃん2000を保持することが可能となる。

【0079】なお、赤ちゃん200が成長して首および腰が座り、赤ちゃん2000を自立させておくことに対して医学的な問題が生じない場合は、図3に示すように、背中部保持部材118を赤ちゃん保持部材100から取外すことにより、赤ちゃん2000を前向きにして縦抱っこをすることが可能になる。

【0080】また、赤ちゃん保持部材100に設けられたベルト部材121、122、オス型バックル124、125、および帯状支持部材128は、この使用形態では用いることがないため、空間120A、121A、101Aにそれぞれ収納しておくことで、誤使用を防ぐとともに、意匠上の観点からもすっきりした印象を与えることができる。

【0081】(背面縦抱き連結状態)次に、図4を参照して、赤ちゃん保持部材100により、赤ちゃん2000をお母さん1000の背面において縦抱き状態を可能にするための第3連結手段について説明する。

【0082】背面縦抱き状態を可能にするためには、使用者装着部材200の肩ベルト211に設けられた2個の係合ボタン211cに、赤ちゃん保持部材100のヘッドサポート121に設けられた2個の係合ボタン126を嵌め合わせる。このとき、赤ちゃん保持部材100のヘッドサポート121から延びるベルト121は使用しないため、あらかじめ空間121Aに収納しておく。

【0083】また、使用者装着部材200の肩ベルト211に設けられたメス型バックル215に、赤ちゃん保持部材100の延長部105から延びるベルト部材107の先端に設けられるオス型バックル109を連結させる。なお、ベルト部材107のずれを防止するために、ループ213にベルト部材107を通過させる。

【0084】また、使用者装着部材200の肩ベルト210に設けられた2個の係合ボタン210cに、赤ちゃん保持部材100のヘッドサポート120に設けられた2個の係合ボタン126を嵌め合わせる。このとき、赤ちゃん保持部材100のヘッドサポート120から延びるベルト122は使用しないため、あらかじめ空間120Aに収納しておく。なお、ベルト部材106のずれを防止するために、ループ212にベルト部材107を通過させる。

【0085】また、使用者装着部材200の肩ベルト2

10に設けられたメス型バックル214に、赤ちゃん保持部材100の延長部104から延びるベルト部材106の先端に設けられるオス型バックル108を連結させる。

【0086】さらに、図示していないが、赤ちゃん保持部材100に設けられたファスナレール133と、使用者装着部材200の使用者用背中パッド部材201に設けられたファスナレール219とをファスナ133Aを用いて結合させる。なお、ファスナ133Aの移動を防止するために、ファスナ133Aに設けられた係合ボタン133Bと、ファスナカバー218に設けられた係合ボタン218aとを嵌め合わせる。

【0087】なお、肩ベルト211側における2個の係合ボタン211cと2個の係合ボタン126、および肩ベルト210側における2個の係合ボタン210cと2個の係合ボタン126とにより、背面縦抱き上部連結手段を構成し、肩ベルト211側におけるメス型バックル215とオス型バックル109、および肩ベルト210側におけるメス型バックル214とオス型バックル108により、背面縦抱き中間部連結手段を構成し、ファスナレール133、ファスナレール219、およびファスナ133Aにより前面縦抱き下部連結手段を構成する。

【0088】また、赤ちゃん2000の下腹部を保護するために、腹部保持部材113に設けられたベルト115に取付けられたフック部材117を、耳状部材119Aに設けられたリング状部材132に係合させる。図示していないが、ベルト115の反対側に設けられたフック部材116についても、同様に耳状部材119Bに設けられたリング状部材131に係合させる。なお、赤ちゃん2000の下腹部の移動を防止するために、使用者装着部材200に設けられたループ220、221にベルト115を通過させる。

【0089】この縦抱き状態においては、赤ちゃん2000の頭部側を2点で支持し、赤ちゃん2000の腹部側面を2点で支持し、さらに赤ちゃん2000の股部を1点で支持する5点支持構造を採用していることから、赤ちゃん2000の縦抱き状態を安定させることが可能になる。また、赤ちゃん2000の頭部側面に、ヘッドサポート120、121が配設されることから、赤ちゃん2000の頭部の振れを防止し、赤ちゃんの頭部および頸椎領域の保護を図ることが可能になる。

【0090】なお、赤ちゃん2000が成長して首および腰が座り、赤ちゃん2000を自立させておくことに対して医学的な問題が生じない場合は、図5に示すように、背中部保持部材118を赤ちゃん保持部材100から取外すことにより、赤ちゃん2000を後向きにして縦抱っこをすることが可能になる。

【0091】また、赤ちゃん保持部材100に設けられたベルト部材121、122、オス型バックル124、125、および帯状支持部材128は、この使用形態で

は用いることがないため、空間120A、121A、101Aにそれぞれ収納しておくことで、誤使用を防ぐとともに、意匠上の観点からもすっきりした印象を与えることができる。

【0092】以上、本実施の形態における子守帯1においては、子守帯1の使用に際して、横抱き状態、前面縦抱き状態および背面縦抱き状態での使用が可能となるため、子守帯1の使用に際して、新生児期からの使用が可能になる。

【0093】なお、上記赤ちゃん保持部材100の股間部保持部材110に、上述したように、曲面領域111a、111bを設けるとともに、赤ちゃん保持部材100と使用者装着部材200とを連結する各ベルトの長さを調節可能とすることで、上述したように、前面縦抱き状態および背面縦抱き状態において、赤ちゃん保持部材100を使用者装着部材200に装着した状態のまま、赤ちゃん1000を前向きまたは後向きに保持することが可能になる。

【0094】なお、上記実施の形態の他の形態として、強度上の観点から、赤ちゃん保持部材100に設けられる、ベルト106、107を下方領域まで延長させて、股間部保持部材110の領域で交差させる構造が考えられる(図6参照)。しかし、股間部保持部材110の領域でベルト106、107を交差させた場合には、交差部が盛り上がり赤ちゃん2000に不快感を与えるおそれがある。このような場合には、図16に示すように、ベルト106、107を股間部保持部材110の曲面領域111a、111bに沿って配置することにより、強度の向上が図れるとともに、赤ちゃん2000への不快感を解消することが可能となる。

【0095】また、上記実施の形態においては、赤ちゃん2000の抱っこ状態をより安定的に実現するために腰ベルト300を設けるようにしたが、肩ベルトのみで十分赤ちゃん2000の体重を支持できる場合は、必ずしも腰ベルト300を設ける必要はない。また、肩ベルトについても、左右1対となるように設けているが、たとえば肩ベルトを1本のたすきがけのように形成することも可能である。

【0096】連結部分において、オス型バックル、メス型バックルを使用しているが、両者を入換えて使用することも可能である。また、オスメス両性のバックルを使用することも可能である。

【0097】また、上記実施の形態における使用者として、お母さんの場合について説明したが、その他お父さんや、他の保護者や保育者であっても構わない。また、特にお父さんにとっては、子守帯の装着を容姿から嫌がる場合もあるが、たとえば、図17に示すように、使用者装着部材200の機能を腕部を通す環状領域を備え、前身ごろおよび後身ごろを有する洋服に組み込む構成にすることにより、ファッション性を高めることで、お父

さんには、違和感なく装着することが可能になり、父親と子供とのスキンシップを向上させることが可能になる。

【0098】(リュックサックの特徴)上記に説明し、図示した実施形態は、主として、子守帯としての機能に重点を置くものであった。一方、図18～図20に示す実施形態は、リュックサックとしての機能を有するものである。

【0099】図18～20に示しているリュックサックは、図10～12に示した使用者装着部材200の背中パッド部材201に、収納袋500を取外し可能に連結したものである。図18および19は使用状態の収納袋500を示し、図20は、小さく折り畳まれた収納袋500を示している。

【0100】リュックサックは、左右の肩ループ部材と、左右の肩ループ部材の背面側を連結する背面連結部材と、折りたたみ可能な収納袋500と、収納袋を背面連結部材に取り外し可能に連結するための背面側脱着手段と、背面側脱着手段によって背面連結部材に連結されている収納袋の折り畳み状態を保持するための折り畳み状態保持手段とを備える。

【0101】左右の「肩ループ部材」とは、左右の肩部分を取囲んでループを描く部分である。図10～12に明瞭に図示されている肩ベルト210、211、背中パッド部材201の両側方部分、腰ベルト300の側部領域302A、302B、補強ベルト303、304が肩ループ部材を形成する。

【0102】「背面連結部材」とは、図10～12の実施形態では、背中パッド部材201の中央部分が該当する。図20に示すように、左右の肩ループ部材の背面側部分と背面連結部材とは、一体的になって後身頃を形成している。このようなデザインであれば、チョッキまたはベスト状の衣服形態に近づくので、見栄えが良くなる。

【0103】「背面側脱着手段」とは、収納袋500を背面連結部材に取外し可能に連結するものであり、止めボタン式連結具、帯状連結具、バックル式連結具等、種々のものが考えられる。図示する実施形態では、背面連結部材に直線的に延びるファスナレール219(図11、図19および図20参照)を設け、この部分に対面する収納袋500の表面にも対応するファスナレール501を設けている。図示していないがファスナレール501上にあるファスナを用いて、背面連結部材のファスナレール219と、収納袋500のファスナレール501とを連結したり、取外したりすることができる。

【0104】収納袋500を安定して背負うために、背面側脱着手段とは別に、収納袋500の上方部分と肩ループ部材または背面連結部材とを取外し可能に連結する上方連結部材を設ける。具体的には、収納袋500の上部にバックル付きの帯部材502、503を設け、これ

らの帯部材を使用者装着部材200上のループ212、213に通す。

【0105】収納袋500を小さく折り畳む際には、まず、帯部材502、503をループ212、213から外す。その状態では、収納袋500は、ファスナレール501の部分だけで背面連結部材に接続されている。したがって、収納袋500をきれいに小さく折り畳むことができる。

【0106】「折り畳み状態保持手段」は、収納袋500の折り畳み状態を保持するものである。図20に示すように収納袋500を袋状に包圍して折り畳み状態を保持することができるようにするために、好ましくは、収納袋500の外面上にU字状に延びるファスナレール504と、それに対応して逆U字状に延びるファスナレール505が設けられる。図19においては、U字状ファスナレール504および逆U字状ファスナレール505の1辺のみが現われている。図19に示す状態から、逆U字状ファスナレール505の全長部分がU字状ファスナレール504の全長部分に対面する位置になるまで、収納袋500を下方に向かって折り畳んでいく。両ファスナレール504および505が対面した関係になったら、U字状ファスナレール504上にあるファスナ506を用いて、両ファスナ504および505を連結する。

【0107】図12に示すように、補強パッド400Aは、左右の肩ループ部材の前面側を連結する「前面連結部材」の役割を果たしている。この前面連結部材には、ファスナレール401が設けられている。このファスナレール401と、収納袋500のファスナレール501とが、収納袋500を前面連結部材に取外し可能に連結するための「前面側脱着手段」を構成する。赤ちゃんを使用者装着部材200の背面で背負う場合には、小さく折り畳んだ収納袋500を前面連結部材に連結しておくが良い。

【0108】子守帯兼用のリュックサックとするために、リュックサックは、子供を受入れて保持する子供キャリアを備えていても良い。子供キャリアは、図6および図7に示した構造のものであっても良いし、別の構造のものであっても良い。また、子供キャリアを肩ループ部材の前面側に永久的に連結しても良いし、取外し可能に連結するものであっても良い。図6および図7に示した子供キャリアであれば、前面側脱着手段の構成要素を利用して子供キャリアを前面連結部材に取外し可能に連結できるし、背面側脱着手段の構成要素を利用して背面連結部材に取外し可能に連結できる。

【0109】子供キャリアを用いて赤ちゃんを前抱きしている場合には、母親の両手は子供を支えるのに使用されている。したがって、この状態では、収納袋は、背面連結部材に連結されて荷物を収容できるようにする。一方、赤ちゃんを背面で背負う場合には、収納袋を背面連

結部材から取り外し、その代わりに、子供キャリアを背面連結部材に連結する。赤ちゃんを背面側で背負う場合には、両手を用いて荷物を持ち運ぶことができるので、収納袋を特に必要としないであろう。したがって、収納袋は小さく折り畳んで、前面連結部材に連結する。

【0110】今回開示した上記実施の形態はすべての点で例示であって、限定的な解釈の根拠となるものではない。したがって、本発明の技術的範囲は、上記した実施の形態のみによって解釈されるのではなく、特許請求の範囲の記載に基づいて画定される。また、特許請求の範囲と均等の意味および範囲内でのすべての変更が含まれる。

【図面の簡単な説明】

【図1】 この発明に基いた実施の形態における子守帯1を用いて、お母さん1000の前面において、赤ちゃん2000を横抱きすることができる状態を示す図である。

【図2】 この発明に基いた実施の形態における子守帯1を用いて、お母さん1000の前面において、赤ちゃん2000を縦抱きすることができる状態を示す第1の図である。

【図3】 この発明に基いた実施の形態における子守帯1を用いて、お母さん1000の前面において、赤ちゃん2000を縦抱きすることができる状態を示す第2の図である。

【図4】 この発明に基いた実施の形態における子守帯1を用いて、お母さん1000の背面において、赤ちゃん2000を縦抱きすることができる状態を示す第1の図である。

【図5】 この発明に基いた実施の形態における子守帯1を用いて、お母さん1000の背面において、赤ちゃん2000を縦抱きすることができる状態を示す第2の図である。

【図6】 赤ちゃん保持部材100を内面側から見た平面図である。

【図7】 赤ちゃん保持部材100を外側側から見た背面図である。

【図8】 図6中V I I I - V I I I 線矢視にしたがった第1断面図である。

【図9】 図6中V I I I - V I I I 線矢視にしたがった第2断面図である。

【図10】 使用者装着部材200を開いた状態での正面図である。

【図11】 使用者装着部材200を開いた状態での背面図である。

【図12】 使用者装着部材200を閉じた状態での正面図である。

【図13】 図11中のX I I I - X I I I 線矢視における第1断面図である。

【図14】 図11中のX I I I - X I I I 線矢視にお

ける第2断面図である。

【図15】 図11中XV-XV線矢視における断面図である。

【図16】 他の形態における赤ちゃん保持部材100を内面側から見た平面図である。

【図17】 他の形態における子守帯1を用いて、お母さん1000の前面において、赤ちゃん2000を横抱きすることができる状態を示す図である。

【図18】 この発明の一実施形態であるリュックサックを示す正面図である。

【図19】 リュックサックを側面側から見た図である。

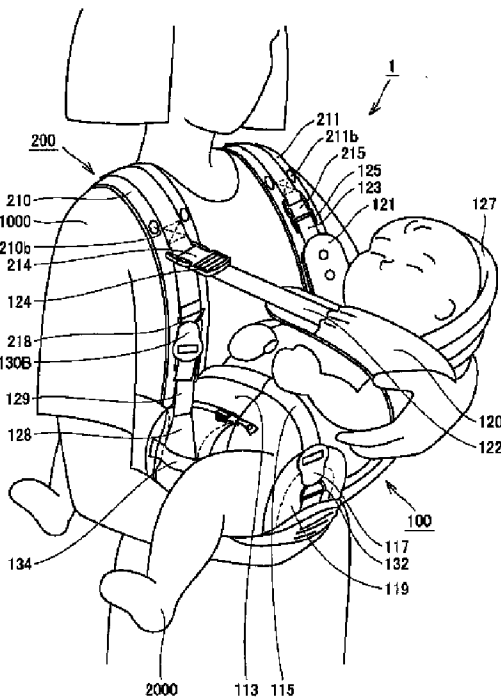
【図20】 収納袋を折り畳んだ状態を示す図である。

【符合の説明】

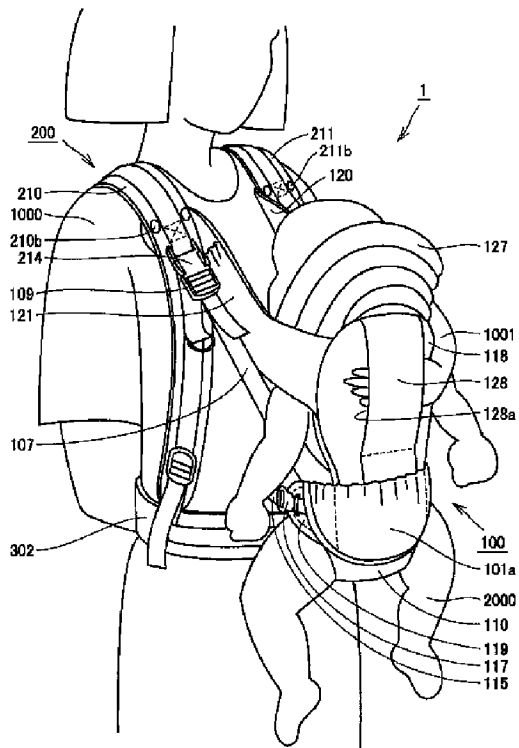
1 子守帯、100 赤ちゃん保持部材、101 背面保持部材、101A、102A、103A、128a、400a 空間、101a、102a、103a 袋状部材、102、103 側部保持部材、104、105 延長部、106、107 ベルト部材、108、109、124、125、305 オス型バックル、110 股間部保持部材、111、112 補助パッド部材、111a、111b 曲面領域、113 腹部保持部材、114 貫通路、115、122、123 ベルト、116、117 フック部材、118 背中部保持部材、118b、118c 赤ちゃん用パッド部材、1

19A、119B 耳状部材、120、121 ヘッドサポート、120B 袋状部材、121A 空間、121B 袋状部材、126、133B、210b、210c、211b、211c、218a、405a 係合ボタン、127 頭部保護パッド、128 帯状支持部材、129 ベルト、130B フック部材、131、132 リング状部材、133、219、401 ファスナレール、133A ファスナ、134ループ、135、136 面ファスナ、200 使用者装着部材、201 使用者用背中パッド部材、201a、301a、402 芯材、201b クッション部材、202、203 パッド部材、210、211 肩ベルト、210A、211A、303 補強ベルト、212、213、218、219、220、221 ループ、214、215 メス型バックル、216 長さ調節用リング、217 長さ調節用リング、218、400 ファスナカバー、300 腰ベルト、301 中央領域、301b クッション部材、302A、302B 側部領域、309 連結部材、310 袋状ガイド部材、400A 補強パッド、403 クッション部材、404 ループ部材、500 収納袋、501 ファスナレール、502、503 帯部材、504 U字状ファスナレール、505逆U字状ファスナレール、1000 お母さん、2000 赤ちゃん。

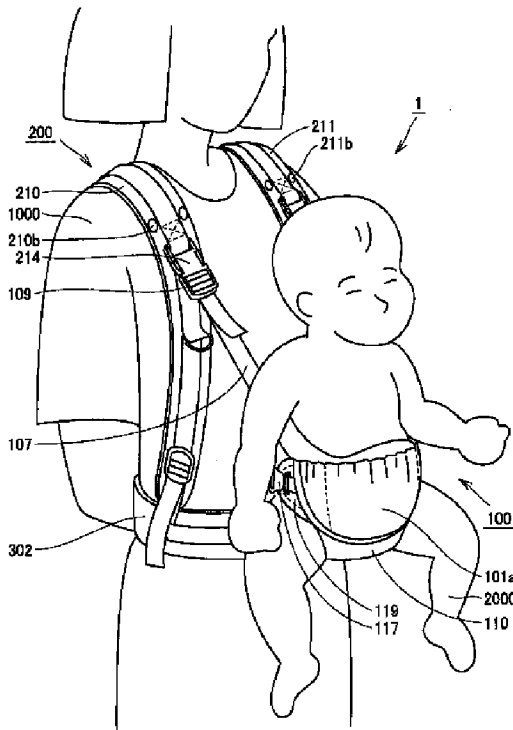
【図1】



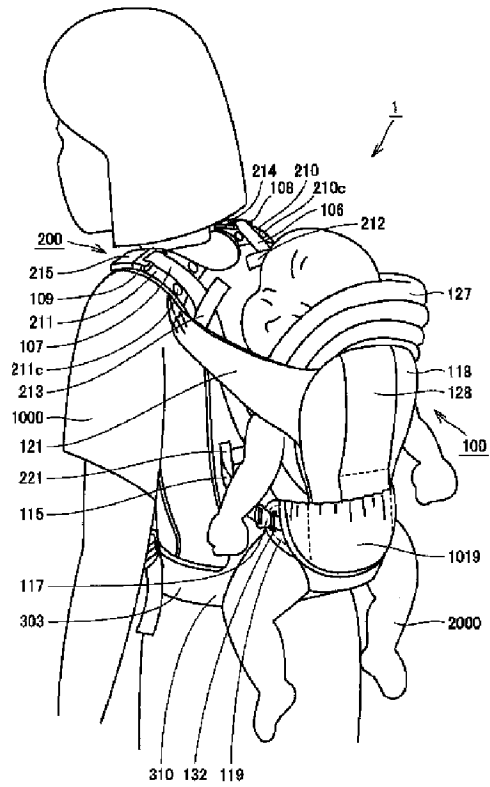
【図2】



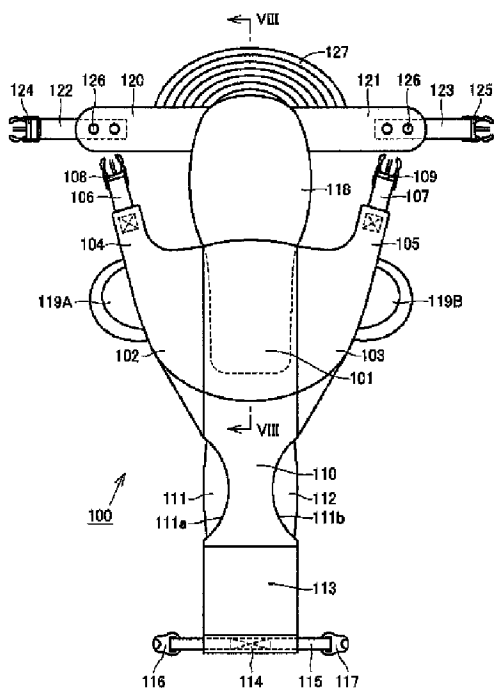
【図3】



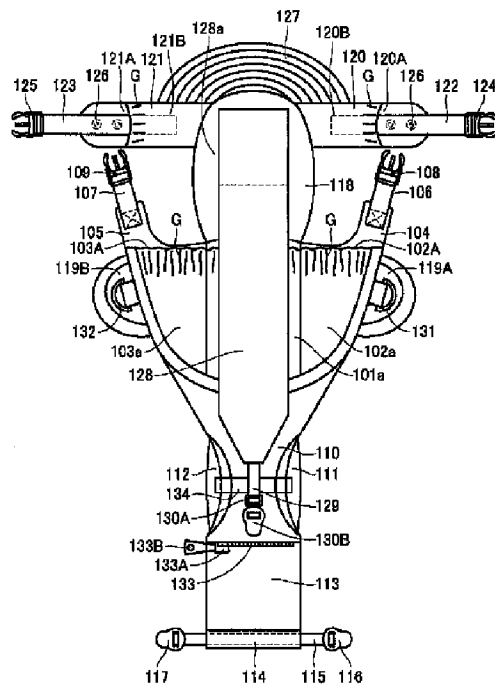
【図4】



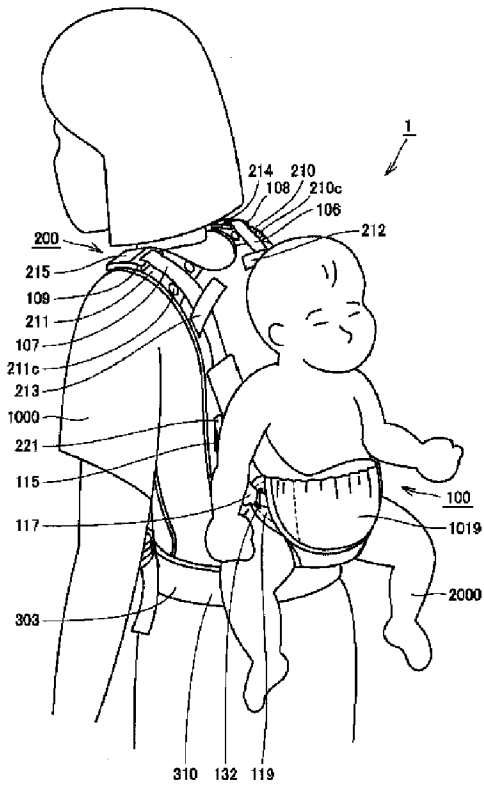
【図6】



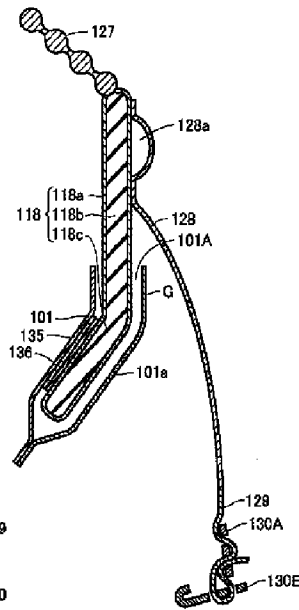
【図7】



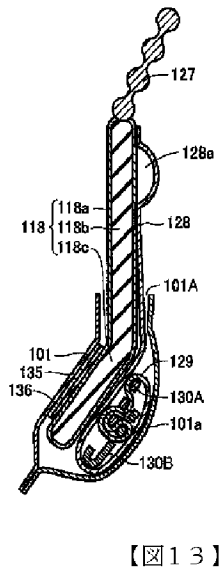
【圖5】



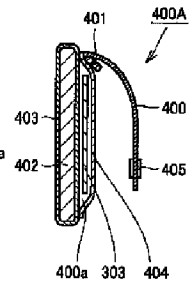
【圖8】



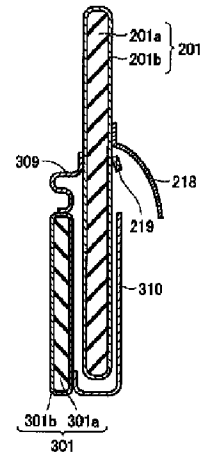
【圖9】



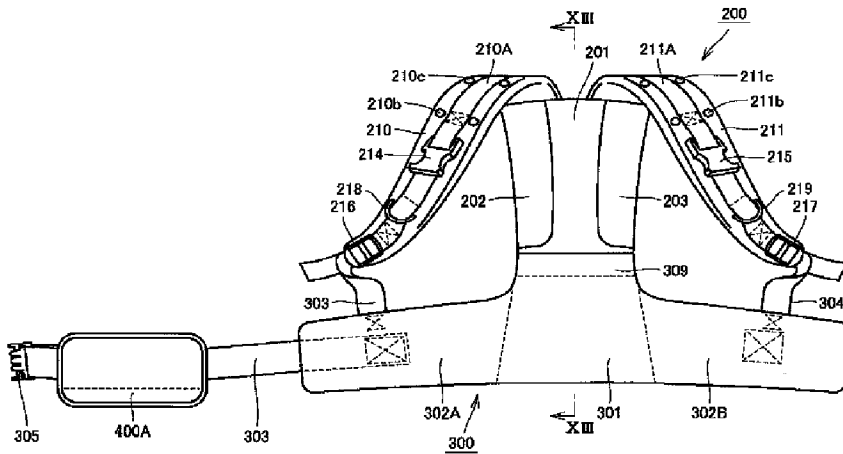
【圖15】



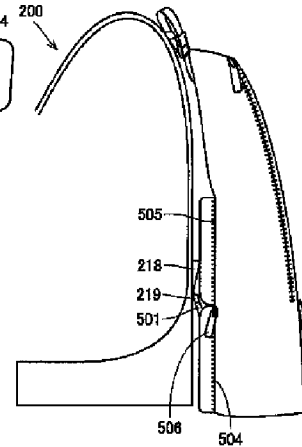
【圖13】



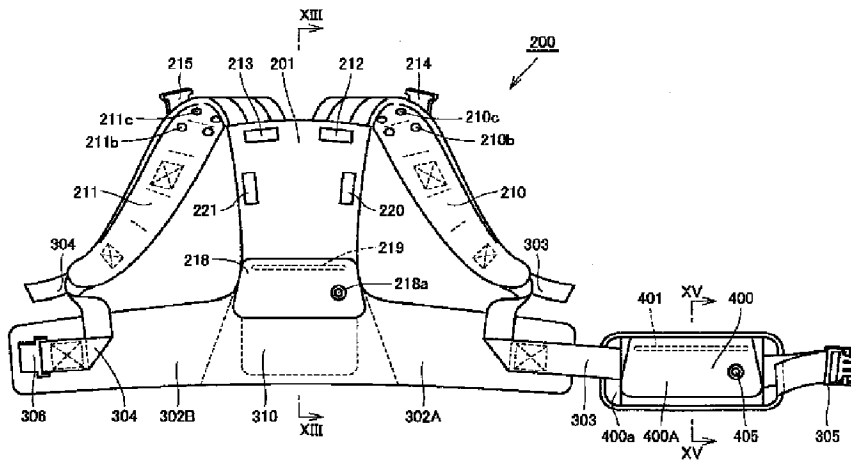
【圖10】



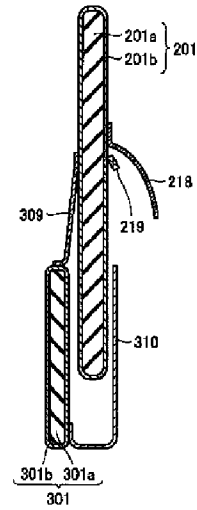
【圖19】



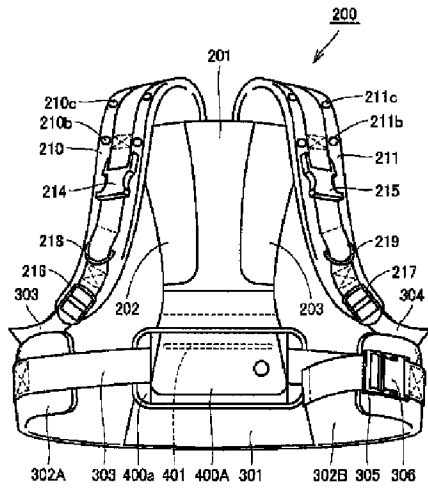
【図11】



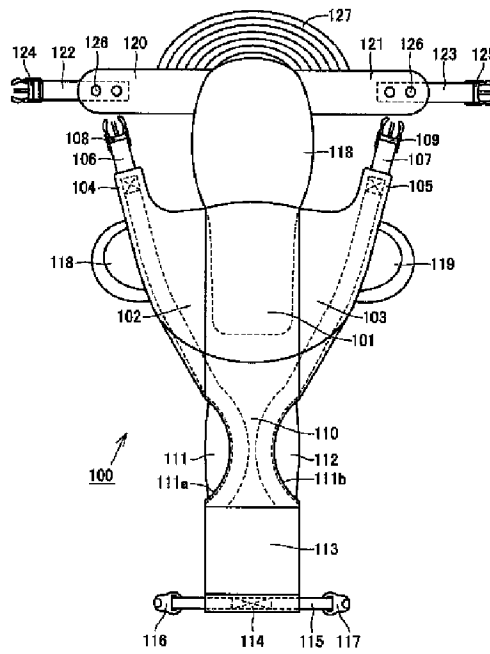
【図14】



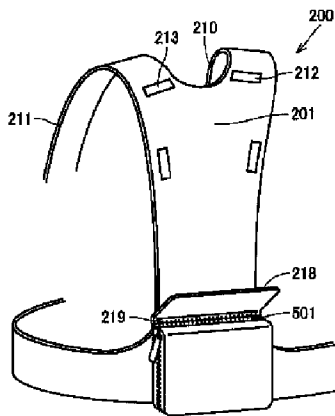
【図12】



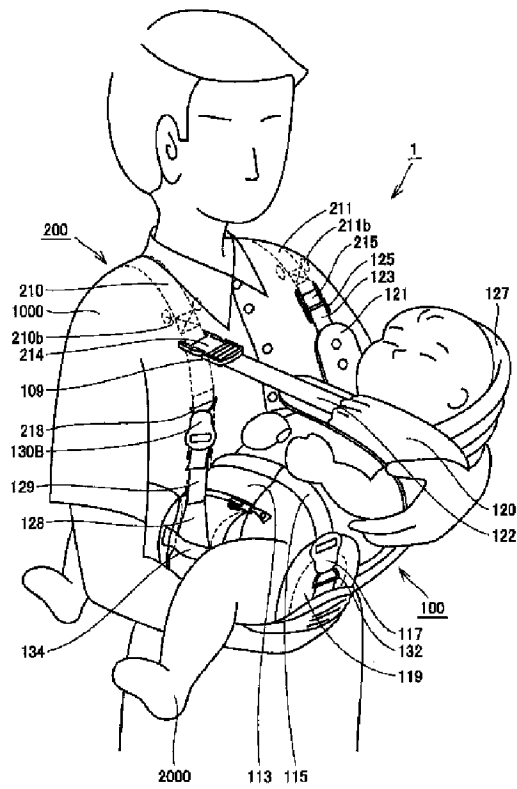
【図16】



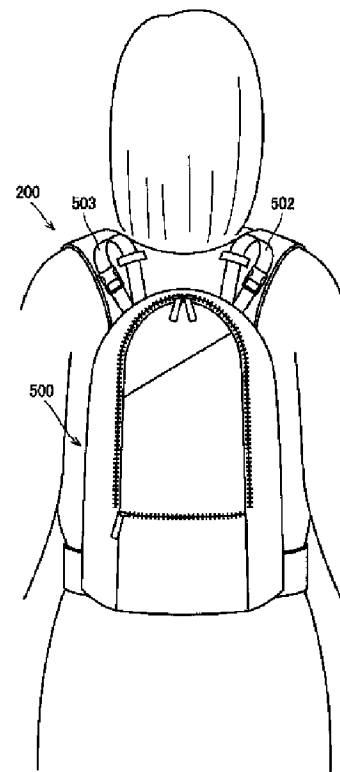
【図20】



【図17】



【図18】



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(43) Date of A publication 28.04.1993

(21) Application No 9122530.0

(22) Date of filing 23.10.1991

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(51) INT CL⁵
A47D 13/02, A45C 9/00 // B60R 22/10

(52) UK CL (Edition L)
A3V VRA V101 V9B2A
A4G G5A G5F2 G5J G5T13

(56) Documents cited
GB 2215184 A GB 2201083 A

(58) Field of search
UK CL (Edition K) A3V
INT CL⁵ A47D
Online databases: WPI

(54) Multipurpose bag and baby carrier

(57) A two-compartment waist bag has a top cover 11, a baby-carrying piece 2, two shoulder straps 21, 22 and two waist band portions 14, 15 each provided with a receiving member or an inserting member 16 thereon engageable with complementary receiving or inserting members 23 at the free ends of the shoulder straps. An auxiliary band 24, 25 is also provided. When not used as a baby carrier, the baby-carrying piece, waist bands, shoulder straps, and the connecting means thereof may be folded and stored in the upper compartment of the waist bag. However, when used as a baby carrier the bands and straps may be arranged for carrying a baby at the front (Figs. 2, 3), back (Figs. 4, 5) or towards the side (Fig. 8) of a person, or against a car seat (Fig. 9).

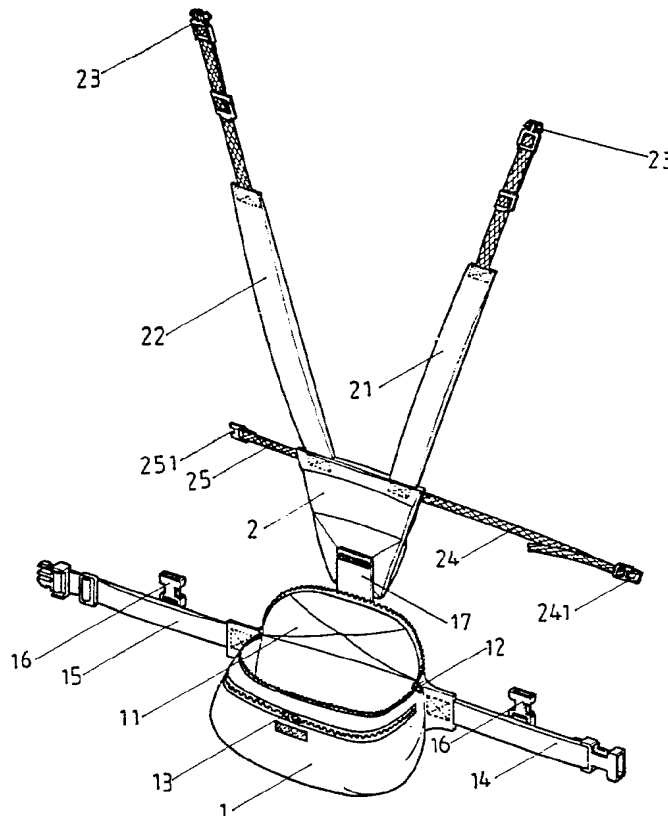


FIG 1

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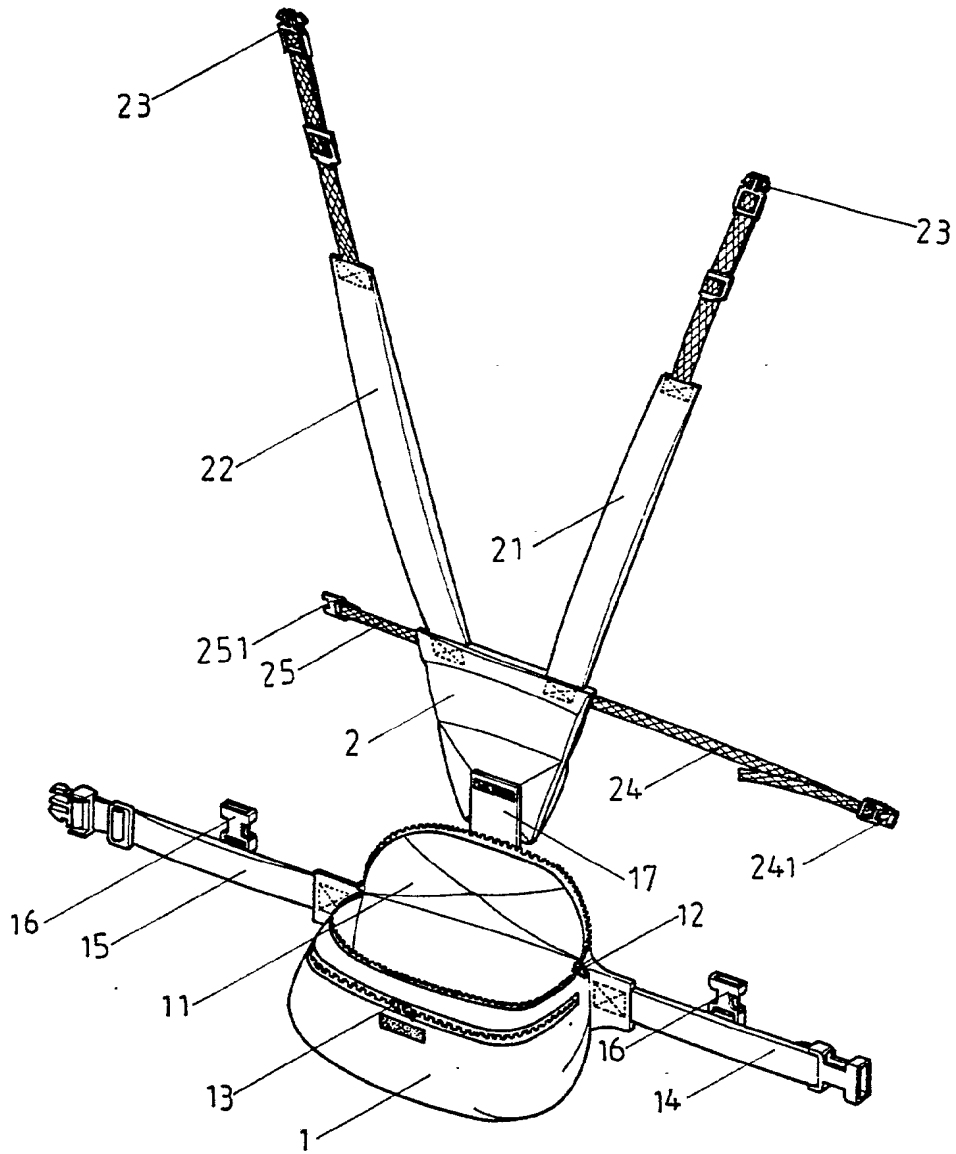


FIG 1

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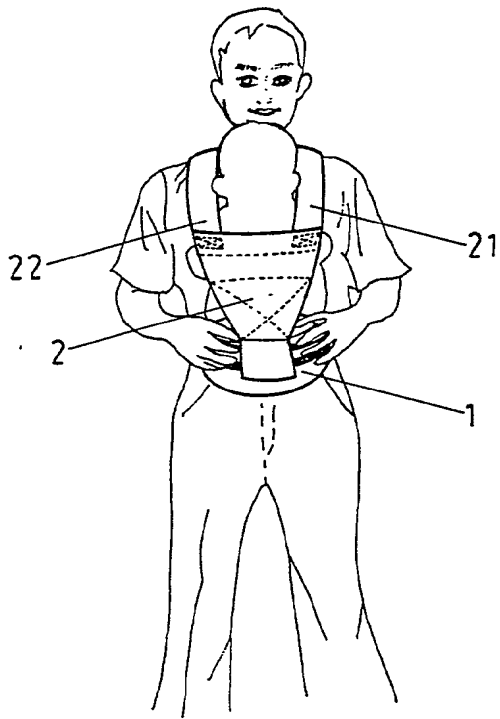


FIG 2

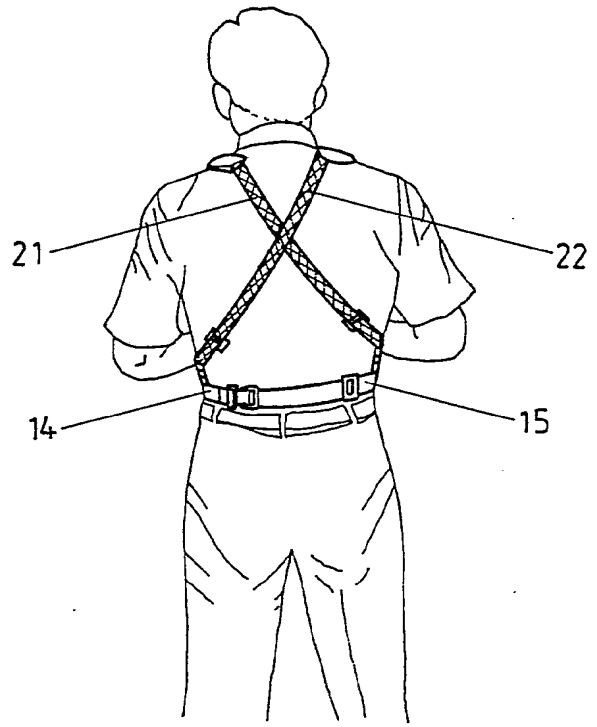


FIG 3

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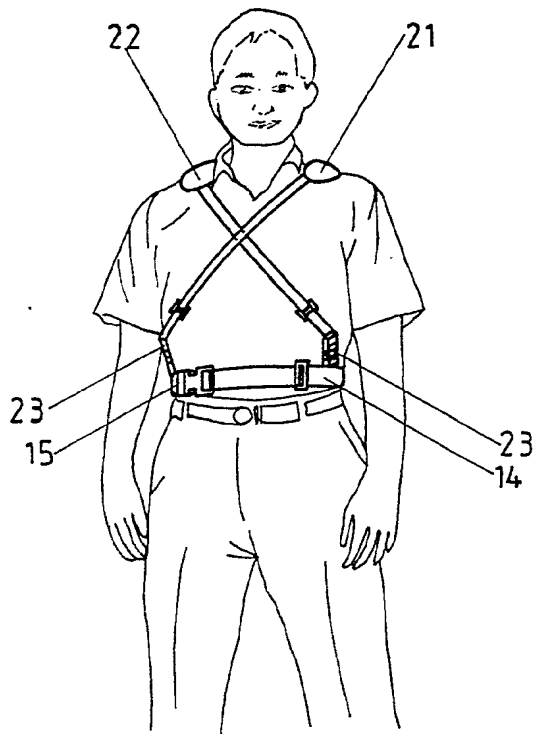


FIG 4

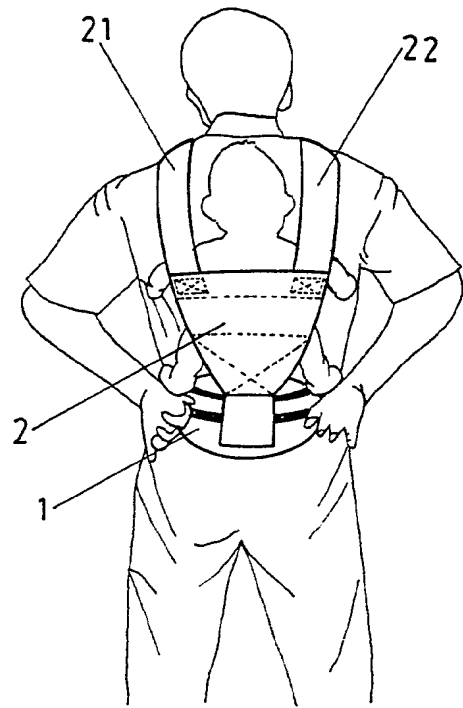


FIG 5

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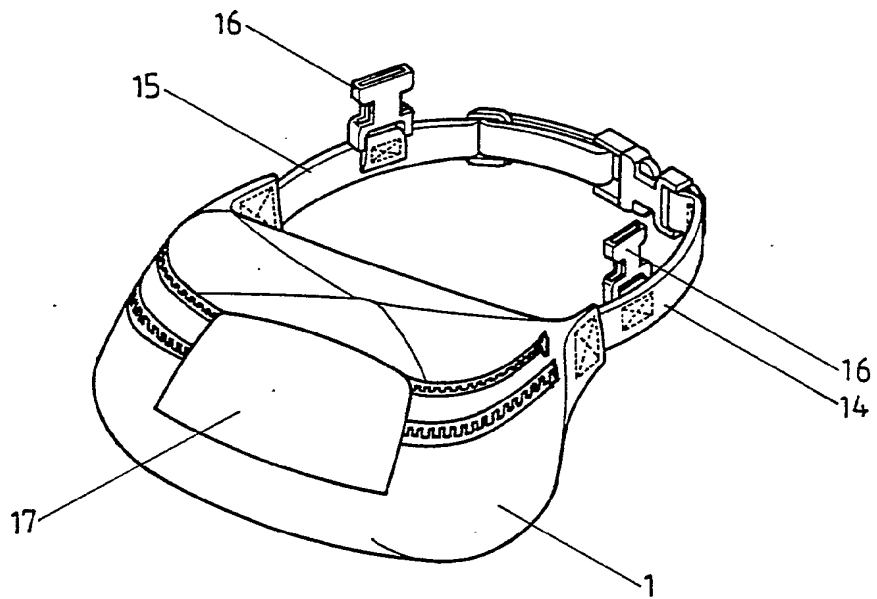


FIG 6

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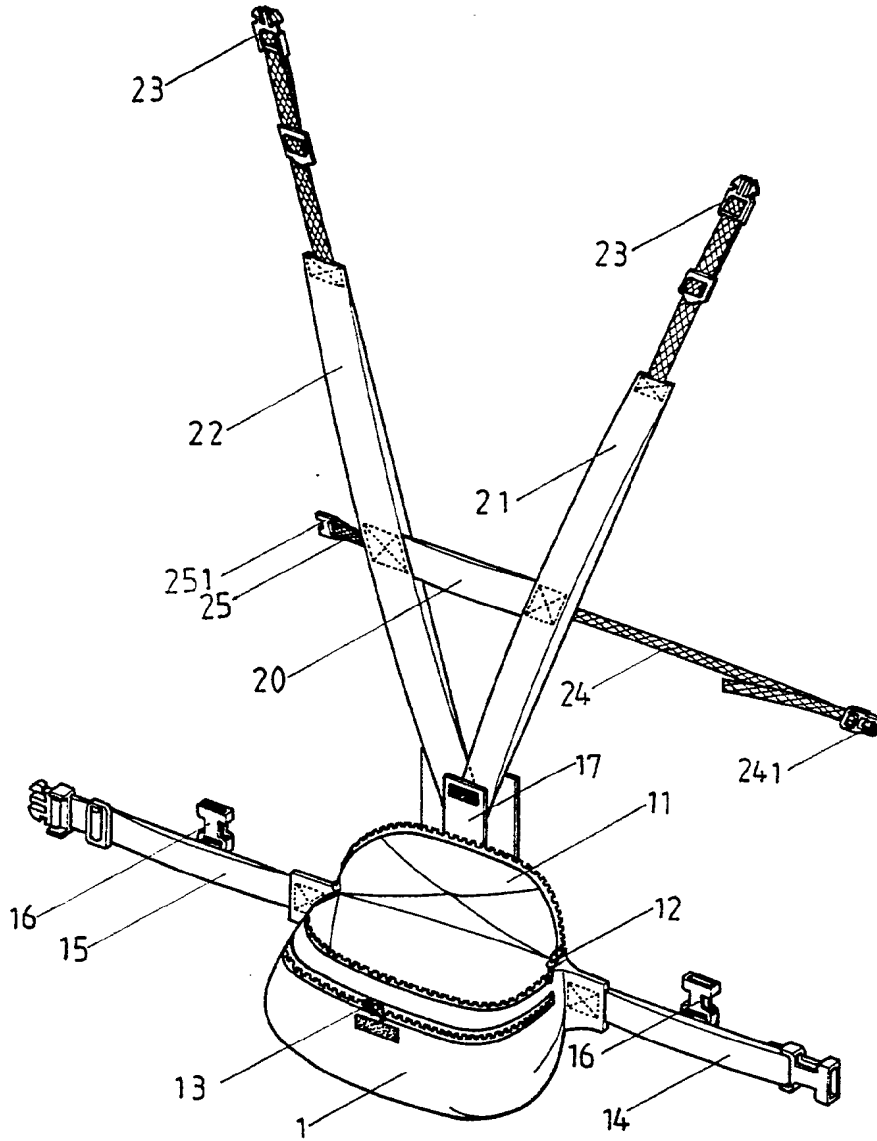


FIG 7

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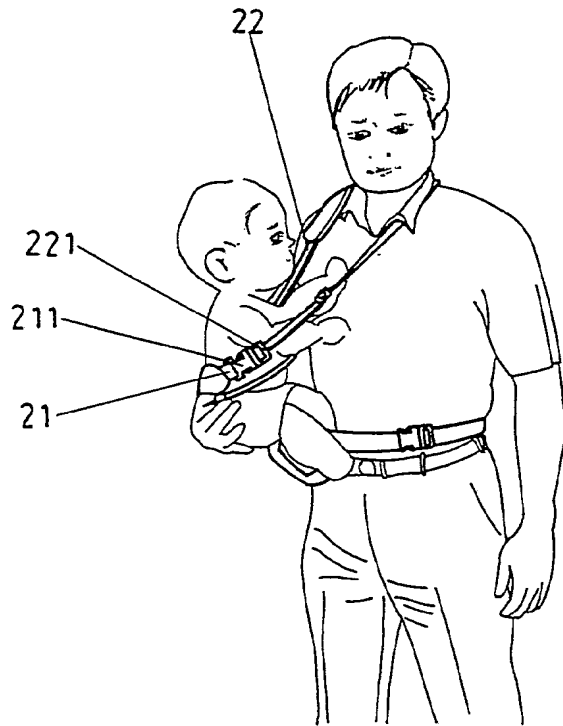


FIG 8

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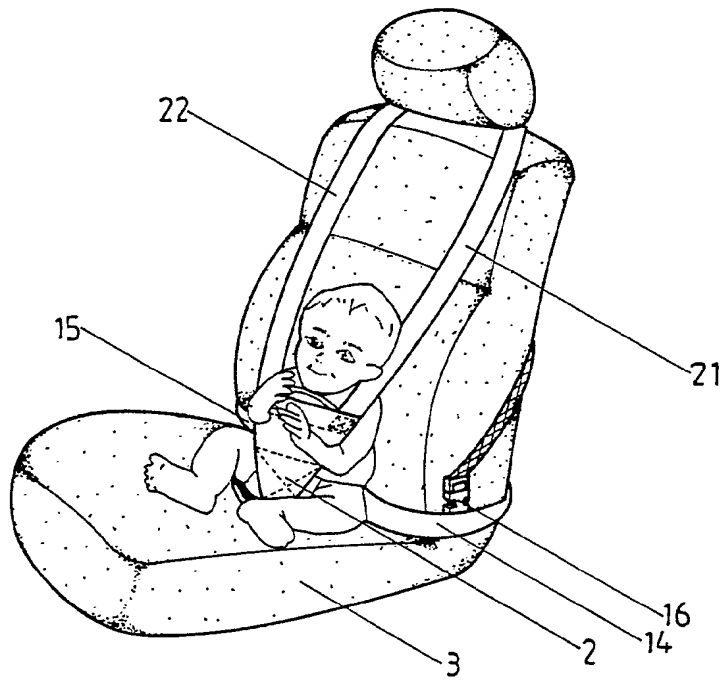


FIG 9

-1-

BACKGROUND OF THE INVENTION

The present invention relates to a multipurpose baby-carrying means which facilitates a user to carry a baby either in front of the user or on back of the user and can
5 be folded to form a waist bag when it is not in use, and therefore, is a very useful article.

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BRIEF DESCRIPTION OF THE DRAWINGS

Different embodiments and usages of the present invention can be understood by referring to the following detailed description of preferred embodiments and the accompanying drawings wherein

Fig. 1 is a three-dimensional perspective showing one of the preferred embodiments of the present invention;

Fig. 2 illustrates a baby carried in front of a user with the present invention;

Fig. 3 is a rear view of Fig. 2;

Fig. 4 illustrates a baby carried on back of a user with the present invention;

Fig. 5 is a rear view of Fig. 4;

Fig. 6 is a three-dimensional perspective showing a waist bag formed after the present invention is folded;

Fig. 7 is a three-dimensional perspective showing a second preferred embodiment of the present invention;

Fig. 8 illustrates the usage of the third preferred embodiment of the present invention; and

Fig. 9 illustrates the present invention used together with a car seat back to carry and hold a baby in a car.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to Fig. 1, the present invention includes a two-compartment waist bag 1 as its main part. The waist bag 1 has a top cover 11, and two laterally extending waist bands 14, 15 which each has a first receiving member 141 and a first inserting member 151, respectively, at their free end and has a second receiving member 16 provided on them at proper position. A generally reverse triangle-shaped baby-carrying piece 2 is sewed to and extends outward from front edge of the top cover 11. Two shoulder straps 21, 22 separately extend from two ends of top side of the baby-carrying piece 2 and each has a second inserting member 23 connected to their free end permitting them to engage with the second receiving members 16 on the waist bands 14, 15. The baby-carrying piece 2 further has two auxiliary belts 24, 25 sewed to and extending laterally from top end of its two sides, and the auxiliary belts 24, 25 each has a third inserting member 241 and a third receiving member 251 at their free end, respectively, so that they can be connected together by engaging the third receiving member 251 with the third inserting member 241.

Two dual-head zippers 12, 13 are used to control the opening and closing of upper and lower compartments of the waist bag 1, respectively. The upper compartment of the waist bag 1 is used to accommodate and store the baby-

carrying piece 2, two shoulder straps 21, 22, two auxiliary belts 24, 25, and the connecting means thereof. The lower compartment of the waist bag 1 provides users with space to store articles that require close attention and protection.

5 The present invention can be used to carry a baby either in front of the user or on back of the user. Figs. 2 and 3 illustrate the present invention being used to carry a baby in front of the user. Please first refer to Fig. 2 for the manner in which the present invention is used. First, circle
10 the waist bands 14, 15 around the user's waist and then, connect their two free ends by engaging the first receiving member 141 with the first inserting member 151, permitting the waist bag 1 to locate at the user's abdomen. Second, pull the baby-carrying piece 2 upward and have the two
15 shoulder straps 21, 22 cross over the user's shoulders and, as shown in Fig. 3, intersect on the user's back before the two second inserting members 23 engage with the two second receiving members 16 separately on the waist bands 14, 15.

 Please further refer to Figs. 4 and 5, the present
20 invention is used to carry a baby on the back of the user. Again, circle the two waist bands 14, 15 around the user's waist and connect their two free ends by engaging the first receiving member 141 with the first inserting member 151, but let the waist bag 1 locate at the user's lower back.
25 Pull the two shoulder straps 21, 22 upward from the user's

back, permit them cross over the user's shoulders and intersect at the user's chest, and then, engage the two second inserting members 23 with the two second receiving members 16 separately.

5 In the above two embodiments of the present invention, the two auxiliary belts 24, 25 may be further connected together by engaging the third receiving member 241 with the third inserting member 251 whenever it is necessary to further ensure the safety of baby carried with the present
10 invention.

 When the present invention is not used to carry a baby, the baby-carrying piece 2, shoulder straps 21, 22, auxiliary belts 24, 25, and all the connecting means thereof may be folded and stored in the upper compartment of the waist bag
15 1 before a tongue-like cover 17 connected to the baby-carrying piece 2 is covered downward so that the folded baby-carrying means of the present invention looks like a common waist bag. The storage space of the lower compartment of the waist bag 1 is not affected by the filled upper compartment.

20 Fig. 7 shows another embodiment of the present invention, wherein the two shoulder straps 21, 22 directly connect to and extend from the front edge of the top cover 11 of the waist bag 1 at one point in such a manner that they look like a character V. The original reverse triangle-shaped
25 baby-carrying piece 2 is removed. On the two shoulder straps

21, 22, at a proper distance from their common lower end, a transversely stretched supporting band 20 is provided to bridge the two shoulder straps 21, 22 and thereby, forms a reverse triangular area permitting a baby to be carried thereon securely.

5

Fig. 8 shows still another embodiment of the present invention, wherein the two shoulder straps 21, 22 have a fourth receiving member 211 and a fourth inserting member 221, respectively, at their free ends to permit them to connect with each other by engaging the fourth receiving with the fourth inserting members 211 and 221.

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Fig. 9 shows the present invention being used together with a car seat back to form a baby seat. In this case, the two shoulder straps 21, 22 are connected and fixed in the manner as illustrated in Figs. 2 and 3, except the user is replaced by the seat back. The baby is securely and safely positioned between the baby-carrying means and the car seat back on a car seat 3.

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WHAT I CLAIMED IS:

1. A multipurpose baby-carrying means comprising:

a waist bag consisting of an upper compartment and a lower compartment, having a top cover and two laterally
5 extending waist bands;

said two laterally extending waist bands having a first receiving member and a first inserting member at their free ends, respectively, permitting said two free ends to engage with each other, and a second receiving or
10 inserting member separately on them at proper position;

said lower and upper compartments each being provided with a dual-head zipper for controlling the opening and closing of said lower and upper compartments;

15 a baby-carrying piece sewed to and extending from front edge of said top cover of said waist bag; and two shoulder straps sewed to and upward and outward extending from two ends of top side of said baby-carrying piece, having a second receiving or inserting
20 member provided at their free ends for engaging with said second inserting or receiving member on said two waist band, respectively.

2. A multipurpose baby-carrying means as claimed in claim 1, wherein said baby-carrying piece is removed and said two
25 shoulder straps are directly sewed to and extend upward

and outward from a point on front edge of said top cover
of said waist bag to look like a character V with a
transverse supporting band provided therebetween at a
position properly above said top cover to bridge said two
5 shoulder straps and form a triangluar area for carrying
a baby therein.

3. A multipurpose baby-carrying means as claimed in claims 1
and 2, wherein said two shoulder straps are provided with
a receiving member and an inserting member, respectively,
10 at their free ends permitting said free ends to engage
with each other to form a loop for hanging on and around
a user's neck so that a baby may be carried in said baby-
carrying piece or triangular area in front of said user or
to the side of said user.

15 4. The multipurpose baby-carrying means substantially as
herein described with reference to and as shown in the
accompanying drawings.

20

25

**Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)**

Application number

9122530.0

Relevant Technical fields

(i) UK CI (Edition K) A3V

(ii) Int CI (Edition 5) A47D

Search Examiner

D BUCKLEY

Databases (see over)

(i) UK Patent Office

(ii) ONLINE DATABASES:WPI

Date of Search

15 JANUARY 1992

Documents considered relevant following a search in respect of claims

1 TO 4

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
A	GB A 2215184 (EATON HALL) see, eg Figures 2 to 4	
A	GB A 2201083 (BENTINCK) see Figures 3 and 4	



Category	Identity of document and relevant passages	Relevant to claim(s).

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

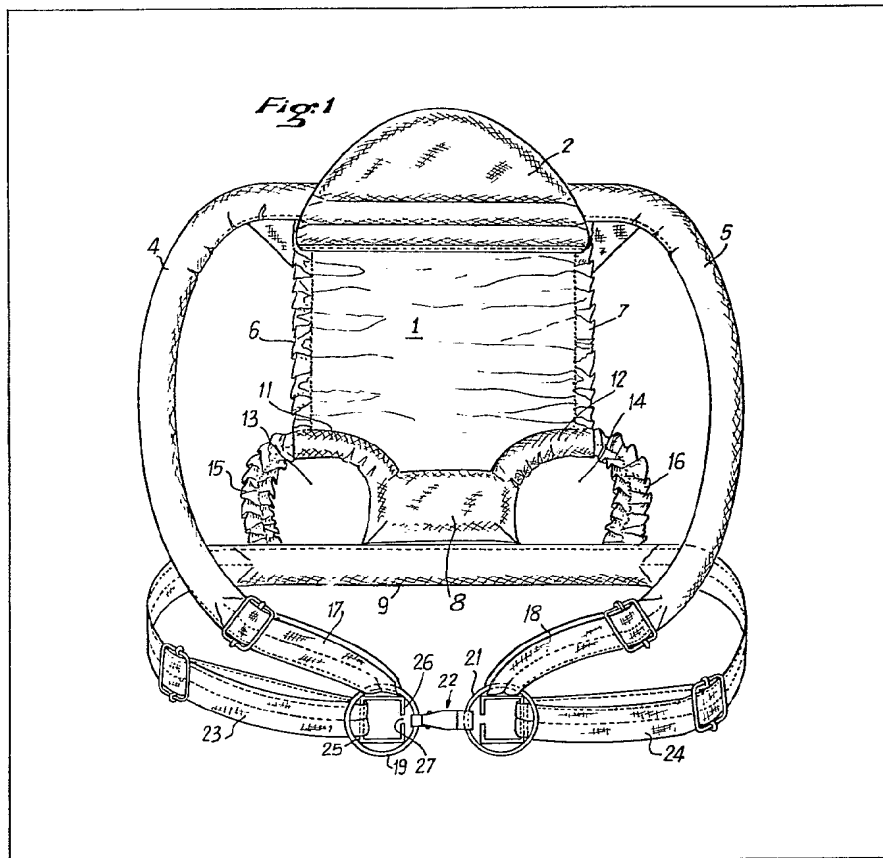
&: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).

- (21) Application No 7929011
- (22) Date of filing 21 Aug 1979
- (23) Claims filed 21 Aug 1979
- (30) Priority data
- (31) 7825163
- (32) 31 Aug 1978
- (33) France (FR)
- (43) Application published 12 Mar 1980
- (51) INT CL³ A45F 3/14
- (52) Domestic classification A3V 9B2A
- (56) Documents cited None
- (58) Field of search A3V
- (71) Applicants **Francois Merlet, 9, rue Mathurin Regnier, Paris 15, France.**
- (72) Inventors **Francois Merlet**
- (74) Agents **Baron & Warren**

(54) **Baby-carrier**

(57) The present invention relates to a baby carrier comprising a back 1 made of fabric which has in its lower part two lateral openings 13, 14 for the passage of the infant's legs, two straps 4, 5 fastened between the top part of the back 1 and to the two respective parts 19, 21 of a buckle fastener, via adjustable connecting straps, and two other straps 23, 24 respectively connecting the two parts of the buckle to the ends of the lower part of the back, wherein each lateral opening for the passage of a leg is bordered, on three of this sides only, namely its upper side, its inner side and its lower side, by a padded support member 8, 9 made of relatively rigid elastic material, and on its fourth, outer side, by a strip of stretch fabric 15, 16.



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Fig:1

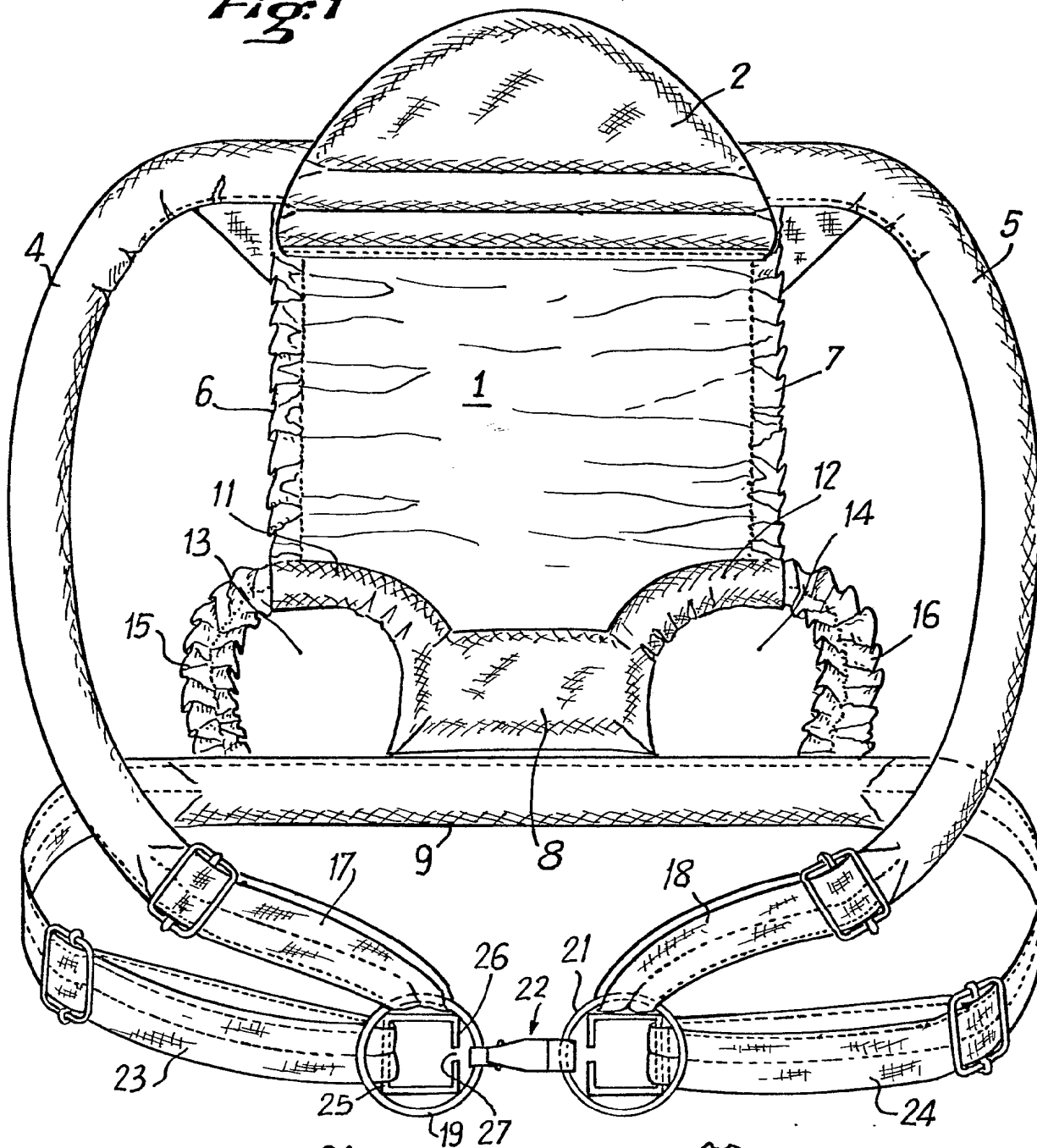
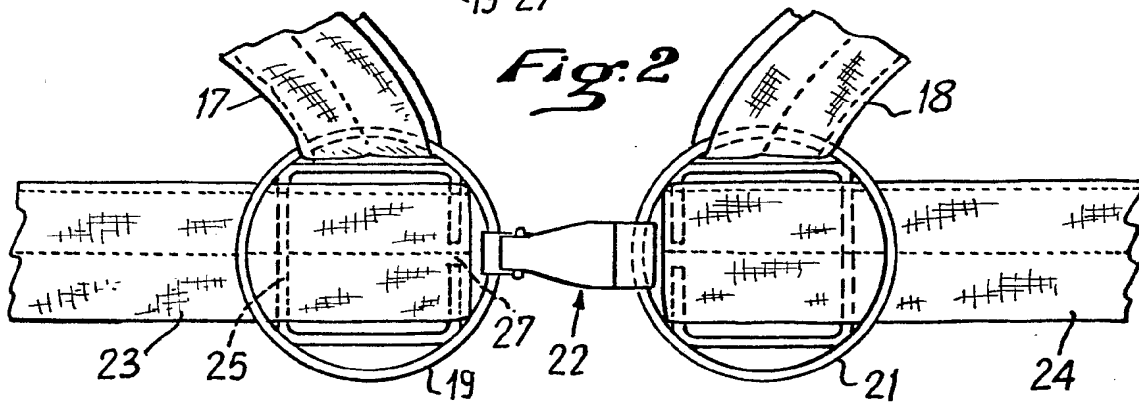


Fig:2



SPECIFICATION

Baby-carrier

5 The present invention relates to improvements in or relating to supple baby carriers.

Supple baby carriers are already known which enable a very young child to be carried on one's back or chest. These baby carriers generally comprise a
 10 supple back made of fabric, moulding the curve of the infant's body, with a head rest at its top end, and, at its bottom end, two lateral openings for passage of the infant's legs. At the top of this back, the ends of two straps which are adapted to pass over the
 15 wearer's shoulders, are fastened on either side of the head rest. These straps are connected, at their other ends, to the two parts of a buckle fastener via connecting straps which are adjustable in length. Other adjustable straps respectively connect the two
 20 parts of the buckle fastener to the ends of the lower part of the supple back.

The openings provided for the passage of the legs are defined, in these known baby carriers, by edges constituted by padded support members of elastic
 25 material (plastics foam for example), but which are nevertheless rigid. The section of passage defined by these padded support members is therefore not easily adaptable to the different sizes of the legs of the infant placed in the baby carrier. In the case of
 30 infants having large legs, this results in said padded support members exerting on said legs an undesirable pressure which may lead to a certain irritation.

It is essentially an object of the present invention to remedy this drawback by providing a baby carrier
 35 which offers increased comfort for the infant around its legs.

To this end, this supple baby carrier comprising a supply back made of fabric which has in its lower part two lateral openings for the passage of the
 40 infant's legs, two straps fastened on the one hand to the top part of the supple back and on the other hand to the two respective parts of a buckle fastener, via adjustable connecting straps, and two other straps respectively connecting the two parts of the buckle
 45 to the ends of the lower part of the supple back, is characterised in that each lateral opening for the passage of a leg is bordered, on three of its sides only, namely its upper side, its inner side and its lower side, by a padded support member made of
 50 relatively rigid elastic material, and on its fourth outer side, by a strip of stretch fabric.

According to a further feature of the invention, the fourth side of each lateral opening may be constituted by a strip of fabric made of stretch yarn or by a
 55 strip of gathered non-stretch material enclosing a length of elastic.

The invention offers the advantage that the section of passage of each lateral opening may easily be adapted to different leg sizes of the infants carried,
 60 without their being uncomfortable, due to the provision of the outer, stretchable fourth side.

According to a further feature of the invention, each part of the buckle fastener has two positions of fastening for the connecting strap, these positions
 65 being respectively defined by a first continuous rod

and by a second rod, parallel to the first, separated into two sections by a central gap, so that the strap may pass either around the first rod only, or around the second split rod and the first rod.

70 This arrangement makes it possible additionally to adjust the length of each connecting strap, the variation in length procured by each part of the buckle being equal to twice the distance between the two rods.

75 The invention will be more readily understood on reading the following description with reference to the accompanying drawings, in which :

Figure 1 is a view of a supple baby carrier according to the invention, shown flat with its buckle
 80 fastener closed.

Figure 2 is a partial plan view of the buckle fastener, showing the second position of fastening of the connecting straps.

Referring now to the drawings, the baby carrier shown in *Figure 1* comprises a supple back 1 made of fabric which moulds the curve of the infant's body. A head rest 2 is removably fixed to the top part of this supple back, said head rest being more particularly fixed to an upper horizontal padded support member 3 constituting the upper edge of the
 90 back 1. This padded support member 3 extends laterally on either side to form two straps 4 and 5.

The back 1 made of fabric is limited laterally by elastic gathers 6 and 7.

The back 1 terminates in its bottom part in a small central cushion 8, made of elastic material, itself stitched to a lower horizontal padded support member 9. The central cushion 8 extends in its upper part and horizontally by two outwardly extending padded support members 11 and 12. These padded support members 11 and 12 thus form with the edges of the central cushion 8 and the lateral parts of the lower padded support member 9 two lateral openings 13 and 14 intended for the passage of the legs of the
 105 infant carried in the baby-carrier.

According to the invention, the lateral openings 13, 14 are closed, towards the outside, by respective strips 15 and 16 of stretch fabric. From the foregoing, it is thus seen that each of the lateral openings 13, 14
 110 is bordered on three of its sides, namely its upper, inner and lower sides, by a relatively rigid padded support member made of elastic material, and on its fourth, outer side, by a strip 15, 16 of a stretch fabric. Consequently, the section of the lateral openings 13,
 115 14 may vary easily as a function of the size of the infant's legs, without the infant suffering discomfort.

Each of the strip 15, 16 of stretch fabric may be made of a strip of gathered fabric enclosing a length of elastic, or of a simple strip of longitudinally stretchable fabric.

The straps 4, 5 are respectively connected, via connecting straps 17, 18, to the two parts 19, 21 of a buckle fastener generally designated by reference 22. Other adjustable straps 23, 24 extend respectively
 125 between the two ends of the lower padded support member 9 of the back 1 and the two parts 19, 21 of the buckle 22.

Each of the two parts 19, 21 of this buckle, of which the outer shape may be circular, comprises a first rod 25 constituted by a chord of the outer circle and
 130

about which each of the straps 23, 24 may pass, in a first position of fastening. Each part 19, 21 of the buckle also comprises a second rod 26 parallel to the first rod 25 and separated into two sections by a central gap 27. This gap enables the straps 23, 24 to be passed therethrough, so as possibly to place this strap in a second position of fastening, as shown in Figure 2. In this position, the strap 23, 24 passes around the second split rod 26 and through the space between this rod and the outer circle of the buckle. It is thus possible additionally to shorten the useful length of each of the straps 23, 24 by placing the latter in the second position of fastening illustrated in Figure 2.

15 CLAIMS

1. A supple baby carrier comprising a supple back made of fabric which has in its lower part two lateral openings for the passage of the infant's legs, two straps fastened on the one hand to the top part of the supple back and on the other hand to the two respective parts of a buckle fastener, via adjustable connecting straps, and two other straps respectively connecting the two parts of the buckle to the ends of the lower part of the supple back, wherein each lateral opening for the passage of a leg is bordered, on three of its sides only, namely its upper side, its inner side and its lower side, by a padded support member made of relatively rigid elastic material, and on its fourth, outer side, by a strip of stretch fabric.

2. A baby carrier as claimed in Claim 1, wherein the fourth side of each lateral opening may be constituted by a strip of fabric made of stretch yarn or a strip of gathered, non-stretch fabric enclosing a length of elastic.

3. A baby carrier as claimed in either one of Claims 1 and 2, wherein each part of the buckle fastener has two positions of fastening for the connecting strap, these positions being respectively defined by a first continuous rod and by a second rod, parallel to the first, separated into two sections by a central gap, so that the strap may pass either around the first rod only, or around the second split rod and the first rod.

4. A supple baby carrier substantially as described hereinabove and illustrated in the accompanying drawings.

PATENT ABSTRACTS OF JAPAN

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(51)Int.Cl. A47D 13/02
A45C 9/00

(21)Application number : 2002-325153

(71)Applicant : LUCKY KOGYO KK

(22)Date of filing : 08.11.2002

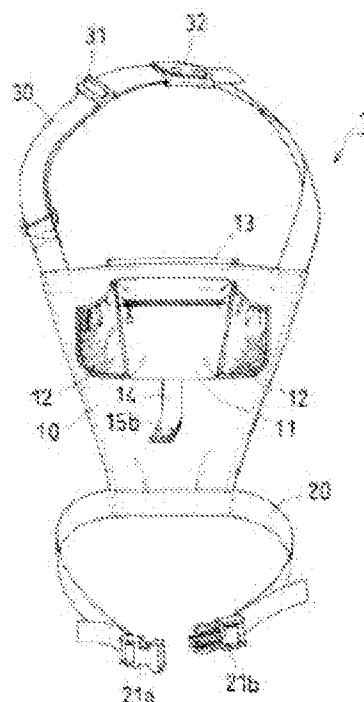
(72)Inventor : HIGUCHI JUNICHI

(54) BABY HOLDER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a baby holder with good external appearance even when it is carried and used as a bag.

SOLUTION: The baby holder 1 includes: a sheet shape back pad part 10; a waist belt 20 which is attached to the lower portion of the back pad part 10 so as to be wrapped around the waist of a user; and a shoulder belt 30 whose both ends are fitted to the left and right of the upper end of the back pad part 10. Pockets 11 and 12 are provided in an upper part at the back surface side of the back pad part 10. A flap 13 hanging at the front surface side is provided at the upper end of the back pad part 10. The flap 13 covers the bent-up back pad part 10, so as to store and hold the back pad part 10 and the waist belt 20.



(19) 日本国特許庁(JP)

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(11) 特許出願公開番号

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(P2004-154468A)

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A 4 7 D 13/02

A 4 5 C 9/00

テーマコード (参考)

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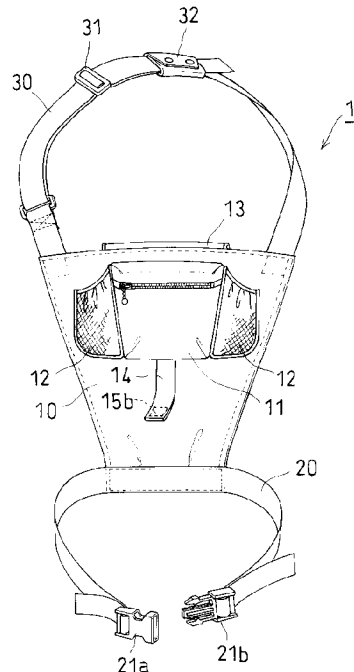
(54) 【発明の名称】 ベビーホルダー

(57) 【要約】

【課題】携帯時にバッグとして使用しても外観の良いベビーホルダーの提供を目的とする。

【解決手段】シート状背当て部10と、前記背当て部10の下端側に取付けられて使用者の腰回りに装着するウエストベルト20と、両端を前記背当て部10の上端側左右に取付けられるショルダーベルト30とを備えるベビーホルダー1において、前記背当て部10の背面側上部にポケット11、12を具備するとともに、前記背当て部10の上端部に前面側に垂下するフラップ13が設けられている。そして、フラップ13を折り上げられた背当て部10に被せることによって背当て部10およびウエストベルト20が収納保持される。

【選択図】 図1



【特許請求の範囲】

【請求項1】

シート状背当て部と、前記背当て部の下端側に取付けられて使用者の腰回りに装着するウエストベルトと、両端を前記背当て部の上端側左右に取付けられるショルダールベルトとを備えるベビーホルダーにおいて、

前記背当て部の背面側上部にポケットを具備するとともに、背当て部の上部に前記ウエストベルトが収納されることを特徴とするベビーホルダー。

【請求項2】

前記ウエストベルトが背当て部の下部とともに上方に折り上げられ、背当て部の下部とともに該背当て部の前面側上部に沿わせられた状態に保持される請求項1に記載のベビーホルダー。

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【請求項3】

前記背当て部の上端部に前面側に垂下するフラップが設けられ、該フラップを折り上げられた背当て部に被せることによって背当て部およびウエストベルトを保持する請求項2に記載のベビーホルダー。

【請求項4】

前記背当て部の背面側中間部にタブが設けられ、該タブに前記フラップを係合させることによって背当て部およびウエストベルトを保持する請求項3に記載のベビーホルダー。

【請求項5】

前記背当て部の上部に袋状収納部が設けられ、該袋状収納部内に背当て部およびウエストベルトが収納される請求項1に記載のベビーホルダー。

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【請求項6】

前記背当て部は前記袋状収納部内に固着され、開閉口を介して背当て部およびウエストベルトが引き出される請求項5に記載のベビーホルダー。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】

この発明は、幼児をだっこして移動する際に使用されるベビーホルダー、特に簡易にだっこして携帯にも便利なベビーホルダーに関する。

【0002】

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【従来の技術】

幼児をだっこするベビーホルダーとして、図7(A)(B)に示すようなものがある。このベビーホルダー(60)は、一枚のシート状背当て部(61)の下端部にウエストベルト(62)を取付けるとともに、上端部に1本のショルダールベルト(63)を左右に架け渡しただけの簡易なものであり、前記ウエストベルト(62)を使用者の腰回りに装着し、ショルダールベルト(63)を一方の肩にたすき掛けにして、だっこした幼児を補助的に支えながら使用する。また、使用しない時は、ショルダールベルト(63)を背当て部(61)で包みながらウエストベルト(62)の周りに巻き付けてその周囲をロールアップベルト(64)等で留め、図7(B)に示すようにウエストベルト(62)を身体に装着したり、ウエストベルトを手提げ紐として使用する等して携帯することができる。

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【0003】

前記ベビーホルダー(60)は、両肩にショルダールベルトを掛けておんぶやだっこするタイプのベビーキャリアと比較すると、装着動作が簡単であり、また部品点数が少ないために非常に軽量であって携帯時にも嵩張らないという長所がある。

しかし、小物手回り品の携帯に不便を感じることもあり、また、携帯時の外観に難点があった。

【0004】

そこで出願人は、背当て部の背面側に小物を入れるポケットを設けるとともに、携帯時に背当て部の下半部にウエストベルトを収納し、ショルダールバッグのように携帯できるベビーホルダーを出願した(特許文献1参照)。

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【0005】

【特許文献1】

特開平11-258694号公報（特許請求の範囲、図1等）

【0006】

【発明が解決しようとする課題】

しかし、上記ベビーホルダーは、背当て部の背面ポケットの下方にウエストベルトを収納する構造であり、バッグとしての外観に不満を感じる使用者もあり、改善が求められている。

【0007】

この発明は、上述の技術背景に鑑み、携帯時にバッグとして使用しても外観の良いベビーホルダーの提供を目的とする。 10

【0008】

【課題を解決するための手段】

前記目的を達成するために、この発明のベビーホルダーは、シート状背当て部と、前記背当て部の下端側に取付けられて使用者の腰回りに装着するウエストベルトと、両端を前記背当て部の上端側左右に取付けられるショルダールベルトとを備えるベビーホルダーにおいて、前記背当て部の背面側上部にポケットを具備するとともに、背当て部の上部に前記ウエストベルトが収納されることを基本要旨とする。

【0009】

前記ベビーホルダーにおいて、前記ウエストベルトが背当て部の下部とともに上方に折り上げられ、背当て部の下部とともに該背当て部の前面側上部に沿わせられた状態に保持されることが好ましい。前記保持方法としては、背当て部の上端部に前面側に垂下するフラップが設けられ、該フラップを折り上げられた背当て部に被せることによって背当て部およびウエストベルトを保持することが好ましい。さらに、前記背当て部の背面側中間部にタブが設けられ、該タブに前記フラップを係合させることによって背当て部およびウエストベルトを保持することが好ましい。 20

【0010】

また、この発明のベビーホルダーにおいて、前記背当て部の上部に袋状収納部が設けられ、該袋状収納部内に背当て部およびウエストベルトが収納されることが好ましい。さらに、前記背当て部は前記袋状収納部内に固着され、開閉口を介して背当て部およびウエストベルトが引き出されることが好ましい。 30

【0011】

【発明の実施の形態】

この発明の好適な2つの実施形態を図示例に基づいて以下に説明する。

〔第一実施形態〕

図1～4に示すベビーホルダー(1)は、背当て部(10)、ウエストベルト(20)およびショルダールベルト(30)から構成されている。

【0012】

前記背当て部(10)は、幼児の背中から部まを覆う長さを有し、上端側は幼児の背から脇を保持するためにやや幅広に形成される一方で、下端側は幼児の足を左右に出しやすいようにやや幅小に形成され、全体として略逆台形に形成されている。 40

【0013】

前記背当て部(10)の上部の背面側には、ファスナーで開閉する箱形ポケット(11)とその両脇に投げ込みポケット(12)(12)の2種類3個のポケットが設けられている。また、上端縁には半円形のフラップ(13)が縫着され、背当て部(10)の前面側に垂下している。また、前記箱形ポケット(11)の下方にはタブ(14)が縫着され、図1に示す背当て部(10)の展開状態において垂下している。そして、前記フラップ(13)とタブ(14)とは、それぞれに縫着された一対の面ファスナー(15a)(15b)によって係合される。また、背当て部(10)の左右両端には保護ベルト(16)(16)が縫着され、先端のバックル(17a)(17b)を連結することによって幼児の 50

身体に巻き留めて幼児の脱落を防止するものとなされている。

【0014】

前記背当て部(10)の下端にウエストベルト(20)が縫着されている。このウエストベルト(20)は、両先端部に互いに対をなすバックル(21a)(21b)が取り付けられて、分離自在に止着連結することができる。

【0015】

前記ショルダールベルト(30)は、その両端が背当て部(10)の上端左右に縫着され、使用者の左右どちらが一方の肩にたすき掛けにされる。なお、図中、(31)はショルダールベルト(30)の長さを調節する調節具、(32)は肩パッドである。

【0016】

次に、前記ベビーホルダー(1)を用いた幼児抱持方法、およびベビーホルダー(1)携帯方法を説明する。

(幼児抱持方法)

図8に示すように、背当て部(10)を使用者の腹部側に配置してウエストベルト(20)を腰に回し、バックル(21a)(21b)を連結して装着する。また、ショルダールベルト(30)は、幼児を収容しやすいように長い目に調節しておく。そして、背当て部(10)内に幼児を収容するとともに、ショルダールベルト(30)を使用者のどちらが一方の肩にたすき掛けにしたのち、ショルダールベルト(30)の長さを適正な長さに調節する。また、背当て部(10)のポケット(11)(12)は適宜物入れとして利用する。

【0017】

また、前記フラップ(13)は図示したように背当て部(10)の内面側に垂下させて使用しても良いし、背面側にはね上げて箱形ポケット(11)上タブ(14)と係合させておくこともできる(図示省略)。

(携帯方法)

図4(A)(B)に示すように、ウエストベルト(20)を背当て部(10)の幅に合わせて適宜折り畳み、背当て部(10)のポケット(11)(12)より下側の部分(以下、下部と称する)でウエストベルト(20)を包んで下部を内側に折り上げ、該背当て部(10)の前面側上部に沿わせる。そして、フラップ(13)を折り上げた背当て部(10)に被せ、背当て部(10)の折り上げによって上向きとなったタブ(14)をフラップ(13)に重ねて面ファスナー(15a)(15b)を係合させる。これにより、ウエストベルト(20)は背当て部(10)の下部とともに背当て部(10)の前面側上部に収納保持される。また、フラップ(13)が折り上げられた背当て部(10)を広範囲に覆うことで、外れにくく安定した保持状態が得られる。また、背当て部(10)が隠されることで外観も良い。

【0018】

このウエストベルト(30)の収納状態において、ポケット(11)(12)の収納機能は幼児抱持時と何ら変わらないから、ポケット(11)(12)内に小物を収納したまま、ショルダールベルト(30)を利用してショルダールバッグとして、あるいはショルダールベルト(30)の長さを短くして手提げバッグとして携帯することができる。しかも、従来のベビーホルダーにフラップとタブを付加するだけの簡単な構造でウエストベルト(30)を収納することができる。

【0019】

前記ベビーホルダー(1)において、ウエストベルト(20)と背当て部(10)の収納保持手段として、図示したフラップ(13)とタブ(14)の組み合わせるものの他、どちらが一方のみを用いて保持することごとくもできる。即ち、タブ(14)を設けずフラップ(13)を折り上げた背当て部(10)に直接留め付けても良いし、またフラップ(13)を設けずタブ(13)の長さを図示例よりも長く形成して先端部を背当て部(10)の上端縁またはその近傍に留め付けることごとくもできる。フラップおよびタブの寸法形状、これらの係着具も何ら限定されず、図示した面ファスナーの他、スナップやボタン等を適宜使用することができる。さらに、フラップやタブを用いずに、折り上げた背当て部を直接

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留め付けるように、背当て部(10)の背面側と前面側上部とに係着具を取り付けたものの本発明に含まれる。

〔第2実施形態〕

図5(A)(B)および図6に示すベビーホルダー(2)は、上記ベビーホルダー(1)とはウエストベルト(20)の収納方法が相違する。なお、図5、6において、図1~4と同じ符号を付したものは上記ベビーホルダー(1)と同じ機能を示すものであり、説明を省略する。

【0020】

(40)は、背面部(40a)と前面部(40b)の2枚のシートを(40c)を介して縫着することによって形成された正面視略長方形の袋状収納部であり、前面部(40b) (幼児に背が当たる側)の下端からやや上方にファスナーによる開閉口(41)が設けられている。また、前記袋状収納部(40)の背面部(40a)に8つの箱形ポケット(42)(42)(42)と袋状ポケット(43)が設けられ、図5(A)(B)に示す背当て部(50)およびウエストベルト(20)収納状態において、背面部(40a)側からも前面部(40b)側からもこれら(50)(20)を視認することはできず、全体としてポケット付きショルダーバッグの外観を呈している。

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【0021】

背当て部(50)は略逆台形であり、その上端縁が袋状収納部(40)の内部上端で縫着され、開かれた開閉口(41)から引き出すことができる。また、前記背当て部(50)は開閉口(41)の近傍においても開閉口(41)に平行に縫着され、後述する幼児抱持時に袋状収納部(40)が不本意にずれて幼児に不快さを与えることを防いでいる。

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【0022】

また、ショルダーベルト(30)は、袋状収納部(40)を介して前記背当て部(50)の上端左右に縫着されている。

【0023】

次に、前記ベビーホルダー(2)における幼児抱持方法および携帯方法を説明する。

(幼児抱持方法)

図6に示すように、袋状収納部(40)の開閉口(41)を開いて背当て部(50)を引き出して展開する。この展開状態において、背当て部(50)の上部は袋状収納部(40)の前面部(40b)に覆われ、幼児の背は袋状収納部(40)を介して背当て部(50)に接することとなる。そして、上記ベビーホルダー(1)と同様に、バックル(21a)(21b)の連結によってウエストベルト(20)を使用者に装着し、背当て部(40)内に幼児を収容して幼児を抱持する。

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(携帯方法)

図5(A)(B)に示すように、引き出された背当て部(50)およびウエストベルト(20)(20)を袋状収納部(40)内に収納し、開閉口(41)を閉じる。

【0024】

本実施形態のベビーホルダー(2)では、背当て部(50)と袋状収納部(40)をそれぞれ別の部材で形成しているが、袋状収納部の前面部またはその一部、あるいは相面部またはその一部を背当て部と兼用させることもできる。また、前記ショルダーベルト(30)は背当て部(50)に直接縫着する他、袋状収納部(40)に縫着するものとし、背当て部(50)に対して間接的に取り付けることもできる。ショルダーベルト(30)を間接的に背当て部(50)に取り付けたものも本発明に含まれる。

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【0025】

上述した2種類のベビーホルダー(1)(2)は、ベビーホルダーとして幼児を抱持したときにポケット(11)(12)(42)(43)に小物を収納でき、かつ携帯時には単なる荷物としてではなく、収納した小物を持ち運ぶバッグとして利用することができる。無論、抱持時と携帯時とでポケット内の収納物の取り出しや入れ替えの必要はない。

【0026】

【発明の効果】

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以上の次第で、請求項1にかかるとの発明によれば、ベビーホルダーとして幼児を抱持したときにポケット内に小物を収納でき、かつ携帯時にはウエストベルトを収納することによって小物を持ち運ぶショルダーバッグとして利用することができる。無論、だっこ時と携帯時とでポケット内の収納物の取り出しや入れ替えの必要はなく、外観も良い。

【0027】

請求項2～4にかかるとの発明によれば、簡単な構造でウエストベルトを収納できる。特にフラップを設けたベビーホルダーでは、折り上げたウエストベルトと背当て部がフラップに覆われるために外観が良く、かつ安定した収納保持状態が得られる。

【0028】

請求項5、6にかかるとの発明によれば、携帯時にウエストベルトと背当て部が外からは見えない状態を袋状収納部内に収納されるため、特に外観が良い。 10

【図面の簡単な説明】

【図1】この発明にかかるとの第1実施形態のベビーホルダーを背面側から見た全体斜視図である。

【図2】図1のベビーホルダーを前面側から見た全体斜視図である。

【図3】図1のベビーホルダーによる幼児抱持状態を示す斜視図である。

【図4】ベビーホルダーの携帯方法を示す斜視図であり、(A)は前面側から見た斜視図、(B)は背面側から見た斜視図である。

【図5】この発明にかかるとの第2実施形態のベビーホルダーの携帯状態を示す図であり、(A)を背面側から見た斜視図、(B)は前面側から見た斜視図である。 20

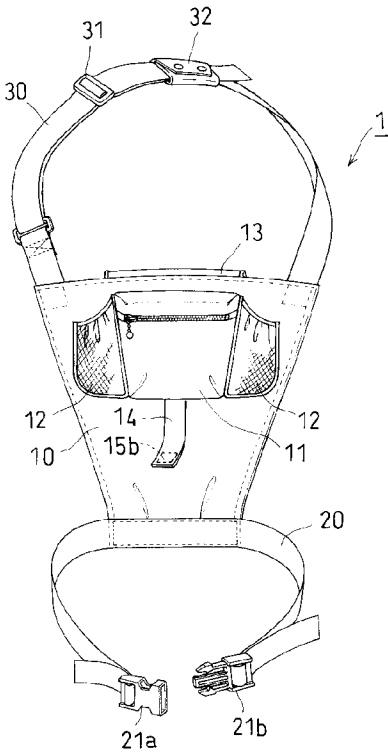
【図6】図5のベビーホルダーにおいて、背当て部の展開状態を示す斜視図である。

【図7】従来のベビーホルダーの斜視図であり、(A)は使用状態を示し、(B)は携帯状態を示している。

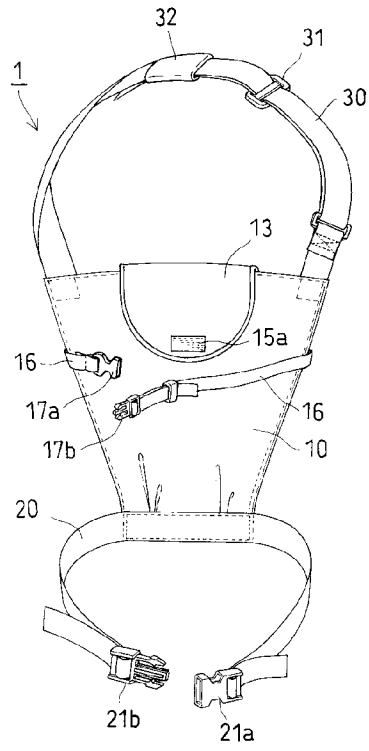
【符号の説明】

- 1、2 ベビーホルダー
- 10、50 背当て部
- 20 ウエストベルト
- 30 ショルダーベルト
- 11 箱形ポケット(ポケット)
- 12 投げ込みポケット(ポケット)
- 13 フラップ
- 14 タブ
- 15a、15b 面ファスナー
- 40 袋状収納部(収納部)
- 41 開閉口
- 42 箱形ポケット(ポケット)
- 43 袋状ポケット(ポケット)

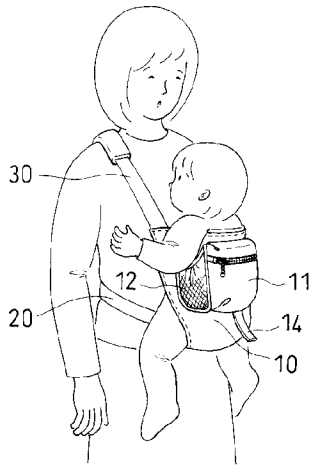
【図 1】



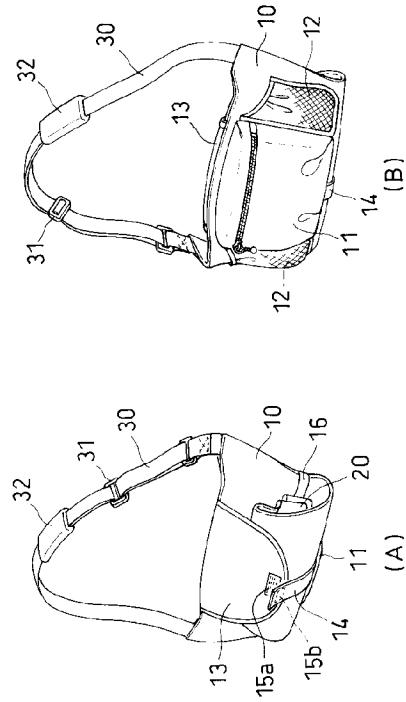
【図 2】



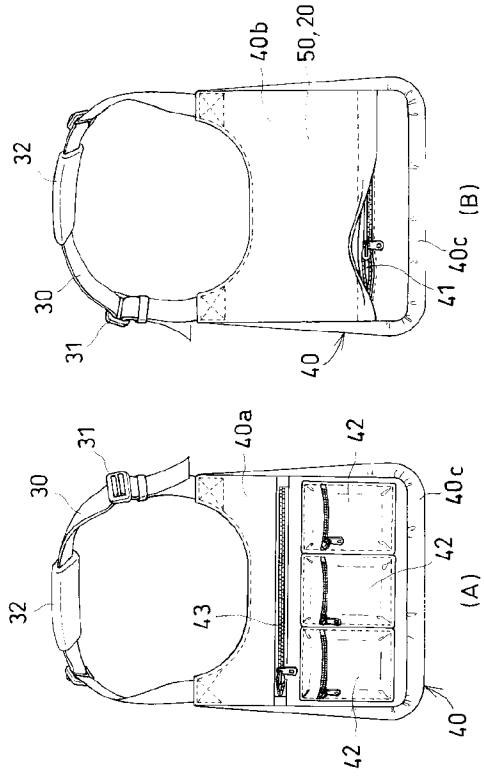
【図 3】



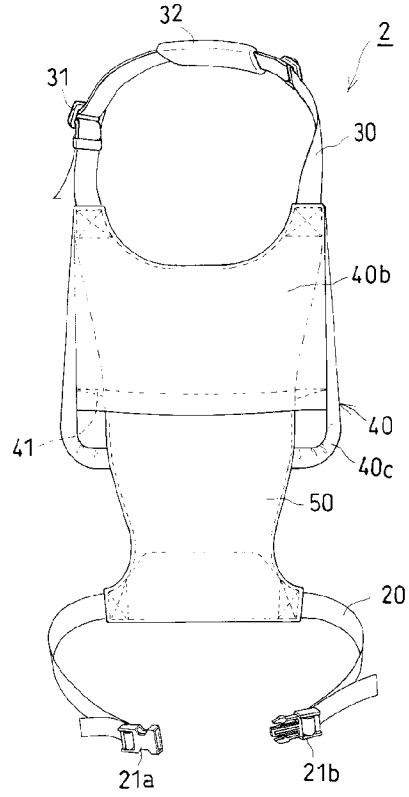
【図 4】



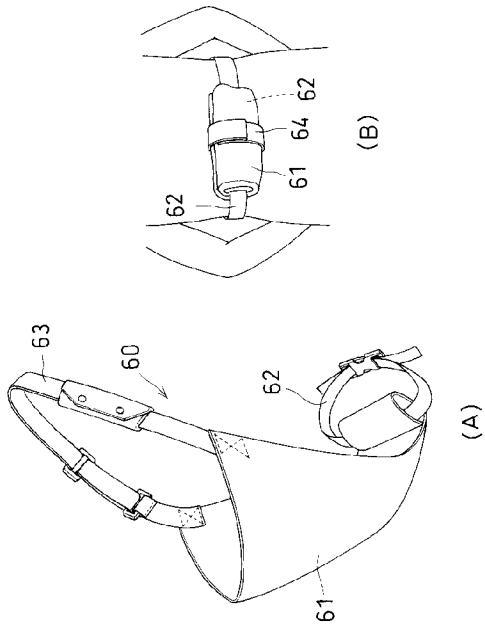
【図5】



【図6】



【図7】



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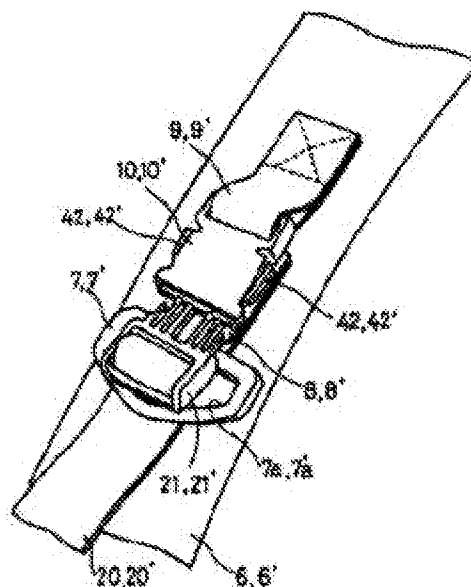
Priority number : 07021372 Priority date : 13.01.1995 Priority country : JP

(54) MECHANISM FOR PREVENTING FALLING OFF OF CARRIER BODY OF BABY CARRIER

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent the back pad of a carrier body from being separated and falling off from the side of a person taking care of a baby in an infant carrier.

SOLUTION: The baby carrier 1 comprising the carrier body 2 for holding the baby is provided with: (first) belt members 20, 20' and (second) belt members 9 and 9' for holding the back pad 5 of the carrier body 2 adjacently to the person taking care of the baby; (first) buckles 21, 21' and (second) buckles 10 and 10' which are for fastening the respective belt members and are attachable and detachable from each other; and falling-off prevention members 7 and 7' comprising annular holes 7a and 7'a which the buckles 21 and 21' are put through and engaged after being put through.



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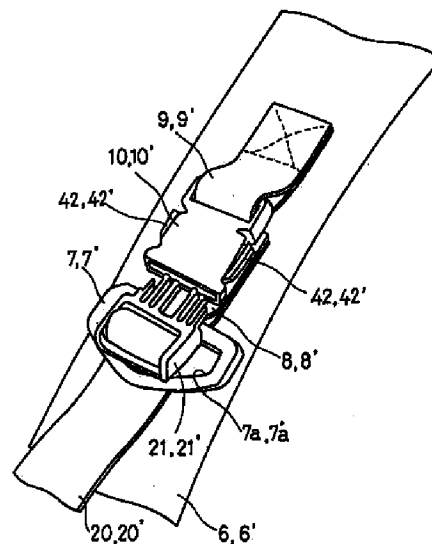
(54) 【発明の名称】 乳幼児キャリアのキャリア本体脱落防止機構

(57) 【要約】

【課題】 乳幼児キャリアにおいて、キャリア本体の背当て部が子守者側から離れて脱落するのを防止する。

【解決手段】 乳幼児を保持するためのキャリア本体2を有するベビーキャリア1において、キャリア本体2の背当て部5を子守者側に接近して保持させるための(第1の)ベルト部材20、20' および(第2の)ベルト部材9、9' と、各ベルト部材を締結するための互いに係脱自在な(第1の)バックル21、21' および(第2の)バックル10、10' と、バックル21、21' が挿通しかつ挿通後は係合し得る環状穴7a、7' aを有する脱落防止部材7、7' とを設ける。

【選択図】 図4



【特許請求の範囲】**【請求項1】**

乳幼児を保持するためのキャリア本体を有する乳幼児キャリアにおいて、前記キャリア本体の背当て部が子守者側から離れて脱落するのを防止するためのキャリア本体脱落防止機構であって、

前記キャリア本体の前記背当て部を子守者側に接近して保持させるための第1および第2のベルト部材と、

前記第1および第2のベルト部材を締結するための互いに係脱自在な第1および第2のバックルと、

前記第1のバックルが挿通しかつ挿通後は前記第1のバックルに係合し得る環状穴を有する脱落防止部材と、

を備えた乳幼児キャリアのキャリア本体脱落防止機構。

【発明の詳細な説明】**【0001】****【発明の属する技術分野】**

本発明は、乳幼児を保持しつつ運搬するための乳幼児キャリアに関する。

【0002】**【従来の技術およびその課題】**

乳幼児キャリアとして、たとえば特願平6-259302号公報に示すようなものが、本件出願人により提案されている。この乳幼児キャリアは、前当て部、股当て部および背当て部を一体に形成してなるキャリア本体を有し、前当て部の下端に取り付けられた肩掛けベルトのバックルが背当て部のバックルに係脱自在に係合することにより、キャリア本体が袋状に構成されて、該キャリア本体内に乳幼児が収容されて保持されるようになっている。

【0003】

このような乳幼児キャリアによれば、その組立ての際には、上記各バックルに係合させるだけでよく、またキャリア本体を組立状態から展開状態にする際には、上記各バックルを外すだけでよいので、取扱いが簡単である。

【0004】

しかしながら、その一方、組立状態において上記各バックルを外した場合には、キャリア本体の背当て部が子守者側から離れて脱落することになるため、乳幼児キャリアの使用時には、このような事態を防止したいとする要請もある。

【0005】

本発明は、このような実情に鑑みなされたもので、乳幼児キャリアにおいて、キャリア本体の背当て部が子守者側から離れて脱落するのを防止できるキャリア本体脱落防止機構を提供することを目的とする。

【0006】**【課題を解決するための手段】**

請求項1の発明は、乳幼児を保持するためのキャリア本体を有する乳幼児キャリアにおいて、キャリア本体の背当て部が子守者側から離れて脱落するのを防止するためのキャリア本体脱落防止機構であって、キャリア本体の背当て部を子守者側に接近して保持させるための第1および第2のベルト部材と、第1および第2のベルト部材を締結するための互いに係脱自在な第1および第2のバックルと、第1のバックルが挿通しかつ挿通後は第1のバックルに係合し得る環状穴を有する脱落防止部材とを備えている。

【0007】

請求項1の発明によれば、乳幼児キャリアの組立ての際において、第1および第2のバックルの締結時には、第1のバックルを脱落防止部材の環状穴に通してから、第1のバックルを第2のバックルに係合させる。

【0008】

これにより、第1のバックルが第2のバックルから外れた場合には、第1のバックルが脱

落防止部材の環状穴と干渉し、その結果、第1のバックルが第2のバックルから離れて下方に脱落するのが防止されて、キャリア本体の背当て部が子守者側から離れて脱落するのを防止できる。

【0009】

【発明の実施の形態】

以下、本発明の実施態様を添付図面に基づいて説明する。

図1ないし図6は本発明の一実施態様による脱落防止機構が採用されたベビーキャリア（乳幼児キャリア）を説明するための図であり、図1はベビーキャリアの展開状態の表面図、図2はその裏面図、図3は脱落防止機構の斜視拡大図、図4は脱落防止機構を構成する各バックルの係合前の状態を示す図または脱落防止機構の作動を説明するための図、図5はベビーキャリアの組立状態の正面図、図6はベビーキャリアの使用状態の一例を示す図である。

【0010】

図1および図2に示すように、ベビーキャリア1は、乳幼児の腹部、股部および背部をそれぞれ支持するための前当て部3、股当て部4および背当て部5を一体に連結して形成されたキャリア本体2を有している。

【0011】

前当て部3の左右両端には、下方に延びる一対のショルダーベルト6、6'が取り付けられている。各ショルダーベルト6、6'の先端には、ベルト部材11、11'を介してワンタッチバックル12、12'が取り付けられている。また各ショルダーベルト6、6'の前当て部側には、(第2の)ベルト部材9、9'を介してワンタッチバックル(第2のバックル)10、10'が取り付けられている。

【0012】

股当て部4の左右両側部には、両側方に延びるベルト部材15、15'を介してワンタッチバックル16、16'が取り付けられている。これらのワンタッチバックル16、16'は、ショルダーベルト6、6'のワンタッチバックル12、12'に係脱自在に係合し得るようになっていてる。

【0013】

背当て部5の左右両肩部には、乳幼児の体側部を支持するためのサイドサポート25、25'が斜め上方に張り出して設けられている。各サイドサポート25、25'には、(第1の)ベルト部材20、20'を介してワンタッチバックル(第1のバックル)21、21'が取り付けられている。各ワンタッチバックル21、21'は、ショルダーベルト6、6'の各ワンタッチバックル10、10'に係脱自在に係合し得るようになっていてる。

【0014】

各サイドサポート25、25'には係止ホック26、26'が取り付けられており、これらの係止ホック26、26'は、前当て部3の両側部に取り付けられた係止ホック27、27'に係脱自在に係合し得るようになっていてる。

【0015】

背当て部5には、乳幼児の頭部を支持するためのヘッドサポート30が着脱自在に設けられている。ヘッドサポート30の両側部32、32'には、係止ホック33、33'が取り付けられている。これらの係止ホック33、33'は、ショルダーベルト6、6'に取り付けられた係止ホック19、19'に係脱自在に係合し得るようになっていてる。

【0016】

ショルダーベルト6、6'には、サイドサポート25、25'の各ワンタッチバックル21、21'がショルダーベルト6、6'の各ワンタッチバックル10、10'から離れて脱落するのを防止するための脱落防止部材7、7'が設けられている。

【0017】

脱落防止部材7、7'は、図3および図4に示すように、略D字状の環状部材であって、各ワンタッチバックル21、21'が挿通しかつ挿通後は係合し得る環状穴7a、7'aを有している。また脱落防止部材7、7'は、ショルダーベルト6、6'に取り付けられ

た各ベルト片8, 8' に支持されている。なお、符号42, 42' はそれぞれワンタッチバックル10, 10' の操作部である。

【0018】

上述のように構成されたベビーキャリア1の組立ての際には、まず、ショルダーベルト6, 6' を子守者の両肩に掛け、ショルダーベルト6, 6' 先端の各ワンタッチバックル12, 12' をそれぞれベルト部材15, 15' 先端の各ワンタッチバックル16, 16' に係合させる(図1, 図2一点鎖線参照)。

【0019】

次に、乳幼児を抱いた状態で背当て部5を子守者側に引き寄せ、この状態から、サイドサポート25側のワンタッチバックル21をショルダーベルト6側の脱落防止部材7の環状穴7aに通した後(図4参照)、ワンタッチバックル21をワンタッチバックル10に係合させる。同様にして、サイドサポート25'側のワンタッチバックル21'をショルダーベルト6'側の脱落防止部材7'の環状穴7'aに通した後(図4参照)、ワンタッチバックル21'をワンタッチバックル10'に係合させる(図5参照)。

【0020】

このようにして、各ベルト部材9, 20および9', 20' がそれぞれ締結されることにより、キャリア本体2の背当て部5が子守者側に接近して保持されて、キャリア本体2が袋状に組み立てられ(図5および図6参照)、キャリア本体2内で乳幼児が保持されることになる。なお、この場合には、さらに、サイドサポート25, 25'の各係止ホック26, 26'が、前当て部3の各係止ホック27, 27'に係合しており、ヘッドサポート両側部32, 32'の各係止ホック33, 33'が、ショルダーベルト6, 6'の各係止ホック19, 19'に係合している。

【0021】

次に、この状態から、仮にワンタッチバックル21, 21'がワンタッチバックル10, 10'から外れたとする。このとき、図4に示すように、ワンタッチバックル21, 21'は各脱落防止部材7, 7'の環状穴7a, 7'aと干渉し、これにより、ワンタッチバックル21, 21'がワンタッチバックル10, 10'から離れて下方に脱落するのが防止される。このようにして、ワンタッチバックル21, 21'の非係合時に、キャリア本体2の背当て部5が子守者側から離れて下方に脱落するのを防止できる。

【0022】

なお、前記実施態様では、脱落防止部材7, 7'がショルダーベルト6, 6'に取り付けたベルト片8, 8'に支持された例を示したが、本発明の適用はこのような脱落防止部材に限定されず、本発明は、図7および図8に示すような脱落防止部材にも同様に適用できる。なお、これらの図において、図3と同一符号は同一または相当部分を示している。

【0023】

図7および図8に示すように、これらの脱落防止部材はいずれも、前記実施態様の脱落防止部材に相当する環状部7, 7'に略コ字状の支持部29を一体に取り付けた形状を有している。そして、図7に示すものでは、支持部29が各ワンタッチバックル10, 10'に直接取り付けられており、また図8に示すものでは、支持部29が、各ワンタッチバックル10, 10'とともに各ベルト片9, 9'に支持されている。

【0024】

これらの場合においても、前記実施態様と同様に、ワンタッチバックル21, 21'の脱落を各環状部7, 7'により防止でき、キャリア本体2の背当て部5がショルダーベルト6, 6'から外れて子守者側から離れるのを確実に防止できる。

【0025】

【発明の効果】

以上のように本発明によれば、第1のバックルが挿通しかつ挿通後は第1のバックルに係合し得る環状穴を有する脱落防止部材を設けるようにしたので、キャリア本体の背当て部が子守者側から離れて脱落するのを防止できる効果がある。

【図面の簡単な説明】

【図1】本発明の一実施態様による脱落防止機構が採用されたベビーキャリアの展開状態の表面図である。

【図2】前記ベビーキャリアの裏面図である。

【図3】前記脱落防止機構の斜視拡大図である。

【図4】前記脱落防止機構を構成する各バックルの係合前の状態を示す図または前記脱落防止機構の作動を説明するための図である。

【図5】前記ベビーキャリアの組立状態の正面図である。

【図6】前記ベビーキャリアの使用状態の一例を示す図である。

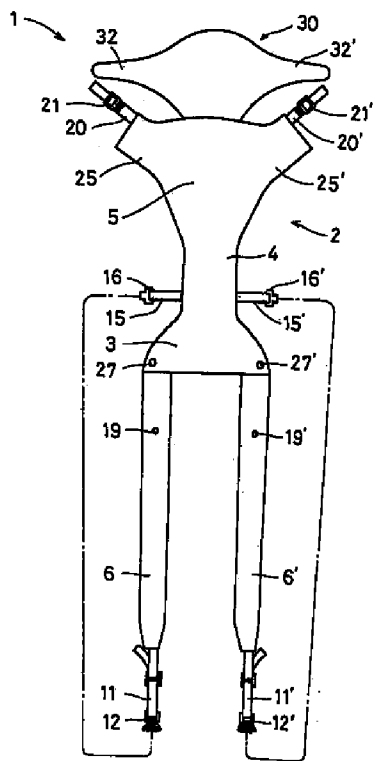
【図7】本発明の他の実施態様による脱落防止部材を示す図である。

【図8】本発明のさらに他の実施態様による脱落防止部材を示す図である。

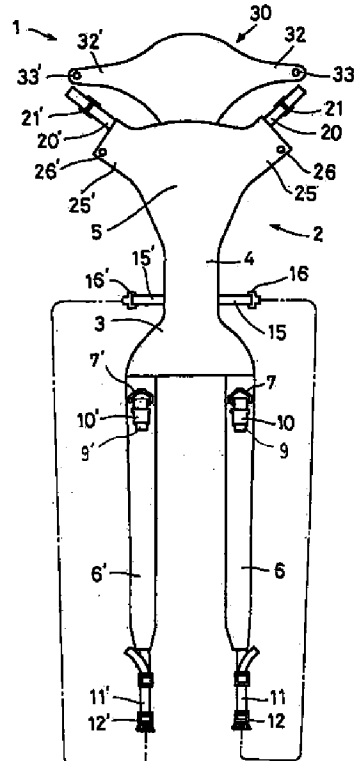
【符号の説明】

- 1： ベビーキャリア
- 2： キャリア本体
- 5： 背当て部
- 7, 7'： 脱落防止部材
- 9, 9'： (第2の)ベルト部材
- 10, 10'： ワンタッチバックル(第2のバックル)
- 20, 20'： (第1の)ベルト部材
- 21, 21'： ワンタッチバックル(第1のバックル)

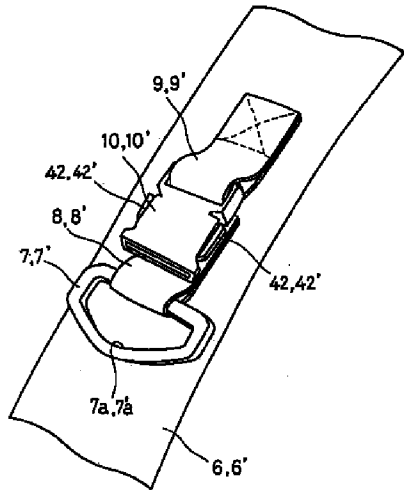
【図1】



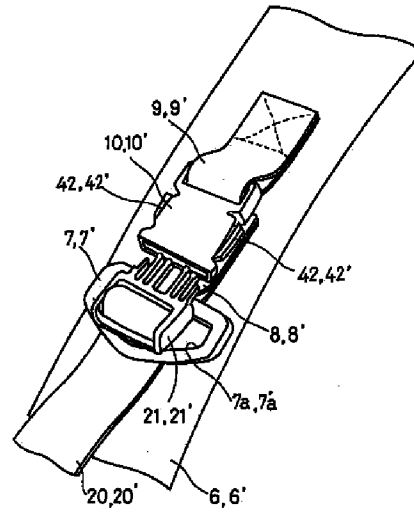
【図2】



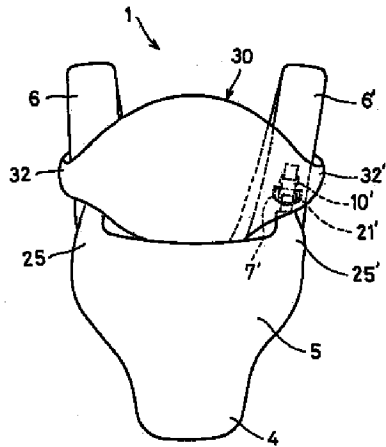
【図3】



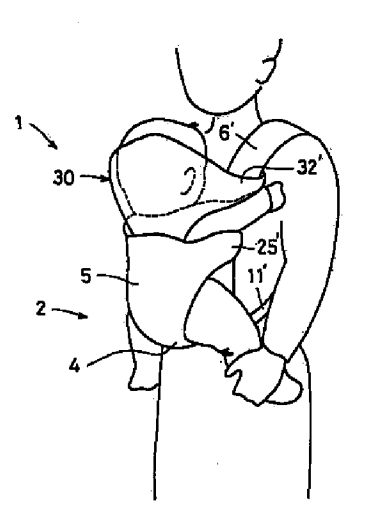
【図4】



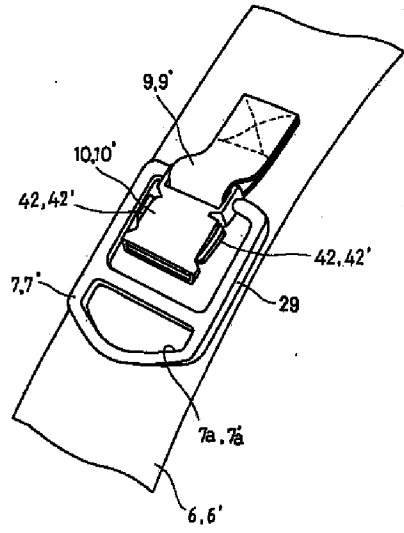
【図5】



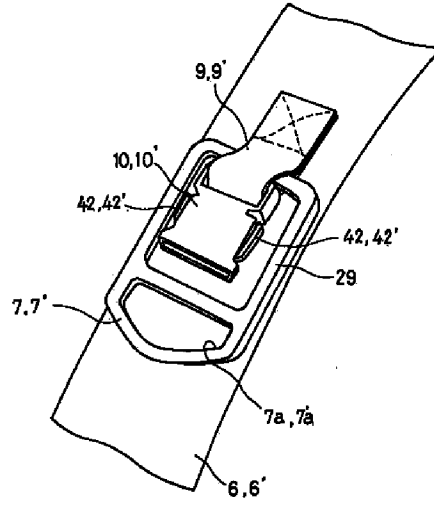
【図6】



【図7】



【図8】





19 BUNDESREPUBLIK
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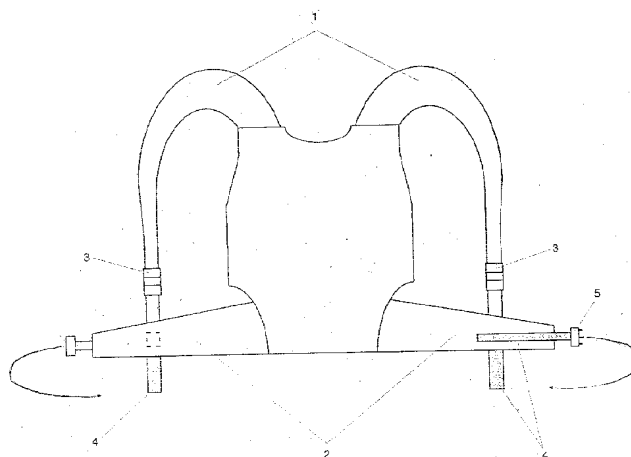
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54 Tragesystem für Babytragesäcke mit über die Hüfte und Schultern verlaufenden Gurten

57 Babytragesack, bei dem das Kind in face-to-face-Haltung an der Brust des Tragenden sitzt, mit einem Tragesystem, welches über die Schulter verlaufende Gurte einschließt, dadurch gekennzeichnet, dass das Tragesystem weiterhin einen Hüftgurt einschließt, der derartig an dem Babytragesack angebracht ist, dass er am Rücken des Tragenden zu schließen ist und seitlich auf den Hüften des Tragenden verläuft, wobei der Hüftgurt den überwiegenden Teil des Gewichts aufnimmt, so dass dieser Gewichtsanteil von der Hüfte und nicht von den Schultern getragen wird.



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20.09.01

Die Erfindung bezieht sich auf Babytragesäcke, die in face-to-face-Haltung vor der Brust des Tragenden angebracht sind und über die Hüfte und Schulter verlaufende Gurte vorweisen.

Tragehilfen kommen in verschiedener Ausführung vor. Es gibt:

Tragehilfen für den seitlichen Sitz, bei denen das Kind in einem Beutel auf der Hüfte des Tragenden sitzt, geeignet ab ca. 3 Monate.

Tragetücher bieten verschiedene Möglichkeiten das Kind zu tragen. Man kann es liegend, aufrecht, auf der Hüfte, vor der Brust und auf dem Rücken tragen, geeignet schon für Säuglinge.

Tragesäcke/-beutel: hierbei wird das Kind in Face-to-face- Orientierung getragen.

(Evelin Kirkilonis, Ein Baby will getragen sein, Kösel Verlag GmbH & Co. aus dem Jahr 1999, Seite 94-101)

All diese Tragehilfen verteilen die Last des Kindes auf den Schultern des Tragenden, dies führt oft zu Verspannungen und Schmerzen im Nacken- bzw. Rückenbereich, Beschwerden werden verstärkt oder werden dadurch hervorgerufen.

Zudem gibt es Rückentragen / Kraxen: hier muss das Kind bereits alleine sitzen können.

Diese Gestelle werden auf dem Rücken getragen und ähneln einem Rucksack mit Kindersitz, geeignet ab 8 Monate. Systeme, die einen nicht ausreichend breiten und gepolsterten Gurt vorweisen, erfüllen die Anforderung nicht und sind zudem ungeeignet für die Anatomie des Säuglings.

Der im Patentanspruch 1 angegebenen Erfindung liegt das Problem zugrunde, ein System zu schaffen, bei dem der Tragende die Last des Kindes auf den Hüften trägt und somit im Nacken- und Rückenbereich entlastet wird.

Das Transportmittel muss für Säuglinge geeignet sein.

Ein weiteres Problem ist das umständliche Hinein- und Hinausmanövrieren des Kindes in das Transportmittel, bedingt durch die Gurte/Bänder, die man zuerst am Körper des Tragenden befestigen muss bevor das Kind hinein gesetzt werden kann. Dies hat zur Folge, dass der Säugling, um in den Tragesack gesetzt zu werden, sehr hoch gehalten werden muss, und somit nochmals der Rücken des Tragenden durch das Gewicht des Kindes beansprucht wird.

Dieses Problem wird durch die im Patentanspruch 1 aufgeführten Merkmale gelöst.

Ein erfindungsgemäßes Tragesystem weist verschiedene Vorteile auf. Zum einen wird die Last des Kindes auf die Hüfte verlagert um den Rücken des Tragenden zu entlasten. Das bedeutet der Säugling kann wesentlich länger getragen werden und der für ihn notwendige Körperkontakt und die Nähe zu den Bezugspersonen ist dadurch z.B. bei der Hausarbeit / beim Einkaufen automatisch gegeben (Auswirkungen auch auf Schreiverhalten des Säuglings).

Das Tragesystem dient dazu das Kind in den Tragesack zu setzen und dann diesen wie einen Rucksack anzuziehen.

Ein Ausführungsbeispiel der Erfindung ist in der Zeichnung dargestellt und wird im folgenden näher beschrieben. Es zeigen:

Fig. 1 Rückwand (Hinteransicht) des Tragesacks mit Schulter- und Hüftgurt

Fig. 2 Seitenansicht

In Figur 1 ist der Tragesack von hinten dargestellt, das heißt der große Stoffteil liegt am Brustkorb des Tragenden an, Schulter- 1 und Hüftgurt 2 verlaufen über die Schulter, bzw. das Becken auf den Rücken des Tragenden.

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Die Schultergurte weisen Kompressionsschnallen 3 und -riemen 4 auf, um auf die Körpergröße des Erwachsenen angepasst zu werden. Die Kompressionsriemen sind so am Hüftgurt angebracht, dass sie sich bei geschlossenem Hüftgurt rechts und links der Wirbelsäule des Tragenden befinden. Dies verhindert ein Herabrutschen der Gurte von der Schulter, wie es der Fall wäre, wenn die Schultergurte am Babytragesack und nicht am Hüftgurt befestigt wären. Gleichzeitig erleichtert dieses System das Auf- und Absetzen des Tragesackes, da es eben wie ein Rucksack zu handhaben ist.

Der Hüftgurt ist mit Steckverschluss 5 und Kompressionsriemen ausgestattet um auf der Hüfte fixiert, im Lendenwirbelbereich geschlossen und auf die Körpergröße des Tragenden eingestellt werden zu können. Der Hüftgurt wird auf dem Rücken verschlossen, da er dort mit beiden Händen gut zu erreichen und gleichzeitig nicht zufällig zu öffnen ist und damit die Sicherheit des Kindes gewährleistet ist.

Schulter- und Hüftgurt sind über die Schulter, bzw. das Becken ausreichend breit, werden im Verlauf schmaler um zusätzliches Gewicht einzusparen und unnötige Wärme zu vermeiden. Die Schultergurte werden zudem schmaler, um an der Innenseite des Schulterblattes vorbei geführt zu werden und somit nochmals ein Herabrutschen von den Schultern zu verhindern. Hüft- und Schultergurte sind bis zu den Kompressionsriemen mit Hanf gepolstert.

(Hanf weist verschiedene Vorteile auf: es ist ein nachwachsender Rohstoff der beim Anbau keine Herbizide oder Pestizide benötigt und somit rein natürlich ist und keine krebserregenden oder allergiefördernden Substanzen enthält. Hanf ist zudem recyclebar.)

Bei dem Hüftgurt hat das Polster folgende Wirkung: zum einen bündelt es das Gewicht des Kindes und verteilt es gleichmäßig auf der Hüfte, zum anderen verhindert es ein Einschneiden und Reiben. Im Schulterbereich verhindert die Polsterung ein Einschneiden der Gurte am Hals und an der Schulter, zudem wird die noch verbleibende, geringe Last die auf den Schultern ruht, auf breiter Fläche verteilt.

Das Hüftpolster ist versteift um ein Zusammenrutschen, bedingt durch das Gewicht des Kindes, zu verhindern. Es ist somit konstant stabil um das Gewicht aufzufangen und gleichmäßig auf der Hüfte zu verteilen.

Der Hüftgurt verläuft in horizontaler Richtung wie in Fig. 2 dargestellt, über dem Hüftknochen 6, da der Zweck der Hüfte das Transportieren von Gewicht ist.

Vor dem ersten Gebrauch wird der Tragesack aufgesetzt und auf die Körpergröße des Erwachsenen eingestellt.

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28.09.01

1. Babytragesack, bei dem das Kind in face-to-face-Haltung an der Brust des Tragenden sitzt, mit einem Tragesystem, welches über die Schulter verlaufende Gurte einschließt.

dadurch gekennzeichnet,

dass das Tragesystem weiterhin einen Hüftgurt einschließt, der derartig an dem Babytragesack angebracht ist, dass er am Rücken des Tragenden zu schließen ist und seitlich auf den Hüften des Tragenden verläuft, wobei der Hüftgurt den überwiegenden Teil des Gewichts aufnimmt, so dass dieser Gewichtsanteil von der Hüfte und nicht von den Schultern getragen wird.

2. Babytragesack nach Anspruch 1

dadurch gekennzeichnet,

dass der Hüftgurt in Vertikalrichtung parallel zum Körper des Tragenden versteift ist.

3. Babytragesack nach Anspruch 1

dadurch gekennzeichnet,

dass Schulter und Hüftgurt mit Hanf gefüttert und stabilisiert sind.

4. Babytragesack nach Anspruch 1

dadurch gekennzeichnet,

dass Schulter- und Hüftgurt durch Kompressionsschnallen miteinander verbunden sind.

5. Babytragesack nach Anspruch 1

dadurch gekennzeichnet,

dass der Hüftgurt mit Steckverschlüssen zu schließen ist.

6. Babytragesack nach Anspruch 1

dadurch gekennzeichnet,

dass Kompressionsriemen der Körperanpassung dienen.

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Fig 1

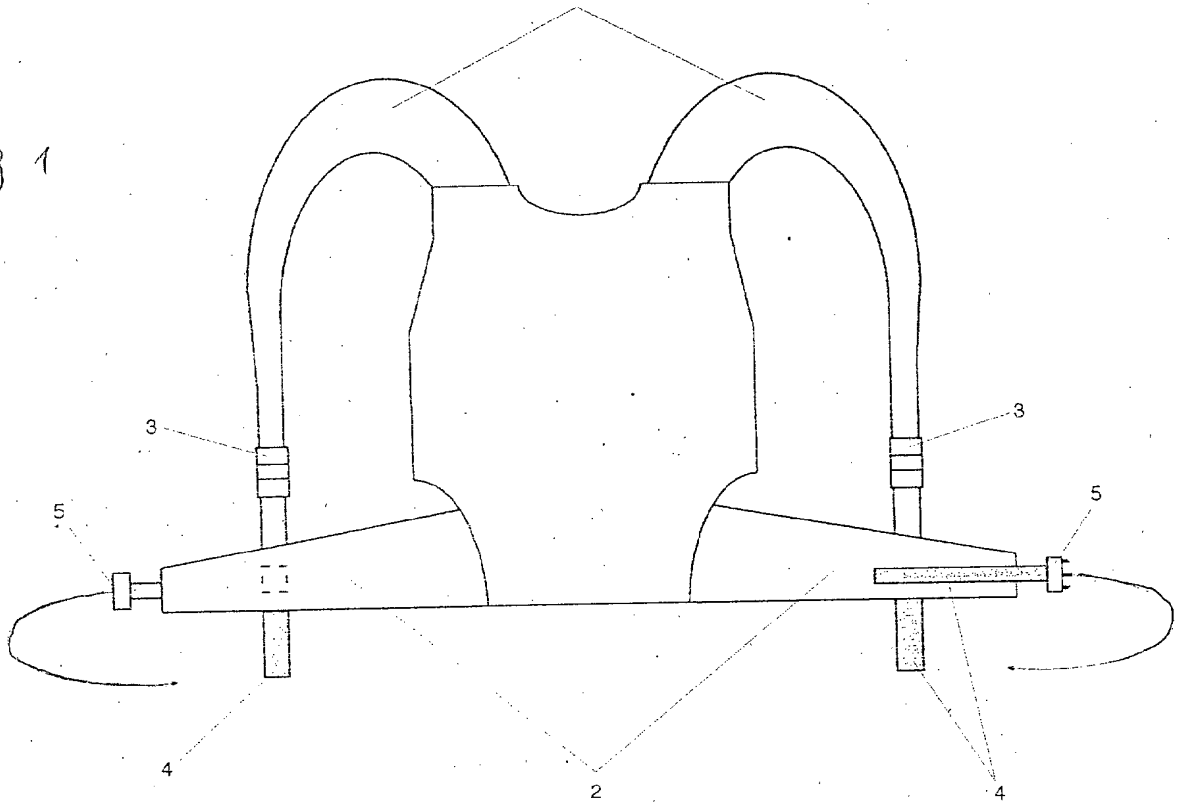
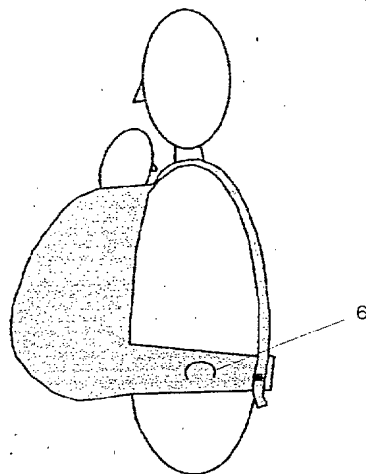


Fig 2



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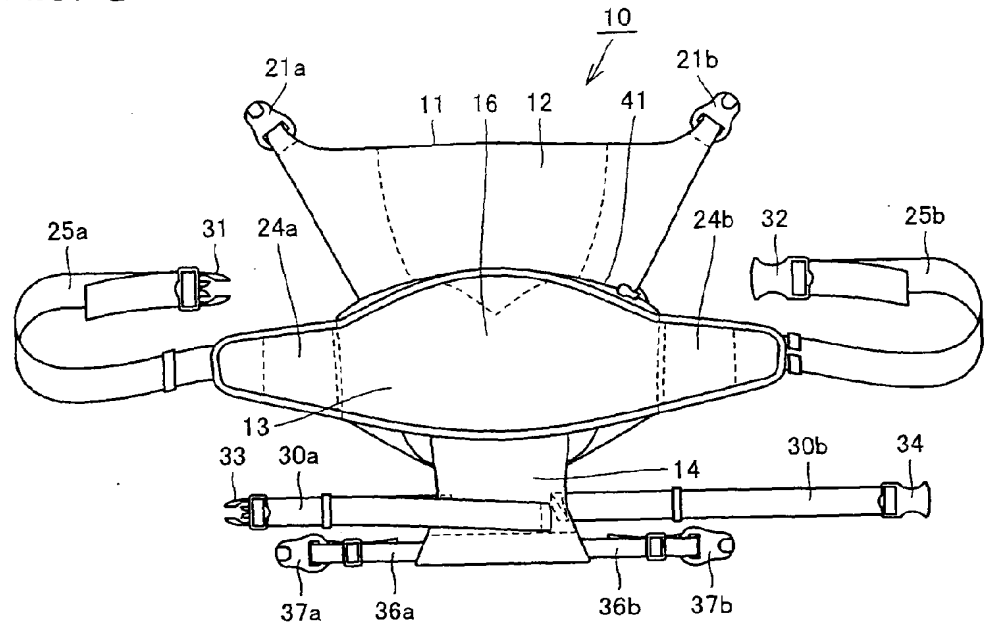
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(54) **Nursing band**

(57) A nursing band (10) can be housed in a band case (50) provided on the back surface of an article case (40) of a belly bag. The band case (50) comprises a cushioned pad part (16) which has a predetermined size and abuts on the hip of a user when a band is used as the belly bag. The nursing band (10) comprises a back rest

part (12) for holding the back of a baby, a hip rest part (13) connected to the back rest part (12) for holding the hip of the baby, and a crotch rest part (14) connected to the hip rest part (13) for holding the crotch of the baby when it is used. The pad part (16) is used as the hip rest part (13) when the nursing band (10) is used.

FIG. 1



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Description

BACKGROUND OF THE INVENTION

Field of the Invention

[0001] The present invention relates to a nursing band and more particularly, to a nursing band which can be easily carried.

Description of the Background Art

[0002] A baby holder which can house an article and be used as a nursing band is disclosed in Japanese Unexamined Patent Publication No. 2002-186543, for example. According to the above document, the baby holder comprises a body in which the baby is housed, a hip belt provided at the lower part of the body to be wound around the hip of a user, and a shoulder belt mounted on the body to be put around the shoulder of the user. A hip pad is provided in the hip belt and a container in which the body and the shoulder belt are housed is integrally provided with the hip pad.

[0003] The conventional nursing band which can be housed in the container has been constituted as described above. Although it is convenient because the body is taken out as the nursing band only when it is used, since the baby is held only by the body which can be folded into any configuration, the baby is forcedly enclosed in narrow space, so that the baby feels uneasy because the abdominal part of the baby is pressed, and the baby cannot be stably held.

SUMMARY OF THE INVENTION

[0004] The present invention was made to solve the above problems and it is an object of the present invention to provide a nursing band which is superior in portability and can hold the baby stably and comfortably.

[0005] A nursing band according to the present invention can be housed in a band case of a belly bag. The band case comprises a pad part which abuts on the hip of a user when a band is used as the belly bag. The nursing band comprises a back rest part for holding the back of a baby, a hip rest part connected to the back rest part for holding the hip of the baby, and a crotch rest part connected to the hip rest part for holding the crotch of the baby when it is used, and the pad part is used as the hip rest part when the band is used as the nursing band.

[0006] Since the nursing band can be housed in the band case of the belly bag, and the pad part is used as the hip rest part when it is used, the baby can be held at the pad part stably.

[0007] As a result, there can be provided a nursing band which is superior in portability and can hold the baby stably and comfortably.

[0008] Preferably, the back rest part is taken out of one side of the band case, and the crotch rest part is taken

out of the other side of the band case.

[0009] Further preferably, the pad part is breathable.

[0010] Still further preferably, the nursing band comprises a first belt connected to the pad part, the crotch rest part is connected to a second belt, the first belt is put on the hip of the user when the band is used as the belly bag, and the second belt is put on the hip of the user when the band is used as the nursing band to hold the baby.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011]

Fig. 1 is a view showing a developed state of a side on which a baby is held in a nursing band according to one embodiment of the present invention;

Fig. 2 is a view showing a side opposite to that shown in Fig. 1;

Fig. 3 is a view showing a state in which the nursing band is housed and a band is used as a belly bag;

Fig. 4 is a view showing a part taken along IV-IV in Fig. 3;

Fig. 5 is a view showing a part taken along V-V in Fig. 3;

Fig. 6 is a view showing a state in which a user puts on the belly bag shown in Fig. 3;

Figs. 7 to 12 are views showing a using procedure of the nursing band according to one embodiment of the present invention; and

Fig. 13 is a view showing a state in which the baby is held by the nursing band.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0012] An embodiment of the present invention will be described with reference to the drawings hereinafter. Fig. 1 is a development of a surface on which a baby is held in a nursing band 10 according to this embodiment of the present invention. Fig. 2 is a view showing a surface opposite to the above surface.

[0013] Referring to Fig. 1, the nursing band 10 comprises a back rest part 12, a hip rest part 13 provided on the lower side of the back rest part 12, and a crotch rest part 14 provided on the lower side of the hip rest part 13. When the nursing band 10 is used, the back, hip and crotch are held by the back rest part 12, the hip rest part 13 and the crotch rest part 14, respectively. Each of the back rest part 12, the hip rest part 13 and the crotch rest part 14 is made of a breathable mesh cloth.

[0014] As will be described below, when the nursing band 10 is housed in a band case of a belly bag, the hip rest part 13 functions as a pad part 16 abutting on the hip of a user of the belly bag. Therefore, the band case comprises the pad part which abuts on the hip of the user when the band is used as the belly bag. In addition, it is preferable that the pad part 16 has a certain size and made of a cushioned material.

[0015] As will be described below, the back rest part 12 is provided so as to be housed in a band case 50 (refer to Fig. 4) provided on the back side of the hip rest part 13 and between the hip rest part 13 and an article case 40 (refer to Fig. 2), and when an upper zipper 41 provided at an upper end of the hip rest part 13 is opened, the back rest part 12 can be taken out of the band case and developed as shown in Fig. 1.

[0016] Similarly, the crotch rest part 14 is also provided so as to be housed in the band case provided on the back side of the hip rest part 13, and when a lower zipper (refer to Fig. 5) provided at a lower end of the hip rest part 13 is opened, it can be taken out of the band case 50 and developed as shown in Fig. 1.

[0017] Hooks 21a and 21b are provided at both ends of the upper side of the back rest part 12, respectively. Case holding parts 24a and 24b each having a predetermined width are provided on the right and left sides of the hip rest part 13, respectively, and their ends are connected to first belts 25a and 25b. A one-touch buckle 31 is provided at an end of the first belt 25a and a covered buckle 32 which engages with the one-touch buckle 31 is provided at an end of the first belt 25b.

[0018] Second belts 30a and 30b are provided on both right and left sides of the center part of the crotch rest part 14, respectively. A one-touch buckle 33 is provided at an end of the second belt 30a and a covered buckle 34 which engages with the one-touch buckle 33 is provided at an end of the second belt 30b. Third belts 36a and 36b are provided at a lower end of the crotch rest part 14, and hooks 37a and 37b are provided at ends of the third belts 36a and 36b, respectively.

[0019] The back side of the baby holding side of the nursing band 10 will be described with reference to Fig. 2. Referring to Fig. 2, rings 22a and 22b are provided on both sides of an upper part of the back surface of the back rest part 12.

[0020] As described above, the band case which can house the back rest part 12 and the crotch rest part 14, and the article case 40 are provided on the back side of the hip rest part 13. A zipper 44 used for housing an article when the band is used as the belly bag is provided at an upper end of the article case 40, and two pockets and zippers 45a and 45b for them are provided at a lower part thereof. Thus, since the pockets are provided in the article case 40, necessary articles can be carried close when a user goes out with a baby.

[0021] Passages 26a and 26b to the first belts 25a and 25b are provided at both ends of the case holding parts 24a and 24b. In addition, rings 27a and 27b are provided in the first belts 25a and 25b, respectively.

[0022] It is to be noted that pathways of the hooks 37a and 37b of the third belt 36 when the nursing band 10 is used as will be described below are shown by arrows in Fig. 2. Namely, the hooks 37a and 37b of the third belt 36 are passed through the passages 26a and 26b of the first belt 25 and connected to the rings 22a and 22b provided in the back rest part 12.

[0023] Furthermore, each of the first to the third belts 25, 30 and 36 has an adjustment part for adjusting its length.

[0024] Fig. 3 is a view showing a state in which the back rest part 12 and the crotch rest part 14 are housed in the band case. As shown in Fig. 3, when the back rest part 12 and the crotch rest part 14 are housed, the band can be used as a normal belly bag.

[0025] Figs. 4 and 5 are views taken along arrows IV-IV and V-V in Fig. 3, respectively. Referring to Fig. 4, the band case 50 is provided on the side of the hip rest part 13 with respect to the article case 40, and the upper zipper 41 is provided on its upper side. Similarly, a lower zipper 42 is provided at a lower part of the article case 40 on the side of the hip rest part 13. As described above, the back rest part 12 is taken out or housed in the band case 50 by opening and closing the upper zipper 41 and crotch rest part 14 is taken out or housed in the band case 50 by opening and closing the lower zipper 42.

[0026] Next, a description will be made of how to use the nursing band 10 according to this embodiment. Fig. 6 is a view showing a state in which the belly bag containing the nursing band 10 shown in Fig. 3 is held on the hip of the user. Therefore, the nursing band 10 is held on the hip of the user normally with the use of the first belt 25. At this time, since the pad part 16 abuts on the hip of the user of the belly bag, the user can easily hold the belly bag.

[0027] A description will be made of the case when the nursing band 10 is used with reference to Fig. 7. First, the lower zipper 42 is opened to take out the crotch rest part 14 and the second belts 30a and 30b from the band case 50 and the article case 40 is held on the hip of the user with the use of the second belts 30a and 30b. At this time, the third belts 36a and 36b provided at the lower end of the crotch rest part 14 are folded down toward the hip rest part 13 as shown in the drawing. Then, the first belts 25a and 25b are taken off and the upper zipper 41 is opened to take out the back rest part 12 from the band case 50.

[0028] Then, as shown in Fig. 8, the first belts 25a and 25b are put around the shoulders of the user by connecting the one-touch buckle 31 to the covered buckle 32. Then, as described with reference to Fig. 2, the hook 37b provided at the end of the third belt 36b is passed through the passage 26b to be connected to the ring 22b of the back rest part 12 as shown in Figs. 9 and 10. Thus, an opening formed by the hip rest part 13, the crotch rest part 14 and the third belt 36, in which legs of the baby can extend is formed.

[0029] Next, as shown in Fig. 11, the hook 21b provided at the end of the back rest part 12 is connected to the ring 27b provided in the first belt 25b. Thus, the back rest part 12 is held in the vertical direction, so that the baby can be held in the vertical direction.

[0030] Fig. 12 is a view showing a state in which the state shown in Fig. 11 is taken from the opposite direction. Respective members are connected in the same manner

in the opposite direction.

[0031] Fig. 13 is a view showing a state in which the baby is held using the nursing band 10 constituted by the above parts connected as described above. As described above, the hook 21 provided at the end of the back rest part 12 is connected to the ring 27 provided in the first belt 25 to form the opening in which the baby can extend the legs, and space in which the baby can be held is formed by the back rest part 12, the hip rest part 13 and the crotch rest part 14. Since the pad part is used as the hip rest part 13, the abdominal part of the baby is not pressed, so that the baby can be stably and comfortably held by the nursing band.

[0032] As a result, there can be provided a nursing band which can stably hold the baby and be easily housed and superior in portability when it is not used.

[0033] In addition, although the description has been made of the state in which the baby is held in the face-to-face direction in the above embodiment, the present invention is not limited to this and the baby can be held in the opposite direction.

[0034] In addition, although the description has been made of the case where the band case and the article case are separately provided in the above embodiment, the present invention is not limited to this, and they may be integrally provided.

[0035] Although the embodiments of the present invention have been described with reference to the drawings in the above, the present invention is not limited to the above-illustrated embodiments. Various kinds of modifications and variations may be added to the illustrated embodiments within the same or equal scope of the present invention.

[0036] The nursing band according to the present invention can be advantageously applied to a nursing band, since it is superior in portability and can hold the baby stably and comfortably.

Claims

- 1. A nursing band (10) which can be housed in a band case (50) of a belly bag, wherein said band case (50) comprises a pad part (16) which abuts on the hip of a user when a band is used as the belly bag, said nursing band (10) comprises a back rest part (12) for holding the back of a baby, a hip rest part (13) connected to the back rest part (12) for holding the hip of the baby, and a crotch rest part (14) connected to the hip rest part (13) for holding the crotch of the baby when it is used, and said pad part (16) is used as said hip rest part (13) when the nursing band (10) is used.
- 2. The nursing band (10) according to claim 1, wherein said back rest part (12) is taken out of one side of said band case (50), and said crotch rest part (14) is taken out of the other side of said band case (50).

- 3. The nursing band (10) according to claim 1 or 2, wherein said pad part (16) is breathable.
- 4. The nursing band (10) according to any one of claims 1 to 3, wherein said nursing band (10) comprises a first belt (25) connected to said pad part (16), said crotch rest part (14) is connected to a second belt (30), said first belt (25) is put on the hip of the user when the band is used as the belly bag, and said second belt (30) is put on the hip of the user when the band is used as the nursing band to hold the baby.

FIG. 1

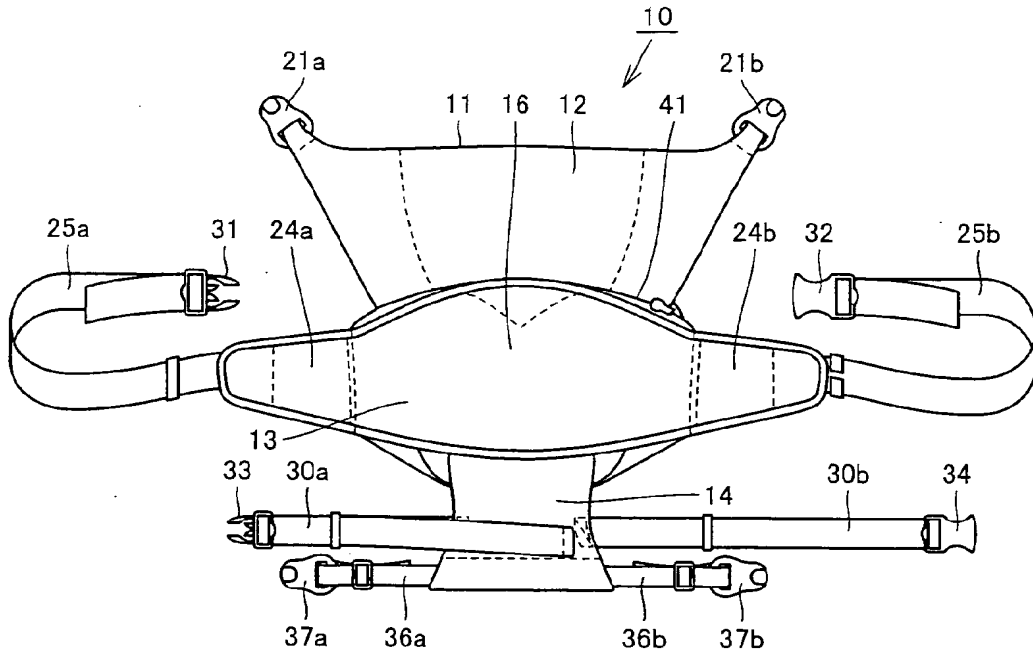


FIG. 2

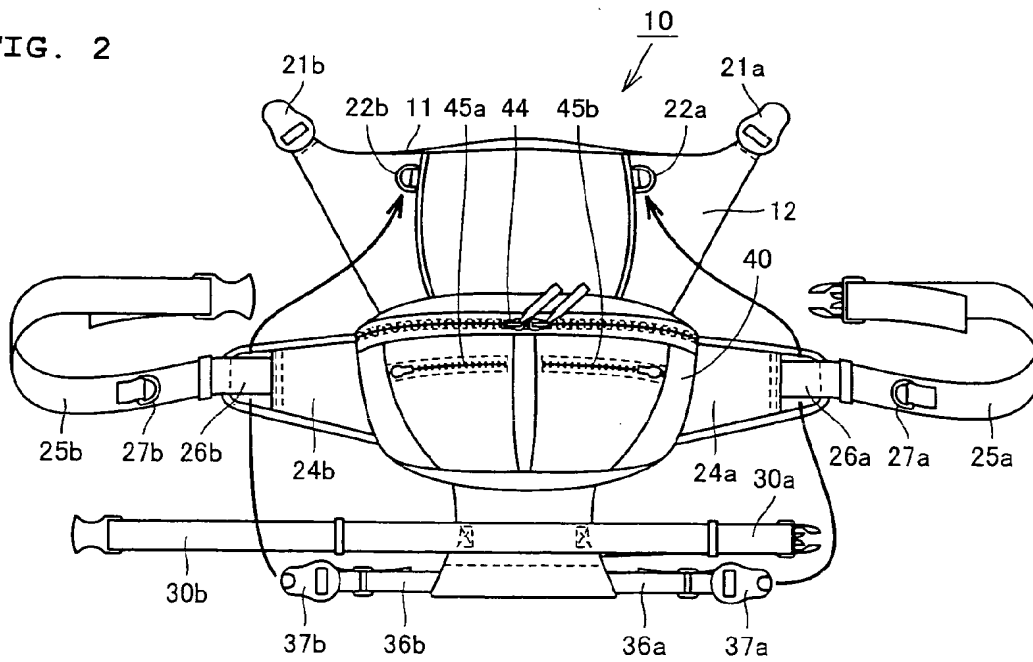


FIG. 3

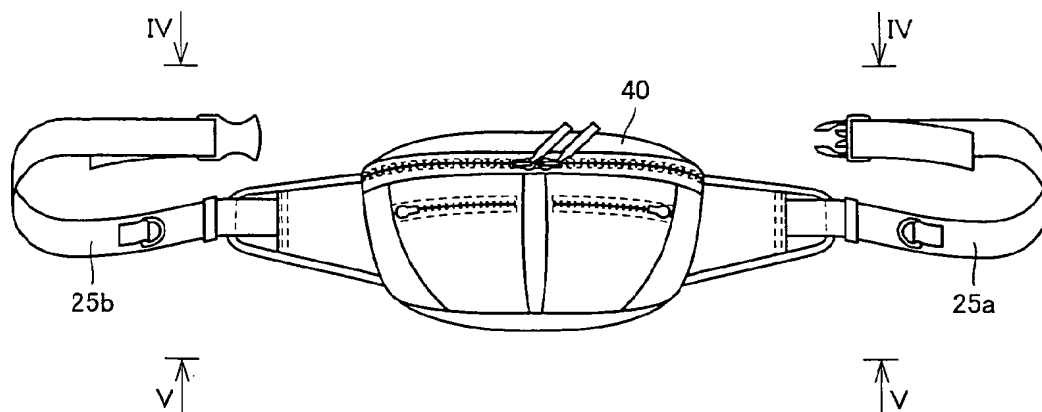


FIG. 4

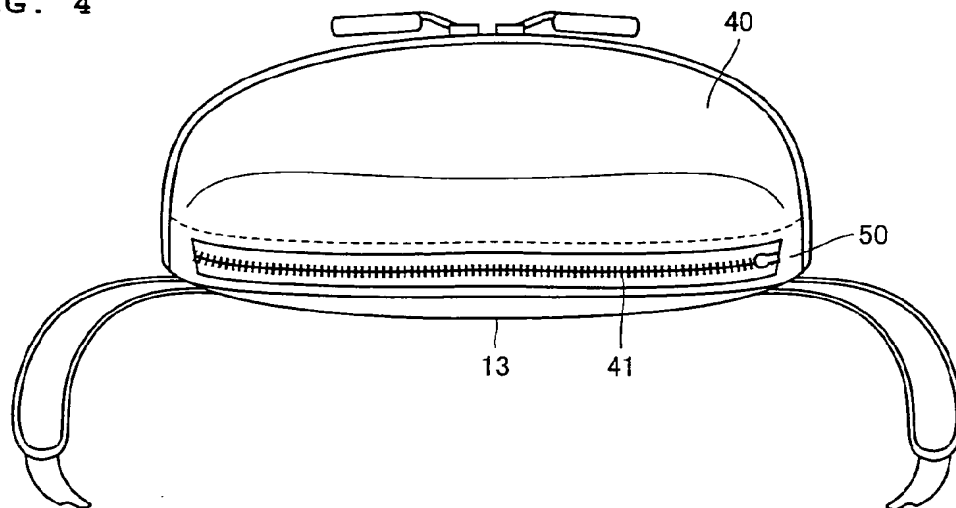


FIG. 5

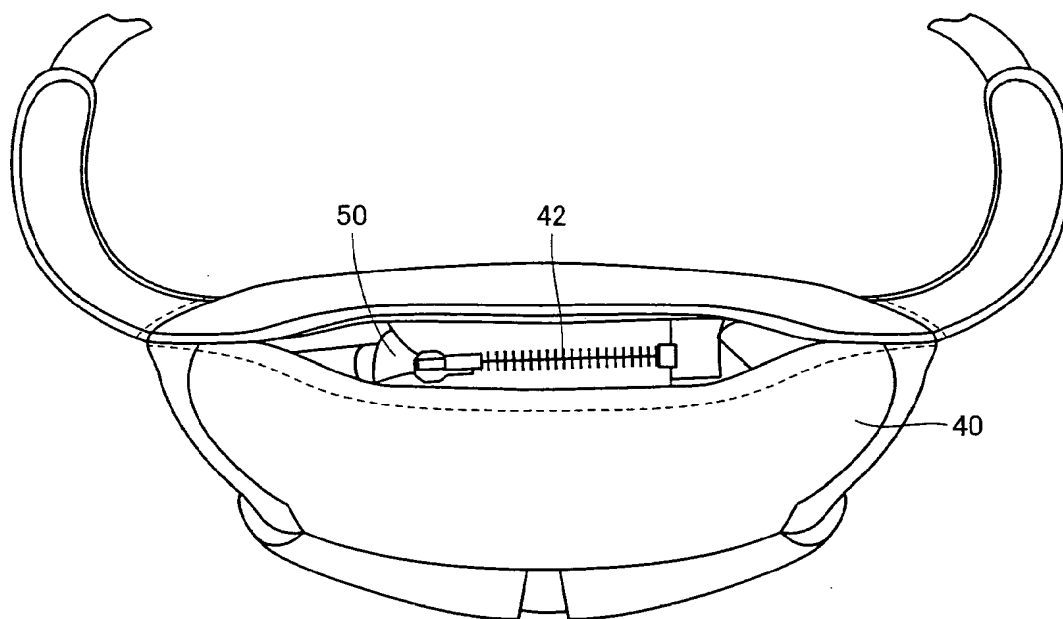


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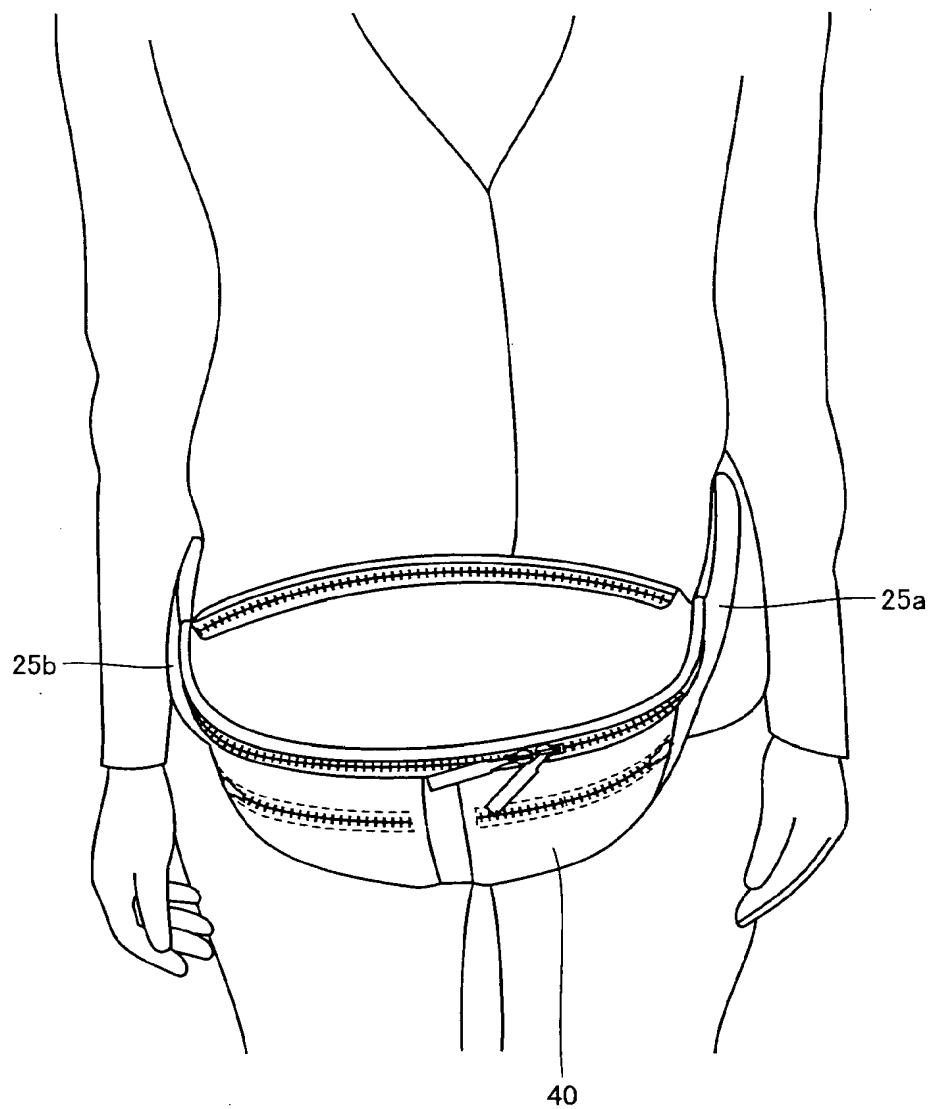


FIG. 7

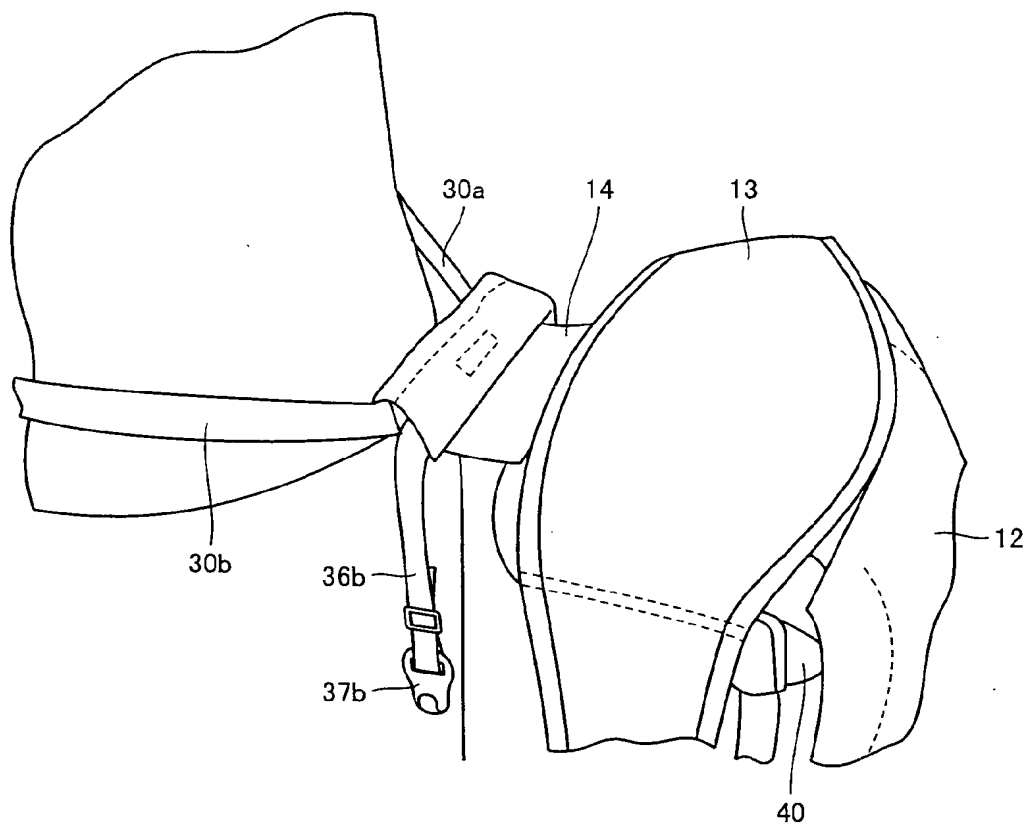


FIG. 8

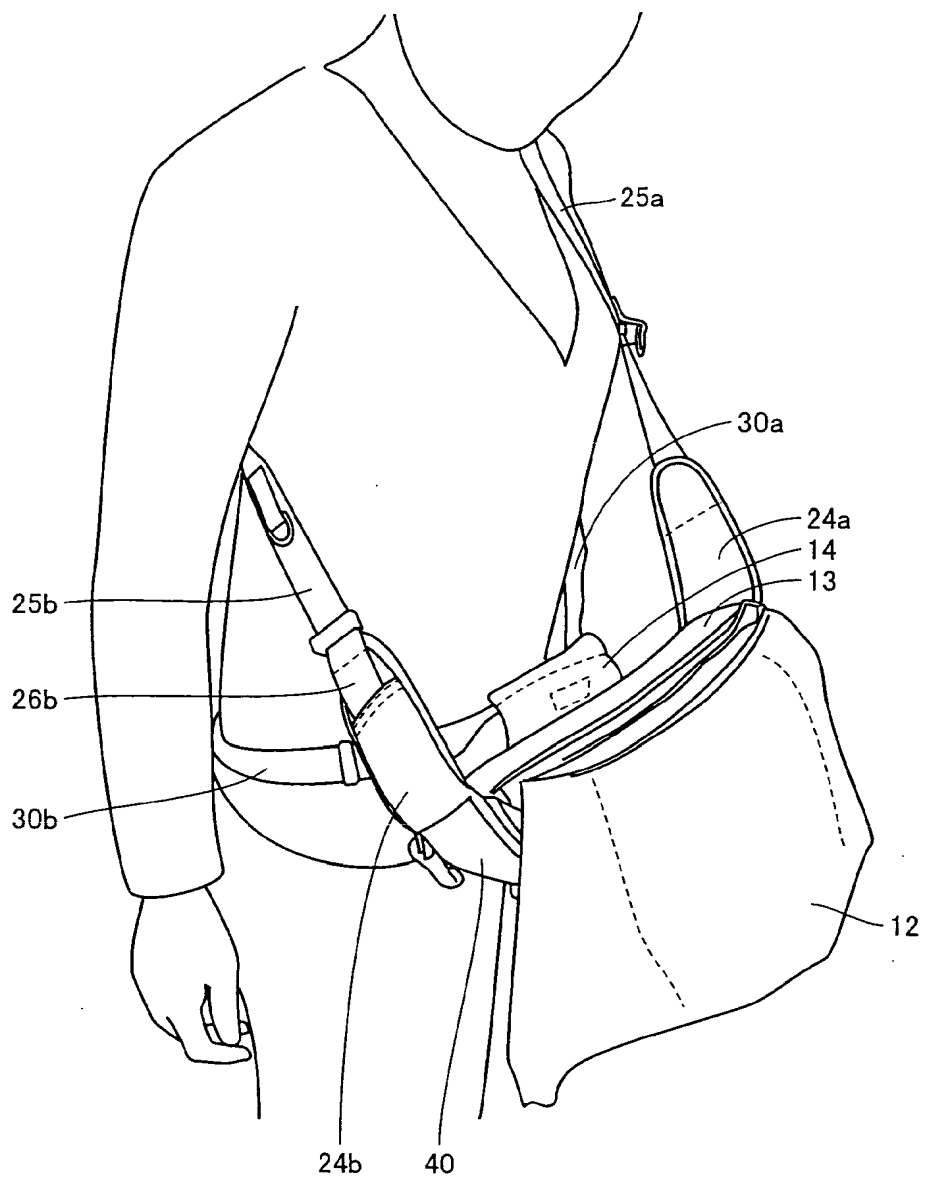


FIG. 9

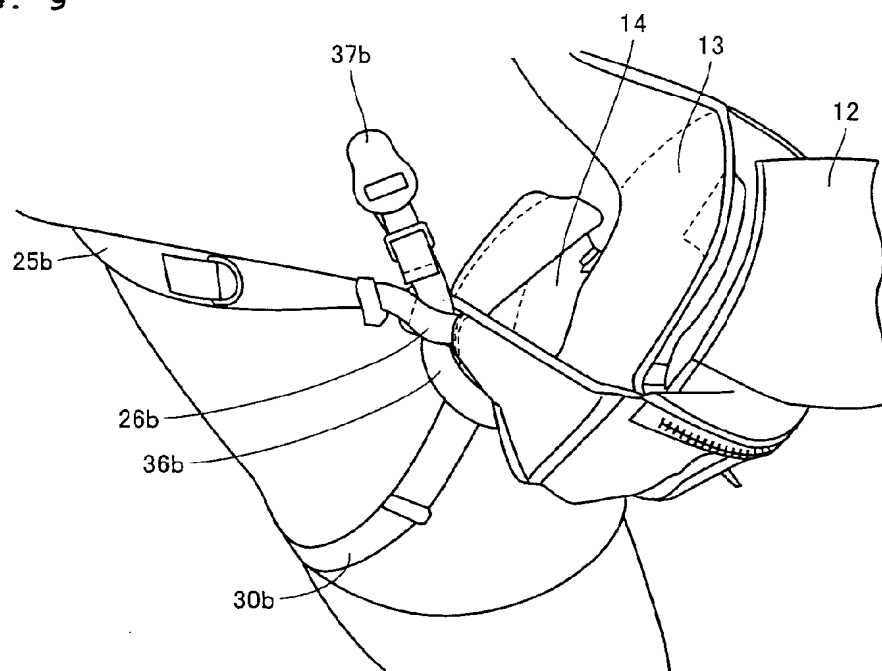


FIG. 10

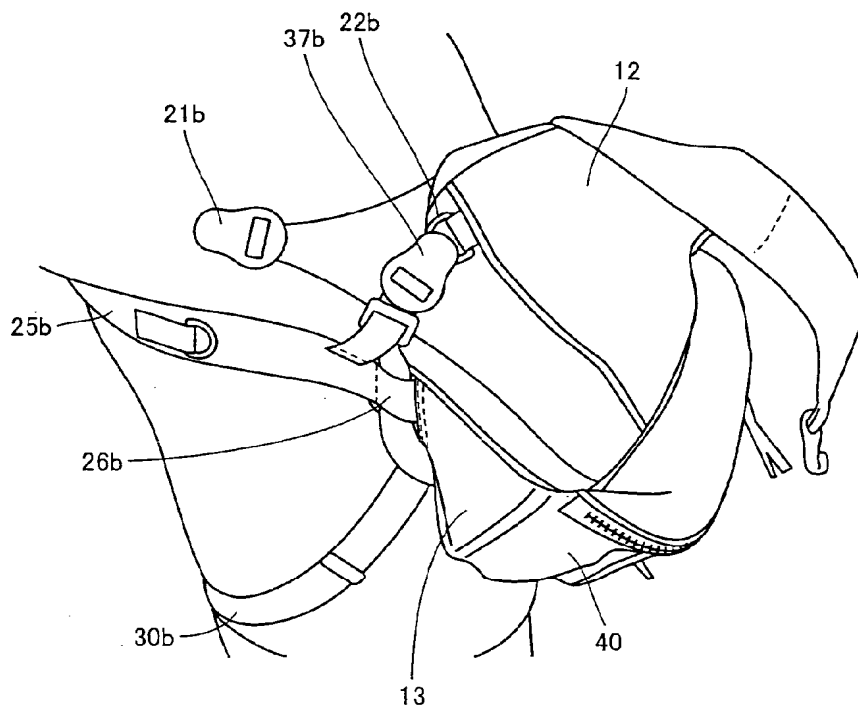


FIG. 11

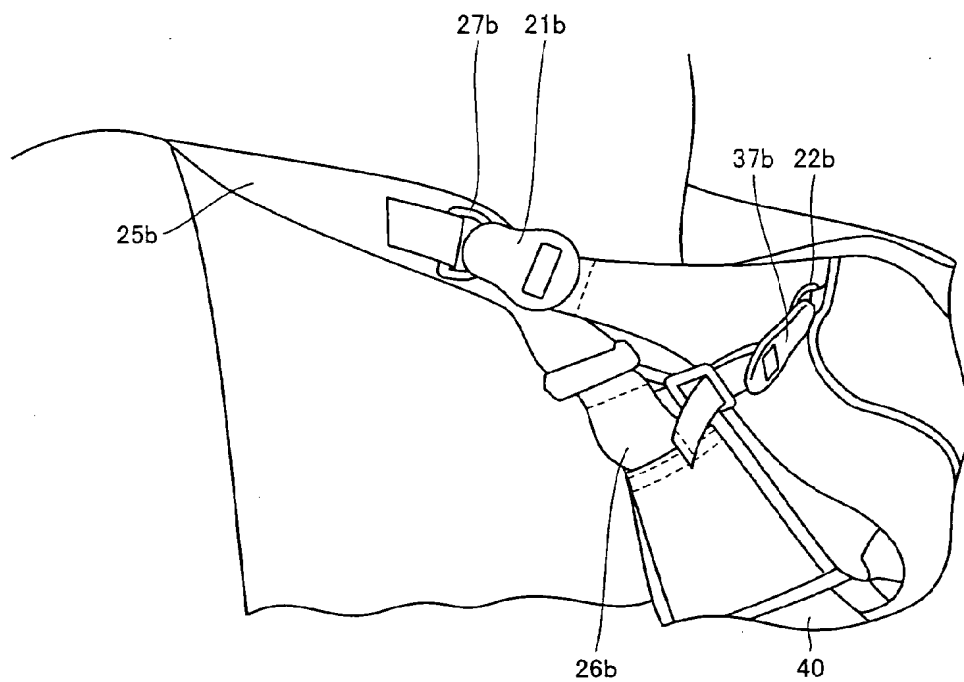


FIG. 12

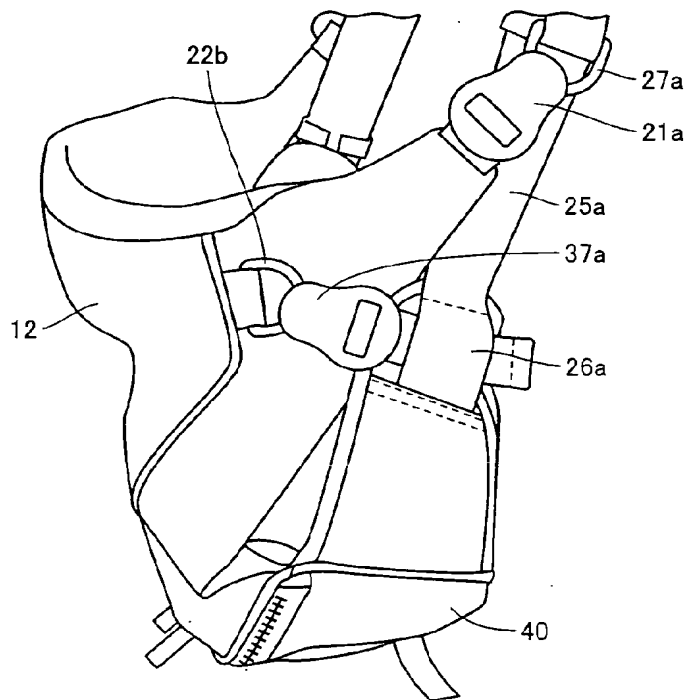
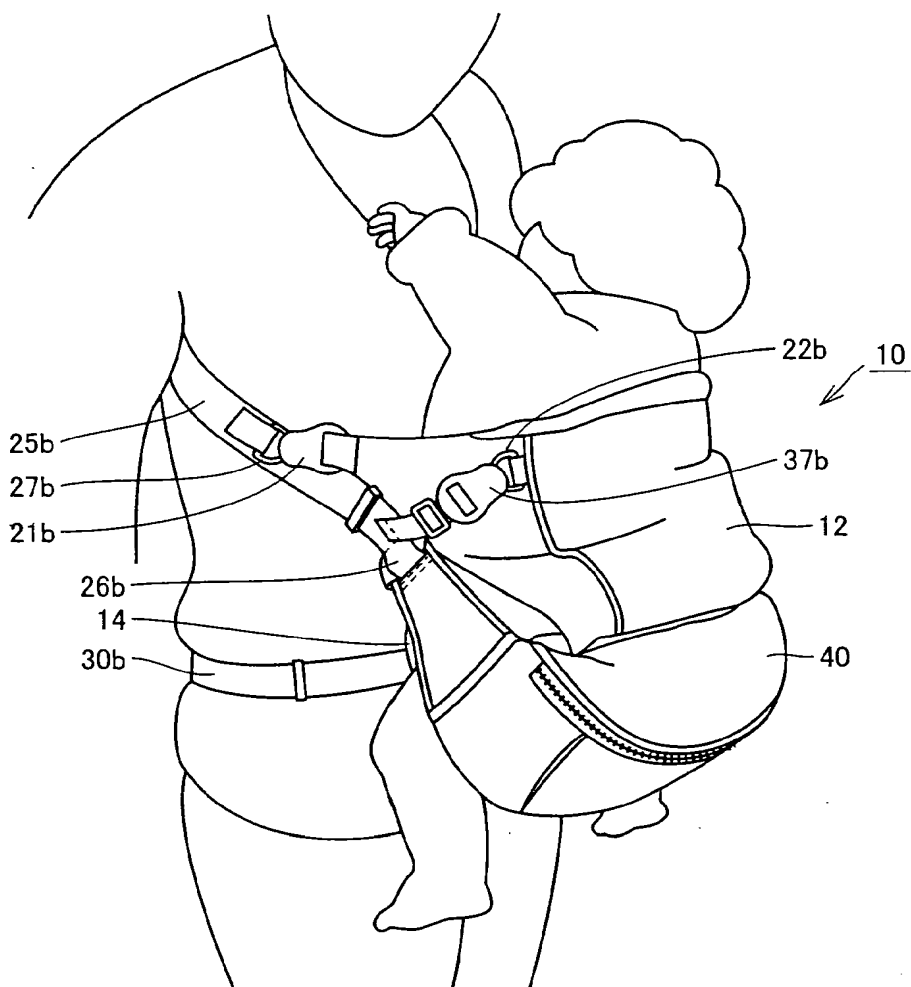


FIG. 13





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 20, 10 July 2001 (2001-07-10) & JP 2001 078857 A (LUCKY KOGYO KK), 27 March 2001 (2001-03-27) * abstract *	1	INV. A47D13/02 A47D13/08
X	----- PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12, 5 December 2003 (2003-12-05) & JP 2004 154468 A (LUCKY KOGYO KK), 3 June 2004 (2004-06-03) * abstract *	1	
D,A	----- PATENT ABSTRACTS OF JAPAN vol. 2002, no. 11, 6 November 2002 (2002-11-06) & JP 2002 186543 A (LUCKY KOGYO KK), 2 July 2002 (2002-07-02) * abstract *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A47D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		10 May 2006	Kis, P
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 03/02 (P04/C01)

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

EP 06 00 5494

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
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10-05-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2001078857 A	27-03-2001	NONE	
JP 2004154468 A	03-06-2004	NONE	
JP 2002186543 A	02-07-2002	NONE	

EPO FORM P/439

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

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2002186543 A [0002]

(12) **UK Patent Application** (19) **GB** (11) **2 314 026** (13) **A**

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(51) INT CL⁶
A47D 13/02

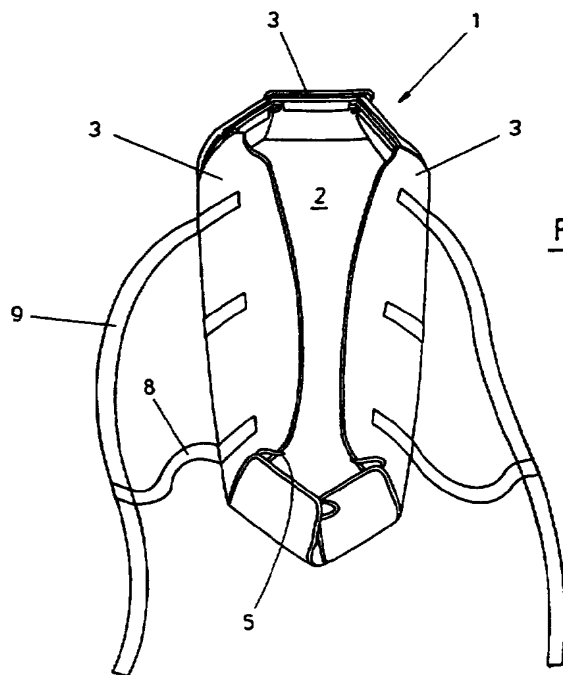
(52) UK CL (Edition O)
A5X X20

(56) Documents Cited
GB 2297915 A GB 2192340 A

(58) Field of Search
UK CL (Edition O) **A4G G3X , A5X X20**
INT CL⁶ **A47D 13/02 , A61G 1/00 1/013 1/04**
Online: WPI

(54) **Infant carrier**

(57) An infant carrier (1) comprises a base portion (2) and wall panels (3). The wall panels can occupy a first position in which they lie substantially in the same plane as the base portion. In this position a baby or infant may be easily placed in the carrier. The wall panels (3) may then be moved into a second raised position by means of a drawstring (5) threadable through the wall panels (3). The base of the carrier may include a step so that in use the infant's head is lower than its body. The carrier may also include a removably attached cover.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy. The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995. This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1995. The print reflects an assignment of the application under the provisions of Section 30 of the Patents Act 1977.

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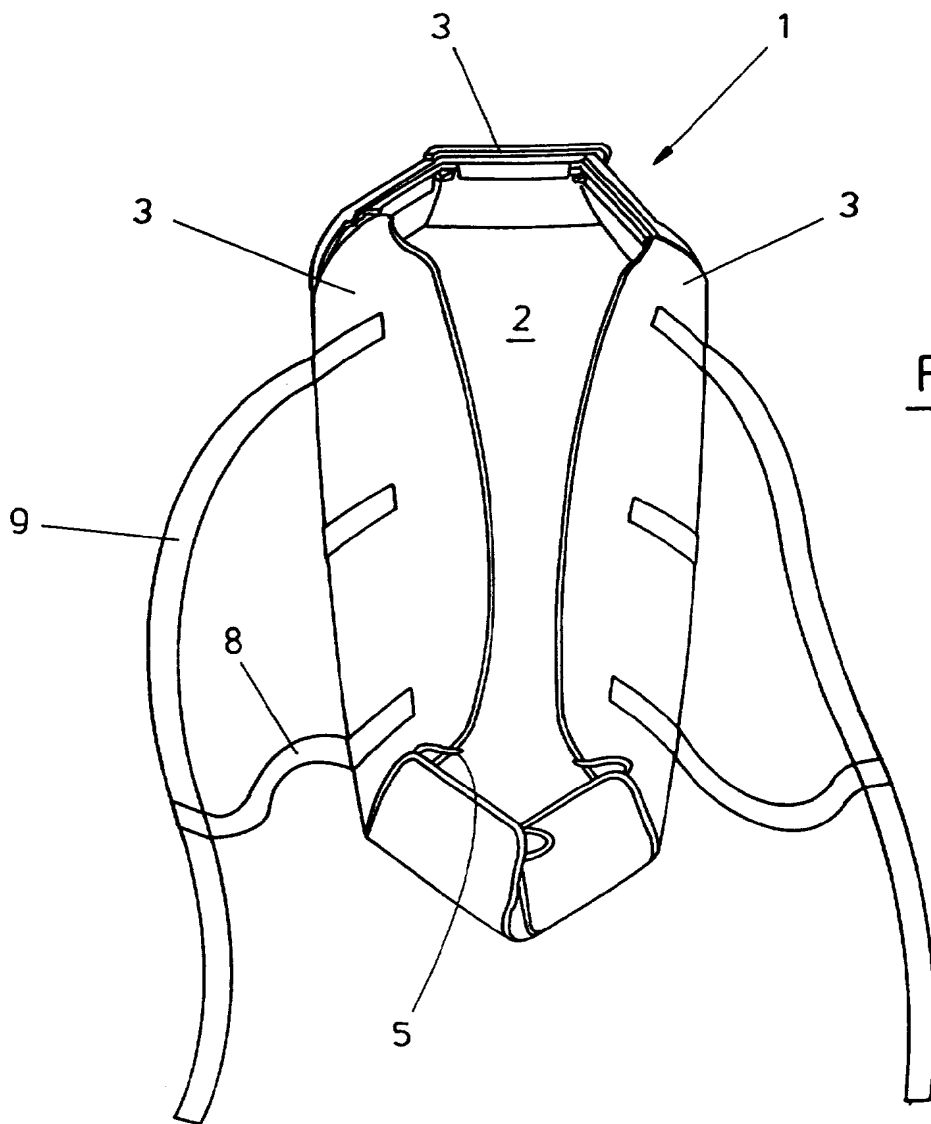


FIG. 1

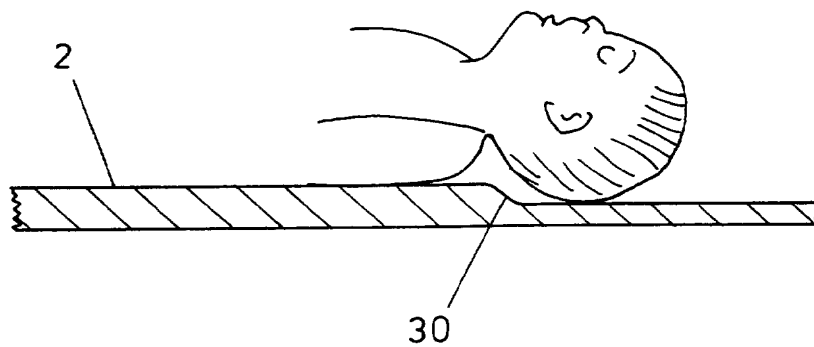


FIG. 3

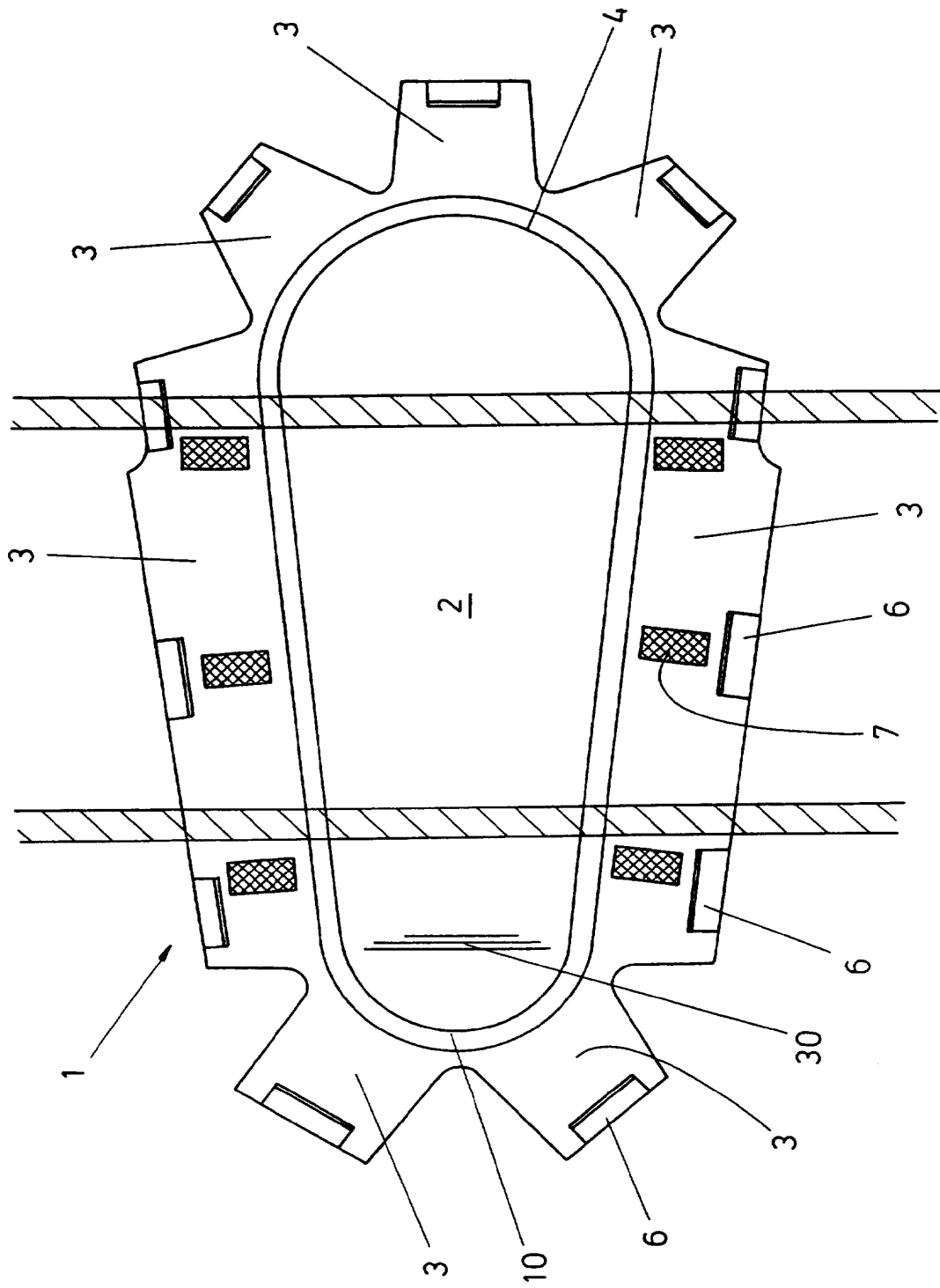


FIG. 2

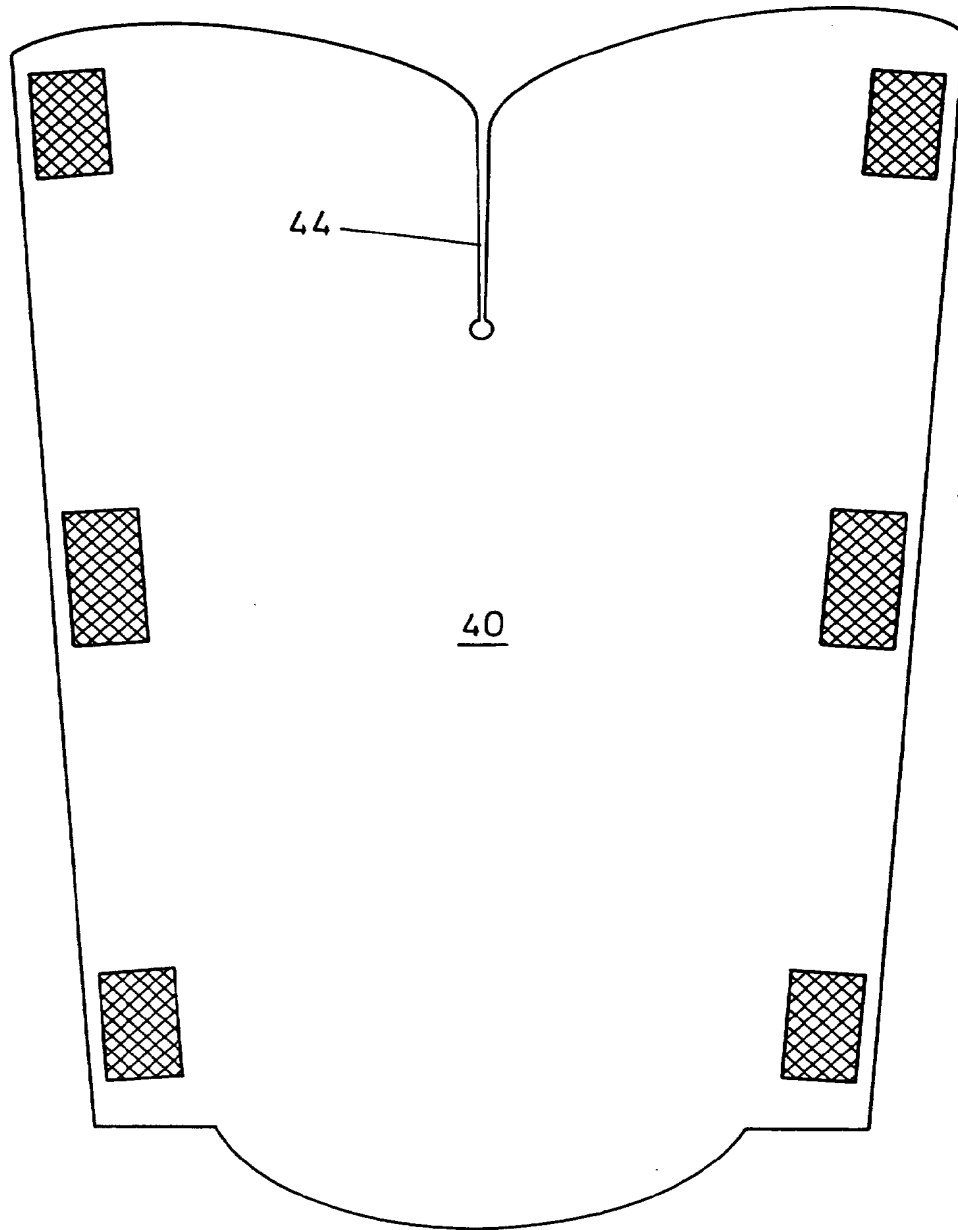


FIG. 4

INFANT CARRIER

This invention relates to a carrier for infants, particularly, but not exclusively, to a carrier for carrying an infant under 10 kilogrammes in an emergency situation.

If an infant becomes seriously ill, it may be necessary to transport the infant from its home to a hospital, or from one hospital to another by means of, for example, an ambulance.

When transporting an infant, particularly a sick or ill infant, it is important to ensure that the infant's body temperature is maintained, and to avoid loss of vital body warmth from the infant.

In addition, it is important that the infant is adequately supported whilst being transported, particularly if the infant is suspected of having broken limbs and/or internal injuries.

It is known to carry an infant in the arms of an adult to transport the infant to, for example, an ambulance.

A disadvantage of this known method of transporting an infant is that the infant may not be properly supported.

In addition, even if the baby is wrapped in blankets, it may still be vulnerable to loss of body temperature.

A further disadvantage is that it is difficult to administer emergency medical care, for example, cardiopulmonary resuscitation (CPR) when a baby is held in the arms of an adult.

According to the present invention, there is provided a carrier comprising:

- a base portion;
- a plurality of wall panels attached to the base portion

and moveable between a first position in which the wall panels and the base are substantially in the same plane, and a second position which the wall panels are raised relative to the base to define an enclosure,

moving means for moving the wall panels from the first position to the second position.

The carrier according to the present invention is particularly suitable for carrying infants, particularly sick or injured infants from, for example, their home to a waiting ambulance.

When taking sick or injured infants from a warm environment such as their home to an ambulance, the infant often has to be carried into a cold environment before reaching the ambulance.

Infants are particularly vulnerable to rapid loss of body temperature. Body heat loss from infants compared to that from adults is more pronounced due to a body surface area that is relatively large in comparison to their ability to regulate heat loss.

By means of the present invention, a sick or injured infant may be placed on the base portion of the carrier when the wall panels are in their first position. In this position the carrier is substantially in a flat form and the infant may easily be placed on the base portion.

The wall panels are then moved into their second position in which they are raised relative to the base portion. In this position, an enclosure is defined by the wall panels and the base portion, and the baby is positioned in the enclosure.

Advantageously, the carrier is formed from a padded material.

Preferably, the means for moving the wall panels from the first position to the second position comprises a drawstring threaded through the wall panels.

Advantageously, the drawstring comprises a locking toggle positioned towards the ends of the drawstring. Once the wall panels have been raised, they may be held in their second raised position by means of a locking toggle.

Preferably, the carrier further comprises a weather cover removably attachable to the carrier and positionable over a baby retained in the enclosure.

Conveniently, the weather cover is attachable to the carrier by means of velcro tapes.

One way in which a body loses heat is through convection. Still air is a poor conductor of heat, but air moving across the body surface can pick up heat and carry it away. If an infant is placed in an open ended cylinder, air would pass through rapidly cooling the infant. This is known as the "tunnel cooling effect". By closing one end of the cylinder, the passage of air through the cylinder is stopped and therefore heat loss reduces. A carry cot open at the foot and head ends could be regarded as a cylinder, and if the infant were carried in such a carry cot it would be susceptible to rapid body heat loss.

When the weather cover of the carrier of the present invention is attached to the carrier only the face of the infant is exposed. The carrier may be regarded as a cylinder or tunnel with one end closed and the other end substantially at 90° to the shaft of the cylinder. This reduces loss of body heat due to the tunnel cooling effect.

Preferably, the base portion is stepped such that when the infant is placed on the base portion its body is at a higher level than its head. In other words the step is aligned with the infant's shoulders to ensure that the back of the head, or the occiput is lower than the infant's back. In this position the infant's air passages are in line and open. In other words

the head is in neutral and airways are open.

Conveniently, the carrier further comprises two or more shoulder straps allowing the baby to easily be carried in the carrier.

The invention will now be further described by way of example only with reference to the accompanying drawings in which:

Figure 1 is a schematic representation of a carrier according to the present invention showing the wall panels raised relative to the base portion;

Figure 2 is a schematic representation of the carrier of Figure 1 in flat form;

Figure 3 is a schematic representation of a part of the base portion of the carrier of Figure 1 showing the step; and

Figure 4 is a schematic representation of a weather cover attachable to the carrier of Figure 1.

Referring to the Figures, a carrier according to the present invention is designated generally by the reference numeral 1. The carrier comprises a base portion 2 and wall panels 3. The wall panels have a first position shown in Figure 2 in which they lie in substantially the same plane as the base portion. This position is known as the open position, and if it is required to transport a baby or infant in the carrier, the carrier is initially arranged into the open position.

An infant may be placed on the base portion 2 with its head towards the wider rounded end 4 of the base portion. The shoulders of the infant should be aligned with a step 30 (shown in more detail in Figure 3) defined in the base portion. The arms of the infant should then be placed at its sides. The wall panels 3 may then be moved into their second raised

position by means of a drawstring 5 which is threadable through the wall panels 3 by means of drawstring holders 6. The ends of the drawstring are positioned at the foot end 7 of the carrier. Once the wall panels have been moved into the raised position shown in Figure 1, a locking toggle through which both ends of the drawstring are threaded is moved into a locking position which holds the wall panels in their raised position.

Any excess cord from the drawstring may be placed inside the carrier.

An attachable weather cover 40, shown in Figure 4 may be placed over the baby and held in place by means of velcro strips 42 engageable with velcro strips 7 positioned on the wall panels 3. The weather cover 40 is shaped to fit the carrier with the wall panels in their raised position with a baby contained within the carrier. The carrier is formed with a division or slit 44 which allows access to an infants chest if that infant requires cardiopulmonary resuscitation. The division or slit 44 should be positioned in line with the infant's sternum when it has been placed over the baby.

The carrier may then be gathered up by the person who is to carry the infant by putting it under one arm with the shoulder straps over the head of the carrier. The position of the carrier relative to the person carrying it is adjustable due to the fact that a first portion of the strap 8 is threaded onto a second portion of the strap 9 such that a loop defined by portions 8, 9 may be varied in size via a buckle to suit the person carrying the infant.

If the infant requires emergency medical attention, for example, cardiopulmonary resuscitation, this may be administered to the baby by a second person while the first person carries the baby in the carrier.

The carrier is made from a padded material such as foam padding

as is the base. A suitable material from which to make the carrier would be, for example, PVC.

The base portion may be reinforced with 4mm plywood and may have 25mm of foam padding over the firewood.

CLAIMS:

1. A carrier comprising:
a base portion;
a plurality of wall panels attached to the base portion and moveable between the first position in which the wall panels and the bases are substantially in the same plane, and a second position in which the wall panels are raised relative to the base to define an enclosure, and
moving means for moving the wall panels from the first position to the second position.
2. A carrier according to claim 1 formed from a padded material.
3. A carrier according to claim 1 or claim 2, wherein the means for moving the wall panels from the first position to the second position comprises a drawstring threaded through the wall panels.
4. A carrier according to claim 3, wherein the drawstring comprises a locking toggle positioned towards the end of the drawstring.
5. A carrier according to any one of the preceding claims, further comprising a weather cover removably attachable to the carrier and positionable over a baby retained in the enclosure.
6. A carrier according to claim 5, wherein the weather cover is attachable to the carrier by means of velcro tapes.
7. A carrier according to any one of the preceding claims, wherein the base portion is stepped such that when an infant is placed on the base portion its body is at a higher level than its head.

8. A carrier according to any one of the preceding claims further comprising two or more shoulder straps.

9. A carrier substantially as hereinbefore described with reference to the accompanying drawings.



Application No: GB 9611995.3
Claims searched: 1-9

Examiner: Dr Jon Broughton
Date of search: 8 September 1997

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK Cl (Ed.O): A5X (X20); A4G
Int Cl (Ed.6): A47D 13/02; A61G 1/00, 1/013/, 1/04
Other: Online: WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
A	GB 2297915 A (CHARLES) see whole document.	
A	GB 2192340 A (GAMBELL) see whole document.	

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
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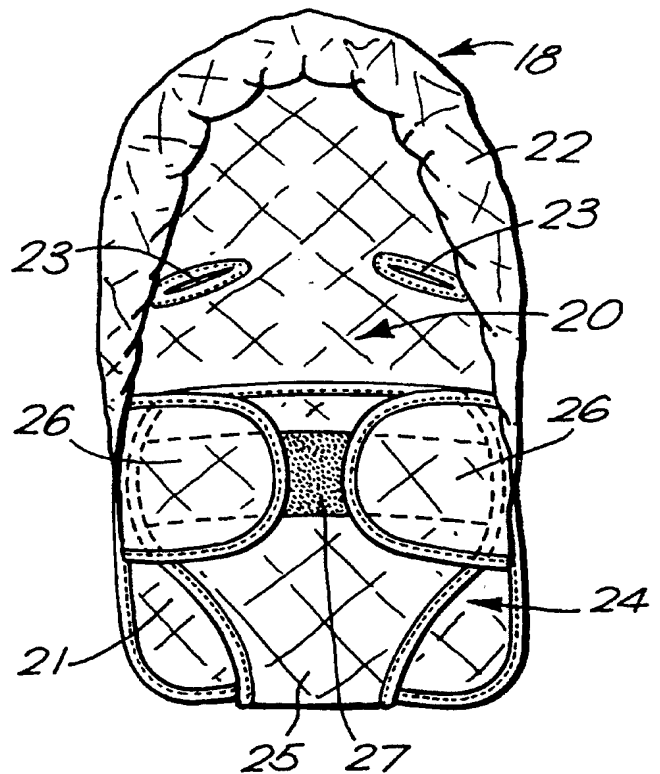
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/GB94/01884 (22) International Filing Date: 30 August 1994 (30.08.94) (30) Priority Data: 9317832.5 27 August 1993 (27.08.93) GB (71) Applicant (for all designated States except US): MERCIA SAFETY CENTRE LIMITED [GB/GB]; Warboro Farm, Henley Road, Hampton-on-the-Hill, Warwick, Warwickshire CV35 8QX (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): DAVIES, Claire [GB/GB]; Warboro Farm, Henley Road, Hampton-on-the-Hill, Warwick, Warwickshire CV35 8QX (GB). (74) Agent: WILSON, Nicholas, Martin; Withers & Rogers, 4 Dyer's Buildings, Holborn, London EC1N 2JT (GB).</p>		<p>(81) Designated States: GB, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>

(54) Title: BABY PROTECTOR

(57) Abstract

A baby protector (18) is provided which has a fabric body (20) having a padded portion (21). The padded portion (21) is positioned so that when placed in a baby seat, the surface contour of the seat presented to the baby is changed, improving the posture for a baby of low body weight. The protector has harness slots (23), a padded protector head portion (22) and a body wrap (24). It may also have carry handles providing a secondary function as a baby carrier.



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BABY PROTECTOR

This invention relates to a baby protector for a car safety seat.

Car safety seats are designed for transporting babies in a motor vehicle and are positioned either forwardly facing or rearwardly facing either on the front seat or rear seat. In either case, the seats are approved and tested to carry babies with a body weight of approximately seven pounds or more up to about eight months in age (or 20 pounds). As a result, preferred safety seats are shaped to present quite a severe 'S' curve in cross-section providing a well into which a baby is seated.

Although it is known, for example, from GB-1494651, to provide a seat which is more adaptable for infants and toddlers, the preferred cross-section for the seat support for the infant has always been to provide a deep well. However, for an infant carrier, a major problem experienced with existing seats is that more than ten per cent (60,000 in the United Kingdom) of new born babies are under seven pounds in weight and, as such, current seat design is not suitable for such small babies. Whilst a well for the baby is an advantage with larger babies, small babies tend to curl up and it has been suggested that this can restrict the baby's lungs, airways and breathing.

An object of the present invention is to

provide a baby protector for a car safety seat particularly for use with low body weight babies.

According to the present invention, a baby protector for a car safety seat including a well in which a baby is to be seated comprises a body of flexible material including a padded portion, and means for retaining the body within the seat whereby, in use, the padded portion is positioned in the well of the seat which smooths the curvature of the well to provide a more favourable contour for a small baby.

The means for retaining the body in position may comprise openings in the body to receive harness straps of a baby seat. Alternatively, short straps on the body may be secured about the baby seat harness by means of hook and loop filament material such as VELCRO (Registered Trade Mark). Preferably, the body is dimensioned to cover substantially the whole of the seat surface on which a baby is to be seated and includes a second curved padded portion defining a nest for a baby's head providing both cushioning against the seat and side support so as to cradle the baby's head during transport.

In a preferred embodiment, the body includes means, such as a strap or panel, for securing between a baby's legs. Suitably, the means comprises a body wrap including a bottom flap

which may be brought up between a baby's legs, two side flaps, one for folding over each leg of the baby into overlying arrangement with the bottom flap, and means for fastening the two side flaps and bottom flap together. The protector may also include carry straps permitting a user to carry a baby to and from a baby seat in the baby protector. The carry straps may include fastening means so that the straps can be secured together as carry handles in which case the baby protector would be carried in the manner of a cradle. The protector may also include releasable holster straps connectable to holster rings on the body allowing the baby protector to be secured to a mother's chest either by tying the straps or by means of quick release catches provided at the ends of the straps. In this latter arrangement, the baby protector has a dual function of protecting the baby in a car seat as well as being useful for carrying the baby on the parent's chest.

However, the preferred form of baby protector for a car safety baby seat having a well comprises a fabric body for positioning in the baby seat, and including a padded portion for positioning in the well of the car seat to provide a more favourable contour for a small baby, means for retaining the body in position on the baby seat, a

head cradling padded portion for protecting the baby's head during transport, a body wrap for securing about the baby's legs and abdomen, and means for retaining the body in position on the baby seat.

The invention also includes a car safety seat including a baby protector as aforesaid.

The invention will now be described by way of example with reference to the accompanying drawings in which:

Figure 1 is a diagrammatic view of a first embodiment of baby protector also showing the contour of a conventional baby seat;

Figure 2 is a second embodiment of baby protector in diagrammatic side section;

Figure 3 is a perspective view of a third embodiment of baby protector;

Figure 4 discloses diagrammatic front view of a fourth, preferred, embodiment of baby protector;

Figure 5 is a diagrammatic longitudinal section of the baby protector of Figure 4;

Figure 6 discloses a front view of fifth embodiment of baby protector;

Figure 7 shows a diagrammatic rear view of the fourth embodiment of baby protector of Figure 6;

Figure 8 is a diagrammatic longitudinal section of the baby protector of Figures 6 and 7;

Figure 9 diagrammatically illustrates the baby protector of the invention in a first principal mode of use in a car seat; and,

Figures 10 and 11 diagrammatically illustrate the baby protector of Figures 6 to 8 in additional modes of use as a hand carrier, and as a body carrier, respectively.

In the embodiment of Figure 1, a baby protector (1) is designed to be fitted within the well (2) of a car baby seat (3). The conventional car baby seat has a severe 'S' curve at the well into which the baby is seated and the baby is held in position by a safety harness (4).

The baby protector (1) comprises a fabric body having a padded portion (5) which locates in the well (2) of the car baby seat (3) and has a peripheral padded portion (6) with side sections (7,8) and a head portion (9). In order to secure the baby protector (1) in the car seat (3) the body is provided with openings (10 & 11 and 12) which receive, respectively, the top and bottom straps of the car baby seat harness (4).

In use, the baby protector (1) is located in the car baby seat (3) and the straps of the safety harness (4) are passed through the respective openings (10,11,12) so that the padded portion (5) is located in the well of the seat and the safety harness secures the baby protector (1) in

position. The padded portion (5) smooths the severity of the contour of the well (2) of the car baby seat. A baby of low body weight positioned in the car baby seat fitted with the baby protector is less crumpled because of the padded portion (5) and the baby's head is prevented from moving from side to side by being cradled particularly by the head portion (9) of the peripheral padded portion (6).

10 In Figure 2, an alternative embodiment is shown which is similar to the embodiment of Figure 1 except that the baby protector (1) is provided with a securing panel (13) and top and bottom pairs of carrying straps (14,15) (only one strap
15 of each pair shown). In use, a parent may release the harness of the baby car seat and then secure the top and bottom pairs of straps respectively around his/her neck and waist so that the baby protector then becomes a carrier for carrying the
20 baby on the parent's chest. The straps (14,15) may either be secured by tying or may, if desired, be provided with quick release catches (not shown) to facilitate securement.

25 The embodiment of Figure 3 differs from the embodiment of Figure 2 in that, instead of having top openings (10,11) for the baby seat safety harness (4), short straps (16,17) are provided which may be secured about the straps of the

safety harness in order to hold the baby protector in position. The straps (16,17) may be secured in any suitable way such as by press-stud fastener or the provision of hook and loop filament material
5 such as VELCRO (Registered Trade Mark).

In the preferred embodiment of Figures 4 and 5, a baby protector (18) comprises a fabric body (20) having a padded portion (21) and a peripheral padded head portion (22). The body also includes
10 harness slots (23) which receive the straps of a car baby seat harness in order to retain the baby protector within the seat. A lower portion of the baby protector of Figures 4 and 5 comprises a body wrap (24) for wrapping about a baby's legs and
15 abdomen. The body wrap (24) includes a bottom flap (25) and two side flaps (26). The flaps (25,26) may be secured together as shown by means of hook and loop filament fastening such as VELCRO (Registered Trade Mark) on the underside of the
20 flaps engaging with a cooperating fastening (27) on the outer surface of the bottom flap (25). As can be seen from Figure 5, the padded portion (21) only extends over part of the body (20).

The baby protector (18) of Figures 4 and 5 is
25 secured in position with the padded portion (21) in the well of the car seat by passing the side harness straps (not shown) through the slots (23). The body wrap (24) is released and the baby laid

into the protector. The body wrap (24) is then secured about the baby by passing the bottom flap (25) between the baby's legs and bringing the side flaps (26) into overlying relationship with the bottom flap (25). The flaps (25,26) are then secured by means of the interengaging hook and loop fastenings. Finally, the car seat bottom harness is engaged with the side harness straps by means of a buckle, the bottom flap (25) protecting the baby against the buckle.

The padded portion (21) is preferably wadding and may be of substantially consistent thickness as shown in Figure 5 or may be more profiled to be complimentary to the 'S' configuration as with the embodiments of Figures 1 and 2. As a child grows, the baby protector can continue to be used but without the body wrap, the bottom and side flaps (25) and (26) being folded underneath the body (20). The flaps (25) and (26) may be secured together by any other suitable releasable fastening such as press-studs or buckles.

In the embodiment of Figures 6 to 8 a baby protector (120) comprises a fabric body having a padded portion (121) which locates in the well of the car baby seat (shown in earlier figures) and has a peripheral padded portion (122) with side sections (123) and a head portion (124). The padded portion (122) is also provided with one or

more strengthening panels (125). In order to secure the baby protector (121) in the car seat, the body is provided with harness slots (126) which receive the straps of the car baby seat harness. A body wrap (127) is secured across the padded portion (122) and includes leg openings (128). The body wrap (127) is releasably attached by means of a clip adjustor (129) at one side.

Attached to each side (123) of the protector (120) is a carry handle (130). Each carry handle (130) includes a central press button fastener (131). One press button fastener (132) is also provided at each side of the rear of the protector as can be seen from Figure 7. The rear of the protector (120) also includes two pairs of holster rings (133) for use with two removable holster straps (134) (see Figure 11) having end clips (135).

As can be seen from Figure 9, the baby protector of this invention has a principal mode of use in a car baby seat with the harness straps of the car seat engaged about the baby and the buckle resting on the body wrap. The baby protector is then located so that the padded portion (5;21;122) is located in the well of the seat and the safety harness secures the baby protector in position. The padded portion smooths the contour of the well of the car baby seat. The

baby is held in position by adjusting and securing the harness straps of the car seat.

However, the embodiment of Figures 6 to 8 has two additional modes of use, namely as a hand
5 carrier and as a body carrier. In use as a hand carrier as shown in Figure 10, the carry handles (130) are released from the rear of the protector (120) where they have been stowed and are brought around to the front. The press button fasteners
10 (131) are then clipped together so that the carrier may be handled as shown without one handle inadvertently slipping away from the other.

Figure 11 illustrates the use of the protector as the body carrier. In this
15 arrangement the carry handles (130) are released from one another and then secured to the fasteners (132) in their stowage position on the rear. Separate holster straps (134) are then secured to the two top holster rings (133) by means of end
20 clips (135) and the baby and the protector lifted together onto the user's chest. Then, one holster strap (134) is fed over one shoulder and down to the bottom holster ring (134) at the opposite side and the other holster strap (134) is similarly fed
25 over the other shoulder and secured. With this arrangement the holster straps (134) cross over one another on the user's back to ensure safe retention of the protector as a body carrier as

shown in Figure 11.

The baby protector of the present invention provides a fabric body having a padded portion which, when placed in the baby seat, changes the surface contour of the seat presented to the baby, improving the posture for a baby of low body weight. In several arrangements the baby protector can be removed with the baby still held in the protector providing a secondary function as a baby carrier. The baby protector preferably covers most of the surface of the car seat but need not do so.

If desired, the peripheral padded portion, particularly the head portion (9;22;124), can be in the form of a removable padded roll so that as the baby grows in weight and the baby becomes able to hold its own head, the padding may be removed either completely or leaving secondary padding of less bulk. The padded portion to be positioned in the well of the baby car seat may also be removable if desired, in order to prolong the useful life of the baby protector.

The baby protector may be made of any suitable fabric material and the padding is preferably soft padding so as to readily adapt to the different surface profiles of car baby seats of different manufacturers.

CLAIMS

1. A baby protector for a car safety seat including a well in which a baby is to be seated, the protector comprising a body of flexible material including a padded portion, and means for retaining the body within the seat whereby, in use, the padded portion is positioned in the well of the seat which smooths the curvature of the well to provide a more favourable contour for a small baby.

2. A baby protector according to claim 1, wherein the means for retaining the body in position comprises openings in the body to receive harness straps of a baby seat into which the protector is to be fitted.

3. A baby protector according to claim 1 or 2, wherein the body is dimensioned in use to cover substantially the whole of the car seat surface on which a baby is to be seated and further includes a second curved padded portion defining a nest for a baby's head.

4. A baby protector according to any one of the preceding claims, wherein the body includes means for securing between a baby's legs.

5. A baby protector according to claim 4, wherein the means for securing between a baby's legs comprises a body wrap including a bottom flap which, in use, may be brought up between a baby's

legs, two side flaps, one for folding over each leg of the baby into overlying arrangement with the bottom flap, and means for fastening the two side flaps and bottom flap together.

6. A baby protector according to claim 5, wherein the fastening means is selected from one of hook and loop filament engagement means, press-stud fasteners and buckles.

7. A baby protector according to claim 4, 5 or 6, wherein the body includes carry straps each include fastening means whereby the handles may be engaged with one another during carrying.

8. A baby protector according to any one of the preceding claims, including releasable holster straps connectable to respective holster rings on the body whereby the baby protector may be secured to a mother's chest.

9. A baby protector for a car safety baby seat having a well, the protector comprising a fabric body for positioning in the baby seat, and including a padded portion for positioning in the well of the car seat to provide a more favourable contour for a small baby, a head cradling padded portion for protecting the baby's head during transport, a body wrap for securing about the baby's legs and abdomen, and means for retaining the body in position on the baby seat.

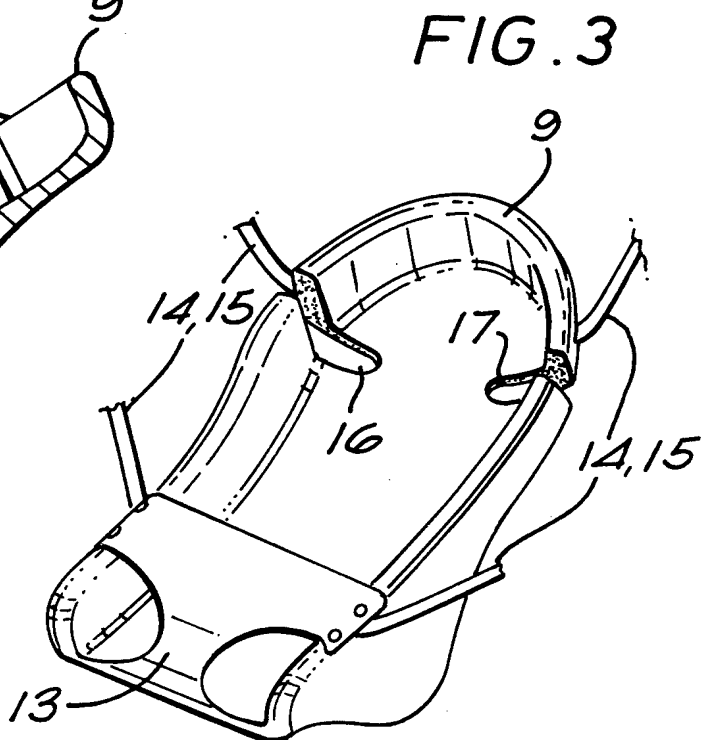
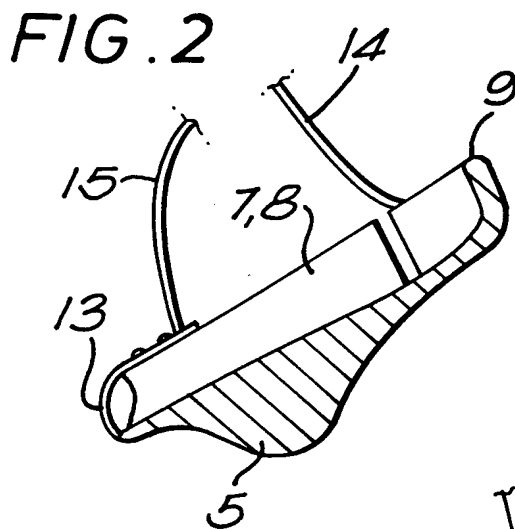
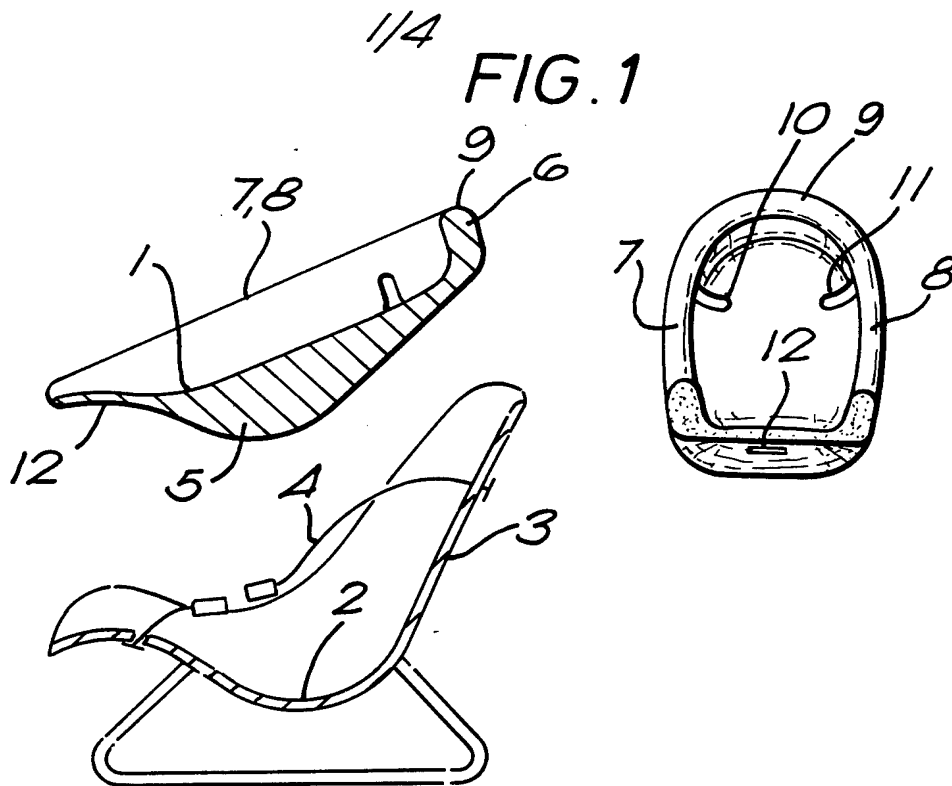
10. A baby protector according to claim 9,

wherein the body wrap comprises a bottom flap to be brought up between the baby's legs, side flaps, one for folding over each leg of the baby, and means for securing the two side flaps and bottom flap together.

11. A baby protector according to claim 10, wherein the two side flaps are dimensioned to overlay the bottom flap in use and the means for securing the two side flaps and bottom flap together comprises interconnecting hook and loop filament fastening means on the flaps.

12. A baby protector according to any one of claims 9 to 11, wherein the retaining means comprises openings in the body to receive harness straps of a baby seat into which the protector is to be fitted.

13. A car baby seat including a baby protector according to any one of claims 1 to 12.



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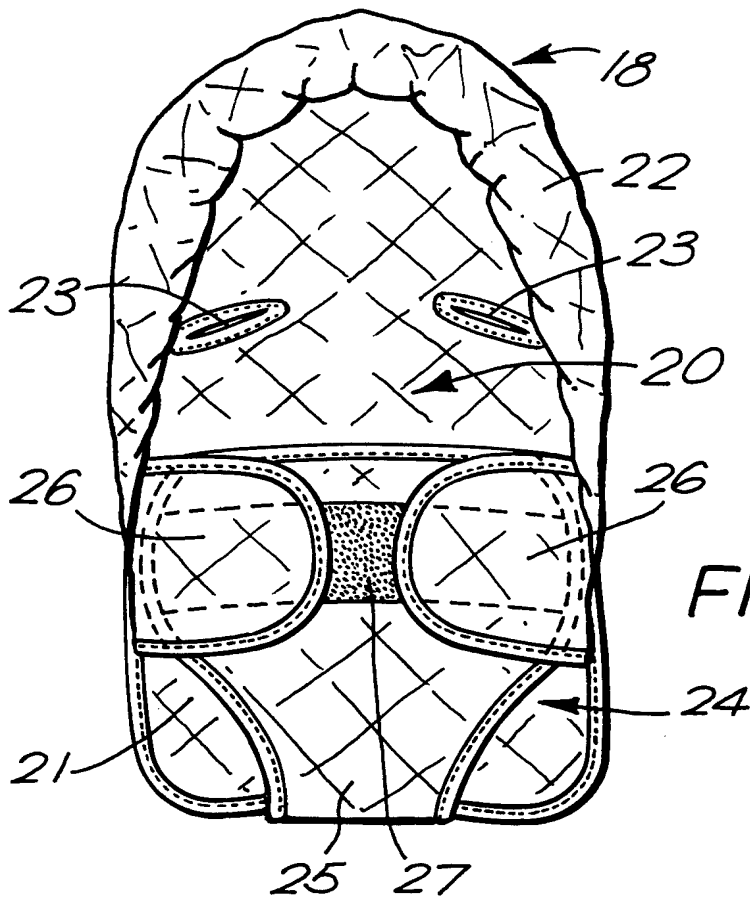


FIG. 4.

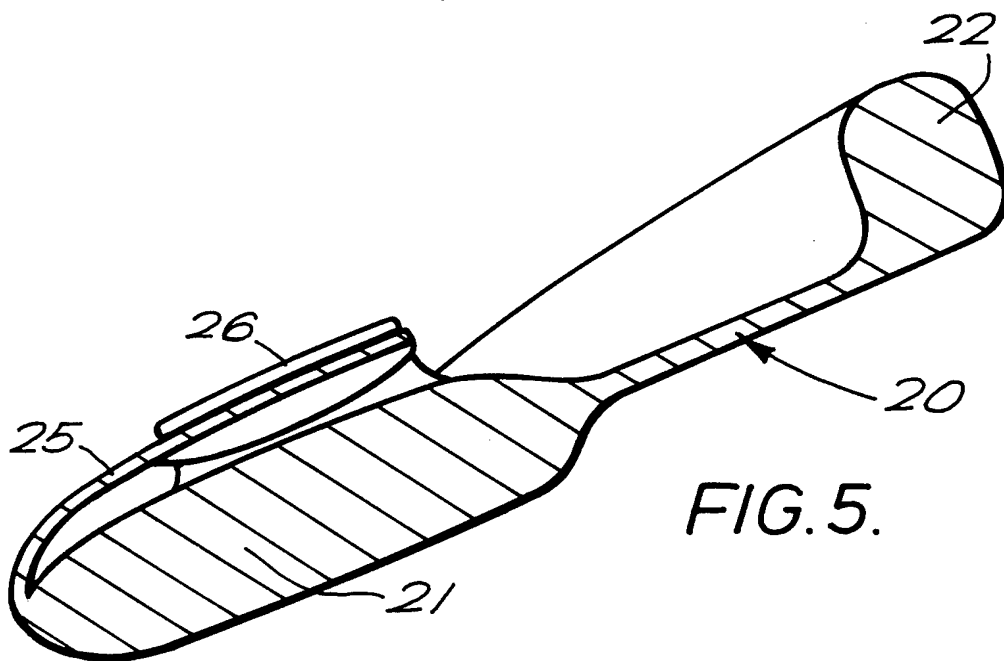


FIG. 5.

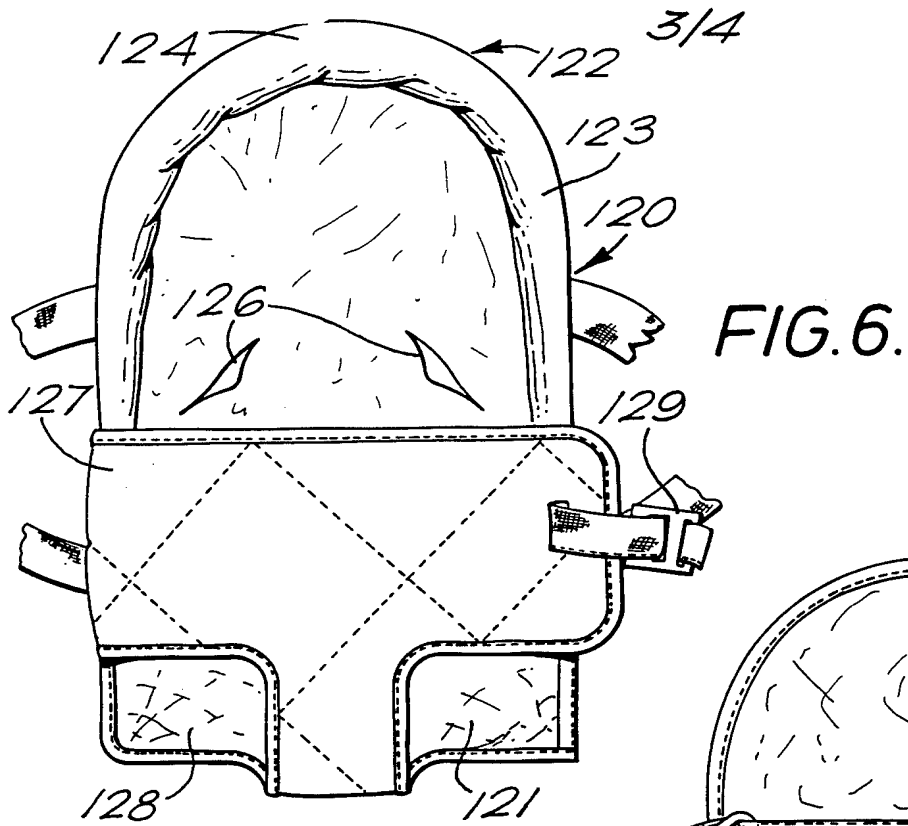


FIG. 7.

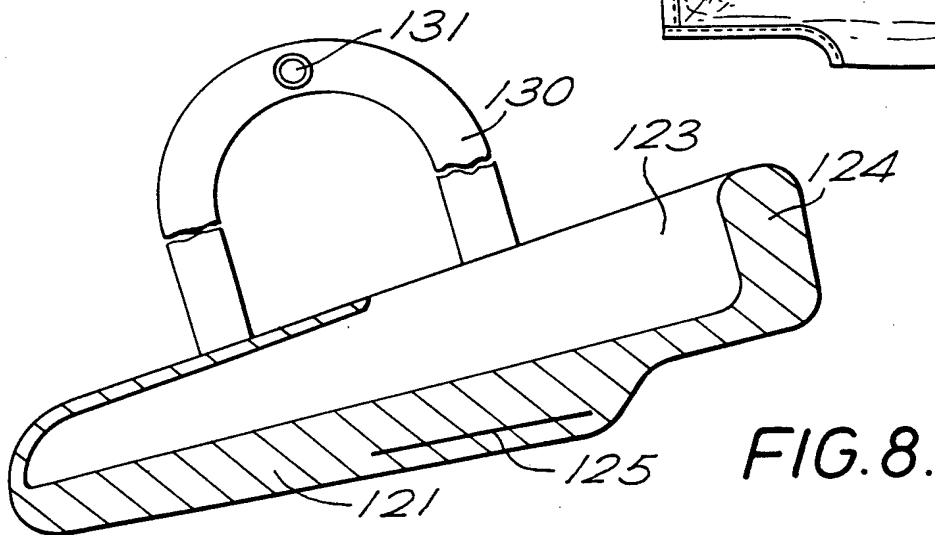
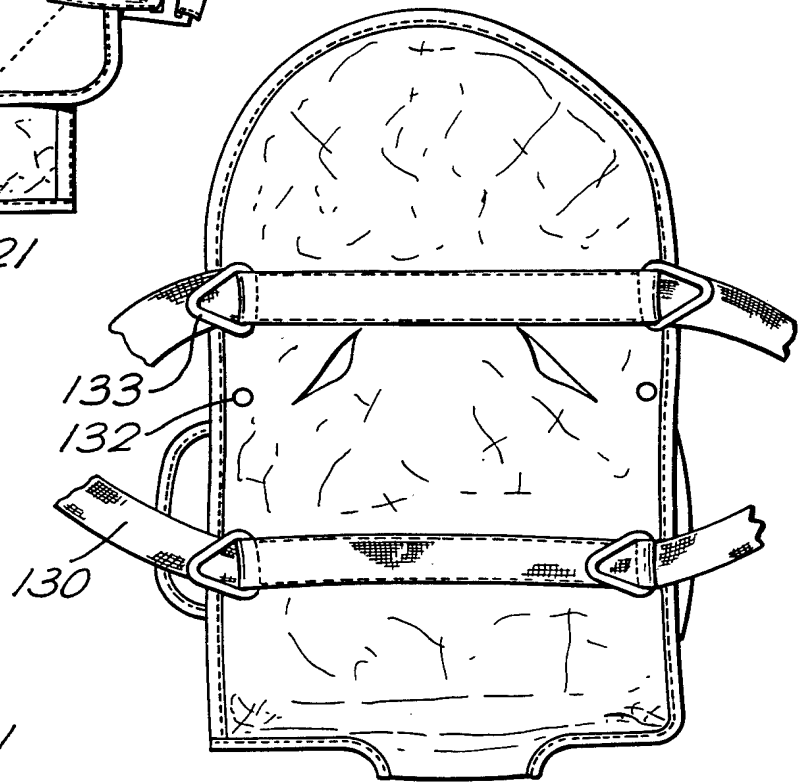


FIG. 8.

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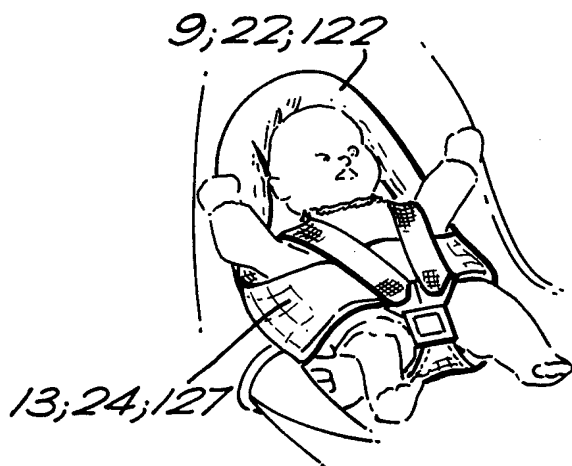


FIG. 9.

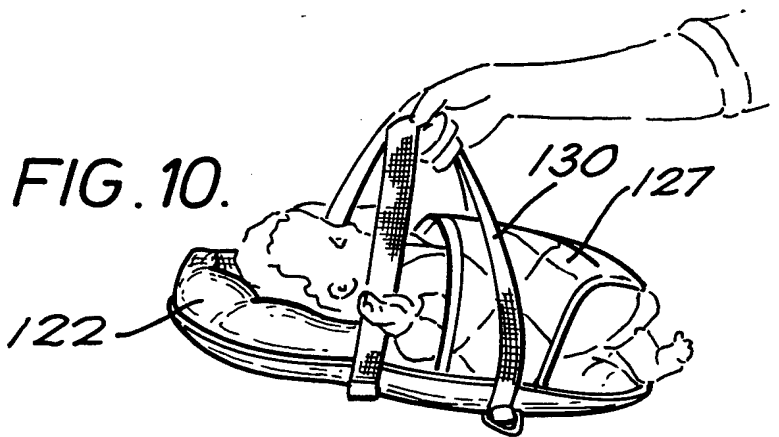
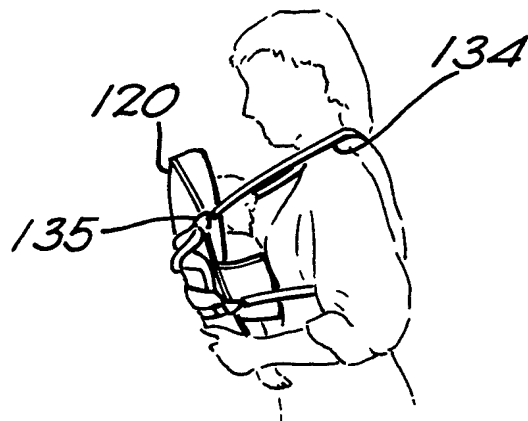


FIG. 10.

FIG. 11.



INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 94/01884

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC 6 B60N2/28 A47D13/02</p>		
<p>According to International Patent Classification (IPC) or to both national classification and IPC</p>		
<p>B. FIELDS SEARCHED</p>		
<p>Minimum documentation searched (classification system followed by classification symbols) IPC 6 B60N A47D</p>		
<p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p>		
<p>Electronic data base consulted during the international search (name of data base and, where practical, search terms used)</p>		
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US,A,5 127 120 (CYNTHIA A. MASON) 7 July 1992 see column 2, line 13 - column 2, line 53; figures 1-4	1,3,9,13
A	DE,A,27 07 303 (WETTER, HANS, DR.) 25 August 1977 see page 4, line 11 - page 5, line 8; figures 1-2	1,9,13
A	DE,U,92 16 287 (POPP, MICHAEL) 19 May 1993 see page 7, line 1 - page 9, line 7; figures 1-10	1,9,13
A	DE,U,87 04 043 (SCHRÄDER, MARGARETE) 30 July 1987	
	-/--	
<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.</p>		
<p>* Special categories of cited documents :</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p>		
<p>Date of the actual completion of the international search</p> <p>12 December 1994</p>		<p>Date of mailing of the international search report</p> <p>23.12.94</p>
<p>Name and mailing address of the ISA</p> <p>European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+ 31-70) 340-3016</p>		<p>Authorized officer</p> <p>Horvath, R</p>

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 94/01884

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB,A,1 494 651 (BUCKEYE INTERNATIONAL, INC.) 7 December 1977 cited in the application -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 94/01884

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-5127120	07-07-92	CA-A- 2063193	02-02-93
DE-A-2707303	25-08-77	AT-A- 345678	25-09-78
DE-U-9216287	19-05-93	NONE	
DE-U-8704043	30-07-87	NONE	
GB-A-1494651	07-12-77	NONE	

⑫

EUROPEAN PATENT APPLICATION

⑰ Application number: 81303828.8

⑸ Int. Cl.³: **A 47 D 13/02**
A 44 B 11/25

⑱ Date of filing: 21.08.81

⑳ Priority: 21.08.80 GB 8027307

⑴ Applicant: **LITTLE ROCK LIMITED**
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㉓ Date of publication of application:
03.03.82 Bulletin 82/9

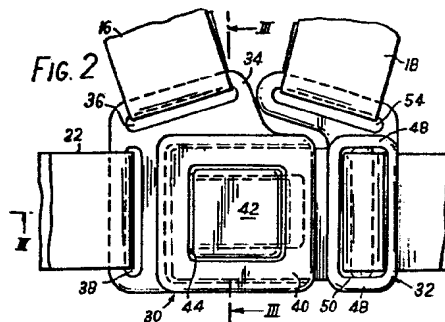
⑵ Inventor: **Barrett, Thomas Jerry**
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F-06130 Grasse(FR)

⑵ Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

⑷ Representative: **Bubb, Antony John Allen et al,**
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London WC2A 1QU(GB)

⑸ Improvements in baby carriers.

⑷ A baby carrier which, in known manner, comprises a body portion having leg holes, for supporting the baby to be carried, and a pair of shoulder straps and a pair of waist straps to be secured together in order to support the baby carrier on the body of a wearer, is provided with a buckle, one component (30) of which incorporates anchorages (36,38) for one shoulder strap (16) and one waist strap (22) respectively, and the other component (32) of which incorporates anchorages (54,46,50) for the other shoulder strap (18) and waist strap (26), the buckle being so constructed that when in the assembled condition the strap anchorages are held rigidly and closely adjacent to one another in such a manner that the axes of the straps converge substantially at the centre point of the buckle.



EP 0 046 672 A1

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IMPROVEMENTS IN BABY CARRIERS

This invention concerns improvements in and relating to baby carriers, and more especially to a baby carrier incorporating an improved buckle.

5 Baby carriers in common use comprise a body portion
in which the baby's body is supported and provided with
two leg holes through which the baby's legs project.
The body portion is secured to the adult wearer's body
by two shoulder straps and two waist straps. The body
10 portion of the carrier may be worn behind so that the
baby is carried against the wearer's back or in front
so that the baby faces the wearer. Particularly in the
latter case, it is very important both for the posture
of the baby, and for the comfortable distribution of
15 the baby's weight against the torso of the wearer of
the baby carrier, that the two shoulder straps and the
two waist straps should be secured together in such a
manner that there is no looseness in the straps, where-
by the body of the baby is supported high up against the
20 chest and the baby's head tends to fall forwards to rest
against the body of the wearer of the baby carrier,
rather than lolling backwards in an unsupported fashion.
In earlier designs of baby carrier, such an arrangement
of the straps was ensured by tying them together in a
25 knot behind the wearer's back. However, owing to the
inconvenience of tying and untying such a knot, there

has been a demand for a baby carrier of the kind initially referred to above but having a buckle to facilitate securing and release of the shoulder and waist straps.

5 Hitherto known proposals to provide a baby carrier of the kind referred to above with a buckle, have, however, resulted in serious disadvantages. Attempts to apply to a baby carrier a conventional buckle of a kind intended for other uses has had the result that the
10 ends of the shoulder and waist straps cannot be drawn sufficiently tightly together to achieve the correct posture required for the baby when supported in the baby carrier. One example of such a hitherto proposed arrangement is shown in U.K. Patent Application published
15 under Serial No. 2 028 633A, wherein the ends of one shoulder strap and one waist strap are in each case looped around a ring-type buckle, the two ring-type buckles being arranged to be linked by means of a fastening hook of the kind conventionally used for securing
20 a dog's lead, or a baby harness. The relatively loose association of the ends of the shoulder and waist straps provided by such an assembly tends to allow the baby carrier to slip downwards relatively to the body of the wearer, causing strain on the wearer, and possible
25 danger to young infants due to the tendency of the head to fall backwards unsupported.

It is accordingly an object of the present invention to provide a baby carrier of the kind generally referred to above, having a buckle to facilitate securing and
30 release of the shoulder and waist straps, and wherein the ends of such straps can be secured in such a manner as to maintain the optimum posture for the baby.

In accordance with the present invention, this ob-

ject is achieved in a baby carrier of the kind initially referred to, wherein said baby carrier is characterized by being provided with a buckle having a first component incorporating a first anchorage for receiving
5 one shoulder strap and a second anchorage for receiving one waist strap and a second component incorporating a first anchorage for receiving the other shoulder strap and a second anchorage for receiving the other waist
10 strap, the said first and second components being so shaped and arranged for movement into interlocking engagement that when they are assembled to form the buckle the said first anchorages thereof are located immediately adjacent one another, whilst the said
15 second anchorages are located on opposite sides of and are directly adjacent to the assembled buckle.

Preferably, means are provided to enable pre-adjustment of the length of the two shoulder straps and one of the waist straps, and the anchorage for the other waist strap includes means enabling tensioning of the
20 other waist strap when the buckle is assembled.

In a particularly favourable embodiment of the invention, said first component comprises a female element having a portion providing an internally directed abutment face, said second component comprises a male element
25 in the form of a tongue with a rearwardly directed resilient leaf biased out of the plane of the tongue, and the arrangement is such that said leaf makes interlocking engagement behind said abutment face when the components of the buckle are in positions such that said anchorages
30 are closest towards one another. The portion of the female element that defines said abutment face may conveniently be in the form of a frame bounding a central panel which can be manually depressed to release said leaf from said abutment surface.

Such an arrangement provides a particularly convenient and simply constructed assembly, wherein all the strap anchorages are rigidly located immediately adjacent a central portion of the buckle, which may be of relatively small dimensions and conveniently shaped to facilitate manual assembly and release of the buckle by the wearer, without requiring that the buckle be visible to the wearer. In a particularly elegant design to be described in more detail below, the frame portion of the female element may be of a generally square configuration, the sides of the square approximating to the transverse dimension of the shoulder and waist straps. In this case, when the buckle is assembled the two waist strap anchorages are rigidly located immediately adjacent opposite sides of the square frame, and the two shoulder strap anchorages are rigidly located immediately adjacent one another and close to the upper edge of the square frame portion of the buckle. All the axes of the straps thus converge at a common point centred on the buckle, which has proved to be effective in locating the baby carrier in the optimum position on the chest.

The construction of the buckle is further simplified when the said frame portion and the said central panel are formed integrally of a synthetic plastics material, the central panel being connected at one side with said frame portion by means of a portion of reduced thickness which forms a hinge.

The invention is illustrated by way of example in the accompanying drawings, in which:

Figure 1 is a perspective view of a baby carrier incorporating a buckle according to the invention,

Figure 2 is a front elevation of the buckle of Figure 1 in the engaged condition;

- 5 -

Figure 3 is a section on the line III-III of Figure 2;

Figure 4 is a section on the line IV-IV of Figure 2; and

5 Figure 5 is a front elevation of the buckle in the disengaged condition.

The baby carrier shown in Figure 1 comprises a body portion 10 having leg holes 12 with padded edges and a detachable head-rest 14. The body portion 10 is secured to a wearer by a pair of shoulder straps 16, 18, each adjustable by a respective sliding bar 20; and a waist belt constituted by a left waist belt strap 22 adjustable by a sliding bar 24 and a right waist belt strap 26 adjustable by a snubbing roller to be described later.

The left-hand straps 16, 22 are connectible to the right-hand straps 20, 26 by means of a buckle 28 comprising a female component 30 and a male component 32. As best shown in Figure 5, the female component 20 30 is constituted by a one-piece plastics moulding formed of a base plate 34 having slots 36, 38 therein for the respective reception of the looped left-hand straps 16, 22 and of a frame 40 surrounding a panel 42 which is connected to the frame 40 by a thin, integral hinge 25 44.

The male component 32 comprises a rectangular moulded plastics housing 46, the end portions 48 of which are provided with elongate grooves (not shown) receiving the respective spindles (not shown) of a snubbing roller 50, the cylindrical surface of which is roughened. The right-hand waist strap 26 is thread-

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ed round the roller 50 as best shown in Figures 2 and 4 leaving its end free. Integrally moulded with the housing 46 is a lug 52 having a slot 54 through which passes the loop of the right-hand shoulder strap 18.

5 Also integrally moulded with the housing 46 is a tongue 56 having an integral leaf 58 which is biased so as normally to be inclined to the plane of the tongue 56 as shown in Figure 4 and which is formed at its distal end with a rebate providing an abutment shoulder 60.

10 To use the baby carrier the shoulder straps 16, 18 and the waist belt strap 22 are first adjusted to the correct length by means of the respective slide bars 20, 24 and the waist belt strap 26 is slackened off the snubbing roller 50. After the wearer has
15 donned the baby carrier he inserts the male buckle component 32 into the female component 30: as the tongue 56 is inserted, the engagement of the leaf 58 with the undersurface 62 of the frame 40 causes the leaf 58 to be forced towards the plane of the tongue
20 56 until the tongue 56 achieves the fully inserted position shown in Figure 4 whereupon the leaf 58 snaps with an engagement position in which the shoulder 60 abuts a face of the frame 40, preventing the male buckle component 32 from being withdrawn by tension applied to
25 the waist belt. The positive click that is heard on engagement supplies a useful audible confirmation that the buckle 28 has been securely fastened. To complete the preparations for use, the baby is placed in the body
30 portion 10 with its legs through the holes 12 facing the wearer; finally the wearer pulls the free end of the right-hand waist belt 26 until the waist belt is comfortably tight. The strap 26 is secured in position by being trapped between the snubbing roller 50 and a side of the housing 48 in the conventional manner.

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To release the buckle 28 it is necessary only to depress the panel 42 which can be done with one finger, which in turn depresses the leaf 58 and the two components 30, 32 will then come apart due to the slight
5 tension in the waist belt.

The simple design of the buckle 28 allows the female component 30 to be formed as a one-piece plastic's moulding; and the male component 32 may be similarly formed apart from the necessity to insert the roller
10 50 into the housing 48. If a suitable plastics material such as polyacetal is chosen the buckle 28 has great strength and lightness while the leaf 58 the necessary resilience. No springs, nor indeed any metal
15 parts, are necessary, thus avoiding all risk of corrosion.

CLAIMS

1. A baby carrier comprising a body portion (10) having leg holes (12), a pair of shoulder straps (16,18), a pair of waist straps (22,26) and means (28) for securing said shoulder straps and waiss straps together, characterised in that said securing means (28) comprises a buckle having a first component (30) incorporating a first anchorage (36) for receiving one shoulder strap (16) and a second anchorage (38) for receiving one waist strap (22) and a second component (32) incorporating a first anchorage (54) for receiving the other shoulder strap (18) and a second anchorage (46,50) for receiving the other waist strap (26), the said first and second components (30,32) being so shaped and arranged for movement into interlocking engagement that when they are assembled to form the buckle the said first anchorages (36,54) thereof are located immediately adjacent one another, whilst the said second anchorages (38;46,50) are located on opposite sides of and are directly adjacent to the assembled buckle.

2. A baby carrier as claimed in Claim 1, characterised in that means (20) are provided for enabling pre-adjustment of the length of the two shoulder straps (16,18) and one of the waist straps (22), and that the anchorage (46,50) for the other waist strap includes means (50) enabling tensioning of the other waist strap (26) when the buckle (28) is assembled.

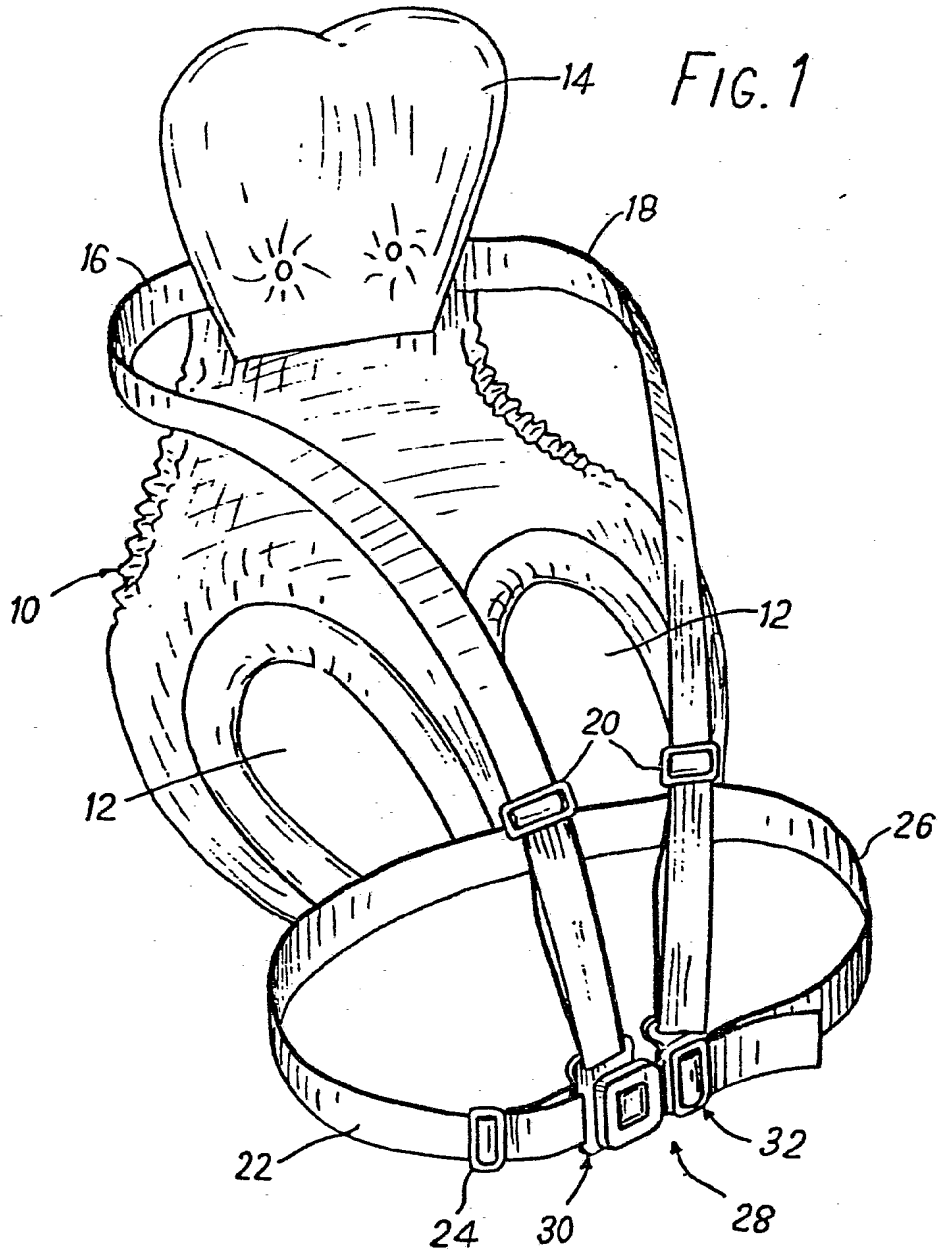
3. A baby carrier as claimed in Claim 1 or 2, characterised in that said first component (30) comprises a female element having a portion (40) providing an internally directed abutment face, that said second component comprises a male element (32) in the form of a tongue (56) with a rearwardly directed resilient leaf (58) biased

out of the plane of the tongue, and that the arrangement is such that said leaf (58) makes interlocking engagement behind said abutment face when the components of the buckle are in positions such that said anchorages
5 (36;54;38;46,50) are closest towards one another.

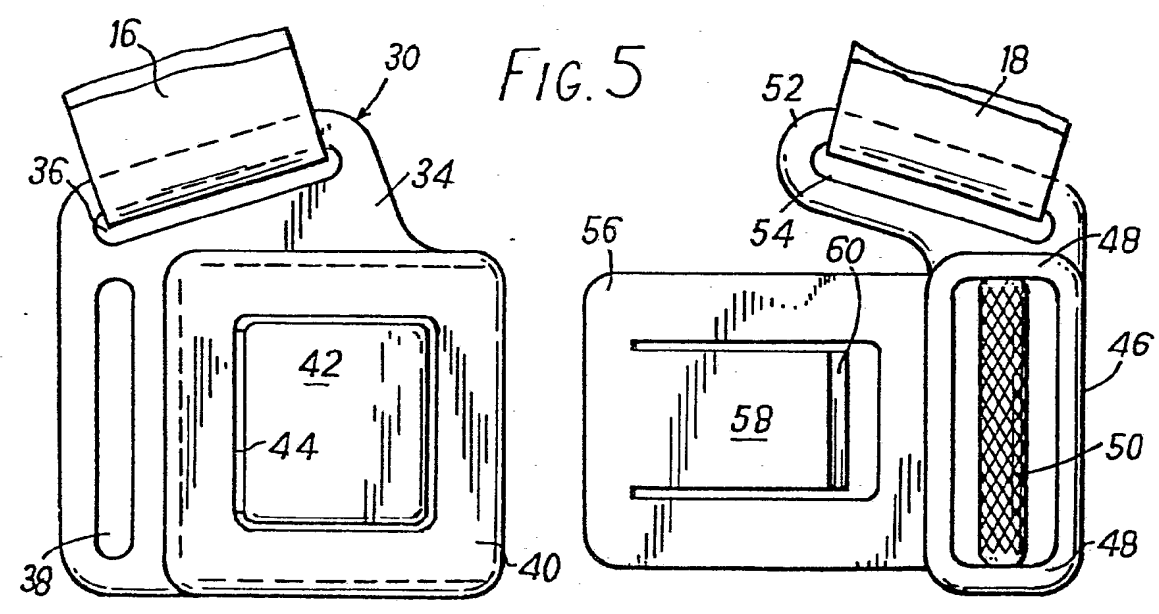
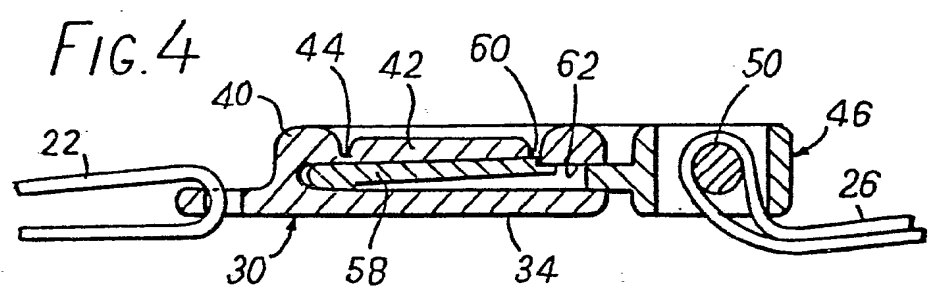
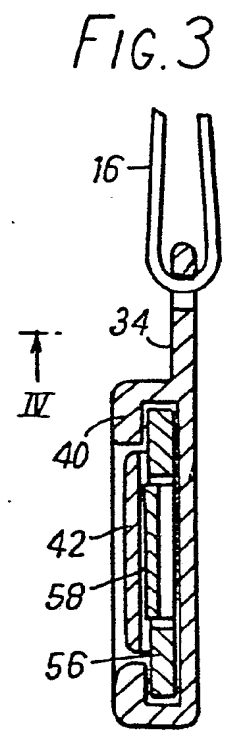
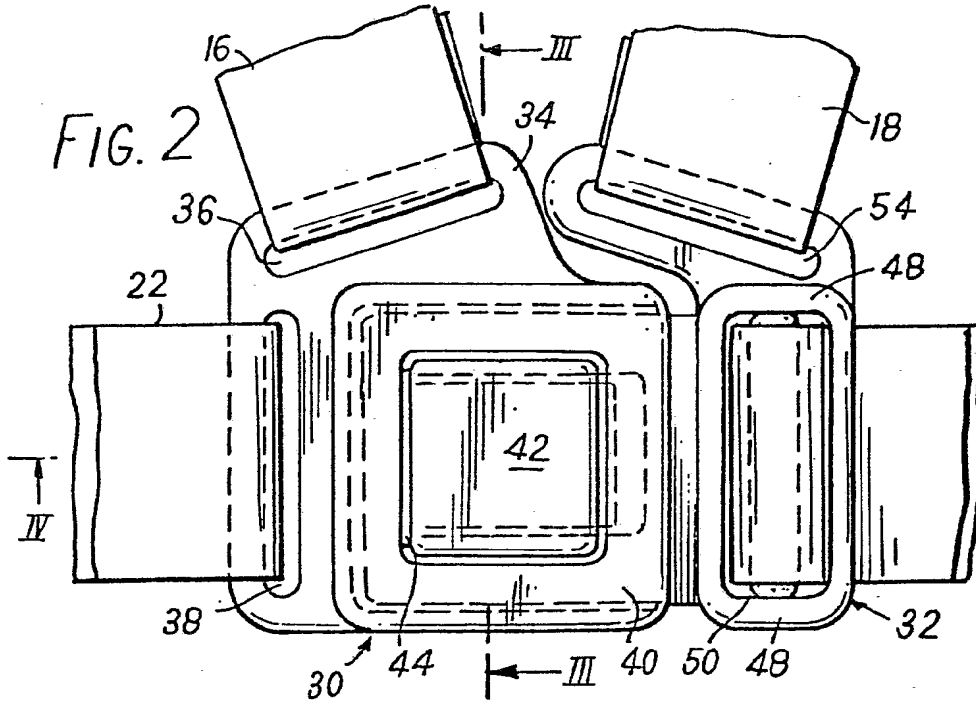
4. A baby carrier as claimed in Claim 3, characterised in that portion (40) of said female element that defines said abutment face is in the form of a frame (40) bounding a central panel (42) which can be manually
10 depressed to release said leaf (58) from said abutment surface.

5. A baby carrier as claimed in Claim 4, characterised in that said frame (40) and said central panel (42) are formed integrally of a synthetic plastics
15 material, said central panel being connected at one side with said frame by means of a portion (44) of reduced thickness forming a hinge.

1/2



2/2





DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
	<p><u>US - A - 3 925 853</u> (NICKLIN)</p> <p>* column 1, lines 51-57; column 2, lines 14-24, 57-60; figures 1,3,4 *</p> <p>---</p>	1	A 47 D 13/02 A 44 B 11/25
D	<p><u>GB - A - 2 028 633</u> (MERLET)</p> <p>* page 1, lines 84-92, 100-105, 121-127; figures *</p> <p>---</p>	1,2	
	<p><u>DE - A - 1 946 913</u> (HÜGEL)</p> <p>* page 4, last paragraph; figures *</p> <p>---</p>	2	TECHNICAL FIELDS SEARCHED (Int. Cl.)
	<p><u>US - A - 3 251 110</u> (HEDU)</p> <p>* column 1, line 50 - column 3, line 8; figures *</p> <p>---</p>	3,5	A 47 D A 44 B
	<p><u>US - A - 4 035 877</u> (BROWNSON)</p> <p>* column 2, line 11 - column 3, line 50; figures *</p> <p>-----</p>	2,4,5	
			CATEGORY OF CITED DOCUMENTS
			<p>X: particularly relevant</p> <p>A: technological background</p> <p>O: non-written disclosure</p> <p>P: intermediate document</p> <p>T: theory or principle underlying the invention</p> <p>E: conflicting application</p> <p>D: document cited in the application</p> <p>L: citation for other reasons</p>
			&: member of the same patent family.
			corresponding document
<p><input checked="" type="checkbox"/> The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
The Hague	20-11-1981	VANDEVONDELE	



EUROPEAN PATENT APPLICATION

Application number : **95300065.0**

Int. Cl.⁶ : **A47D 13/02**

Date of filing : **06.01.95**

Priority : **10.01.94 GB 9400309**

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Date of publication of application :
12.07.95 Bulletin 95/28

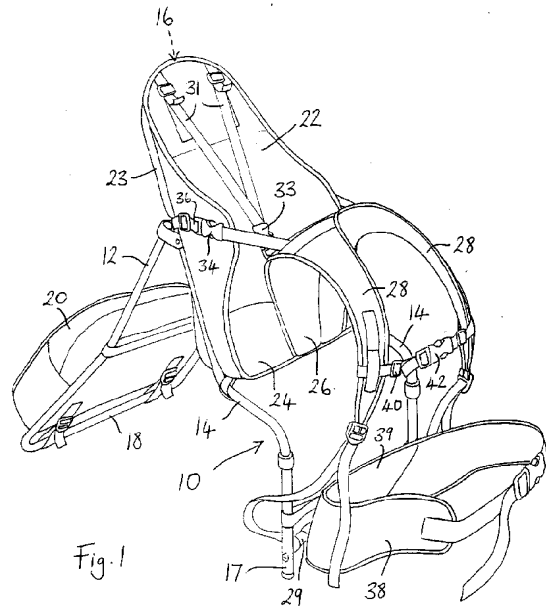
Designated Contracting States :
AT BE CH DE DK FR GB LI SE

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Baby/child carrier.

The baby carrier has a substantially rigid frame (10) including an upper U-shaped portion (16) extending from respective side frame members (14), a seat (22, 24) for a baby suspended from said U-shaped portion, and straps (28) for mounting the carrier on a user's back. The upper U-shaped portion (16) extends upwards in alignment with or at an obtuse angle to the respective side frame members (14) and the seat (22, 24) for the baby is suspended from the U-shaped portion at the front thereof, in the orientation in which the carrier is to be used. Preferably, the seat for the baby is front loading in that it is provided with a releasable frontal flap (26). Preferably, also, the seat for the baby has a seat position proper (24) incorporating a rigid or semi-rigid element.



This invention concerns a baby or child carrier (hereinafter referred to as a baby carrier) of the type having a substantially rigid frame, e.g. typically of metal tubing, and straps whereby it is mountable on a user's back.

In one known baby carrier of this type the tubing providing the frame is configured to include an upper U-shaped portion which extends from and at an acute angle to respective side frame members. In the intended orientation of use of the carrier the said U-shaped portion projects forwardly from the top of the side frame members and forms the front of the carrier which lies between a baby seated therein and the user when the carrier is mounted on the user's back. In this respect, a fabric seat for reception of the baby is suspended to the rear of the U-shaped portion and the straps to go over the user's shoulders are also attached to the U-shaped portion.

Conventionally, the fabric seat is in the style of a pouch or hammock, with holes provided for the baby's legs to project through and, optionally, with side adjustment by means of straps whereby the bottom of the pouch can be raised or lowered relative to the top of the frame (i.e. the U-shaped portion).

A back rest may be provided in the form of a padded board at the rear of the pouch and extending upwardly therefrom so as to support and/or shelter the head of a baby, particularly when sleeping. Additional fabric is usually suspended from the U-shaped portion of the frame and attached to other portions of the frame to provide an enclosure for the baby's body and legs. The U-shaped portion is padded in order to safeguard the baby who may tilt forwards and bump said portion.

Lower ends of the side frame members may, in simple versions, be connected by a further, lower U-shaped portion, which usually projects rearwardly therefrom in use. In this respect the side frame members generally extend obliquely between upper and lower U-shaped portions so that the frame, when viewed from the side, approximates to a reversed Z-shape.

Alternatively, in more complex versions, the lower ends of the side frames members may provide feet whereby the carrier can be supported on a surface, with one or more additional frame elements being pivotally connected to the rear of the side frame members to provide two further legs, the lower ends of which will also make contact with such surface. In this respect the additional pivotally connected legs are movable between a first "closed" position lying closely adjacent the respective side frame members and a second "open" position where their lower ends are swung out to provide additional supportive feet for the carrier. Stable support of such a carrier on a surface is particularly advantageous to the user when initially placing the baby therein and also immediately upon lowering the carrier from the shoulders.

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One object of the present invention is to effect improvements to a back-mounted baby carrier whereby it may be manufactured more cost effectively and whereby a baby may be more easily positioned therein or removed therefrom.

Additionally or alternatively, the invention may provide alternative means for stable support of the carrier upon a surface with the baby seated therein, which support means is easier for the user to position while the carrier is mounted on his/her back compared to the known pivotal legs and which is preferably adjustable in position so that the carrier may also be safely supported upon a sloping or uneven surface.

According to one aspect of the invention there is provided a baby carrier having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, and shoulder straps positioned for extending over a user's shoulders for mounting the carrier rearward of the user's back, characterised in that the seat for the baby has a back rest portion and is suspended from the U-shaped portion facing towards the user's back in use.

With such a construction no part of the frame intervenes between the baby and the shoulders of the user when the carrier is in use. In other words, there is no frontal part of the frame against which the baby may bump.

Preferably, the upper U-shaped portion extends generally upwards in the orientation in which the carrier is to be used, with a middle portion thereof being located adjacent a baby's head in use. Preferably, the upper U-shaped portion extends generally in alignment with the side frame member.

Equally importantly, the seat for the baby may be constructed more simply than hitherto from a production viewpoint with a back rest portion including a fabric pocket whereby it can readily be located over the U-shaped frame portion during manufacture. It may, in the same way, be removable by the user, for cleaning and repair.

A further simplification in the construction of the seat, both from the point of view of its production and as regards the manner of positioning a baby therein, is that it may now be fabricated with a releasable frontal flap, held at each side by e.g. conventional child proof releasable fastenings. Thus, with the carrier laid flat and the flap released and folded downwards or forwards a baby can be placed in the seat, lying on its back, before the flap is folded back over the baby and secured at both sides. This contrasts with the procedure necessary for positioning a baby in previously known carriers of this general back-mountable type where the legs of the baby had to be guided into the respective holes in the suspended pouch, often with some difficulty.

A further advantageous proposal in respect of the

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carrier of the invention is that the seat should be provided with a seat portion proper incorporating a rigid or semi-rigid element whereby the bottom of the baby will have positive support from below, in contrast to the previous arrangement of the baby hanging in a pouch. Thus, according to a further aspect of the invention, a baby carrier of the type having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, and straps for mounting the carrier in a user's back is characterised in that the seat has a seat or base portion (or seat bottom) incorporating a rigid or semi-rigid element for support of the baby from below when the carrier is in its upright carrying position.

In respect of a further object of the invention, a separate aspect of the invention is a baby carrier of the type having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, straps for mounting the carrier on a user's back and support means which is pivotally connected to the respective side frame members and swingable relative thereto to an open position for supporting the carrier on a surface, characterised in that said support means is connected to at least one of the side frame members by way of a releasable locking mechanism whereby it may be positionally adjusted and locked in any selected open position for supporting the carrier on a surface or in a closed position adjacent the side frame members.

Preferably, a respective locking mechanism is provided at each side of the carrier frame, with both mechanisms requiring release to enable adjustment of the position of the support means. This safeguards against failure of one mechanism, although in most circumstances a single such locking mechanism would suffice.

For ease of release of the locking mechanism(s), particularly when the carrier is mounted on a user's back with a baby seated therein, a mechanism with a push button release is preferably employed. With the button or buttons depressed the position of the support means can be readily adjusted to that required, then, upon release of pressure from the button or buttons, the support means is automatically locked in the selected position. In this way angular positions for the support means can be selected whereby the carrier can be stably placed on rough, uneven or sloping ground.

In a preferred embodiment the support means is in the form of a further U-shaped member having end portions which are pivotally connected at or near ends of the respective side frame members. However, this is not essential, and in other embodiments the support means could be in the form of a U-shaped member having end portions which are pivotally connected to the side frame members at locations remote from

the ends of the latter. Alternatively, the support means could take the form of two separate legs or other supports, pivotally connected to the respective side frame members at or adjacent the lower ends of the latter, or remote from the lower ends of the latter. Yet another possibility is that the support means is unitary, and connected between the side frame members, but is not in the form of a U-shaped member.

Two specific embodiments of baby carriers in accordance with the various aspects of the invention will be described further, by way of example, by reference to the accompanying drawings, in which:

Fig. 1 is a front perspective view of a first embodiment in a condition for placement on a surface;

Fig. 2 is an identical view of the same embodiment with the frontal flap of the seat shown released and folded forwards; and

Fig. 3 is a corresponding view of a second embodiment of carrier in accordance with the invention.

Referring firstly to Figs. 1 and 2, this embodiment consists of a substantially rigid frame, conveniently fabricated from tubular aluminium, onto which a seat for reception of a baby is mounted. The frame is made up of two generally U-shaped elements, namely a main frame portion, designated by reference numeral 10, and a support portion 12.

For the purposes of the description, the main frame 10 is conveniently divided into two side frame members or limbs 14, which are each of kinked or jogged configuration, as shown, and are symmetrically formed, and an upper U-shaped portion 16 (not visible, but its position is indicated) which links the two side frame members 14 and extends in alignment with upper regions of the side frame members 14, as a continuation therefrom.

Ends of the support frame 12 are pivotally connected to the main frame at or about the regions where the respective side frame members 14 merge into the upper U-shaped portion 16. The support frame 12 is freely pivotal and can be swung between a closed or folded condition lying adjacent the side frame members 14 and an open condition, as shown, enabling the carrier to stand in an upright position on a substantially flat surface. One or more retainers or clips may be provided on either or both of the main frame and support frame which is/are usable to lock the support frame in either or both of the open and closed positions.

In this respect the ends of the side frame members 14 provide front feet 17 (only one is visible) and a connecting portion or crosspiece 18 of the support frame 12 provides a rearward support. As shown, a bag 20 may optionally be mounted onto the support frame 12.

The seat for the baby is made of fabric, typically textile fabric of a washable and weatherproof type, and comprises a back rest portion 22 with integral

side portions, a seat bottom 24 (which may be referred to as seat portion proper), and a frontal flap 26. Straps 28 for extending over a user's shoulders (not shown) whereby the carrier is mounted on the user's back are, in this case, provided as integral extensions from the frontal flap 26. Other ends of these straps 28 are connected at 29 to a crosspiece extending between end regions of the side frame members 14.

As is readily apparent from the drawings, the seat is suspended from the front of the main frame so that when the carrier is mounted on a user's back, a baby can be carried therein at a location between the frame and the user's back. In other words, no parts of the frame intervene between the baby and the user's back.

The back rest portion 22 of the seat has a downwardly open pocket or flap 23 on its rear side, which, in assembly of the carrier during manufacture, is located over the upper U-shaped portion 16 of the main frame, so that the seat is suspended therefrom in the illustrated manner.

The seat portion proper 24 incorporates a rigid or semi-rigid core to provide a firm base for the seat for supporting a baby from below. In this respect, the core may be a piece of hardboard or polypropylene or the like slipped between upper and lower layers of fabric and stitched or glued or otherwise fastened therein during manufacture.

As best shown in Fig. 2 two straps 31 extend from the top of the backrest 22 and one strap 32 extends centrally from the front of the seat bottom 24 and these straps 31, 32, which together provide a harness for the baby, are securable at a central location by means of a childproof fastening 33 on the end of one of them so as to retain a child in the seat. The straps 31, 32 are adjustable in length.

The frontal flap 26 is an additional device for holding a child in the seat. It also serves to properly position the child in the centre of the seat, as openings for the legs of the child are defined more narrowly at each side thereof, and to shelter the child to some extent. At each side the flap 26 is secured by conventional childproof releasable fastenings 34, comparable to the fastening 33. As shown, one portion of each fastening 34 is provided on a respective strap 36, connected to the edge of the backrest 22 or directly to the main frame, which is adjustable in length. In modified embodiments such adjustable straps could be used between the flap 26 itself and the respective fastening portions connected thereto, instead of or in addition to those in the illustrated embodiment.

As shown, a hip belt 38 for the user, which may or may not incorporate a lumbar pad 39, is mounted onto the lower ends of the side frame members 14 and/or the above mentioned crosspiece which extends therebetween. Also, straps 40 for holding the main shoulder straps 28 in a comfortable position at the front of the user's body are provided on the said

straps 28 for fastening across the chest of a user, again by means of a conventional fastening 42.

In use, with the frontal flap 26 released and drawn forwards, as in Fig. 2, and with the straps 31, 32 also released, a child may be placed in the seat 22, 24 and then secured therein upon reattachment of the respective features 33, 34. This may be accomplished with the support frame 12 folded into its closed position adjacent the side frame members 14 and the entire carrier laid flat on a convenient surface, in which respect the child will be positioned while lying on its back. Thereafter, the carrier can be lifted directly onto a user's back, or the support frame 12 may be swung out, as shown, and the carrier disposed as shown in Fig. 1 for a while before being lifted onto the user's back, whereupon the support frame should be swung to its closed position again.

Alternatively, the child may in some cases be positioned in the seat 22, 24 while the carrier is supported in an upright position, as shown in the drawings.

When the carrier is to be lowered from a user's back, the user will generally wish to reach behind and swing the support frame 12 to an open position so that, when lowered, the carrier can straightaway be supported on the ground, or any other convenient approximately flat surface, before the child is removed.

Turning now to the embodiment of Fig 3, the details of the main frame and the seat are identical to those just described for the first embodiment, so they will not be repeated. The corresponding parts are indicated by the same reference numerals elevated by 100.

This embodiment differs in respect of the support frame. With the previous embodiment, the user may have some trouble in manipulating the support frame 12 to swing it between closed and open positions while the carrier is actually on his/her back. Also, with only one fully open position, the carrier is only stably supported when placed down on a relatively flat surface. These problems are obviated with the support frame of this further embodiment, which is designated by reference numeral 52.

As shown, this support frame 52 is also of U-shaped configuration, but in this case, ends thereof are pivotally connected to lower ends 117 of the side frame members 114 by way of respective locking devices 54 (only one of which is visible). Each device 54 includes a push button 56 and, upon depression of both at the same time, the support frame 52 is released to pivot freely. The frame 52 can then be positioned at any described angle relative to the main frame 110, and, upon release of the buttons 56, it will be locked in the selected position. Depression or release of the buttons 56 is readily accomplished by a user while the carrier is mounted on his/her back, and the selection of the angle of the support frame allows the carrier to be stably supported on a sloping or un-

even surface.

In Fig. 3, although the frontal flap 126 is connected to the front of the seat portion proper 124, as in the first embodiment, there is a lower extension, designated 127, providing an additional pad for the comfort of the user.

The details, shown in Fig. 3, of construction of the support frame could, of course, vary in other embodiments, while still retaining the feature of releasable locking devices to connect it to the main frame. Also so long as the support frame is a unitary element (or one piece) only a single such releasable locking device would suffice. In modified embodiments, the locking device or devices could be released by actuation by the user of a lever operated cam instead of a push button, or one or more pressure locks could be used in place of the illustrated type of releasable locking devices. Other variations are possible.

More generally, the invention is not limited to the details of the illustrated embodiments and many variations are possible. For example, the main frame 10, 110, could include additional crosspieces, such as a crosspiece in the vicinity of the front of the seat bottom 24, 124 to which the latter and/or the frontal flap 26, 126 could be enclosed. Also, the straps 28 need not be extensions of the flap 26 and could be connected thereto at some other position, or connected to another suitable and/or point in the frame or seat.

Claims

- 1. A baby carrier having a substantially rigid frame (10) including an upper U-shaped portion (16) extending from respective side frame members (14), a seat (22, 24) for a baby suspended from said U-shaped portion, and shoulder straps (28) positioned for extending over a user's shoulders for mounting the carrier rearward of the user's back, characterised in that the seat for the baby has a back rest portion (22) and is suspended from the U-shaped portion facing towards the user's back in use.
- 2. A baby carrier according to claim 1 wherein the back rest portion of the seat includes a fabric pocket (23) whereby it is mounted over the U-shaped portion of the frame.
- 3. A baby carrier according to claim 1 or 2 wherein the seat for the baby is provided with a releasable frontal flap (26).
- 4. A baby carrier according to claim 3 wherein the frontal flap is securable at each side by releasable fastenings (34).
- 5. A baby carrier according to claim 4 wherein the

straps for mounting the carrier on a user's back are provided as extensions of the frontal flap.

- 6. A baby carrier according to any preceding claim wherein the seat for the baby has a seat portion (24) (or seat bottom) incorporating a rigid or semi-rigid element for support of the baby from below when the carrier is in its upright carrying position.
- 7. A baby carrier according to any preceding claim further including support means (12, 52) pivotally connected to the respective side frame members and swingable relative thereto to an open position for supporting the carrier on a surface, said support means being connected to at least one of the side frame members by way of a releasable locking mechanism (54) whereby it may be positionally adjusted and locked in a selected open position for supporting the carrier on a surface or in a closed position adjacent the side frame members.
- 8. A baby carrier according to claim 7 wherein the or each locking mechanism is releasable by a push-button (56).
- 9. A baby carrier according to claim 7 or 8 wherein the support means is in the form of a further U-shaped member (52) having end portions which are pivotally connected at or near ends of the respective side frame members.
- 10. A baby carrier according to any preceding claim wherein the upper U-shaped portion extends generally upwards in the orientation in which the carrier is to be used, with a middle portion thereof being located adjacent a baby's head in use.
- 11. A baby carrier according to any preceding claim wherein the upper U-shaped portion extends generally in alignment with the side frame members.
- 12. A baby carrier of the type having a substantially rigid frame including an upper U-shaped portion extending from respective side frame members, a seat for a baby suspended from said U-shaped portion, and straps for mounting the carrier on a user's back, characterised in that the seat has a seat portion proper (or seat bottom) incorporating a rigid or semi-rigid element for support of the baby from below when the carrier is in its upright carrying position.

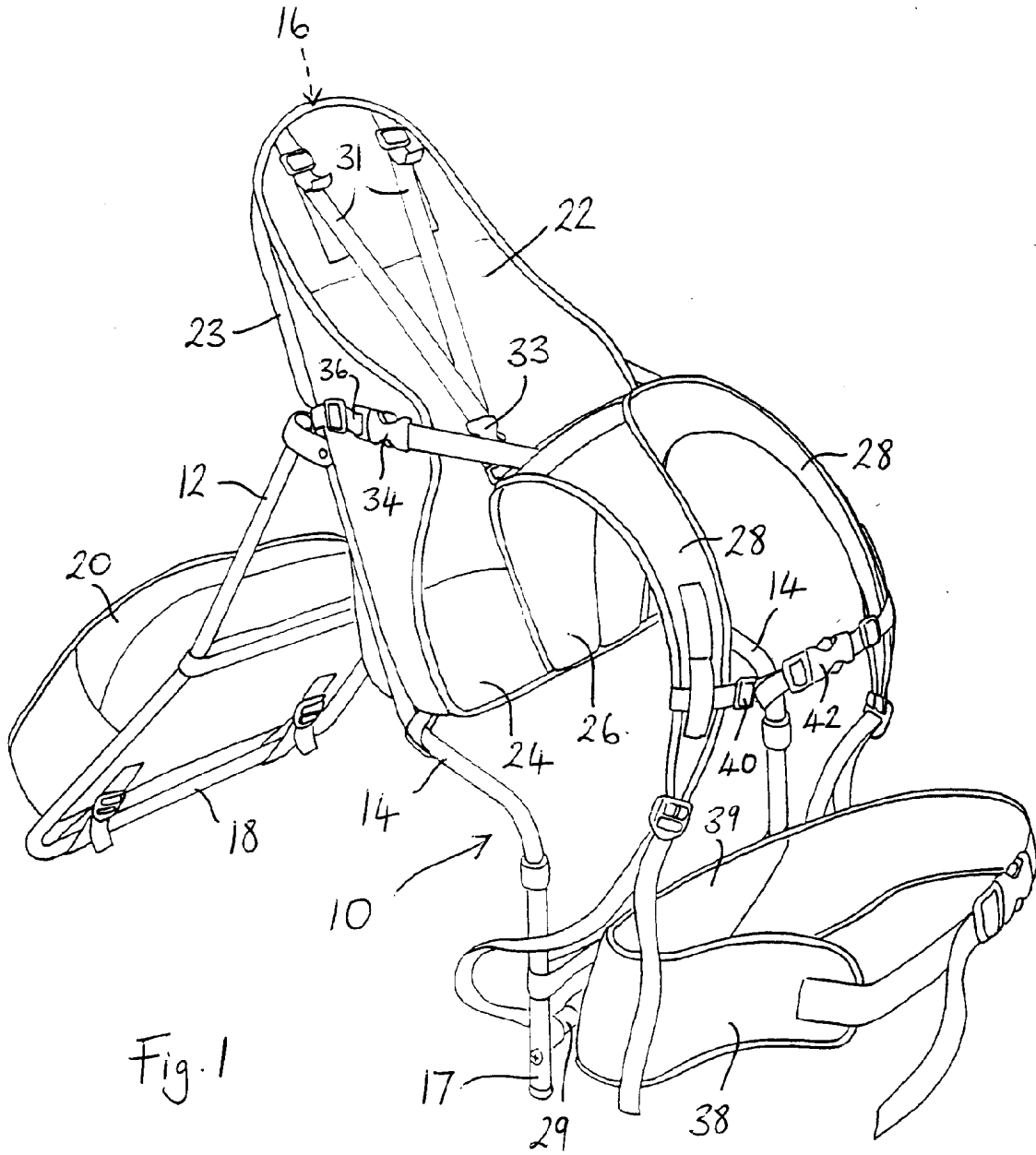


Fig. 1

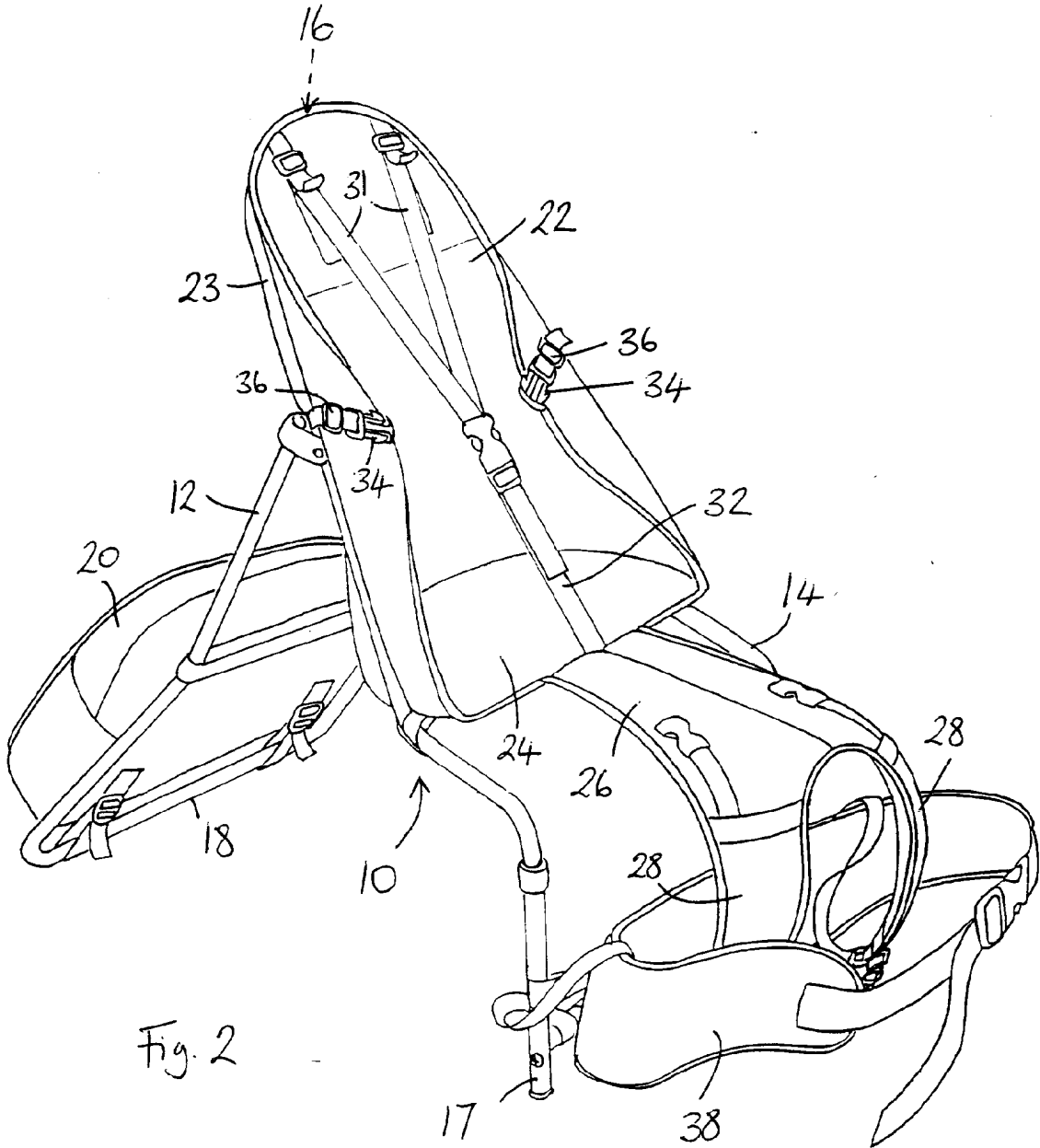


Fig. 2

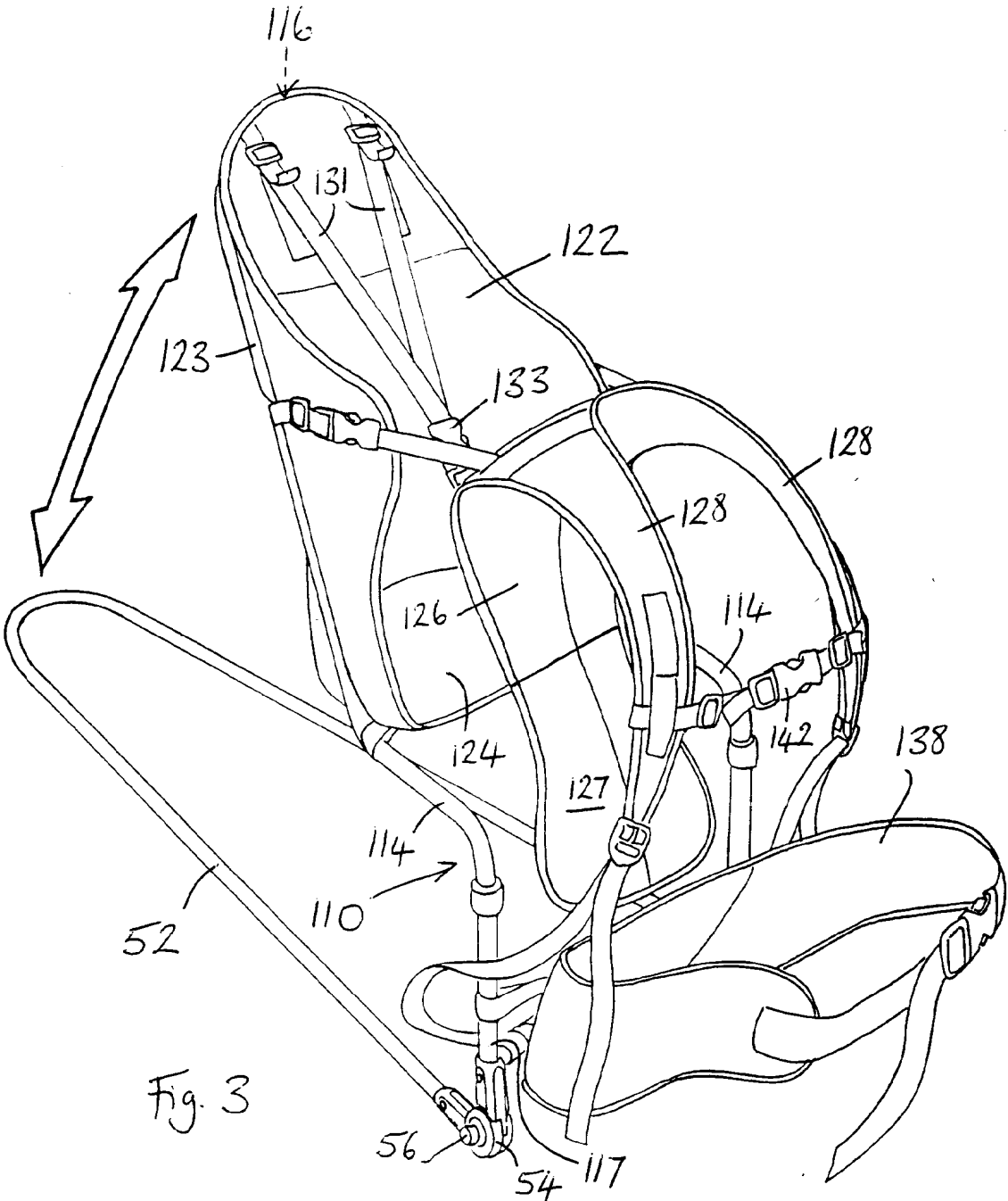


Fig. 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 30 0065

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.6)
X	EP-A-0 509 107 (INTERNATIONAL DESIGN/MANUFACTURING INC.)	1,10,11	A47D13/02
Y	* column 4, line 45 - column 7, line 45; figures 4-6 *	2	
A	---	7,9,12	
Y	FR-A-2 321 251 (SALINO)	2	
A	* page 1, line 36 - page 2, line 30; figures 1-3 *	12	
A	FR-A-2 571 238 (CLERC) * figures 1-3 *	10,11	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A47D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 3 April 1995	Examiner Mysliwetz, W
CATEGORY OF CITED DOCUMENTS		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	
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			

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19 BUNDESREPUBLIK
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12 **Gebrauchsmusterschrift**
10 **DE 299 12 951 U 1**

51 Int. Cl.7:
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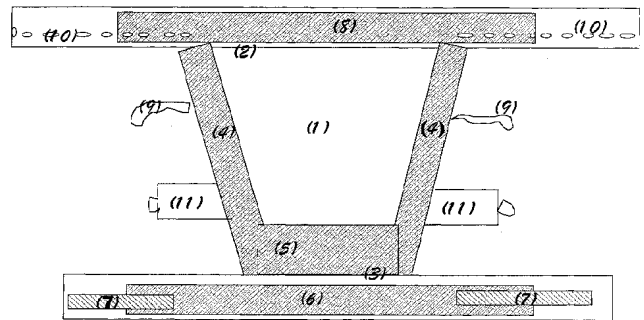
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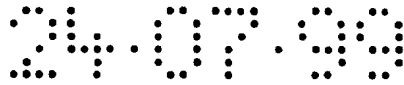
73 Inhaber:
Linssen, Jutta, 87752 Holzgünz, DE

54 **Baby- und Kindertragesystem**

57 Ein Tragesystem für Kinder mit einem Schultergurt und einem Hauptteil zum Tragen eines Kindes durch einen Träger dadurch gekennzeichnet, daß das System erste Mittel besitzt, die die Verwendung des Tragesystems für Kinder ab der 2. Lebenswoche bis einschließlich zum 3. Lebensjahr, ohne starre Teile ermöglichen. Durch zweite Mittel besitzt, die unterschiedliche Tragepositionen sowohl für das Kind, als auch für den Träger möglichen.



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Beschreibung

Baby- und Kindertragesystem

Auf dem Markt befinden sich Tragehilfen für Babys und Kinder, sowie z.B. bekannt aus CA 1332928 C, CA 89-604381 890629. Diese Tragehilfen sind jedoch nur für eine relativ kurze Zeit der Entwicklungsperiode eines Kindes geeignet. Meistens beträgt der Zeitraum 6 Monate bis maximal 1 Jahr. Desweiteren ist eine, maximal zwei Tragepositionen möglich.

Der im Schutzanspruch angegebenen Entwicklung liegt das Problem zugrunde, eine Tragehilfe für Kinder zu entwickeln, die ab der zweiten Lebenswoche bishin zum etwa dritten Lebensjahr Verwendung finden kann. Darüber hinaus sollten mehrere Tragepositionen und Trageweisen sowie eine hervorragende Anpassung an den Tragenden möglich sein. Dieses Problem wird vom Kennzeichen des ersten Schutzanspruches gelöst.

Vorteil: Es können sowohl Babys als auch Kinder bis zum 3. Lebensjahr in verschiedenen Sitzpositionen und Trageweisen getragen werden.

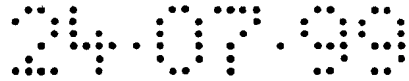
Figur(en): Kurzbeschreibung Figur

Die Baby- und Kindertrage besteht aus einem Haupteinsatz (1) aus weichem flexiblem Material, dessen Oberkante (2) breiter ist als die untere Kante (3). Der Einsatz hat eine Innenpolsterung (4), die an den schrägen Außenkanten verläuft. Am unteren, schmalen Teil des Einsatzes befindet sich eine zusätzliche Innenpolsterung (5) zwischen den Außenkanten, die eine zusätzliche Rückenstütze gewährleistet. Ein weicher, flexibler Hüftgurt (6), der beidseitig nach außen verläuft, ist an der Unterkante des Haupteinsatzes befestigt. Der Hüftgurt ist gepolstert und mit einem großzügigen Klettverschluß (7) versehen, der einen sicheren und individuell flexibel anpassbaren Verschluß ermöglicht. An der Oberkante des Haupteinsatzes schließen sich zwei weich gepolsterte Schultergurte(8) an, die über Kreuz gelegt auf der jeweils gegenüber liegenden Seite mit Hilfe eines Metallkarabiners (9) am Haupteinsatz befestigt wird. Durch die Vielzahl von Einhängösen (10) am Schultergurt ist eine variable Größenanpassung sowohl für Männer als auch Frauen möglich. Das Baby bzw. Kind kann in mehreren Tragepositionen, Blick nach vorne, Blick zum Tragenden vor der Brust und auf dem Rücken getragen werden. Die Verkleinerungsglaschen (11) beidseits am Haupteinsatz, ermöglichen das sichere Tragen von Kindern unter 4 Monaten.

Vorteil: Es können sowohl Babys als auch Kinder bis zum 3. Lebensjahr getragen werden.

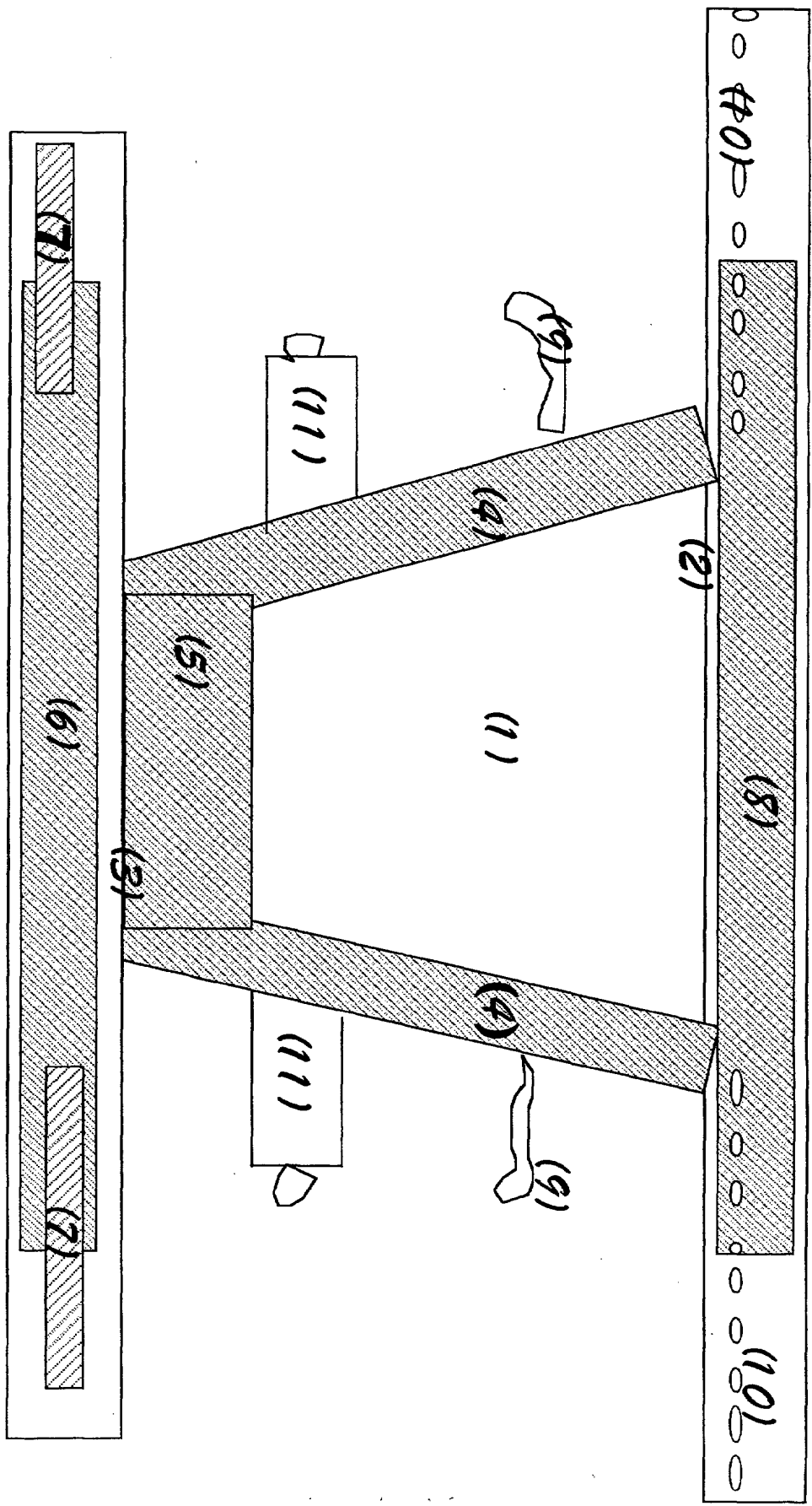
 **Klettband**

 **Polsterung**



Schutzansprüche

1. Ein Tragesystem für Kinder mit einem Schultergurt und einem Hauptteil zum Tragen eines Kindes durch einen Träger dadurch gekennzeichnet, daß das System erste Mittel besitzt, die die Verwendung des Tragesystems für Kinder ab der 2. Lebenswoche bis einschließlich zum 3. Lebensjahr, ohne starre Teile ermöglichen. Durch zweite Mittel besitzt, die unterschiedliche Tragepositionen sowohl für das Kind, als auch für den Träger ermöglichen.
2. Tragesystem nach Anspruch 1 dadurch gekennzeichnet, daß die ersten Mittel, der Schultergurt, einen Verstellbereich von etwa 90 cm ermöglichen, und somit sowohl eine Frontrageposition als auch eine Rückentrageposition jeweils in optimaler Größenanpassung an das zu tragende Kind erfolgen kann.
3. Tragesystem nach Anspruch 1 dadurch gekennzeichnet, daß das Hauptteil eine eingearbeitete, gepolsterte Rückenstütze aufweist, und somit die Physiologie des Säuglings positiv unterstützt.
4. Tragesystem nach Anspruch 1 dadurch gekennzeichnet, daß die zweiten Mittel eine Anpassung des Hauptteils, gegen seitliches Herausrutschen, auf die entsprechende Größe des Kindes ermöglichen mittels Verkleinerungsglaschen, die seitlich mit Karabinern wahlweise in einer Vielzahl von Ösen der Schultergurte befestigt werden können.
5. Tragesystem nach Anspruch 1 dadurch gekennzeichnet, daß die mehrjährige Anwendung durch Metallkarabiner und Metallösen gewährleistet wird.



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①⑨ BUNDESREPUBLIK
DEUTSCHLAND



DEUTSCHES
PATENTAMT

①⑫ **Gebrauchsmuster**
①⑩ **DE 295 19 530 U 1**

⑥① Int. Cl.⁶:
A 47 D 13/02

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④⑦ Eintragungstag:	22. 2. 96
④③ Bekanntmachung im Patentblatt:	4. 4. 96

DE 295 19 530 U 1

⑦③ Inhaber:
Wagner, Petra, 50969 Köln, DE

⑥④ Babyrückentrage

DE 295 19 530 U 1

Babyrückentrage

Rückentragen üblicher Art bestehen aus Metallkonstruktionen die groß und sperrig sind und eine bestimmte Körpergröße des Trägers voraussetzen.

Auch Tragesäcke oder Tücher bedürfen einer komplizierten Handhabung.

Der im Schutzanspruch 1 angegebenen Erfindung liegt das Problem zugrunde eine Babyrückentrage zu entwickeln, die einerseits sehr leicht zu handhaben ist und andererseits extrem klein ist und daher gut geeignet ist, um ständig mitgeführt zu werden.

Dieses Problem wird mit der hier aufgeführten Rückentrage gelöst.

Mit der Erfindung wird erreicht, daß die Rückentrage in zusammengelegtem Zustand so klein ist, daß sie in jeder Jackentasche mitzuführen ist und bei Bedarf überall ganz einfach und sehr schnell angezogen werden kann.

Im folgenden wird in Bezugnahme auf die Zeichnungen ein Ausführungsbeispiel näher erläutert.

Figur 1 zeigt die Babyrückentrage ausgebreitet auf einem Untergrund liegend. Die Haltebahn(1), bestehend aus zwei aufeinander genähten Stoffstücken, hat eine konische Form, so daß der obere Rand um ca. 20% breiter ist als der untere Rand. Weiterhin zeichnet sich die Haltebahn(1) durch zwei Beinausnehmungen(4) aus, die von den unteren Ansatzstellen der Schultergurte(2) bis zu den Ansatzstellen der Bauchgurte(3) gehen. Diese dienen der Bequemlichkeit des Kindes.

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Die Schultergurte(2) sind jeweils an beiden Enden fest mit der Haltebahn(1) vernäht. Um ein hohes Maß an Bequemlichkeit für den Träger zu erreichen sind diese von innen abgepolstert. Die Bauchgurte(3) sind mit einem Ende an der Haltebahn(1) befestigt. Die Babyrückentrage besteht ausschließlich aus Stoff.

Figur 2 zeigt das Anlegen der Babyrückentrage. Man legt sie ausgebreitet auf z.B. einen Tisch, setzt das Kind darauf und stellt sich selbst mit dem Rücken davor. Dann zieht man die Schultergurte(2) wie bei einem Rucksack über die Schultern. Die Bauchgurte(3) werden unter den Beinen des Kindes hindurch nach vorne geführt und auf der Taille des Trägers miteinander verknotet. Kleinere Kinder schauen nur mit dem Kopf oben heraus, größere Kinder auch mit den Armen.

Figur 3 zeigt die Babyrückentrage in angelegtem Zustand.

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Schutzansprüche

1. Babyrückentrage zum Transport von Babies und Kleinkindern,

dadurch gekennzeichnet,

daß zwei Schultergurte(2) und zwei Bauchgurte(3) an
einer kindkörpergerecht zugeschnittenen Haltebahn(1)
befestigt sind.

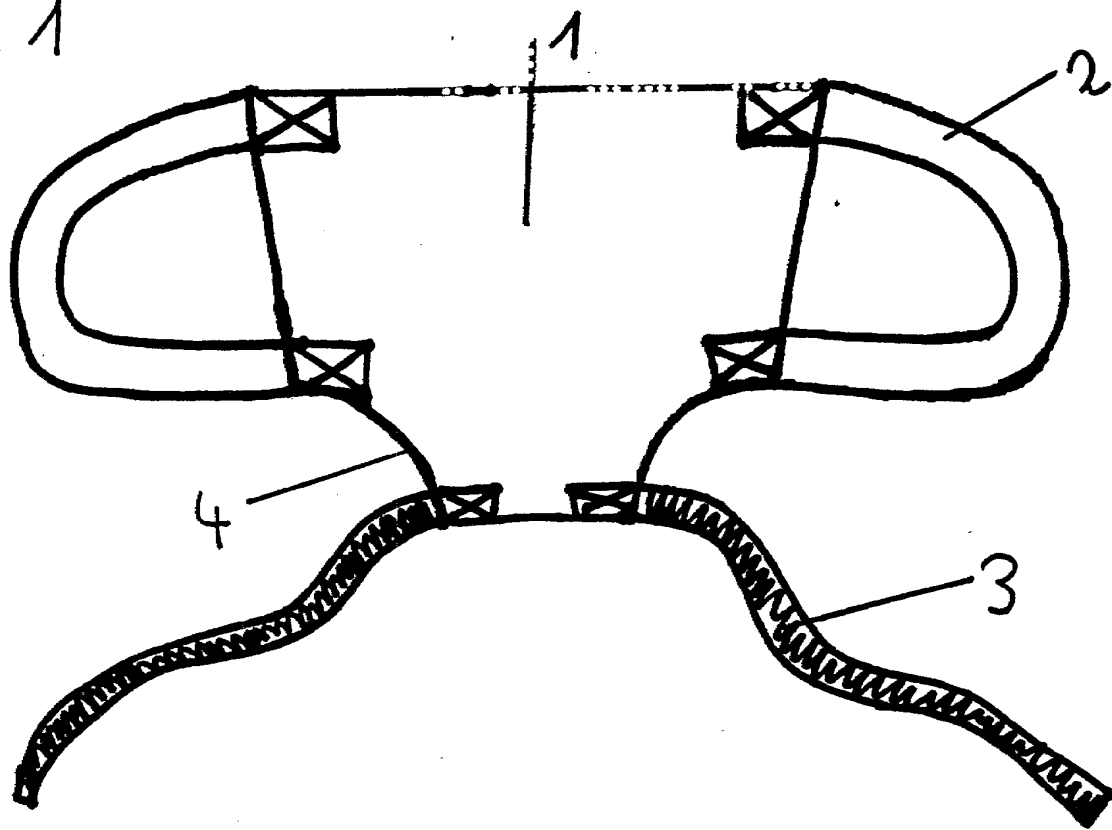
2. Babyrückentrage nach Schutzanspruch 1

dadurch gekennzeichnet,

daß über den Ansatzstellen der Bauchgurte(3) Bein-
ausnehmungen an der Haltebahn(1) vorgesehen sind.

295195 30

Fig. 1



295195 30

Fig. 2

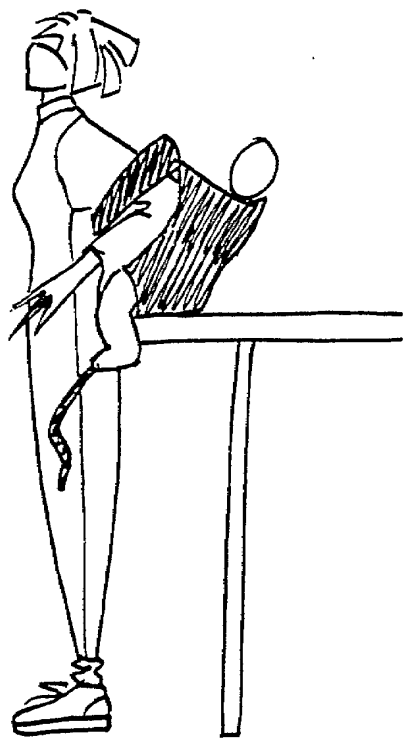
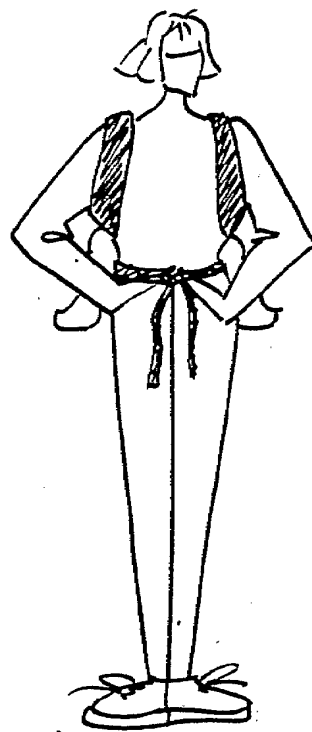


Fig. 3



(19)



(11)

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(54) **BABY CARRIER**

SÄUGLINGSTRAGEVORRICHTUNG

PORTE-BEBE

(84) Designated Contracting States:
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Description

Cross-Reference To Related Applications

[0001] This application claims priority to and the benefit of co-pending U.S. provisional patent application. Serial No. 60/501,396, filed September 10, 2003. This application also claims priority to and the benefit of co-pending U.S. non-provisional patent application Serial No. 10/937,137 filed September 9, 2004.

Background of the Invention

[0002] This invention relates to a lightweight child carrier that can be worn by an adult with the child being positioned either in front of the wearer or behind the wearer.

[0003] There are currently any number of wearable child carriers on the market which afford the wearer freedom of hand and arm movement while transporting a child that is secured in the carrier. Known is a baby carrier having a pad of the present invention comprises a carrier body including at least a back rest and capable of accommodating and holding a baby in both a face-to-face holding manner in which the baby is held such that the back rest is brought into contact with a back of the baby and a forward-facing holding manner in which the baby is held such that the back rest is brought into contact with chest and abdomen of the baby; and shoulder belts mounted to the carrier body and carried on left and right shoulders; wherein the baby carrier further comprises a pad, which can cover the back rest, mounted detachably in the carrier body, formed wider than a portion which corresponds to a crotch rest portion of the back rest of the carrier body when the carrier body is used in the forward-facing holding. With this structure, it is possible to safely and comfortably hold the baby in any of the face-to-face and forward-facing directions, and to carry the baby laterally and piggyback (US 6,415,969).

Also known is an apparatus for carrying a car seat such as an infant car seat, child car seat, or a child booster seat is disclosed. The apparatus includes a carrier body and at least one system of harnesses for attaching to the car seat, and for securing the apparatus on a person's back, chest, or side, leaving the person's hands free. The system of harnesses may include an upper harness system, a middle harness system, a lower harness system, a shoulder harness system, and a hip harness system. The apparatus permits a person to carry the car seat together with a child secured in the care seat (US 2003/0106916 A1).

Finally known is infant carrier having infant supporting pouch and a harness permitting the carrier to be worn by an adult. The harness comprises adjustable shoulder straps and an adjustable girth strap. The shoulder straps are secured at upper left and right corner to said pouch and extending diagonally down and across said pouch to a location in the right and left end of the lower edge of

said pouch. Said girth strap is independently slidable within a sleeve formed along said lower edge of the pouch and has cooperating coupling means operable to couple opposite end portions of said girth strap. This arrangement of said shoulder straps and said girth strap enable to carrying pouch to be switched from a position of frontal support to a position of side support while the harness is on a wearer and while the child remains in the pouch. The carrier may also be used to carry an infant on the back of the wearer (US 4,986,458).

In pursuit of child safety, some of these devices have become overly complex involving, among other things, rigid seats and frames which considerably increase the weight of the carrier and cannot accommodate for the growth of the child. These complex carriers also are relatively heavy and place an undue strain upon the wearer, particularly in the lumbar region. In addition, because of the size of many of the present day carriers, they can only be worn on the back thus denying the child the comfort and security of a front carrier position where a child and its mother are in a face-to-face relationship. On the other hand, many simple carriers can be so poorly constructed that they can pose a danger to the wearer as the child being transported.

Summary of the Invention

[0004] It is therefore an object of the present invention to improve child carriers that are worn by adults in such a manner, that most of the child's weight is transmitted directly through the waist band to the wearer's hips and thighs.

[0005] A still further object of the present invention is to provide a lightweight child carrier that can be worn on the front or the back of the wearer without the need for significant changes or modifications of the carrier's configuration.

[0006] Another object of the present invention is to provide a lightweight child carrier that can be worn in comfort by a woman while pregnant with a second child during the course of her pregnancy.

[0007] Yet another object of the present invention is to provide a child carrier that is lightweight yet safe for a child that is seated in the carrier.

[0008] These and other objects of the present invention are attained by a child carrier that is worn by an adult to transport a child in a hands and arms free manner. The carrier includes a generally rectangular-shaped main panel. The bottom edge of the main panel is joined to the top edge of a padded waist band, and the bottom edge of a rectangular head restraining panel is joined to the top edge of the main panel. A pair of shoulder straps are secured to the main panel with each forming a loop along the side edges of the panel. A chest strap is slidably retained upon each of the shoulder straps, so that the chest strap can be adjusted along the length of the shoulder straps. A pair of restraining straps are secured at one end to the upper corners of the head restraining panel

and the opposite end of each restraining strap is adjustably connected to the chest strap. The waist band includes a buckle having a female member and a male member that is removably retained within the female member. An auxiliary strap is also provided that contains a male member located at one end of the strap that mates with the female member of the waist band and a female member at the opposite end of the strap that similarly mates with the male member of the waist band to considerably expand the waist band.

Brief Description of the Drawings

[0009] For a better understanding of these and other objects of the invention, reference will be made to the following detailed description of the invention which is to be read in association with the accompanying drawings, wherein:

[0010] Figure 1 is a perspective view illustrating the carrier embodying the teachings of the invention being mounted upon the back of a wearer with a child seated in the carrier;

[0011] Figure 2 is a perspective view illustrating the carrier mounted in front of the wearer with a child seated in the carrier;

[0012] Figure 3 is an enlarged front view of the carrier;

[0013] Figure 4 is an enlarged rear view of the carrier;

[0014] Figure 5 is a front perspective view showing the chest strap and shoulder strap arrangements when a child is seated in the carrier mounted upon the back of the wearer;

[0015] Figure 6 is a rear perspective view showing a child seated in the carrier mounted on the back of a wearer and further illustrating the child's head being supported in the head restraint of the carrier;

[0016] Figure 7 is a plan view of a belly pad that may be utilized with the carrier shown in Figures 1-6;

[0017] Figure 8 is a perspective view of a hood extension that may be utilized with the carrier shown in Figures 1-6; and

[0018] Figure 9 is a different perspective view of the hood extension shown in Figure 8.

Description of the Invention

[0019] Turning initially to Figures 1 and 2, there is illustrated two modes of mounting a child carrier, generally referenced 10, upon the torso of an adult 12. The carrier shown in Figure 1 is mounted upon the wearer so that a child 13 that is seated in the carrier is located behind the wearer in a forward facing position facing with regard to the wearer. As will become apparent from the disclosure below, the mode of carry can be easily and simply accomplished by reversing the location of the shoulder straps upon the wearer's torso. This second mode of carry is illustrated in Figure 2, wherein the child seated in the carrier is located in front of the wearer in face to face contiguous relation with the wearer.

[0020] The present carrier, unlike some of the more complex devices, is not only simple in construction and lightweight, but can be reversed in the mode of carry from front to back or vice versa without any major readjustment of the harness. In fact, the reversal of position can be easily and safely made while a child is seated in the body pouch of the carrier. The carrier has no rigid structures such as plastic seats or metal frames that might impede the reversal operation.

[0021] Turning now to Figures 3 and 4, the carrier includes a waist band 20 having a wide padded section 21 that encircles the hips of the wearer when the carrier is in either a front or a rear carry position. The waist band 20 is designed to take a good deal of strain away from the wearer's lumbar region, particularly when the carrier is worn in a front carry position. The two ends of the padded section are joined by a strap 55 containing a releasable buckle 19 as best shown in Figure 5. The carrier further includes a main panel 23 that is somewhat rectangular-shaped and is fabricated from a high strength, yet flaccid, material that can easily conform to the contour of a child's body when seated in the device. Canvas and many nylon and other high strength synthetic fabrics may be used for this purpose.

[0022] The main panel includes a bottom edge 24 that is stitched securely into the top section of the waist band 20 so that band 20 and the main panel 23 share a common vertical axis 25 of the carrier. As will be appreciated from the following description of a preferred embodiment of the invention, the baby carrier essentially possesses bi-lateral symmetry about the vertical axis 25. The main panel 23 further includes two opposed side edges 26 and 27 along with a top edge 29. The main panel 23, when sewn into the waist band 20, provides a good deal of material over the band 20 so that a generous sling is formed in which a child can be comfortably and safely seated. The sling provides ample support for the child's buttocks as well as for the back of the child's legs.

[0023] A rectangular-shaped head restraining panel 30 is sewn into the top edge 29 of the main panel 23. The head restraining panel 30 shares the common vertical axis 25 with the main panel 24 and can be fabricated from the same material as the main panel, although other lightweight, high strength materials may be used. The head restraining panel 30 thus forms a continuation of the main panel 23 so that the panels 23, 30 will cover the entire length of the head and torso of a child that is seated in the carrier. The restraining panel 30 may help support the child's head while the child is sleeping and also may be used to screen or shelter the child's head from sun, rain, or snow.

[0024] A pair of shoulder straps 34 and 35, are connected to each side of the main panel 23. Each shoulder strap 34, 35 includes a padded section 40 that is attached at one end 41 to a belt section 42. The other end of each padded section is securely sewn 43 into the main panel 23 at the two upper corners of the panel. The belt section 42 of each shoulder strap 34, 35 is looped around and

is sewn into the main panel 23 at 44 below the padded end of the associated shoulder strap. Adjusting buckles 45 are operatively connected to each belt section 42 by which the length of the shoulder straps 34, 35 can be altered.

[0025] As best seen in Figure 4, a chest strap 47 is looped at each end around each of the shoulder straps 34, 35 so that the chest strap 47 can slide up or down along the length of the shoulder straps 34, 35. The chest strap contains an adjustable buckle 48 that permits the chest strap to be opened to facilitate entering and exiting the carrier harness. One end of the buckle 48 contains an adjustable coupling 49 by which the length of the chest strap 47 can be adjusted to pull the shoulder straps 34, 35 inwardly to best suit the wearer's torso. As can be seen, the chest strap 47 can be adjusted both vertically and horizontally to attain for the wearer the most comfortable position for the harness. An adjusting buckle 45 is also mounted upon the belt section 42 of each shoulder strap 34, 35 to provide for further adjustment of the shoulder straps. The chest strap 47 of the harness contains a pair of spaced apart rings 51-51 located on either side of the buckle 48. Restraining straps 52-52 are joined to the upper two corners of the head restraining panel 30 and are looped through each of the rings 51 as illustrated in Figure 4. A Velcro fastener is sewn into the free end of each restraining strap 52 that includes a hook pad 53 and a loop pad 54 that are aligned in series along the back of each strap 52. Instead of a Velcro fastener, the straps 52 may include a series of snap fit connectors secured to bias tape, whereby the effective length of each strap 52 may be adjusted. Each pad has sufficient length so that the head restraining panel 30 can be snugly positioned around the child's head when the child is seated in the carrier.

[0026] The padded section 21 of the waist band 20 is joined at each end by a belt section 55 containing a bayonet type buckle having a male member 56 and a female member 57 that can be mated to releasably join the two ends of the belt 55 together. Limited adjustment of the belt length is provided by an adjusting loop 59 that forms a part of one of the buckle members. An auxiliary belt 60 is provided with the carrier which has a male member 62 at one end and a female member 63 at the other end of the belt. The male member 62 of the auxiliary belt can be mated with the female member 57 of the waist band, while the female member 63 can be mated with the male member 56 of the waist band, thus providing the waist band with considerably greater length. This feature permits a pregnant woman to use the carrier longer into her pregnancy when compared to other carriers. The waist band 20 is normally adjustable to a length of between sixty-nine to one hundred and fourteen cm, and the auxiliary belt 60 effectively extends the length of waist band 20 preferably by another twenty cm.

[0027] A pouch 70 with one or more pocket sections is mounted on the back of the main panel 23. The two side edges 71 and 72, as well as the bottom edge 73, of

the pouch 70 are sewn into the main panel 23 while the top edge 75 remains open. An elastic band is sewn into the top edge of the pouch 70 which restricts the size of the opening to more securely retain articles stored in the pouch 70 preferably soft items, such as diapers, hats, wipes, and extra clothing. The pouch 70 is centered upon the vertical axis 25 of the carrier below the head restraining panel 30. Accordingly, the head restraining panel 30 can be conveniently stored within the pouch 70 when not in use.

[0028] A second, smaller pouch 77 with one or more pocket sections is sewn into the waist band 20 in which such items as currency, credit cards, sunglasses, a cell phone, writing implements, a wallet, a checkbook, and keys can be stored. The second pouch 77 may be selectively opened and closed with snap fit connectors, a zipper, hook and loop fasteners, buttons, or other mechanisms.

[0029] The carrier may also include a belly pad 80 as shown in Figure 7. The pad 80 preferably possesses a generally flat, rectangular configuration and an exterior sheath fashioned of the same fabric as the carrier and contains an interior foam or other resilient material substantially throughout its width and length. The belly pad 80 preferably includes a pair of longitudinally spaced, elastic bands 82, 84 extending laterally across, and sewn or otherwise secured to, the exterior fabric. Each band 82, 84 forms a shallow opening or loop with the adjacent fabric such that the male member 56 of the buckle on the belt section 55 may snugly pass therethrough. It will be appreciated that the belly pad is preferably positioned between the belt section 55 (and its associated bayonet type buckle having a male member 56 and a female member 57) and the stomach or abdomen of the wearer. As such, the belly pad 80 provides better dispersion of the forces acting upon the belt section 55 and more comfort to the wearer. When the belly pad 80 is so positioned, the longitudinal ends of the belly pad 80 are situated in a layer between the corresponding ends of the waist band 20 and the wearer. It should also be appreciated that one of the bands 84 is preferably disposed adjacent to the adjustment portion of the male member 56 when the members 56, 57 are connected so that if the male member 56 and the female member 57 become inadvertently disconnected, the band 84 will inhibit the members 56, 57 from being further separated. Thus, the band 84 enhances the safety of the carrier.

[0030] the carrier may further include a hood extension 90, shown in Figures 8 and 9, for cradling and restraining the head of a relatively large child whose head extends beyond the head restraining panel 30. The hood extension 90 includes a sheet 92 preferably fashioned of the same fabric as the head restraining panel 30 and possessing the configuration of an isosceles triangle. A looped string or cord 94 is attached to the apex of sheet 92. The hood extension 90 may also include a pair of strap extensions 96 having a D-ring 98 secured to one end thereof and an affixed hook pad adapted to cooper-

ate with an affixed loop pad as components of a Velcro fastener. The inner and outer surfaces along each lateral edge near the base edge of the triangular sheet 92 also possess a hook pad and a loop pad component of a Velcro fastener.

[0031] The hood extension 90 is assembled onto the carrier preferably as follows. The free end of each restraining strap 52 is inserted through the D-ring 98 of an associated strap extension 96, and then the free end of each strap extension 96 is inserted through an associated ring 51 on the chest strap 47. Each strap extension 96 is then folded back upon itself so that the hook pad and the loop pad selectively, cooperatively fasten together whereby each strap extension 96 loops through an associated ring 51. Each lateral edge near the triangular base of the sheet 92 is then placed against the hook or loop pad of an associated restraining strap 52 and the free end of each restraining strap 52 is placed over the associated lateral edge such that the hook and loop pads of the restraining strap 52 selectively, cooperatively fasten to the hook and loop pads affixed to the lateral edges of the sheet 92. Thus, each lateral edge is sandwiched between the overlapping segments of an associated restraining strap 52, as best shown in Figure 9. A button 100 may then be sewn or secured to the carrier where the looped cord 94 overlaps the carrier, and the button 100 may then be selectively inserted through the looped cord 94 to secure the apex of the sheet 92 against the carrier such that the sheet 92 substantially abuttingly overlays the carrier, as best shown in Figure 8.

[0032] The baby carrier also may be used to carry infants by tucking or wrapping the infant in a blanket or quilt and placing the infant in the main panel 23 with the infant's legs together on one side, the head leaning to the other side, and the butt centered in the middle of the main panel 23. In such a carrying mode, the carrier acts more like a sling.

[0033] It will be appreciated that the child is secured in the baby carrier in a seated position, with most of the child's weight being dispersed through the hips and thighs, thereby substantially eliminating compression of the spine (and potentially hip dysphasia) that occurs when a child is hanging in the carrier by the crotch. When the child is seated in the child carrier, at least about seventy percent to ninety percent of the child's weight is transmitted directly through the waist band 20 to the wearer's hips, and not through the wearer's shoulders or upper spine, thereby promoting wearer comfort and diminishing wearer fatigue. The baby carrier also positions the child when the child is in front of the wearer so that the head and mouth of the child are conveniently aligned for nursing.

[0034] Preferably, the carrier is fashioned of a fabric material such as cotton canvas for exterior facing surfaces and brushed cotton twill for interior facing surfaces. Preferably the carrier is substantially deformable and machine washable and dryable and weighs less than about one or one and a half kg.

[0035] While this invention has been particularly shown and described with reference to the preferred embodiment in the drawings, it will be understood by one skilled in the art that various changes in its details may be effected therein without departing from the teachings of the invention.

Claims

1. A child carrier adapted to be worn by a human wearer including:

a main panel (23) possessing a top edge (29), a bottom edge (24), and two opposed side edges (26, 27);

a waist band (20) adapted to be worn about the waist of a wearer (12), and whereby said waist band (20) containing a buckle having a female member (57) and a male member (56) that is removably retained in the female member (57); first and second shoulder straps (34, 35), each shoulder strap being attached at an upper end to an upper corner of the main panel (23),

characterised in,

that said waist band (20) having a top edge that is stitched to the bottom edge (24) of the main panel (23) so that the main panel is substantially centered upon the waist band (20) and

that each shoulder strap being attached also at the lower end to the main panel (23) below the upper end of the shoulder strap (34, 35) so that each shoulder strap (34, 35) forms a loop along the side edges of the panel (23).

2. A child carrier according to claim 1,

characterised in,

that a chest strap (47) is slideably secured at each end to one of said shoulder straps (34, 35).

3. A child carrier according to claim 1,

characterised in,

that a head restraining panel (30) possessing a top edge, a bottom edge, and two opposed side edges, the bottom edge of the head restraining panel (30) is joined to the top edge (29) of the main panel (23) so that the head restraint panel (30) is substantially centered upon the main panel (23) and

that restraining straps (52) are secured to each upper corner of the head restraining panel (30), said restraining straps (52) are secured to said chest strap (47) by detachable connectors.

4. A child carrier according to claim 1,

characterised in,

that an auxiliary strap (60) having a female member (63) mounted upon one end thereof is connectable

to the male member (56) of said waist band (20) and a male member (62) mounted upon the other end thereof that is connectable to the female member (57) of the waist band (20) for extending the effective length of said waist band (20).

- 5
5. A child carrier of claim 1,
characterised in,
that the waist band (20) contains a heavily padded section (21) for encompassing the lumbar region of the wearer (12). 10
6. A child carrier of claim 1,
characterised in,
that said chest strap (47) contains a releasable buckle (48) mounted upon the chest strap (47) and a retaining ring (51) mounted on the chest strap (47) on either side of said buckle (48). 15
7. A child carrier of claim 3,
characterised in,
that the detachable connector on each of said restraining straps (52) includes a hook pad (53) and a loop pad (54) mounted in series upon one side of the strap whereby the strap can be looped through a retaining ring (51) of the chest strap (47) and the hook pad (53) secured to the loop pad (54). 20
8. A child carrier of claim 7,
characterised in,
that said chest strap (47) further includes an adjusting means for adjusting the length of the chest strap (47) whereby the chest strap (47) can be slideably brought to a desired position along the shoulder strap (34, 35) and then tightened to secure the chest strap (47) in said desired position. 25
9. A child carrier of claim 1,
characterised in,
that further includes a storage pouch (70) mounted upon the outside of the main panel (23) in which the head restraining panel (30) can be stored when not in use. 30
10. A child carrier of claim 9,
characterised in,
that said storage pouch (70) is substantially centered upon the main panel (23). 35
11. A child carrier of claim 9,
that further includes a second storage pouch (77) mounted upon the waist band (20). 40
12. A child carrier according to claim 1,
characterised in,
that said child carrier weighs less than about one kilogram (two pounds). 45

Patentansprüche

1. Kindertrage, die ausgelegt ist, um von einem menschlichen Träger getragen zu werden, umfasst:
eine Hauptstoffbahn (23), die eine Oberkante (29), eine Unterkante (24) und zwei gegenüberliegende Seitenkanten (26, 27) aufweist;
einen Hüftgurt (20), der für das Tragen um die Hüfte des Trägers (12) ausgelegt ist, und wobei der genannte Hüftgurt (20) eine Schnalle aufweist, die aus einer Buchse (57) und einem Steckelement (56) besteht, das lösbar in der Buchse (57) gehalten wird;
erste und zweite Schulterriemen (34, 35), wobei jeder Schulterriemen (34, 35) an einem oberen Ende an einer oberen Ecke der Hauptstoffbahn (23) angeordnet ist,
dadurch gekennzeichnet,
dass der genannte Hüftgurt (20) eine Oberkante aufweist, die mit der Unterkante (24) der Hauptstoffbahn (23) vernäht ist, so dass die Hauptstoffbahn im Wesentlichen auf dem Hüftgurt (20) mittig angeordnet ist und
dass jeder Schulterriemen auch an dem unteren Ende an der Hauptstoffbahn (23) unterhalb des oberen Endes des Schulterriemens (34, 35) angeordnet ist, so dass jeder Schulterriemen (34, 35) entlang der Seitenkanten der Stoffbahn (23) eine Schlaufe bildet.
2. Kindertrage nach Anspruch 1,
dadurch gekennzeichnet,
dass ein Brustriemen (47) an jedem Ende verschiebbar an einem der genannten Schulterriemen (34, 35) befestigt ist.
3. Kindertrage nach Anspruch 1,
dadurch gekennzeichnet,
dass eine Kopfstützstoffbahn (30) eine Oberkante, eine Unterkante und zwei gegenüberliegende Seitenkanten aufweist, wobei die Unterkante der Kopfstützstoffbahn (30) mit der Oberkante (29) der Hauptstoffbahn (23) zusammengefügt ist, so dass die Kopfstützstoffbahn (30) im Wesentlichen auf der Hauptstoffbahn (23) mittig angebracht ist und
dass Rückhalterriemen (52) an jeder oberen Ecke der Kopfstützstoffbahn (30) befestigt sind, wobei die Rückhalterriemen (52) am Brustriemen (47) durch abnehmbare Verbinder befestigt sind.
4. Kindertrage nach Anspruch 1,
dadurch gekennzeichnet,
dass ein Hilfsriemen (60), welcher eine Buchse (63), die an einem seiner Enden angebracht ist und mit dem Steckelement (56) des Hüftgurts (20) verbindbar ist, und ein Steckelement (62) aufweist, das an

seinem anderen Ende angebracht ist und mit der Buchse (57) des Hüftgurts (20) verbindbar ist zur Vergrößerung der effektiven Länge des genannten Hüftgurts (20).

- 5
5. Kindertrage nach Anspruch 1,
dadurch gekennzeichnet,
dass der Hüftgurt (20) einen stark gepolsterten Abschnitt (21) zum Umschließen des Lendenbereichs des Trägers (12) umfasst. 10
6. Kindertrage nach Anspruch 1,
dadurch gekennzeichnet,
dass der Brustriemen (47) eine lösbare Schnalle (48), welche am Brustriemen (47) angebracht ist, und einen Rückhaltering (51) umfasst, welcher auf dem Brustriemen (47) auf einer von beiden Seiten der Schnalle (48) angebracht ist. 15
7. Kindertrage nach Anspruch 3,
dadurch gekennzeichnet,
dass der abnehmbare Verbinder auf jedem der Rückhalterriemen (52) ein Hakenteil (53) und ein Ösenteil (54) umfasst, welche in Reihe auf einer Seite des Riemens angebracht sind, wobei der Riemen durch einen Rückhaltering (51) des Brustriemens (47) geschlungen werden kann und das Hakenteil (53) am Ösenteil (54) befestigt werden kann. 20
8. Kindertrage nach Anspruch 7,
dadurch gekennzeichnet,
dass der genannte Brustriemen (47) des Weiteren ein Anpassungsmittel zum Anpassen der Länge des Brustriemens (47) aufweist, wobei der Brustriemen (47) verschiebbar in eine gewünschte Position entlang des Schulterriemens (34, 35) gebracht und dann gespannt werden kann, um den Brustriemen (47) in der gewünschten Position fest zu ziehen. 25
9. Kindertrage nach Anspruch 1,
dadurch gekennzeichnet,
dass diese des Weiteren eine Aufbewahrungstasche (70) umfasst, die auf der Außenseite der Hauptstoffbahn (23) angebracht ist, in welcher die Kopfstützstoffbahn (30) aufbewahrt werden kann, wenn sie nicht gebraucht wird. 30
10. Kindertrage nach Anspruch 9,
dadurch gekennzeichnet,
dass die Aufbewahrungstasche (70) im Wesentlichen mittig auf der Hauptstoffbahn (23) sitzt. 35
11. Kindertrage nach Anspruch 9,
die des Weiteren eine zweite Aufbewahrungstasche (77) umfasst, die auf dem Hüftgurt (20) angebracht ist. 40
12. Kindertrage nach Anspruch 1, 45

dadurch gekennzeichnet,
dass die genannte Kindertrage weniger als ungefähr ein Kilogramm (zwei Pfund) wiegt.

Revendications

1. Porte-bébé adapté pour être porté par un porteur humain, comprenant :

- un panneau principal (23) possédant un bord supérieur (29), un bord inférieur (24) et deux bords latéraux opposés (26, 27) ;
- une ceinture (20) adaptée pour être portée autour de la taille d'un porteur (12), et ladite ceinture (20) comportant une boucle avec un élément femelle (57) et un élément mâle (56) retenu de façon amovible dans l'élément femelle (57) ;
- une première et une deuxième sangle d'épaule (34, 35), chaque sangle d'épaule étant attachée par une extrémité supérieure à un coin supérieur du panneau principal (23),

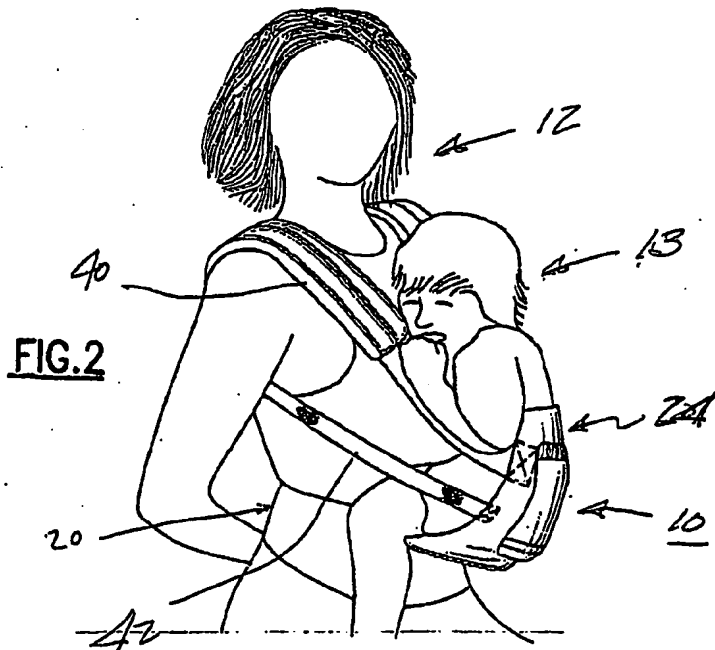
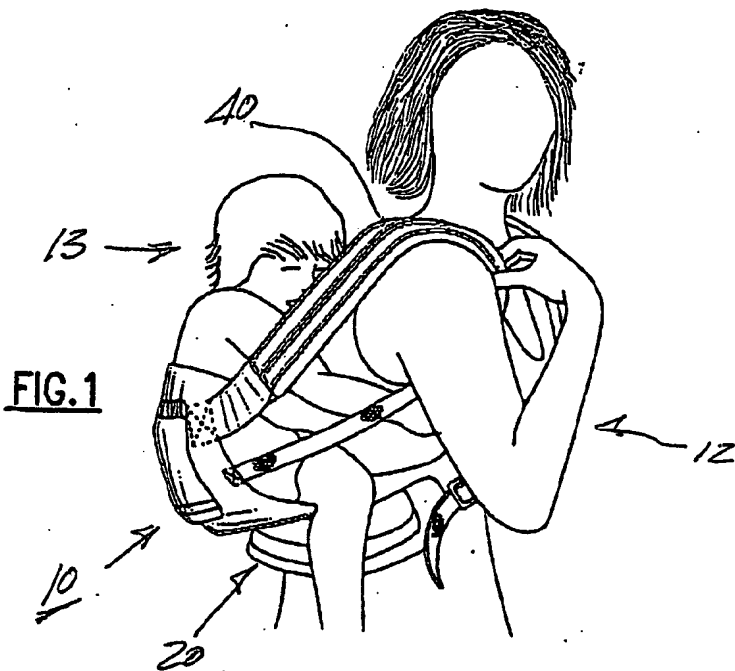
caractérisé en ce que

- ladite ceinture (20) possède un bord supérieur cousu au bord inférieur (24) du panneau principal (23), de manière à ce que le panneau principal soit substantiellement centré sur la ceinture (20), et
- chaque sangle d'épaule est également attachée par l'extrémité inférieure au panneau principal (23), en-dessous de l'extrémité supérieure de la sangle d'épaule (34, 35), de manière à ce que chaque sangle d'épaule (34, 35) forme une boucle le long des bords latéraux du panneau (23).

2. Porte-bébé selon la revendication 1,
caractérisé en ce que
une sangle de poitrine (47) est fixée de façon coulissante par chaque extrémité à l'une desdites sangles d'épaule (34, 35).

3. Porte-bébé selon la revendication 1,
caractérisé en ce que
- un panneau de retenue de tête (30) possède un bord supérieur, un bord inférieur et deux bords latéraux opposés, le bord inférieur du panneau de retenue de tête (30) étant relié au bord supérieur (29) du panneau principal (23), de manière à ce que le panneau de retenue de tête (30) soit substantiellement centré sur le panneau principal (23), et
 - des sangles de retenue (52) sont fixées à chaque coin supérieur du panneau de retenue de tête (30), lesdites sangles de retenue (52) étant

- fixées à ladite sangle de poitrine (47) par des attaches détachables.
4. Porte-bébé selon la revendication 1, **caractérisé en ce que** une sangle auxiliaire (60) possédant un élément femelle (63) monté à une extrémité de celle-ci peut être reliée à l'élément mâle (56) de ladite ceinture (20), et un élément mâle (62) monté à l'autre extrémité de celle-ci peut être relié à l'élément femelle (57) de la ceinture (20), pour rallonger la longueur effective de ladite ceinture (20). 5 10
5. Porte-bébé selon la revendication 1, **caractérisé en ce que** la ceinture (20) comprend une section rembourrée (21) pour entourer la région lombaire du porteur (12). 15
6. Porte-bébé selon la revendication 1, **caractérisé en ce que** ladite sangle de poitrine (47) comprend une boucle détachable (48) montée sur la sangle de poitrine (47), et un anneau de retenue (51) monté sur la sangle de poitrine (47), de chaque côté de ladite boucle (48). 20 25
7. Porte-bébé selon la revendication 3, **caractérisé en ce que** l'attache détachable sur chacune des sangles de retenue (52) comprend un coussin à crochet (53) et un coussin à boucle (54) montés en série d'un côté de la sangle, permettant ainsi de nouer la sangle à travers un anneau de retenue (51) de la sangle de poitrine (47), et de fixer le coussin à crochet (53) au coussin à boucle (54). 30 35
8. Porte-bébé selon la revendication 7, **caractérisé en ce que** ladite sangle de poitrine (47) comprend en outre un moyen de réglage pour régler la longueur de la sangle de poitrine (47), par lequel la sangle de poitrine (47) peut être ajustée de façon coulissante à la position souhaitée le long de la sangle d'épaule (34, 35), puis serrée pour fixer la sangle de poitrine (47) dans ladite position souhaitée. 40 45
9. Porte-bébé selon la revendication 1, **caractérisé en ce que** il comprend en outre une poche de rangement (70) montée du côté extérieur du panneau principal (23), permettant de ranger le panneau de retenue de tête (30) lorsqu'il n'est pas utilisé. 50
10. Porte-bébé selon la revendication 9, **caractérisé en ce que** ladite poche de rangement (70) est substantiellement centrée sur le panneau principal (23). 55
11. Porte-bébé selon la revendication 9, **caractérisé en ce que** il comprend en outre une deuxième poche de rangement (77) montée sur la ceinture (20).
12. Porte-bébé selon la revendication 1, **caractérisé en ce que** ledit porte-bébé pèse moins d'environ un kilogramme (deux livres).



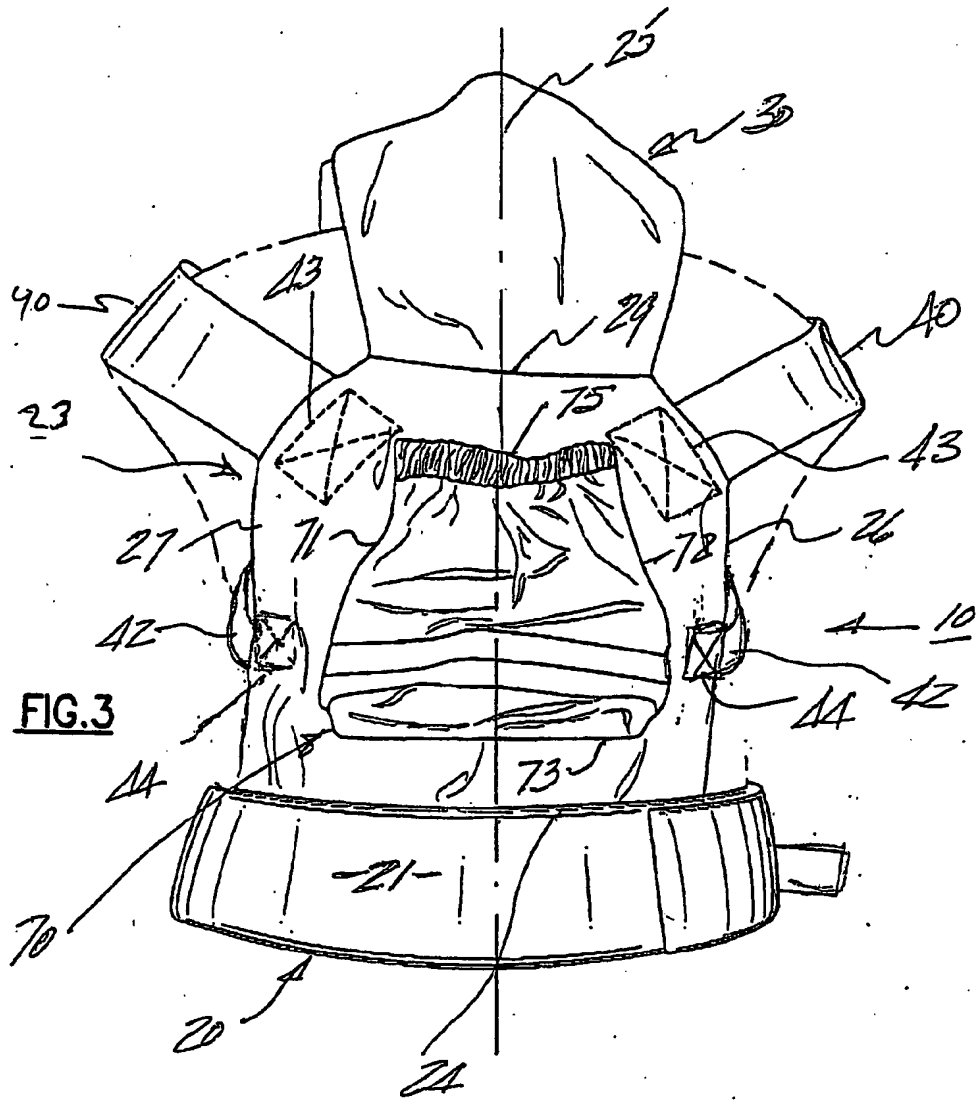
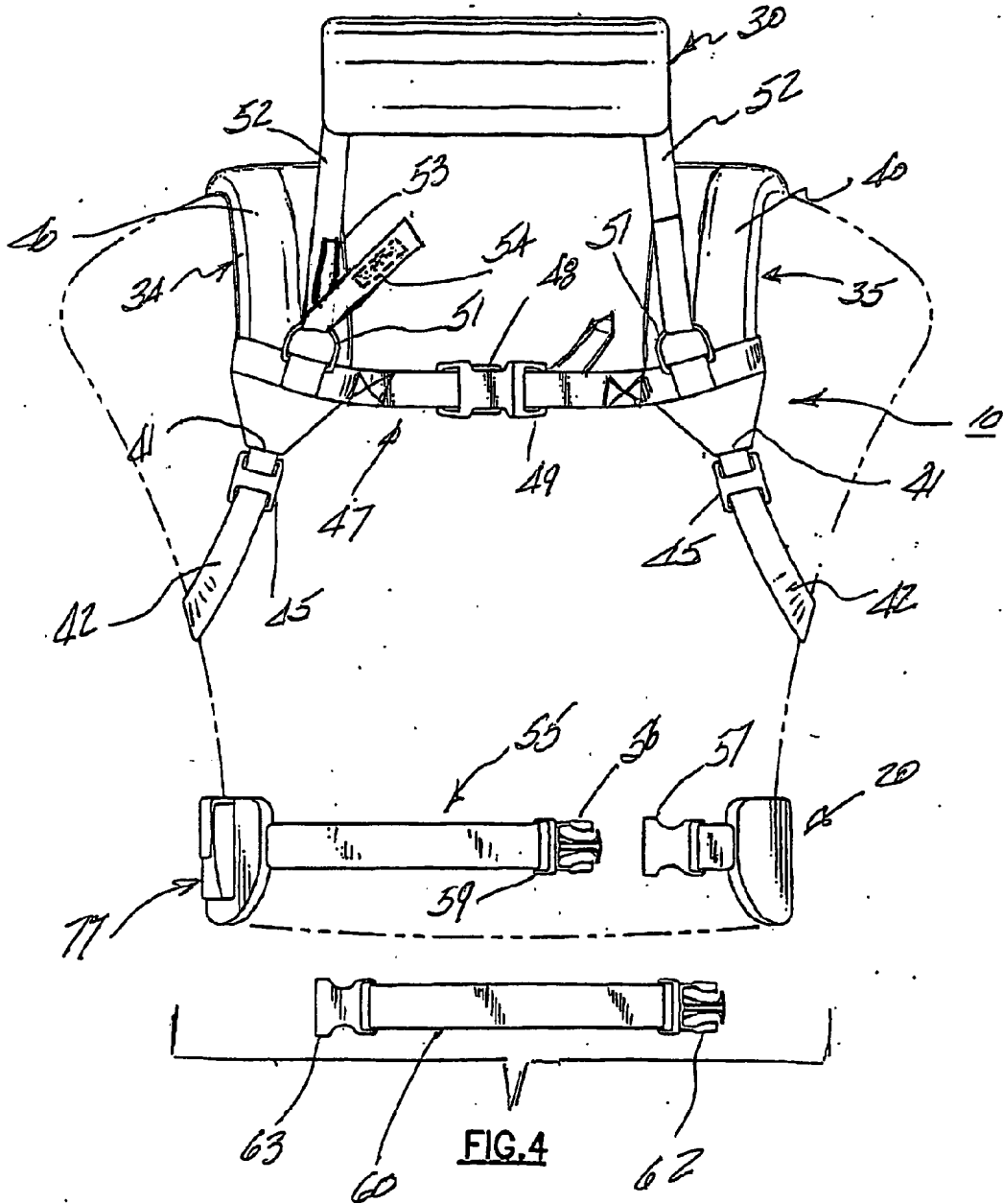
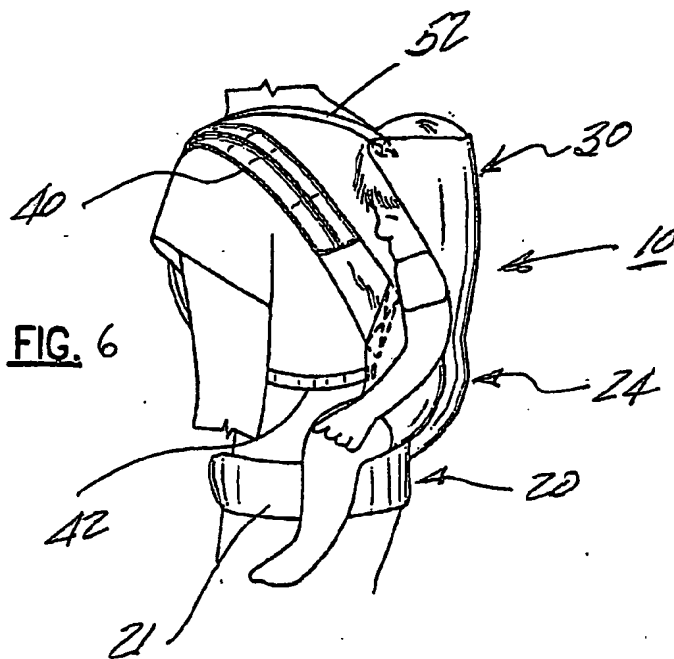
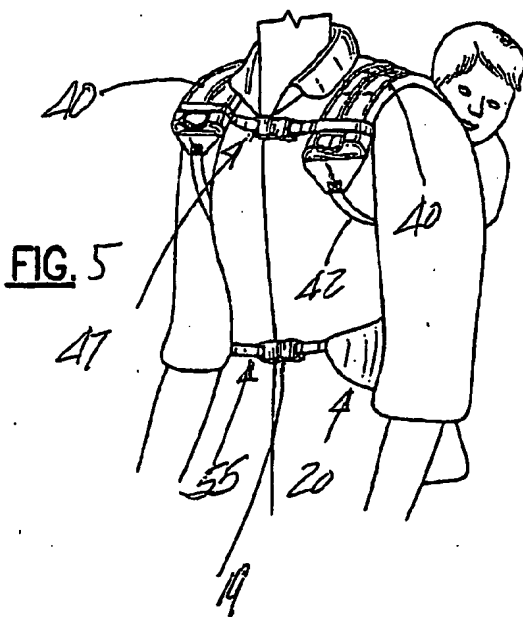


FIG.3





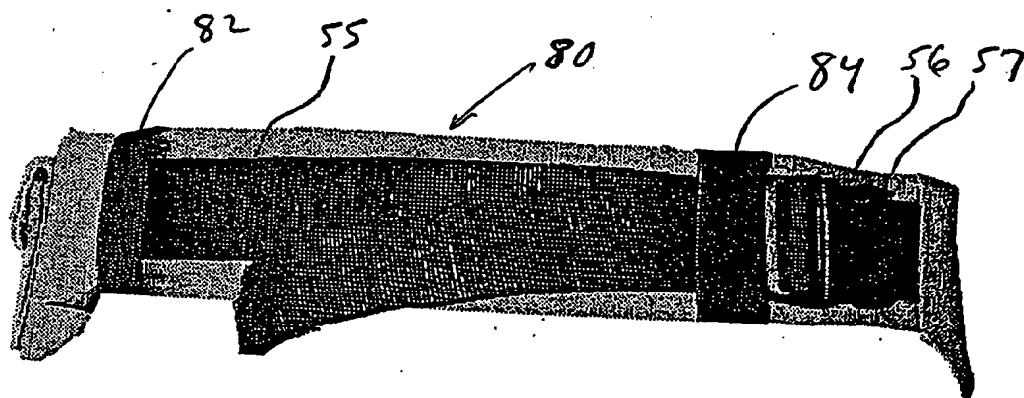


FIG-7

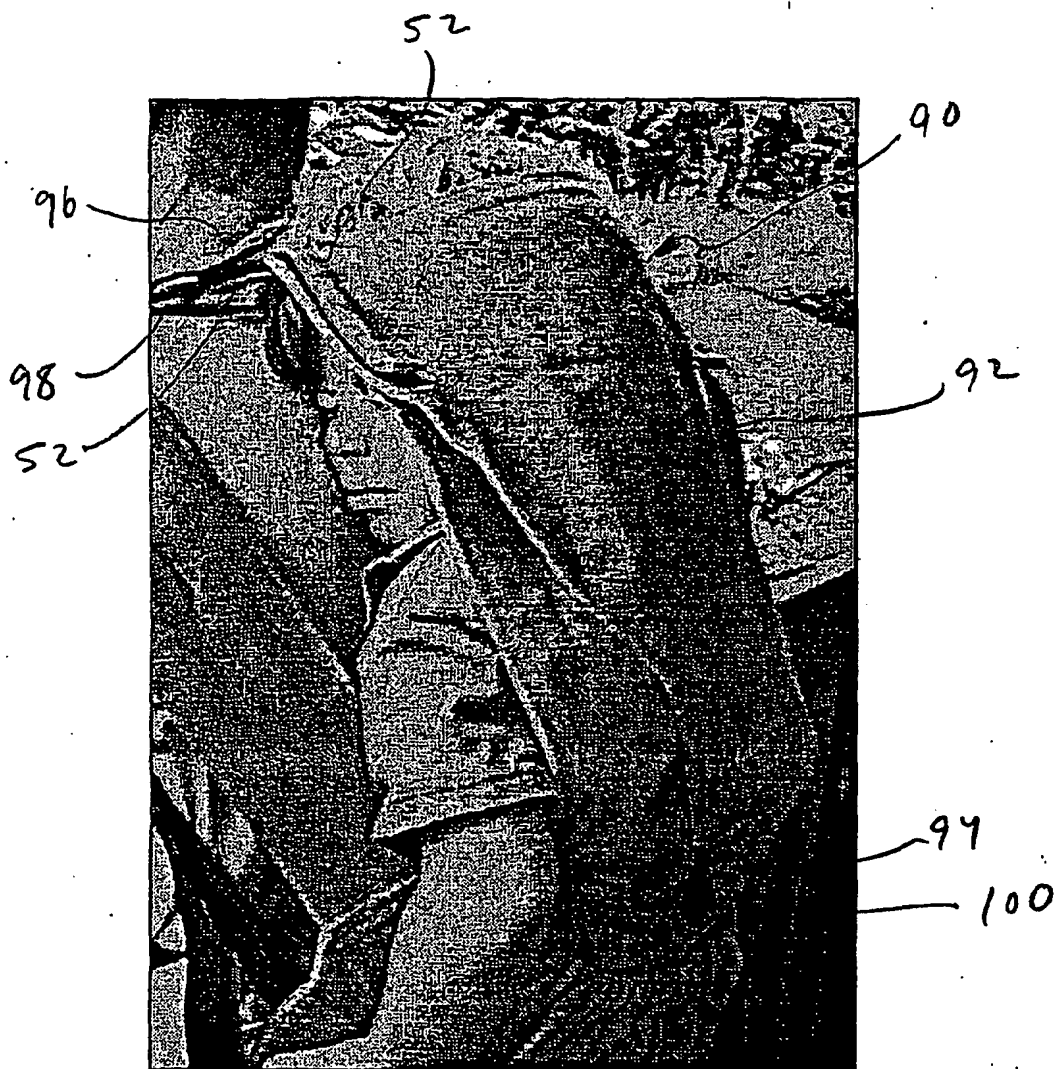


FIG. 8

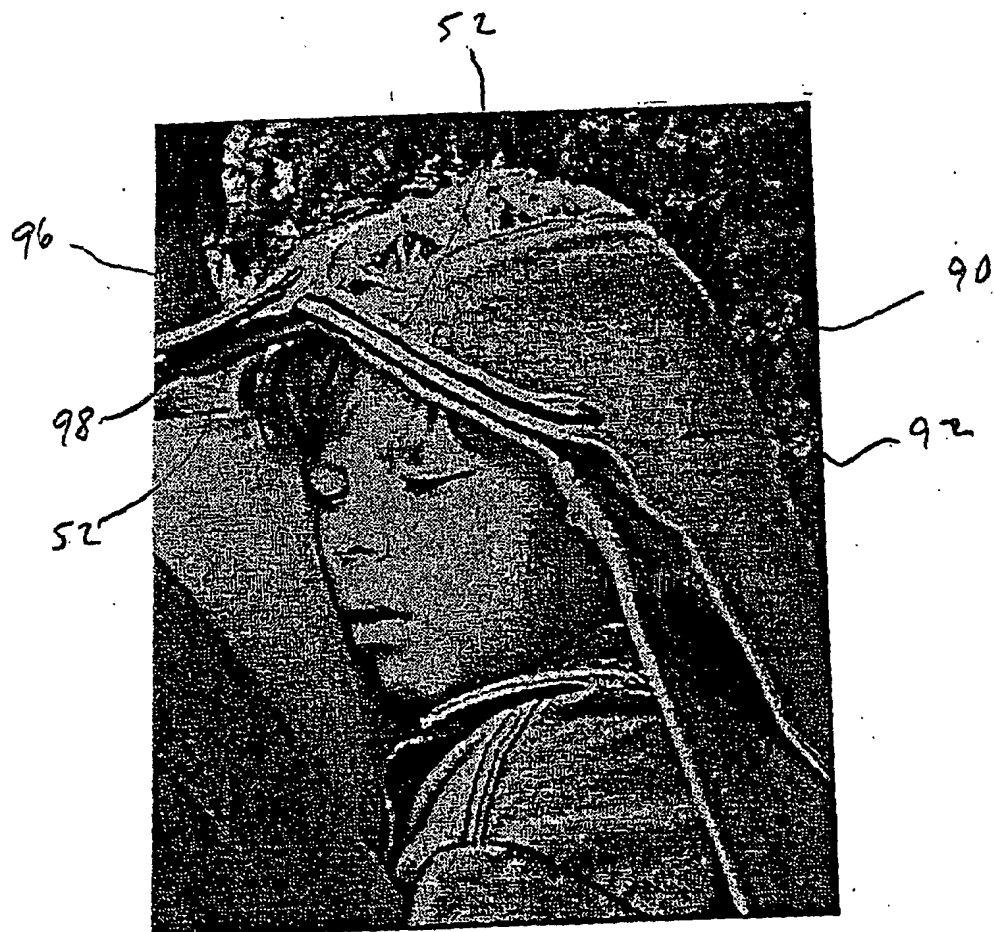


FIG. 9

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- US 50139603 P [0001]
- US 93713704 A [0001]
- US 6415969 B [0003]
- US 20030106916 A1 [0003]
- US 4986458 A [0003]

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/029614

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A47D13/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A47D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 415 969 B1 (HIGUCHI JUNICHI) 9 July 2002 (2002-07-09)	9-12, 15, 16
Y	column 4, lines 48-55	13, 14, 17-21
A	column 5, lines 23-45 column 6, lines 25-54 column 7, lines 28-39; claim 3; figures 5-7	1-8
Y	----- FR 2 806 279 A (TENNESSEE) 21 September 2001 (2001-09-21) pages 3,4; figures 1,3	13, 14, 19, 20
Y	----- US 2003/106916 A1 (BOONE BRIAN T) 12 June 2003 (2003-06-12) paragraph '0057!; figures	17-21
	----- -/--	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

11 February 2005

Date of mailing of the international search report

03/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Amghar, N

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/029614

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 662 292 A (TRUBEND MANUFACTURING LIMITED) 12 July 1995 (1995-07-12) column 5, last paragraph; figure 1 -----	17
A	US 2002/175194 A1 (NORMAN LISA C) 28 November 2002 (2002-11-28) abstract; figures 2,3,10,11 -----	1,9,13, 14,17, 19,20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/029614

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 6415969	B1	09-07-2002	JP 2001070107 A TW 474800 B	21-03-2001 01-02-2002
FR 2806279	A	21-09-2001	FR 2806279 A3	21-09-2001
US 2003106916	A1	12-06-2003	CA 2438752 A1 US 2003192925 A1	04-06-2004 16-10-2003
EP 0662292	A	12-07-1995	AT 168540 T DE 69503525 D1 DE 69503525 T2 EP 0662292 A1	15-08-1998 27-08-1998 28-01-1999 12-07-1995
US 2002175194	A1	28-11-2002	US 2003178452 A1	25-09-2003

PATENT COOPERATION TREATY

REC'D 0.1 MAR 2005

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To:

see form PCT/ISA/220

24/3

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference see form PCT/ISA/220

FOR FURTHER ACTION See paragraph 2 below
--

International application No. PCT/US2004/029614	International filing date (day/month/year) 10.09.2004	Priority date (day/month/year) 10.09.2003
--	--	--

International Patent Classification (IPC) or both national classification and IPC A47D13/02
--

Applicant THE ERGO BABY CARRIER, INC.
--

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application


2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA:</p> <div style="text-align: center; margin-top: 10px;">  </div> <p>European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016</p>	<p>Authorized Officer</p> <p style="margin-top: 10px;">Amghar, N</p> <p>Telephone No. +31 70 340-3909</p>
--	---



Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material:
 - in written format
 - in computer readable form
 - c. time of filing/furnishing:
 - contained in the international application as filed.
 - filed together with the international application in computer readable form.
 - furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/029614

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-8,13,14,17-21
	No: Claims	9-12,15,16
Inventive step (IS)	Yes: Claims	1-8
	No: Claims	9-21
Industrial applicability (IA)	Yes: Claims	1-21
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

- 1 Reference is made to the following documents:
D1: US-B1-6 415 969 (HIGUCHI JUNICHI) 9 July 2002 (2002-07-09)
D2: FR-A-2 806 279 (TENNESSEE) 21 September 2001 (2001-09-21)
D3: US 2003/106916 A1 (BOONE BRIAN T) 12 June 2003 (2003-06-12)
- 2 Although claims 1, 9, 17 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
- 3 **INDEPENDENT CLAIM 1**
Document D1, which is considered to represent the most relevant state of the art, discloses (see figures) a carrier for a child from which the subject-matter of claim 1 differs in that moreover are foreseen:
a chest strap slideably secured at each end to one of the shoulder straps, restraining straps secured to each upper corner of the head restraining panel and being secured to the chest strap by detachable connectors, and
an auxiliary strap having a female member mounted upon one end thereof that is connectable to the male member of the waist band and a male member mounted upon the other end thereof that is connectable to the female member of the waist band.
The subject-matter of claim 1 is therefore new (Article 33(2) PCT).
- 3.1 The problem to be solved by the present invention may be regarded as improving the use comfort for both the child and the wearer.
- 3.2 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following

reasons:

D1 fails to disclose the features of a chest strap to adjust the shoulder straps' spacing in order to fit the wearer's size, as well as the restraining straps for the head panel that assure better stability and support to the child, and also the auxiliary strap that increases the waist band's length in order to adapt to various baby's sizes like those of pregnant women. Taken altogether these features strongly contribute to improve the comfort of such a device and there is no hint in the state of the art that would suggest the skilled person to use them and possibly how to combine them to solve the problem here-above mentioned. Consequently inventive step is involved in reaching the solution proposed in claim 1.

3.3 DEPENDENT CLAIMS 2-8

Claims 2-8 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4 INDEPENDENT CLAIM 9

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 9 is not new in the sense of Article 33(2) PCT.

The document D1 discloses all the features of claim 9:

a child carrier with

- a waist band, see paragraph [0046], and
- means joined to the waist band for securing a child facing or abutting either the front side or back side of the wearer's torso, see figures 6-8.

4.1 DEPENDENT CLAIMS 10-12

With regards to document D1, dependent claims 10-12 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and inventive step.

4.2 DEPENDENT CLAIMS 13 and 14

With regards to document D2, dependent claims 13 and 14 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

5 INDEPENDENT CLAIM 17

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 17 does not involve an inventive step in the sense of Article 33(3) PCT.

- 5.1 The subject-matter of claim 17 differs from the child carrier described in D1 in that: it comprises means for adjusting the spacing of the shoulder straps in order to solve the problem of good fitting to the wearer's body.

However this feature is described in document D2 as providing the same advantages as in the present application. The skilled person would therefore regard it as a normal option to include this feature in the child carrier described in document D1 in order to solve the problem posed.

Therefore the solution proposed in claim 17 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) .

5.2 DEPENDENT CLAIMS 18-21

With regards to D2 and D3, dependent claims 18-21 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 1270_001PCT	FOR FURTHER ACTION		See item 4 below
International application No. PCT/US2004/029614	International filing date (<i>day/month/year</i>) 10 September 2004 (10.09.2004)	Priority date (<i>day/month/year</i>) 10 September 2003 (10.09.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant THE ERGO BABY CARRIER, INC.			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																						
<input type="checkbox"/>	Box No. II	Priority																						
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																						
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																						
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																						
<input type="checkbox"/>	Box No. VI	Certain documents cited																						
<input type="checkbox"/>	Box No. VII	Certain defects in the international application																						
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																						

<p align="center">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 13 March 2006 (13.03.2006)</p>
	<p>Authorized officer</p> <p align="center">Athina Nickitas-Etienne</p> <p>Telephone No. +41 22 338 89 95</p>

PATENT COOPERATION TREATY

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
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FOR FURTHER ACTION
See paragraph 2 below

International application No. PCT/US2004/029614	International filing date (day/month/year) 10.09.2004	Priority date (day/month/year) 10.09.2003
--	--	--

International Patent Classification (IPC) or both national classification and IPC
A47D13/02

Applicant
THE ERGO BABY CARRIER, INC.

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

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For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA:</p> <div style="text-align: center; margin-top: 10px;"> </div> <p>European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016</p>	<p>Authorized Officer</p> <p style="margin-top: 10px;">Amghar, N</p> <p>Telephone No. +31 70 340-3909</p>
--	--



Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material:
 - in written format
 - in computer readable form
 - c. time of filing/furnishing:
 - contained in the international application as filed.
 - filed together with the international application in computer readable form.
 - furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/029614

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-8,13,14,17-21
	No: Claims	9-12,15,16
Inventive step (IS)	Yes: Claims	1-8
	No: Claims	9-21
Industrial applicability (IA)	Yes: Claims	1-21
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

- 1 Reference is made to the following documents:
D1: US-B1-6 415 969 (HIGUCHI JUNICHI) 9 July 2002 (2002-07-09)
D2: FR-A-2 806 279 (TENNESSEE) 21 September 2001 (2001-09-21)
D3: US 2003/106916 A1 (BOONE BRIAN T) 12 June 2003 (2003-06-12)

- 2 Although claims 1, 9, 17 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

- 3 **INDEPENDENT CLAIM 1**
Document D1, which is considered to represent the most relevant state of the art, discloses (see figures) a carrier for a child from which the subject-matter of claim 1 differs in that moreover are foreseen:
a chest strap slideably secured at each end to one of the shoulder straps, restraining straps secured to each upper corner of the head restraining panel and being secured to the chest strap by detachable connectors, and
an auxiliary strap having a female member mounted upon one end thereof that is connectable to the male member of the waist band and a male member mounted upon the other end thereof that is connectable to the female member of the waist band.
The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

- 3.1 The problem to be solved by the present invention may be regarded as improving the use comfort for both the child and the wearer.

- 3.2 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following

reasons:

D1 fails to disclose the features of a chest strap to adjust the shoulder straps' spacing in order to fit the wearer's size, as well as the restraining straps for the head panel that assure better stability and support to the child, and also the auxiliary strap that increases the waist band's length in order to adapt to various baby's sizes like those of pregnant women. Taken altogether these features strongly contribute to improve the comfort of such a device and there is no hint in the state of the art that would suggest the skilled person to use them and possibly how to combine them to solve the problem here-above mentioned. Consequently inventive step is involved in reaching the solution proposed in claim 1.

3.3 DEPENDENT CLAIMS 2-8

Claims 2-8 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4 INDEPENDENT CLAIM 9

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 9 is not new in the sense of Article 33(2) PCT.

The document D1 discloses all the features of claim 9:

a child carrier with

- a waist band, see paragraph [0046], and
- means joined to the waist band for securing a child facing or abutting either the front side or back side of the wearer's torso, see figures 6-8.

4.1 DEPENDENT CLAIMS 10-12

With regards to document D1, dependent claims 10-12 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and inventive step.

4.2 DEPENDENT CLAIMS 13 and 14

With regards to document D2, dependent claims 13 and 14 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

5 INDEPENDENT CLAIM 17

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 17 does not involve an inventive step in the sense of Article 33(3) PCT.

- 5.1 The subject-matter of claim 17 differs from the child carrier described in D1 in that: it comprises means for adjusting the spacing of the shoulder straps in order to solve the problem of good fitting to the wearer's body.

However this feature is described in document D2 as providing the same advantages as in the present application. The skilled person would therefore regard it as a normal option to include this feature in the child carrier described in document D1 in order to solve the problem posed.

Therefore the solution proposed in claim 17 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) .

5.2 DEPENDENT CLAIMS 18-21

With regards to D2 and D3, dependent claims 18-21 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: JOHN L. ADAIR
 SPRINKLE IP LAW GROUP
 1301 W. 25TH STREET, SUITE 408
 AUSTIN, TX 78705

PCT

NOTIFICATION OF TRANSMITTAL OF
 THE INTERNATIONAL SEARCH REPORT AND
 THE WRITTEN OPINION OF THE INTERNATIONAL
 SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing (day/month/year) **21 JUL 2014**

Applicant's or agent's file reference ERGO1130-WO	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/US2014/026378	International filing date (day/month/year) 13 March 2014
Applicant THE ERGO BABY CARRIER, INC.	

- The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.
Filing of amendments and statement under Article 19:
 The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):
When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.
Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 82 70
For more detailed instructions, see PCT Applicant's Guide, International Phase, paragraphs 9.004 – 9.011.
- The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
- With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
 - the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.
 - no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
- 4. Reminders**
 The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. Following the expiration of 30 months from the priority date, these comments will also be made available to the public.
 Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90bis.1 and 90bis.3).
 Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.
 In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.
 For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide, National Chapters*.

Name and mailing address of the ISA/ Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 Telephone No. PCT OSP: 571-272-7774
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference ERGO1130-WO	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US2014/026378	International filing date (<i>day/month/year</i>) 13 March 2014	(Earliest) Priority Date (<i>day/month/year</i>) 13 March 2013
Applicant THE ERGO BABY CARRIER, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

the international application in the language in which it was filed.

a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (see Box No. II).

3. **Unity of invention is lacking** (see Box No. III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 2B

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2014/026378

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.: 4-12, 16-24
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/026378

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - A47D 13/02 (2014.01)
 USPC - 224/160
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 IPC(8) - A47D 13/00, 13/02, 13/06, 13/07, 13/08 (2014.01)
 USPC - 224/158, 159, 160

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 CPC - A47D 13/025 (2014.06)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Orbit, Google Patents, Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011/0290831 A1 (WANG) 01 December 2011 (01.12.2011) entire document	1-3, 13-15
Y	US 2012/0205406 A1 (SCHACHTNER) 16 August 2012 (16.08.2012) entire document	1-3, 13-15
A	US 2012/0043359 A1 (BERGKVIST et al) 23 February 2012 (23.02.2012) entire document	1-3, 13-15

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 30 June 2014	Date of mailing of the international search report 21 JUL 2014
---	--

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: JOHN L. ADAIR
SPRINKLE IP LAW GROUP
1301 W. 25TH STREET, SUITE 408
AUSTIN, TX 78705

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

21 JUL 2014

Applicant's or agent's file reference
ERGO1130-WO

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/US2014/026378

International filing date (day/month/year)

13 March 2014

Priority date (day/month/year)

13 March 2013

International Patent Classification (IPC) or both national classification and IPC

IPC(8) - A47D 13/02 (2014.01)

USPC - 224/160

Applicant THE ERGO BABY CARRIER, INC.

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

Date of completion of this opinion

30 June 2014

Authorized officer:

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2014/026378

Box No. I	Basis of this opinion
1.	<p>With regard to the language, this opinion has been established on the basis of:</p> <p><input checked="" type="checkbox"/> the international application in the language in which it was filed.</p> <p><input type="checkbox"/> a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).</p>
2.	<p><input type="checkbox"/> This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43<i>bis</i>.1(a))</p>
3.	<p>With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:</p> <p>a. (means)</p> <p><input type="checkbox"/> on paper</p> <p><input type="checkbox"/> in electronic form</p> <p>b. (time)</p> <p><input type="checkbox"/> in the international application as filed</p> <p><input type="checkbox"/> together with the international application in electronic form</p> <p><input type="checkbox"/> subsequently to this Authority for the purposes of search</p>
4.	<p><input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p>
5.	<p>Additional comments:</p>

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/026378

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

the entire international application.

claims Nos. 4-12, 16-24

because:

the said international application, or the said claims Nos. _____ relate to the following subject matter which does not require an international search (*specify*):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 4-12, 16-24 are so unclear that no meaningful opinion could be formed (*specify*):

Claims 4-12 and 16-24 are improper multiple dependent claims not drafted in accordance with the second and third sentences of Rule 6.4(a).

the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

no international search report has been established for said claims Nos. 4-12, 16-24

a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.

pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

See Supplemental Box for further details.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2014/026378

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-3, 13-15</u>	YES
	Claims	<u>None</u>	NO
Inventive step (IS)	Claims	<u>None</u>	YES
	Claims	<u>1-3, 13-15</u>	NO
Industrial applicability (IA)	Claims	<u>1-3, 13-15</u>	YES
	Claims	<u>None</u>	NO

2. Citations and explanations:

Claims 1-3 and 13-15 lack an inventive step under PCT Article 33(3) as being obvious over Wang in view of Schachtner.

Regarding claim 1, Wang discloses a child carrier (Fig. 3) comprising: a waist belt (waistband 5, Fig. 1A); one or more panels forming an upper torso support (main body 32, para 0044 Fig. 3) and a hammock (baby pouch 34, Fig. 3), the hammock having a first end portion coupled to the waist belt (baby pouch 34 is best described with reference to Fig. 1A wherein baby pouch 4 has a bottom edge 19 adapted to couple to waistband 5, para 0034); a thigh support strap extending to each side of the hammock (seat flaps 30), each thigh support strap having an inward end portion proximate to the hammock (each flap 30 is attached to baby pouch 34 at crotch region 35 and adapted to be positioned under each thigh of the baby, para 0044) and an outward end portion (straps 31), the outward end portion configured for selective coupling to the upper torso support in multiple positions (straps 31 are configured to couple to main body 32, para 0044; as discussed with respect to Fig. 2A, multiple points of attachment for straps to main body are contemplated to maximize comfort for the caregiver, see para 0041 where various points of attachment are discussed), the hammock and the thigh support straps adapted to form an adjustable seat to support a child in an ergonomic spread-squat position in an inward facing orientation and an outward facing orientation (the seat flap(s) and baby pouch, together form adjustable support for the baby's thighs, buttocks, and torso, para 0041 such that baby sits upright and the legs are supported at least ninety degrees from the lower portion, para 0024, "facing-out position", para 0041 ; "facing into the caregiver's body", para 0042), wherein the shape of the seat adjusts depending on the positions in which the outward end portions of the thigh support straps are coupled to the upper torso support (the straps associated with the seat flaps can be adjusted in length for better fit and support of baby when switching between facing out and facing-in positions, para 0042); and a set of shoulder straps (shoulder straps 6, Figs. 1A and 1B), each shoulder strap having a first end coupled to the upper torso support and a second end coupled to the upper torso support (shoulder straps 6 have a first end attached to the main body 32 at upper corners 22 of pouch 4 while the respective second end of each strap is configured to attach to buckles also located proximate to corners 22, para 0034, Fig. 1B)

Wang lacks the teaching of a hammock having a second end portion coupled to the upper torso support. Schachtner is in the field of infant carrier devices and teaches a hammock (45) having a second end portion coupled to an upper torso support (43, 44; Figs. 1, 2b). It would have been obvious to one of skill in the art at the time of the invention modify baby pouch of Wang from a uniform one piece construction to include a plurality of panels as taught by Schachtner. The motivation would have been to create additional flexibility in the main body to accommodate the baby received therein as well as to enable the device to be more compactly folded for storage when not in use.

Regarding claim 2, modified Wang discloses the invention with respect to Claim 1, and further discloses wherein the upper torso support comprises a plurality of attachment points for each of the thigh support straps (seat flap straps can be attached somewhere around the upper region of the carrier to maximize comfort of the caregiver, para 0041).

Regarding claim 3, modified Wang discloses the invention with respect to any one of Claim 1 or Claim 2, wherein the outward end of each thigh support strap comprises an opening for receiving a mechanical fastener on the upper torso support (straps 3, which extend from seat flap 1, may include D-rings for attachment to main body 23, para 0035).

(Continued in Supplemental Box)

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2014/026378

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box V

Regarding claim 13, Wang discloses a method of positioning a child in a child carrier, comprising: fastening a waist belt around a waist of a user (waistband 5 is wrapped around the waist of the caregiver, para 0040); positioning a child in a hammock (baby is placed in pouch 4 after waistband is secured, para 0040) having an inward end portion coupled to the belt (baby pouch 4 has a bottom edge 19 adapted to couple to waistband 5, para 0034); wrapping a first thigh support strap under a first thigh of the child and a second thigh support strap under a second thigh of the child (seat flaps 30 are positioned under each thigh of the baby, para 0044), each thigh support strap having an inward end and an outward end (Fig. 3); fastening an outward end of the first thigh strap to the upper torso support and an outward end of the second thigh support strap to the upper torso support at selected attachment points from a plurality of attachment points to adjust the shape of a seat formed by the hammock, the first thigh support strap and the second thigh support strap, the seat adapted to support the child in an ergonomic spread-squat position in an inward facing orientation and an outward facing orientation (each flap 30 is separately attached to main body 31, para 0044, multiple points of attachment thereto are contemplated based on the direction the baby is facing and the comfort of the caregiver, para 0041; the seat flap(s) and baby pouch, together form adjustable support for the baby's thighs, buttocks, and torso, para 0041 such that baby sits upright and the legs are supported at least ninety degrees from the lower portion, para 0024); and inserting at least one arm into a set of shoulder straps (see Figs. 2A-2C), each shoulder strap having a first end coupled to the upper torso support and a second end coupled to the waist belt the upper torso support (shoulder straps 6 have a first end attached to the main body 23 at upper corners 22 of pouch 4 while the respective second end of each strap is configured to attach to buckles also located proximate to corners 22, para 0034, Fig. 1B).

Wang lacks the teaching of a hammock having a second end portion coupled to the upper torso support. Schachtner is in the field of infant carrier devices and teaches a hammock (45) having a second end portion coupled to an upper torso support (43, 44; Figs. 1, 2b). It would have been obvious to one of skill in the art at the time of the invention modify baby pouch of Wang from a uniform one piece construction to include a plurality of panels as taught by Schachtner. The motivation would have been to create additional flexibility in the main body to accommodate the baby received therein as well as to enable the device to be more compactly folded for storage when not in use.

Regarding claim 14, modified Wang discloses the method of claim 13, and further discloses the step of orienting the child in an inward facing orientation, wherein the seat supports the child in the ergonomic spread squat position in the inward facing orientation (Fig. 2B shows the baby facing into the caregiver's body with buttocks and thighs equally supported such that the bay's legs are held at a 90-degree or greater angle, para 0042).

Regarding claim 15, modified Wang discloses the method of any one of claim 13 or claim 14, and further discloses the step of readjusting the shape of the seat using the first thigh support strap and second thigh support; and reorienting the child in an outward facing orientation, wherein the seat supports the child in the ergonomic spread squat position in the outward facing orientation (Fig. 2A shows the baby in a facing-out position, pulling on straps 3 orients the seat flap 1 to properly support the baby's buttocks and thighs, para 0041).

Claims 1-3 and 13-15 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

Electronic Patent Application Fee Transmittal

Application Number:	14685235
Filing Date:	13-Apr-2015
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Filer:	Ari G. Akmal/Shenise Ramdeen
Attorney Docket Number:	ERGO1110-4

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
Total in USD (\$)				180

Electronic Acknowledgement Receipt

EFS ID:	22580101
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Shenise Ramdeen
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	09-JUN-2015
Filing Date:	13-APR-2015
Time Stamp:	16:45:10
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	3503
Deposit Account	503183
Authorized User	AKMAL, ARI G.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ERGO1110-4_IDS06-09-15.pdf	1279446	yes	10
			3307068484dac3217c3bf30c79dd3bac17d8abe8		
Multipart Description/PDF files in .zip description					
Document Description			Start	End	
Transmittal Letter			1	3	
Information Disclosure Statement (IDS) Form (SB08)			4	10	
Warnings:					
Information:					
2	Foreign Reference	ERGO1110_REF_B1.pdf	1190674	no	12
			2eb22851a2bc5580b51bc5e515d91917a0618c77		
Warnings:					
Information:					
3	Foreign Reference	ERGO1110_REF_B2.pdf	512978	no	9
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Warnings:					
Information:					
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Information:					
5	Foreign Reference	ERGO1110_REF_B4.pdf	760624	no	24
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Information:					
6	Foreign Reference	ERGO1110_REF_B5.pdf	1288774	no	12
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Information:					

7	Foreign Reference	ERGO1110_REF_B6.pdf	952235	no	10
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9	Foreign Reference	ERGO1110_REF_B8.pdf	407351	no	18
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37	Non Patent Literature	ERGO1110_REF_C18.pdf	441368 e35ac287c020cc239b887846ba526e10328 a7c49	no	9
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38	Non Patent Literature	ERGO1110_REF_C19.pdf	302303 554a4273dc87a990c47de38f0fd94fa9e9af9 a30	no	8
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39	Fee Worksheet (SB06)	fee-info.pdf	30257 7f0db063861a91b2f9947aa7f2101537d4ad 1437	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			48492517		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Atty. Docket No. (Opt.)
ERGO1110-4

Applicant Karin A. Frost	
Application Number 14/685,235	Filing or 371 (c) Date: April 13, 2015
For Baby Carrier	
Group Art Unit 3782	Examiner Corey N. Skurdal
Confirmation Number: 7364	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on June 9 2015.



Shenise Ramdeen

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application;

This Information Disclosure Statement is being submitted before the mailing of a First Office Action on the merits; or

This Information Disclosure Statement is being submitted before the mailing of a First Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(b) and before the mailing date of any of a Final Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

- The statement specified in 37 C.F.R. § 1.97(e); or
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(c) and on or before payment of the issue fee and is accompanied by:

- The statement specified in 37 C.F.R. § 1.97(e); and
- The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of \$180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Pursuant to 37 C.F.R. § 1.97(e), Applicant hereby states:

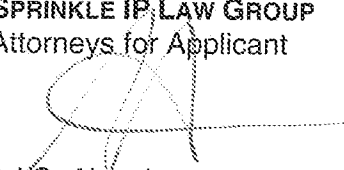
That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the information disclosure statement.

Applicant respectfully submits that the claims of Applicant's above-referenced patent application are patentably distinguishable from the listed information. Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Respectfully submitted,

SPRINKLE IP LAW GROUP
Attorneys for Applicant



Ari G. Akmal
Reg. No. 51,388

Dated: June 9, 2015

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Table with columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO., EXAMINER, ART UNIT, PAPER NUMBER, MAIL DATE, DELIVERY MODE. Includes application details for Karin Annette Frost and examiner SKURDAL, COREY NELSON.

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	14/685,235	FROST, KARIN ANNETTE	
	Examiner	Art Unit	
	COREY SKURDAL	3782	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 April 2015.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 April 2015 is/are: a) accepted or b) objected to by the Examiner.
 - Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 - Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 - Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 - Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit <http://www.uspto.gov/forms/>. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to <http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp>.

2. Claims 1-19 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 7,322,498 and US Patent 8,590,757 and claims 1-20 of U.S. Patent 9,022,260. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both teach child carriers having padded waist bands, a main panel, a pair of shoulder straps attached to the main panel, a head restraining panel, a restraining strap, an auxiliary strap and a chest strap.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 8-11, 13, 14, 16, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hwang (US 2002/0011503).

Regarding claims 1, 3, 4, 8-11, 16, 17, Hwang discloses a child carrier comprising: a waistband 180 comprising a padded section (considered padded in that it comprises two flexible materials which would inherently provide some degree of padding) and having an adjustable length; a substantially rectangular and flexible main panel 110/116/119 adapted to support a child in an area between the panel and the wearer's torso, the main panel having a bottom edge joined to the waistband (Figure 7); a first shoulder strap 152a having an adjustable length and first and second ends connected to a first side of the main panel; a second shoulder strap 152b having an adjustable length and first and second ends connected to a second side of the main panel; wherein the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front or back side of the wearer's torso as claimed; an adjustable length chest strap 201 and adjustable in height in that it is flexible and can be moved up and down. The initial statement of intended use and all other functional implications have been carefully considered but are deemed not to impose any patentably distinguishing structure over that disclosed by Hwang which is capable of being used in the intended manner, i.e., as either a front or back carrier and adjusting the various straps such that 70-90% of the weight is distributed to the wearer's hips through the waistband, and to support a majority of the child's weight through the child's hips and thighs (see M.P.E.P. 2111).

Regarding claim 2, see Figure 7.

Regarding claims 13 and 14, the carrier is made from flexible materials such that it is inherently machine washable and support the child by only deformable materials.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Fair (US 5,848,741). Hwang discloses the invention substantially as claimed, and as noted above, but does not disclose a head panel. However, Fair teaches a child carrier having a head panel 28 including first and second restraining straps 98/100 attached at respective corners of the head panel, wherein the restraining straps detachably couple shoulder straps 24/26 by buckles 52/54. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the carrier of Hwang with the head panel and restraining straps of Fair in order to cover the child's head from the elements.

7. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Official Notice. Hwang discloses the invention substantially as claimed but does not specify that the carrier is less than three pounds or that the shoulder straps are padded. However, Examiner takes Official Notice that it is well known to those of ordinary skill in the art that it is desirable to reduce the weight of a carrier by selecting appropriate lightweight materials and to provide padding on shoulder straps. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the carrier of Hwang less than three pounds in weight

Art Unit: 3782

and to provide padding on the shoulder straps in order to make the carrier more comfortable to the wearer.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Christopher (US 6,182,873). Hwang disclose the invention as claimed but does not have the padded section of the waistband with a vertical length approximately 1/3 of the vertical length of the main panel. However, Christopher teaches a waist belt 14 and main panel 15 with the approximate claimed dimensions. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the waistband of Hwang with a larger vertical height in order to distribute the weight applied thereto over a larger surface area thus making the carrier more comfortable.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Christopher, as applied to claim 35, and in further view of Storm (US 4,492,326). Hwang discloses the invention as claimed but does not have the second end of the shoulder straps coupled to the main panel 2/3 of the vertical length of the main panel away from the bottom edge. However, Storm (Figure 1) discloses a carrier with the claimed spacing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to move connection between the shoulder straps and main panel on Hwang up a little more to the claimed 2/3 distance spacing, in order to make the carrier more comfortable to some users.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to COREY SKURDAL whose telephone number is (571)272-9588. The examiner can normally be reached on M-Th 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Pickett can be reached on 571-272-4560. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Corey N Skurdal/
Examiner, Art Unit 3782

Notice of References Cited	Application/Control No. 14/685,235	Applicant(s)/Patent Under Reexamination FROST, KARIN ANNETTE	
	Examiner COREY SKURDAL	Art Unit 3782	Page 1 of 1

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-6,182,873	02-2001	Christopher et al.	224/159
*	B US-2002/0011503	01-2002	Hwang, Choon H.	224/160
*	C US-5,848,741	12-1998	Fair, Paul F.	224/160
*	D US-4,492,326	01-1985	Storm, Linda W.	224/160
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			


FOREIGN PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

NON-PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes 	Application/Control No. 14685235	Applicant(s)/Patent Under Reexamination FROST, KARIN ANNETTE
	Examiner COREY SKURDAL	Art Unit 3782

CPC- SEARCHED		
Symbol	Date	Examiner
A47D13/025	5/18/2015	CNS

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
224	155, 159, 160, 259, 627	5/18/2015	CNS
24	301, 302	5/18/2015	CNS
2	920	5/18/2015	CNS
224	638	5/18/2015	CNS

SEARCH NOTES		
Search Notes	Date	Examiner
inventor name search	5/18/2015	CNS

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/685,235	04/13/2015	Karin Annette Frost	ERGO1110-4

CONFIRMATION NO. 7364

POA ACCEPTANCE LETTER



44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

Date Mailed: 04/29/2015

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/24/2015.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/tpetros/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

**Power of Attorney to Transact Business with the
United States Patent and Trademark Office**

I hereby revoke all previous Powers of Attorney given in the application(s) identified in the attached Transmittal for Power of Attorney to One or More Registered Practitioners ("Transmittal Form").

I hereby appoint practitioners associated with the following Customer Number associated with Sprinkle IP Law Group, PC:

44654

as my/our attorney(s) or agent(s) and to transact all business before the United States Patent and Trademark Office (USPTO) in connection with any and all patents and patent applications that are assigned to The ERGO Baby Carrier, Inc. (the "assignee's patents/patent applications") in which they shall appear, any and all assignee's patents/patent applications associated with the above-referenced customer number, and any and all patents and patent applications referenced in the attached Transmittal Form.

Please recognize or change the correspondence address for the patents and patent applications referenced in the attached Transmittal Form to the address associated with the above-referenced customer number.

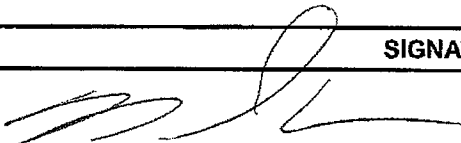
The undersigned is:

- Inventor or Joint Inventor
- Assignee or Person to Whom the Inventor is Under an Obligation to Assign
*the undersigned has authority to act on behalf of the Assignee or Person to Whom the Inventor is Under an Obligation to Assign.
- Legal Representative of a Deceased or Legally Incapacitated Inventor
- Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is currently being filed in this document)

The Transmittal Form may be completed and executed by one of the practitioners associated with the above-referenced customer number.

SIGNATURE

Signature:



Date:

8/22/2013

Name: Michael Sanders

Title: Chief Financial Officer

Company: The ERGO Baby Carrier, Inc.

Electronic Acknowledgement Receipt

EFS ID:	22158103
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Delia Narvaiz
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	24-APR-2015
Filing Date:	13-APR-2015
Time Stamp:	11:11:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ERGO1110-4_Cert_Trans_POA.pdf	1048293 <small>a2a40fa57211bae86c532e6eb07b8a67a4d8b537</small>	yes	4

Multipart Description/PDF files in .zip description			
Document Description		Start	End
Miscellaneous Incoming Letter		1	1
Assignee showing of ownership per 37 CFR 3.73		2	3
Power of Attorney		4	4

Warnings:

Information:

Total Files Size (in bytes):	1048293
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
CERTIFICATE OF TRANSMISSION VIA EFS-WEB SYSTEM	Atty. Docket No. (Opt.) ERGO1110-4
First Named Inventor Karin Annette Frost	
Application Number 14/685,235	Filing or 371 (c) Date April 13, 2015
Title Baby Carrier	
Group Art Unit Not Yet Assigned	Confirmation No. 7364

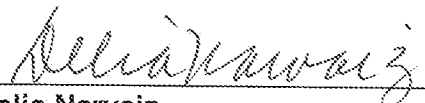
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that the attached Transmittal For Power Of Attorney To One Or More Registered Practitioners and Power of Attorney to Transact Business with the United States Patent and Trademark Office are being deposited electronically using the United States Patent and Trademark Office EFS-Web System on April 24, 2015.

Respectfully submitted,

SPRINKLE IP LAW GROUP


Delia Narvaiz

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

Patent No./Application No.:	14/685,235
Issue Date/Filing Date:	April 13, 2015
First Named Inventor:	Karin Annette Frost
Title:	Baby Carrier
Assignee:	The ERGO Baby Carrier, Inc.

Assignee is:

1. Assignee of the entire right, title and interest in the above-referenced patent/patent application;
2. Assignee of less than the entire right, title and interest in the above-referenced patent/patent application:
 - The extent (by percentage) of its ownership interest is _____%; or
 - There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. Assignee of an undivided interest in the entirety of the above-referenced patent/patent application (a complete assignment by one or more of the joint inventors was made). The other parties, including inventor, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. Recipient, via court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is/are attached.

The interest identified in option 1, 2 or 3 above as evidenced by either:

A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 035397, Frame 0675, or for which a copy thereof is attached.

or

B. A chain of title from the inventor(s) of the patent/patent application identified above, to the current assignee;

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached hereto.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached hereto.

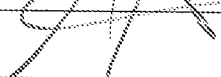
3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached hereto.

Additional documents in the chain of title are listed on the supplemental sheet(s).

Documentary evidence of chain of title from the original owner to the assignee was, or concurrently is being submitted for recordation pursuant to 37 CFR 3.11 [NOTE: A separate copy (i.e., a true copy the original assignment document(s)) must be/have been submitted to the Assignment Division to record the assignment in the records of the USPTO]

Signature of Applicant or Practitioner

Signature:		Date: 04-24-2015
Name:	Ari Akmal	Telephone: 512-637-9220
Registration No.	51388	

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number
14/685,235

APPLICATION AS FILED - PART I

(Column 1) (Column 2)

FOR	NUMBER FILED	NUMBER EXTRA
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A
TOTAL CLAIMS (37 CFR 1.16(j))	19	minus 20 = *
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1	minus 3 = *
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).	
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))		

SMALL ENTITY

RATE(\$)	FEE(\$)
N/A	
N/A	
N/A	
TOTAL	

OR OTHER THAN SMALL ENTITY

RATE(\$)	FEE(\$)
N/A	280
N/A	600
N/A	720
x 80 =	0.00
x 420 =	0.00
	0.00
	0.00
TOTAL	1600

* If the difference in column 1 is less than zero, enter "0" in column 2.

APPLICATION AS AMENDED - PART II

(Column 1) (Column 2) (Column 3)

AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(j))	*	Minus	**	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=
	Application Size Fee (37 CFR 1.16(s))				
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))				

SMALL ENTITY

RATE(\$)	ADDITIONAL FEE(\$)
x =	
x =	
TOTAL ADD'L FEE	

OR OTHER THAN SMALL ENTITY

RATE(\$)	ADDITIONAL FEE(\$)
x =	
x =	
TOTAL ADD'L FEE	

(Column 1) (Column 2) (Column 3)

AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(j))	*	Minus	**	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=
	Application Size Fee (37 CFR 1.16(s))				
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))				

RATE(\$)	ADDITIONAL FEE(\$)
x =	
x =	
TOTAL ADD'L FEE	

OR OTHER THAN SMALL ENTITY

RATE(\$)	ADDITIONAL FEE(\$)
x =	
x =	
TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 7 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY,DOCKET.NO, TOT CLAIMS, IND CLAIMS. Row 1: 14/685,235, 04/13/2015, 3782, 1600, ERGO1110-4, 19, 1

CONFIRMATION NO. 7364

FILING RECEIPT



44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

Date Mailed: 04/23/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Inventor(s)

Karin Annette Frost, Makawao, HI;

Applicant(s)

The ERGO Baby Carrier, Inc., Los Angeles, CA

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 14/047,892 10/07/2013 PAT 9022260
which is a CON of 11/949,324 12/03/2007 PAT 8590757
which is a CON of 10/937,193 09/09/2004 PAT 7322498
which claims benefit of 60/501,396 09/10/2003

Foreign Applications for which priority is claimed (You may be eligible to benefit from the Patent Prosecution Highway program at the USPTO. Please see http://www.uspto.gov for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

If Required, Foreign Filing License Granted: 04/22/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US 14/685,235

Projected Publication Date: 07/30/2015

Non-Publication Request: No

Early Publication Request: No

Title

Baby Carrier

Preliminary Class

224

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

UTILITY PATENT APPLICATION TRANSMITTAL <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>	Attorney Docket No.	ERGO1110-4
	First Named Inventor	Karin Annette Frost
	Title	Baby Carrier
	Express Mail Label No.	N/A

APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i>	ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
--	--

1. **Fee Transmittal Form**
(PTO/SB/17 or equivalent)
2. **Applicant asserts small entity status.**
See 37 CFR 1.27
3. **Applicant certifies micro entity status.** See 37 CFR 1.29.
Applicant must attach form PTO/SB/15A or B or equivalent.
4. **Specification** [Total Pages 13]
Both the claims and abstract must start on a new page.
(See MPEP § 608.01(a) for information on the preferred arrangement)
5. **Drawing(s)** (35 U.S.C. 113) [Total Sheets 6]
6. **Inventor's Oath or Declaration** [Total Pages _____]
(including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))
 - a. Newly executed (original or copy)
 - b. A copy from a prior application (37 CFR 1.63(d))
7. **Application Data Sheet** * See note below.
See 37 CFR 1.76 (PTO/AIA/14 or equivalent)
8. **CD-ROM or CD-R**
in duplicate, large table, or Computer Program (Appendix)
 - Landscape Table on CD
9. **Nucleotide and/or Amino Acid Sequence Submission**
(if applicable, items a. - c. are required)
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. Paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PAPERS

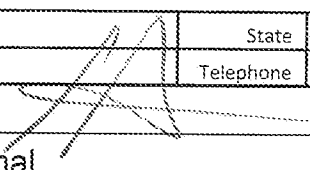
10. **Assignment Papers**
(cover sheet & document(s))
Name of Assignee _____
11. **37 CFR 3.73(c) Statement** **Power of Attorney**
(when there is an assignee)
12. **English Translation Document**
(if applicable)
13. **Information Disclosure Statement**
(PTO/SB/08 or PTO-1449)
 Copies of citations attached
14. **Preliminary Amendment**
15. **Return Receipt Postcard**
(MPEP § 503) (Should be specifically itemized)
16. **Certified Copy of Priority Document(s)**
(if foreign priority is claimed)
17. **Nonpublication Request**
Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
18. **Other:** Certificate of Transmission

*Note: (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 must be included in an Application Data Sheet (ADS).
 (2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

19. CORRESPONDENCE ADDRESS

The address associated with Customer Number: 44654 OR Correspondence address below

Name			
Address			
City	State	Zip Code	
Country	Telephone	Email	

Signature		Date	<u>2015-04-13</u>
Name (Print/Type)	<u>Ari Akmal</u>	Registration No. (Attorney/Agent)	<u>51388</u>

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	ERGO1110-4
		Application Number	
Title of Invention	Baby Carrier		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2

Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1					<input type="button" value="Remove"/>
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Karin	Annette	Frost		
Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service					
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City	Makawao	State/Province	HI		
Postal Code	96768	Country	US		
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.					
<input type="button" value="Add"/>					

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
 For further information see 37 CFR 1.33(a).

An Address is being provided for the correspondence information of this application.

Customer Number	44654
Email Address	docketing@sprinklelaw.com
<input type="button" value="Add Email"/> <input type="button" value="Remove Email"/>	

Application Information:

Title of the Invention	Baby Carrier		
Attorney Docket Number	ERGO1110-4	Small Entity Status Claimed	<input type="checkbox"/>
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	6	Suggested Figure for Publication (if any)	

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	ERGO1110-4
		Application Number	
Title of Invention	Baby Carrier		

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

Request Early Publication (Fee required at time of Request 37 CFR 1.219)

Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	<input checked="" type="radio"/> Customer Number	<input type="radio"/> US Patent Practitioner	<input type="radio"/> Limited Recognition (37 CFR 11.9)
Customer Number	44654		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the application number blank.

Prior Application Status	Pending	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
	Continuation of	14/047892	2013-10-07		
Prior Application Status	Patented	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14/047892	Continuation of	11/949324	2007-12-03	8590757	2013-11-26
Prior Application Status	Patented				

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	ERGO1110-4
		Application Number	
Title of Invention	Baby Carrier		

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
11/949324	Continuation of	10/937193	2004-09-09	7322498	2008-01-29

Prior Application Status: Expired Remove

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
10/937193	Claims benefit of provisional	60/501396	2003-09-10

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(d). When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(h)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ⁱ (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.

NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization to Permit Access:

Authorization to Permit Access to the Instant Application by the Participating Offices

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	ERGO1110-4
		Application Number	
Title of Invention	Baby Carrier		

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

- Assignee
 Legal Representative under 35 U.S.C. 117
 Joint Inventor
 Person to whom the inventor is obligated to assign.
 Person who shows sufficient proprietary interest

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor:

If the Applicant is an Organization check here.

Organization Name: The ERGO Baby Carrier, Inc.

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Country: US

Postal Code:

90017

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	ERGO1110-4
		Application Number	
Title of Invention	Baby Carrier		

Email Address	
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Additional Applicant Data may be generated within this form by selecting the Add button.

Assignee Information including Non-Applicant Assignee Information:

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Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

If the Assignee or Non-Applicant Assignee is an Organization check here.

Prefix	Given Name	Middle Name	Family Name	Suffix

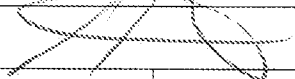
Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		State/Province	
Country		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

Signature:

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Signature			Date (YYYY-MM-DD)	2015-04-13	
First Name	Ari	Last Name	Akmal	Registration Number	51388

Additional Signature may be generated within this form by selecting the Add button.

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	ERGO1110-4
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Title of Invention	Baby Carrier		

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BABY CARRIER

Cross-Reference To Related Applications

[0001] This application is a continuation of, and claims a benefit of priority to, U.S. Patent Application No. 14/047,892, filed October 7, 2013, which is a continuation of U.S. Patent Application No. 11/949,324, filed December 3, 2007, issued as U.S. Patent No. 8,590,757, which is a continuation of U.S. Patent Application No. 10/937,193, filed September 9, 2004, issued as U.S. Patent No. 7,322,498, which claims priority to U.S. Provisional Patent Application No. 60/501,396, filed September 10, 2003, each of which is hereby incorporated by reference in its entirety.

Background of the Invention

[0002] This invention relates to a lightweight child carrier that can be worn by an adult with the child being positioned either in front of the wearer or behind the wearer.

[0003] There are currently any number of wearable child carriers on the market which afford the wearer freedom of hand and arm movement while transporting a child that is secured in the carrier. In pursuit of child safety, some of these devices have become overly complex involving, among other things, rigid seats and frames which considerably increase the weight of the carrier and cannot accommodate for the growth of the child. These complex carriers also are relatively heavy and place an undue strain upon the wearer, particularly in the lumbar region. In addition, because of the size of many of the present day carriers, they can only be worn on the back thus denying the child the comfort and security of a front carrier position where a child and its mother are in a face-to-face relationship. On the other hand, many simple carriers can be so poorly constructed that they can pose a danger to the wearer and the child being transported.

[0004] Most child carriers are worn by mothers who wish to be close to their young children as they go about their daily schedules. It is not uncommon for many of these women to become pregnant with a second child while the first child is still an infant. Most carriers cannot accommodate for changes in the mother's body as she goes through pregnancy and as a consequence, the carrier

is rendered unusable by the mother for long periods of time.

Summary of the Invention

[0005] It is therefore an object of the present invention to improve child carriers that are worn by adults.

[0006] It is a further object of the invention to provide a lightweight child carrier that is both strong and comfortable for both the child and the wearer of the carrier.

[0007] A still further object of the present invention is to provide a lightweight child carrier that can be worn on the front or the back of the wearer without the need for significant changes or modifications of the carrier's configuration.

[0008] Another object of the present invention is to provide a lightweight child carrier that can be worn in comfort by a woman while pregnant with a second child during the course of her pregnancy.

[0009] Yet another object of the present invention is to provide a child carrier that is lightweight yet safe for a child that is seated in the carrier.

[00010] These and other objects of the present invention are attained by a child carrier that is worn by an adult to transport a child in a hands and arms free manner. The carrier includes a generally rectangular-shaped main panel. The bottom edge of the main panel is joined to the top edge of a padded waist band, and the bottom edge of a rectangular head restraining panel is joined to the top edge of the main panel. A pair of shoulder straps are secured to the main panel with each forming a loop along the side edges of the panel. A chest strap is slidably retained upon each of the shoulder straps, so that the chest strap can be adjusted along the length of the shoulder straps. A pair of restraining straps are secured at one end to the upper corners of the head restraining panel and the opposite end of each restraining strap is adjustably connected to the chest strap. The waist band includes a buckle having a female member and a male member that is removably retained within the female member. An auxiliary strap is also

provided that contains a male member located at one end of the strap that mates with the female member of the waist band and a female member at the opposite end of the strap that similarly mates with the male member of the waist band to considerably expand the waist band.

Brief Description of the Drawings

[00011] For a better understanding of these and other objects of the invention, reference will be made to the following detailed description of the invention which is to be read in association with the accompanying drawings, wherein:

[00012] Figure 1 is a perspective view illustrating the carrier embodying the teachings of the invention being mounted upon the back of a wearer with a child seated in the carrier;

[00013] Figure 2 is a perspective view illustrating the carrier mounted in front of the wearer with a child seated in the carrier;

[00014] Figure 3 is an enlarged front view of the carrier;

[00015] Figure 4 is an enlarged rear view of the carrier;

[00016] Figure 5 is a front perspective view showing the chest strap and shoulder strap arrangements when a child is seated in the carrier mounted upon the back of the wearer;

[00017] Figure 6 is a rear perspective view showing a child seated in the carrier mounted on the back of a wearer and further illustrating the child's head being supported in the head restraint of the carrier;

[00018] Figure 7 is a plan view of a belly pad that may be utilized with the carrier shown in Figures 1-6;

[00019] Figure 8 is a perspective view of a hood extension that may be utilized with the carrier shown in Figures 1-6; and

[00020] Figure 9 is a different perspective view of the hood extension shown in Figure 8.

Description of the Invention

[00021] Turning initially to Figures 1 and 2, there is illustrated two modes of mounting a child carrier, generally referenced 10, upon the torso of an adult 12. The carrier shown in Figure 1 is mounted upon the wearer so that a child 13 that is seated in the carrier is located behind the wearer in a forward facing position facing with regard to the wearer. As will become apparent from the disclosure below, the mode of carry can be easily and simply accomplished by reversing the location of the shoulder straps upon the wearer's torso. This second mode of carry is illustrated in Figure 2, wherein the child seated in the carrier is located in front of the wearer in face to face contiguous relation with the wearer.

[00022] The present carrier, unlike some of the more complex devices, is not only simple in construction and lightweight, but can be reversed in the mode of carry from front to back or vice versa without any major readjustment of the harness. In fact, the reversal of position can be easily and safely made while a child is seated in the body pouch of the carrier. The carrier has no rigid structures such as plastic seats or metal frames that might impede the reversal operation.

[00023] Turning now to Figures 3 and 4, the carrier includes a waist band 20 having a wide padded section 21 that encircles the hips of the wearer when the carrier is in either a front or a rear carry position. The waist band 20 is designed to take a good deal of strain away from the wearer's lumbar region, particularly when the carrier is worn in a front carry position. The two ends of the padded section are joined by a strap 55 containing a releasable buckle 19 as best shown in Figure 5. The carrier further includes a main panel 23 that is somewhat rectangular-shaped and is fabricated from a high strength, yet flaccid, material that can easily conform to the contour of a child's body when seated in the device. Canvas and many nylon and other high strength synthetic fabrics may be used for this purpose.

[00024] The main panel includes a bottom edge 24 that is stitched securely into the top section of the waist band 20 so that band 20 and the main panel 23 share a common vertical axis 25 of the carrier. As will be appreciated from the

following description of a preferred embodiment of the invention, the baby carrier essentially possesses bi-lateral symmetry about the vertical axis 25. The main panel 23 further includes two opposed side edges 26 and 27 along with a top edge 29. The main panel 23, when sewn into the waist band 20, provides a good deal of material over the band 20 so that a generous sling is formed in which a child can be comfortably and safely seated. The sling provides ample support for the child's buttocks as well as for the back of the child's legs.

[00025] A rectangular-shaped head restraining panel 30 is sewn into the top edge 29 of the main panel 23. The head restraining panel 30 shares the common vertical axis 25 with the main panel 24 and can be fabricated from the same material as the main panel, although other lightweight, high strength materials may be used. The head restraining panel 30 thus forms a continuation of the main panel 23 so that the panels 23, 30 will cover the entire length of the head and torso of a child that is seated in the carrier. The restraining panel 30 may help support the child's head while the child is sleeping and also may be used to screen or shelter the child's head from sun, rain, or snow.

[00026] A pair of shoulder straps 34 and 35, are connected to each side of the main panel 23. Each shoulder strap 34, 35 includes a padded section 40 that is attached at one end 41 to a belt section 42. The other end of each padded section is securely sewn 43 into the main panel 23 at the two upper corners of the panel. The belt section 42 of each shoulder strap 34, 35 is looped around and is sewn into the main panel 23 at 44 below the padded end of the associated shoulder strap. Adjusting buckles 45 are operatively connected to each belt section 42 by which the length of the shoulder straps 34, 35 can be altered.

[00027] As best seen in Figure 4, a chest strap 47 is looped at each end around each of the shoulder straps 34, 35 so that the chest strap 47 can slide up or down along the length of the shoulder straps 34, 35. The chest strap contains an adjustable buckle 48 that permits the chest strap to be opened to facilitate entering and exiting the carrier harness. One end of the buckle 48 contains an adjustable coupling 49 by which the length of the chest strap 47 can be adjusted to pull the shoulder straps 34, 35 inwardly to best suit the wearer's torso. As can

be seen, the chest strap 47 can be adjusted both vertically and horizontally to attain for the wearer the most comfortable position for the harness. An adjusting buckle 45 is also mounted upon the belt section 42 of each shoulder strap 34, 35 to provide for further adjustment of the shoulder straps. The chest strap 47 of the harness contains a pair of spaced apart rings 51-51 located on either side of the buckle 48. Restraining straps 52-52 are joined to the upper two corners of the head restraining panel 30 and are looped through each of the rings 51 as illustrated in Figure 4. A Velcro fastener is sewn into the free end of each restraining strap 52 that includes a hook pad 53 and a loop pad 54 that are aligned in series along the back of each strap 52. Instead of a Velcro fastener, the straps 52 may include a series of snap fit connectors secured to bias tape, whereby the effective length of each strap 52 may be adjusted. Each pad has sufficient length so that the head restraining panel 30 can be snugly positioned around the child's head when the child is seated in the carrier.

[00028] The padded section 21 of the waist band 20 is joined at each end by a belt section 55 containing a bayonet type buckle having a male member 56 and a female member 57 that can be mated to releasably join the two ends of the belt 55 together. Limited adjustment of the belt length is provided by an adjusting loop 59 that forms a part of one of the buckle members. An auxiliary belt 60 is provided with the carrier which has a male member 62 at one end and a female member 63 at the other end of the belt. The male member 62 of the auxiliary belt can be mated with the female member 57 of the waist band, while the female member 63 can be mated with the male member 56 of the waist band, thus providing the waist band with considerably greater length. This feature permits a pregnant woman to use the carrier longer into her pregnancy when compared to other carriers. The waist band 20 is normally adjustable to a length of between twenty-seven to forty-five inches, and the auxiliary belt 60 effectively extends the length of waist band 20 preferably by another eight inches.

[00029] A pouch 70 with one or more pocket sections is mounted on the back of the main panel 23. The two side edges 71 and 72, as well as the bottom edge 73, of the pouch 70 are sewn into the main panel 23 while the top edge 75

remains open. An elastic band is sewn into the top edge of the pouch 70 which restricts the size of the opening to more securely retain articles stored in the pouch 70 preferably soft items, such as diapers, hats, wipes, and extra clothing. The pouch 70 is centered upon the vertical axis 25 of the carrier below the head restraining panel 30. Accordingly, the head restraining panel 30 can be conveniently stored within the pouch 70 when not in use.

[00030] A second, smaller pouch 77 with one or more pocket sections is sewn into the waist band 20 in which such items as currency, credit cards, sunglasses, a cell phone, writing implements, a wallet, a checkbook, and keys can be stored. The second pouch 77 may be selectively opened and closed with snap fit connectors, a zipper, hook and loop fasteners, buttons, or other mechanisms.

[00031] The carrier may also include a belly pad 80 as shown in Figure 7. The pad 80 preferably possesses a generally flat, rectangular configuration and an exterior sheath fashioned of the same fabric as the carrier and contains an interior foam or other resilient material substantially throughout its width and length. The belly pad 80 preferably includes a pair of longitudinally spaced, elastic bands 82, 84 extending laterally across, and sewn or otherwise secured to, the exterior fabric. Each band 82, 84 forms a shallow opening or loop with the adjacent fabric such that the male member 56 of the buckle on the belt section 55 may snugly pass therethrough. It will be appreciated that the belly pad is preferably positioned between the belt section 55 (and its associated bayonet type buckle having a male member 56 and a female member 57) and the stomach or abdomen of the wearer. As such, the belly pad 80 provides better dispersion of the forces acting upon the belt section 55 and more comfort to the wearer. When the belly pad 80 is so positioned, the longitudinal ends of the belly pad 80 are situated in a layer between the corresponding ends of the waist band 20 and the wearer. It should also be appreciated that one of the bands 84 is preferably disposed adjacent to the adjustment portion of the male member 56 when the members 56, 57 are connected so that if the male member 56 and the female member 57 become inadvertently disconnected, the band 84 will inhibit

the members 56, 57 from being further separated. Thus, the band 84 enhances the safety of the carrier.

[00032] The carrier may further include a hood extension 90, shown in Figures 8 and 9, for cradling and restraining the head of a relatively large child whose head extends beyond the head restraining panel 30. The hood extension 90 includes a sheet 92 preferably fashioned of the same fabric as the head restraining panel 30 and possessing the configuration of an isosceles triangle. A looped string or cord 94 is attached to the apex of sheet 92. The hood extension 90 may also include a pair of strap extensions 96 having a D-ring 98 secured to one end thereof and an affixed hook pad adapted to cooperate with an affixed loop pad as components of a Velcro fastener. The inner and outer surfaces along each lateral edge near the base edge of the triangular sheet 92 also possess a hook pad and a loop pad component of a Velcro fastener.

[00033] The hood extension 90 is assembled onto the carrier preferably as follows. The free end of each restraining strap 52 is inserted through the D-ring 98 of an associated strap extension 96, and then the free end of each strap extension 96 is inserted through an associated ring 51 on the chest strap 47. Each strap extension 96 is then folded back upon itself so that the hook pad and the loop pad selectively, cooperatively fasten together whereby each strap extension 96 loops through an associated ring 51. Each lateral edge near the triangular base of the sheet 92 is then placed against the hook or loop pad of an associated restraining strap 52 and the free end of each restraining strap 52 is placed over the associated lateral edge such that the hook and loop pads of the restraining strap 52 selectively, cooperatively fasten to the hook and loop pads affixed to the lateral edges of the sheet 92. Thus, each lateral edge is sandwiched between the overlapping segments of an associated restraining strap 52, as best shown in Figure 9. A button 100 may then be sewn or secured to the carrier where the looped cord 94 overlaps the carrier, and the button 100 may then be selectively inserted through the looped cord 94 to secure the apex of the sheet 92 against the carrier such that the sheet 92 substantially abuttingly overlays the carrier, as best shown in Figure 8.

[00034] The baby carrier also may be used to carry infants by tucking or wrapping the infant in a blanket or quilt and placing the infant in the main panel 23 with the infant's legs together on one side, the head leaning to the other side, and the butt centered in the middle of the main panel 23. In such a carrying mode, the carrier acts more like a sling.

[00035] It will be appreciated that the child is secured in the baby carrier in a seated position, with most of the child's weight being dispersed through the hips and thighs, thereby substantially eliminating compression of the spine (and potentially hip dysphasia) that occurs when a child is hanging in the carrier by the crotch. When the child is seated in the child carrier, at least about seventy percent to ninety percent of the child's weight is transmitted directly through the waist band 20 to the wearer's hips, and not through the wearer's shoulders or upper spine, thereby promoting wearer comfort and diminishing wearer fatigue. The baby carrier also positions the child when the child is in front of the wearer so that the head and mouth of the child are conveniently aligned for nursing.

[00036] Preferably, the carrier is fashioned of a fabric material such as cotton canvas for exterior facing surfaces and brushed cotton twill for interior facing surfaces. Preferably the carrier is substantially deformable and machine washable and dryable and weighs less than about two or three pounds.

[00037] While this invention has been particularly shown and described with reference to the preferred embodiment in the drawings, it will be understood by one skilled in the art that various changes in its details may be effected therein without departing from the teachings of the invention.

CLAIMS:

1. A child carrier adapted to be worn by a human wearer for carrying a child, the child carrier comprising:

a waistband comprising a padded section, the waistband having an adjustable length positioned to be securely worn about the waist of the wearer and rest on the hips of the wearer;

a flexible main panel having, a bottom edge and opposing side edges, the flexible main panel adapted to form a child carrying area in cooperation with the wearer's torso that is open to the wearer's torso the main panel having the bottom edge joined to the waistband, the main panel so dimensioned to form a sling adapted to support the child in a seated position such that the child's legs are flexed and spread apart;

a first shoulder strap having an adjustable length forming a loop along a first of the opposing side edges, wherein an upper end of the first shoulder strap is coupled to the main panel to a first side of a vertical axis of the main panel and a lower end of the first shoulder strap is coupled to the main panel to the first side of the vertical axis of the main panel; and

a second shoulder strap having an adjustable length forming a loop along a second of the opposing side edges, wherein an upper end of the second shoulder strap is coupled to the main panel to a second side of the vertical axis of the main panel and a lower end of the second shoulder strap is coupled to the main panel to the second side of the vertical axis of the main panel; wherein:

the child carrier is adapted to allow the wearer to selectively support the child in a position facing a front side of the wearer's torso or in a position facing a back side of the wearer's torso, wherein the upper ends of the first and second shoulder straps are coupled to the main panel at a position that is on a side of the child carrying area that is away from the wearer when the child carrier is worn and wherein the child carrier is configured to distribute at least a portion of the child's weight to the wearer's hips through the waistband.

2. The child carrier of Claim 1, wherein the width of the bottom edge of the

main panel is greater than a distance between the upper ends of the first and second shoulder straps.

3. The child carrier of Claim 1, wherein the child carrier is configured to distribute at least a majority of the child's weight to the wearer's hips through the waistband.

4. The child carrier of Claim 3, wherein the child carrier is adapted to support a majority of the child's weight through the child's hips and thighs.

5. The child carrier of Claim 1, wherein the child carrier further comprises a head panel positioned to cover the child's head.

6. The child carrier of Claim 5, further comprising a first restraining strap coupled to a first corner of the head panel and a second restraining strap coupled to a second corner of the head panel.

7. The child carrier of Claim 6, wherein the child carrier is adapted such that the first restraining strap detachably couples to the child carrier at the first shoulder strap over a first shoulder of the wearer and the second restraining strap detachably couples to the child carrier at the second shoulder strap over the second shoulder of the wearer.

8. The child carrier of Claim 1, further comprising a chest strap adapted to cross the wearer's chest or back from the first shoulder strap to the second shoulder strap on the opposite side of the wearer from the main panel.

9. The child carrier of Claim 8, wherein the chest strap has an adjustable length.

10. The child carrier of Claim 9, wherein the chest strap has an adjustable height.

11. The child carrier of Claim 1, wherein the main panel is substantially rectangular.

12. The child carrier of Claim 1, wherein the child carrier weighs less than three pounds.

13. The child carrier of Claim 1, wherein the child carrier is machine washable.

14. The child carrier of Claim 1, wherein the child carrier is adapted to support the child with only substantially deformable materials.

15. The child carrier of Claim 1, wherein the first shoulder strap and second shoulder strap each comprise a section of padding.

16. The child carrier of Claim 1, wherein the child carrier is adapted to allow the wearer to select whether to support the child in a position facing the front side of the wearer's torso or the back side of the wearer's torso without modifying the configuration of the shoulder straps and waistband relative to the main panel.

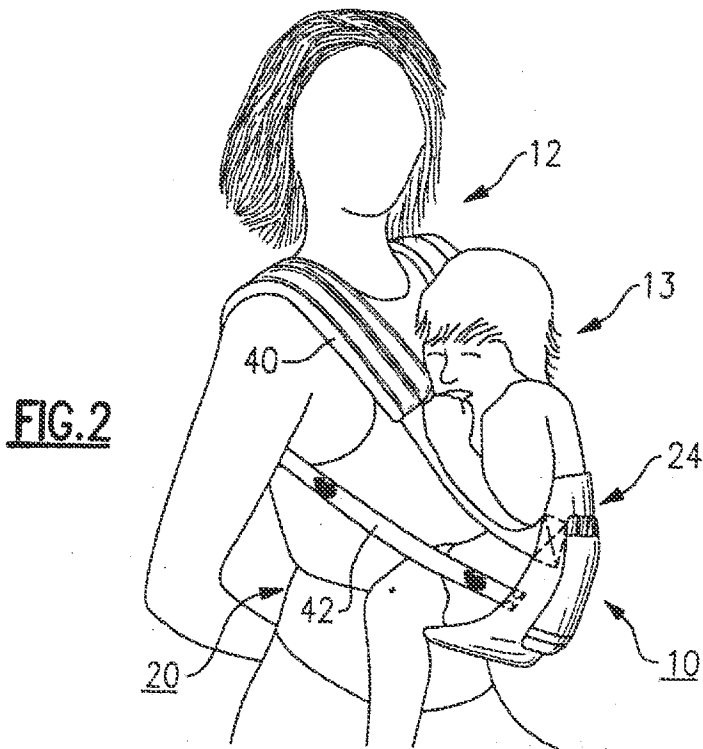
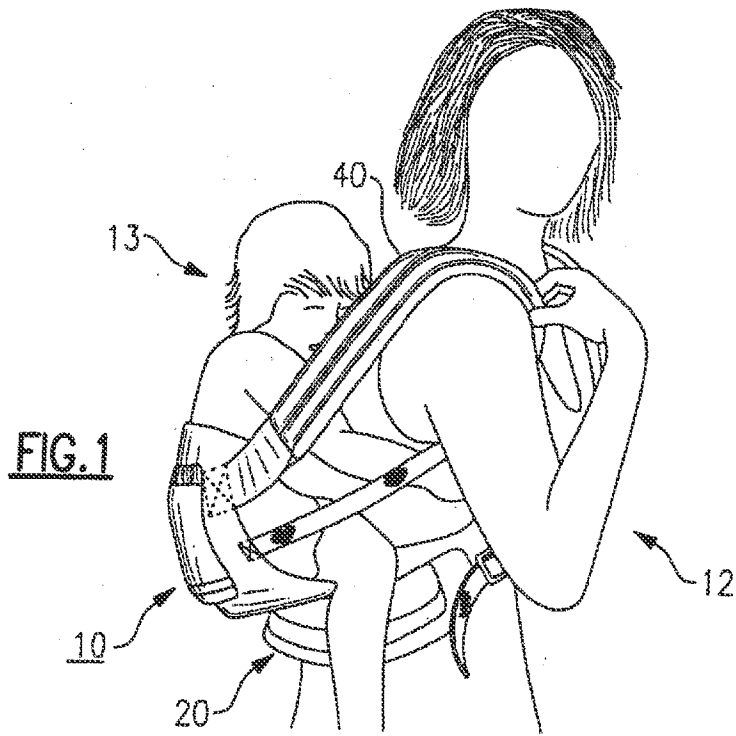
17. The child carrier of Claim 1, wherein the child carrier configured to distribute 70-90% of a child's weight to the wearer's hips through the waistband.

18. The child carrier of Claim 1, wherein the waistband at the padded section has a vertical length that is approximately 1/3 of the vertical length of the main panel.

19. The child carrier of Claim 18, wherein the lower end of the first shoulder strap and the lower end of the second shoulder strap are coupled to the main panel approximately 2/3 of vertical length of the main panel away from the bottom edge.

ABSTRACT

A lightweight child carrier that can be mounted upon the front or the back of a wearer's torso with little or no need to adjust the carrier's harness. The carrier includes a main panel having generally a rectangular shape. The bottom edge of the main panel is joined to the top edge of a padded waist band and the bottom edge of a head restraining panel is joined to the top edge of the main panel. Shoulder straps are connected to the main panel and are cojoined by a chest strap that is slidably mounted upon each shoulder strap. Adjustable restraining straps are connected to the chest strap and to the head restraining panel. An auxiliary waist belt is provided that considerably expands the length of the waist band to allow the carrier to be worn by a woman during pregnancy.



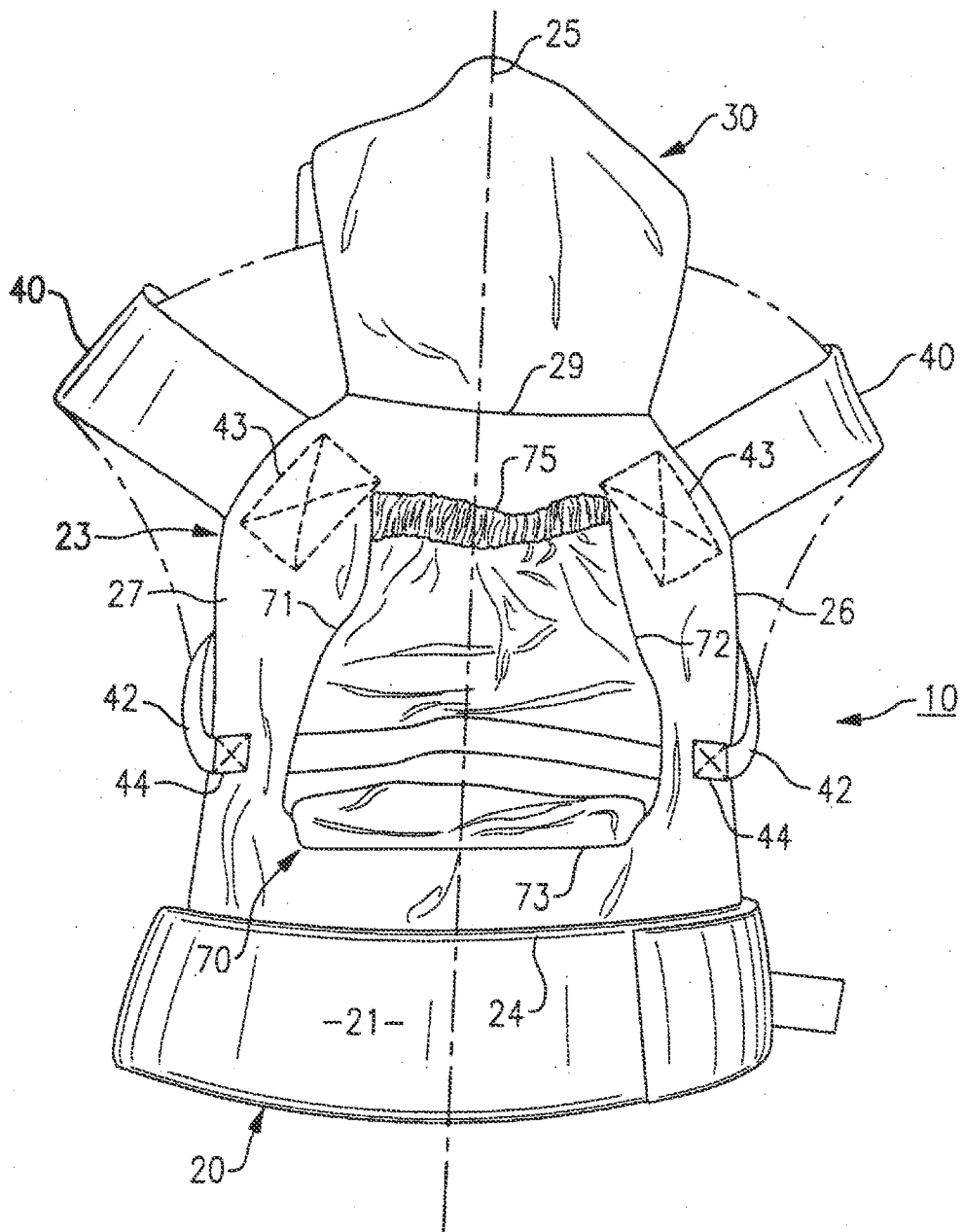


FIG.3

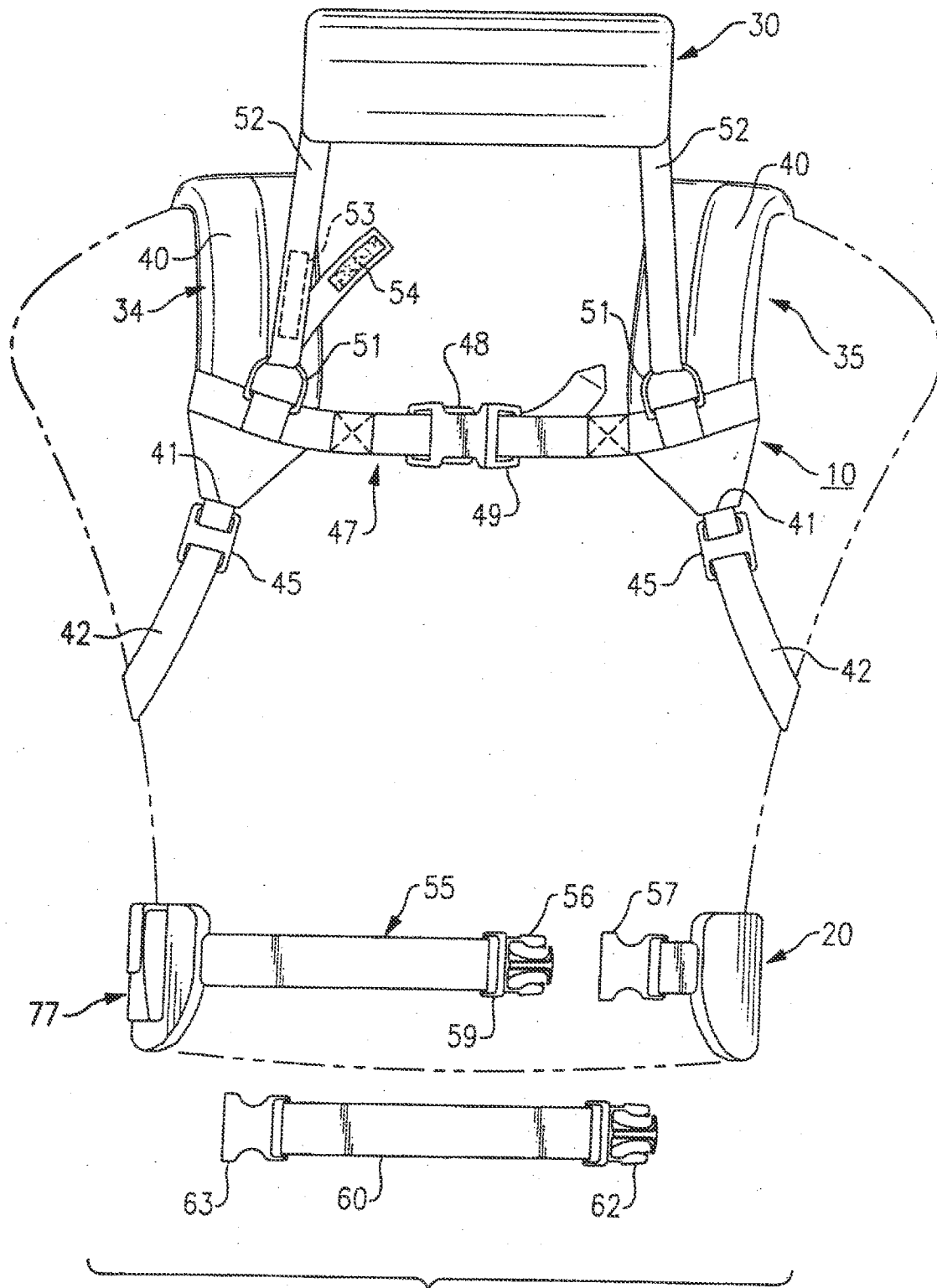


FIG. 4

FIG.5

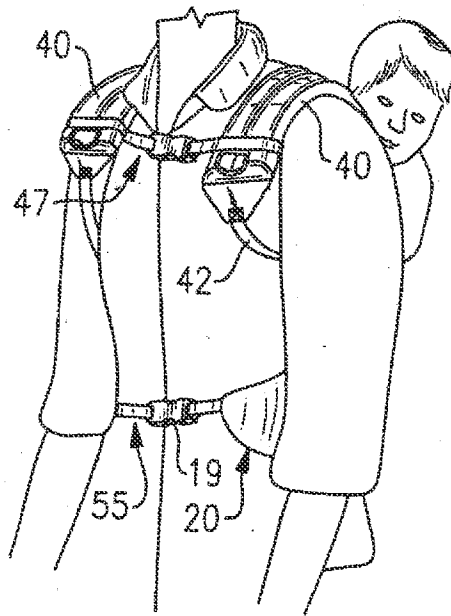
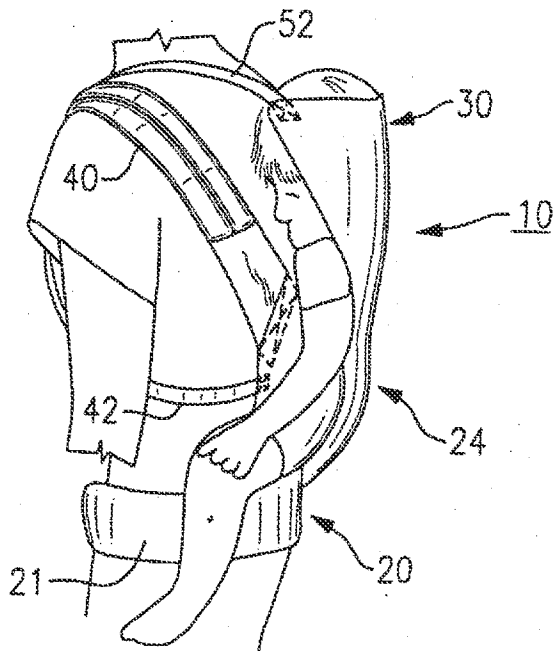
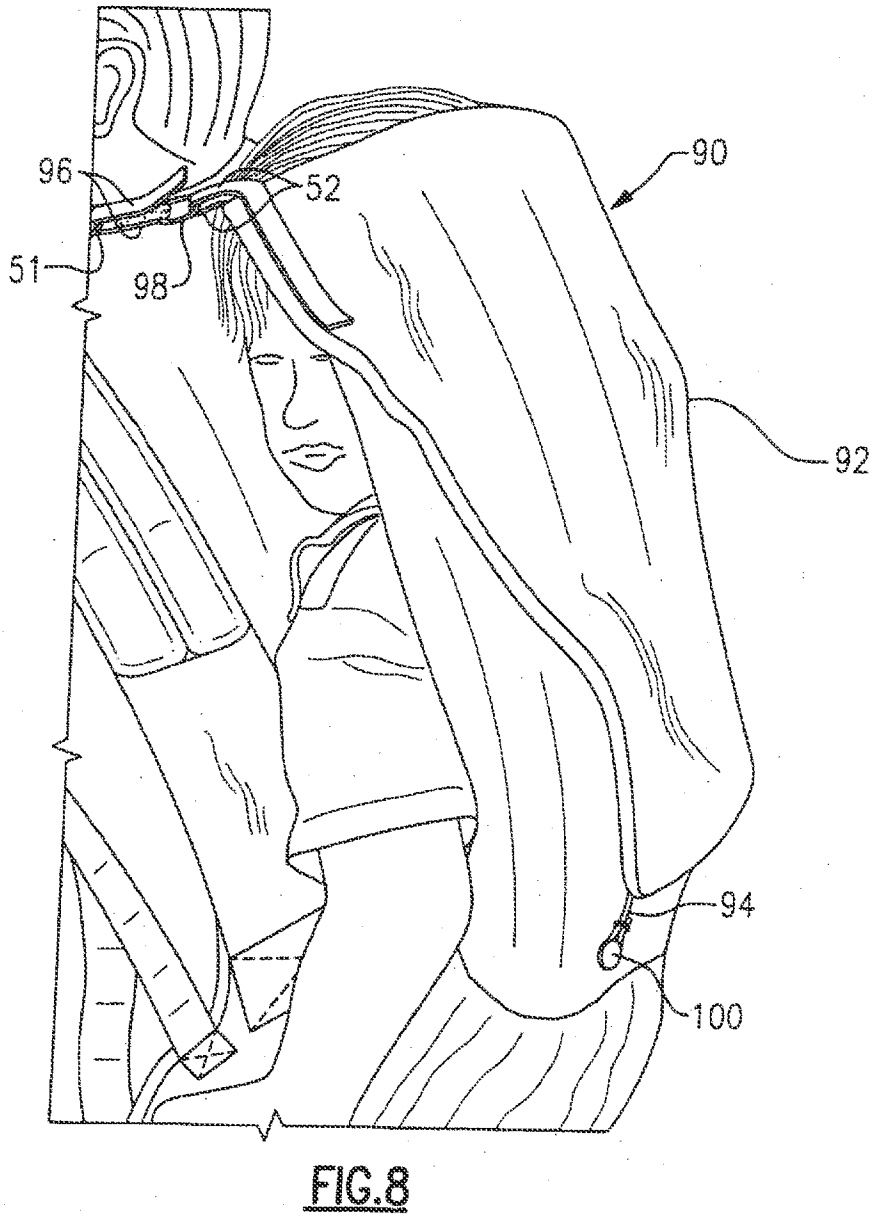
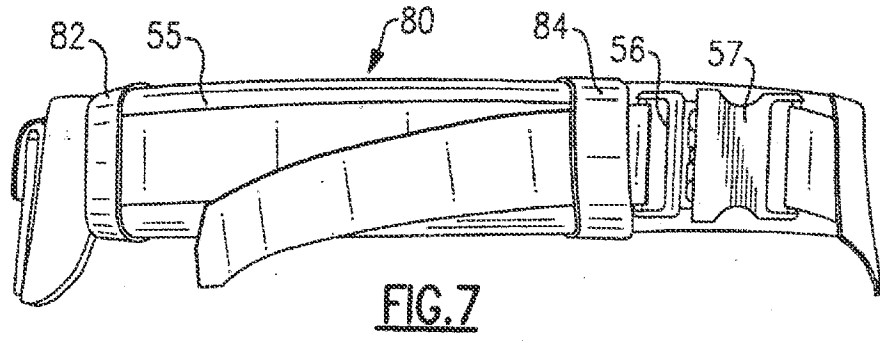


FIG.6





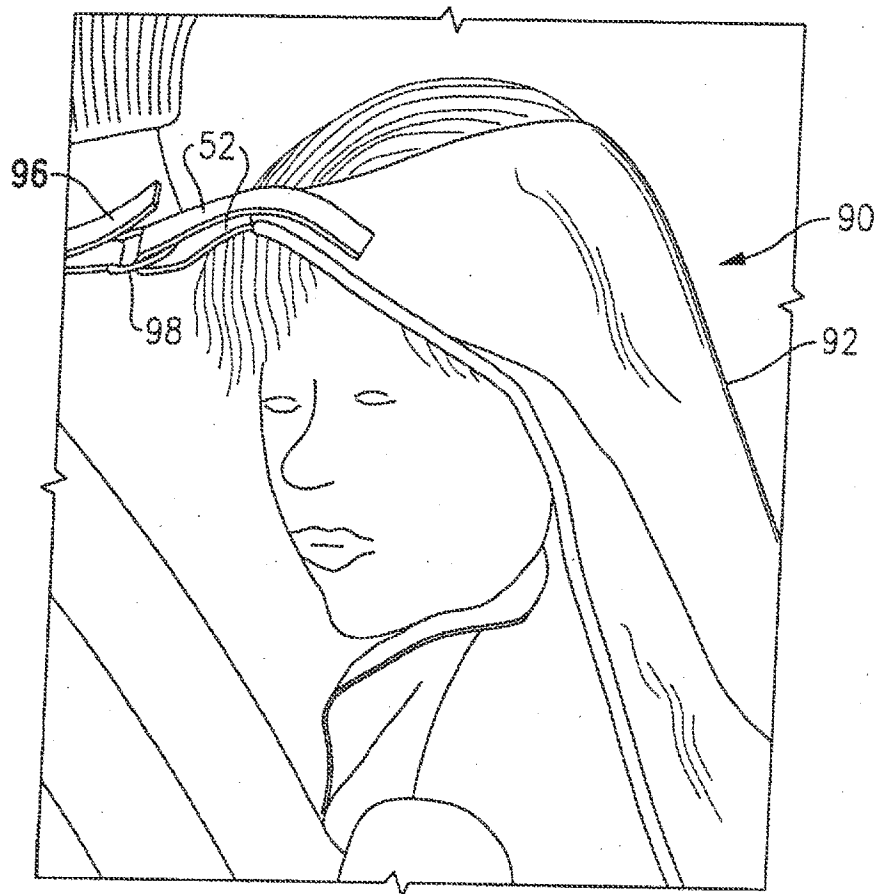


FIG.9

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Filer:	Ari G. Akmal/Delia Narvaiz
Attorney Docket Number:	ERGO1110-4

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility application filing	1011	1	280	280
Utility Search Fee	1111	1	600	600
Utility Examination Fee	1311	1	720	720

Pages:

Claims:

Miscellaneous-Filing:

Petition:

Patent-Appeals-and-Interference:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1600

Electronic Acknowledgement Receipt

EFS ID:	22040272
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Delia Narvaiz
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	13-APR-2015
Filing Date:	
Time Stamp:	17:35:22
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1600
RAM confirmation Number	4539
Deposit Account	503183
Authorized User	

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	ERGO1110-4_Cert_Transmission.pdf	350053 c2b17a9e1c09577f8f5e9d0d7c0ec84963c98598	no	1

Warnings:

Information:

2	Transmittal of New Application	ERGO1110-4_Transmittal.pdf	863702 7171224c90363ad8aa250f34e8ad534ec6fa8c09	no	1
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Warnings:

Information:

3	Application Data Sheet	ERGO1110-4_ADS.pdf	1007473 4580aeb73a0535f0119aa687e3ed4e34a1f015e7	no	6
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Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	9
Claims	10	12
Abstract	13	13

Warnings:

Information:

5	Drawings-only black and white line drawings	ERGO1110-4_Drawings.pdf	5007902 e0b266cf0d7317ec1ac99c92fa33b2a7d3e0f42d	no	6
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Total Files Size (in bytes):	17125113
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

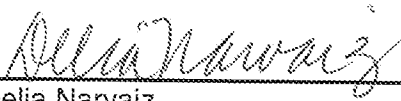
New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
CERTIFICATE OF TRANSMISSION VIA EFS-WEB SYSTEM	Atty Docket No. ERGO1110-4
Mail Stop: Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Dear Sir:	In the Application of: Karin Annette Frost
	Date Filed: Herewith
	Title: Baby Carrier

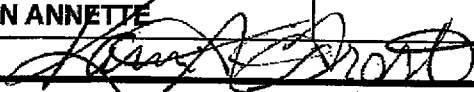
I hereby certify that the attached Patent Application Transmittal Form, Application Data Sheet, Patent Application, and Drawings (6 sheets) are being deposited electronically using the United States Patent and Trademark Office EFS-Web System on **April 13, 2014**.

Respectfully submitted,
Sprinkle IP Law Group



 Delia Narvaiz

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)		Attorney Docket No.	ERGO1110-3
		First Named Inventor	Karin Annette Frost
		<i>COMPLETE IF KNOWN</i>	
		Application Number	14/047,892
		Filing Date	10/07/2013
		<input type="checkbox"/> Declaration Submitted with Initial Filing <input checked="" type="checkbox"/> Declaration Submitted after Initial Filing	Group Art Unit
		Examiner Name	Not Yet Assigned
BABY CARRIER <i>(Title of Invention)</i>			
As a below named inventor, I hereby declare that: This declaration is directed to: <input type="checkbox"/> The attached application, OR <input checked="" type="checkbox"/> United States Application Number or PCT International application number <u>14/047,892</u> filed on <u>10/07/2013</u> , as amended on _____			
I have reviewed and understand the contents of the above-identified specification, including the claims.			
I believe I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.			
The above-identified application was made or authorized to be made by me.			
I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me which is material to the patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part.			
I acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			

LEGAL NAME OF INVENTOR:			
Given Name (first and middle (if any))		Family Name or Surname	
KARIN ANNETTE		FROST	
Inventor's Signature		Date	5.23.14

Electronic Acknowledgement Receipt

EFS ID:	22047571
Application Number:	14685235
International Application Number:	
Confirmation Number:	7364
Title of Invention:	Baby Carrier
First Named Inventor/Applicant Name:	Karin Annette Frost
Customer Number:	44654
Filer:	Ari G. Akmal/Delia Narvaiz
Filer Authorized By:	Ari G. Akmal
Attorney Docket Number:	ERGO1110-4
Receipt Date:	13-APR-2015
Filing Date:	
Time Stamp:	17:45:47
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Oath or Declaration filed	ERGO1110-4_Ex_Declaration_fr _parent.pdf	847869 <small>a2c9e77cbcdfab52726c7ac43888dccc94268ef19</small>	no	2

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National Stage of an International Application under 35 U.S.C. 371

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New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.