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SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 06-039631- -00004-0000

Fecha: 2008-03-19 16:22:21 Dep. 2020 NUECREACION  
Tra. 11 PATENTE IYI Eva: 378 FASE NACIONAL I  
Act. 538 PETICION Folios: 2

Señora Jefe de la  
**DIVISION DE NUEVAS CREACIONES**  
Superintendencia de Industria y Comercio  
E. S. D.

Trámite :011  
Evento :378  
Actuación :538

Referencia : Expediente No. 06.039.631  
Asunto : SOLICITUD DE PATENTE PARA MEDIOS DE DESECHO  
SOBRE UN PAÑAL ABSORBENTE  
Solicitante : SCA HYGIENE PRODUCTS AB  
Clase : A61F 13/15  
Publicada en : La Gaceta No. 580 Del 28 de septiembre de 2007  
Fecha de Solicitud : 26 de abril de 2006

1. Yo, Emilio FERRERO, identificado como aparece al pie de mi firma, actuando como apoderado en el asunto de la referencia, atentamente, solicito se efectúe el examen de patentabilidad de la solicitud en referencia presentada de acuerdo con el Capítulo I del PCT y según lo establecido en el artículo 44 de la Decisión 486 de la Comisión de la Comunidad Andina. Para tal efecto presento junto con este escrito el recibo por valor de \$ 420.000.00 correspondiente a la tasa fijada.

2. Ruego atentamente a la Señora Jefe se sirva ordenar que se anexe este recibo para que se efectúe dicho examen y se continúe con el trámite de la solicitud.

Señora Jefe,

**EMILIO FERRERO**  
T.P.A. No. 31.929

COLO-11256-841-082-6  
MVN\SCT\ID-121898\WPC11256  
No. M-2008-121898\MVN

**DIVISIÓN DE NUEVAS CREACIONES**

RADICACIÓN EXPEDIENTE No. 06-39631

EL EXTRACTO DE LA PRESENTE SOLICITUD DE **PATENTE DE INVENCION**

FUE PUBLICADO EN LA GACETA DE PROPIEDAD INDUSTRIAL No **580** DE

FECHA **28 DE SEPTIEMBRE DE 2007** EL TÉRMINO HÁBIL SEÑALADO POR

LA LEY EXPIRA EL **27 DE DICIEMBRE DE 2007**

NOTA: Dentro del plazo de los seis (6) meses siguientes a partir de la fecha de publicación en la gaceta de Propiedad Industrial, deberá solicitar y cancelar el examen de patentabilidad so pena de que la solicitud caiga en abandono, de acuerdo con lo establecido en el Artículo 44 de la Decisión 486/2000.

SE PRESENTARON OPOSICIONES POR PARTE DE TERCEROS.

SI \_\_\_\_\_

NO       X

**United States Patent** [19]

Robertson et al.

[11] Patent Number: 4,963,140

[45] Date of Patent: Oct. 16, 1990

- [54] **MECHANICAL FASTENING SYSTEMS WITH DISPOSAL MEANS FOR DISPOSABLE ABSORBENT ARTICLES**
- [75] Inventors: Anthony J. Robertson, Blue Ash, Ohio; Charles L. Scripps, Brookfield, Wis.
- [73] Assignee: The Procter & Gamble Company, Cincinnati, Ohio
- [21] Appl. No.: 134,275
- [22] Filed: Dec. 17, 1987
- [51] Int. Cl.<sup>3</sup> ..... A61F 13/5
- [52] U.S. Cl. .... 604/389; 604/391
- [58] Field of Search ..... 128/DIG. 15, DIG. 26; 604/386, 389, 390, 391, 387, 392, 385.1, 385.2
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Primary Examiner—Randall L. Green

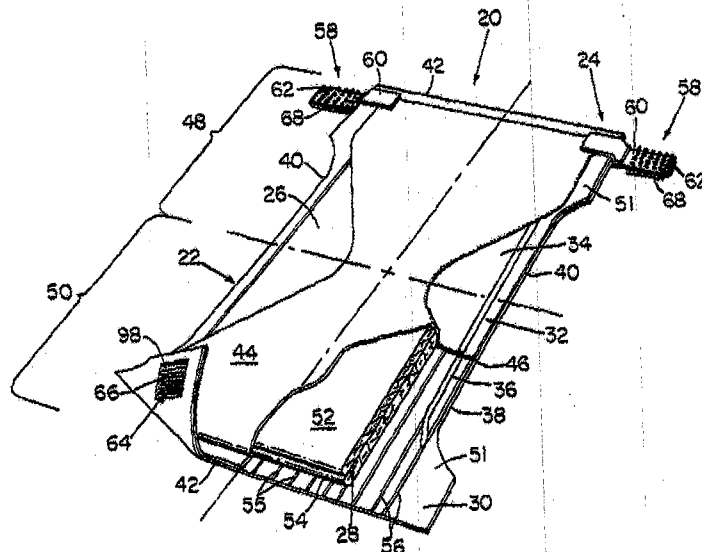
Assistant Examiner—K. M. Reiche

Attorney, Agent, or Firm—Steven W. Miller; John M. Pollaro; Fredrick H. Braun

[57] **ABSTRACT**

A disposable absorbent article with a mechanical fastening system having disposal members so as to provide convenient disposal of the absorbent article. The mechanical fastening system preferably comprises a tape tab having a first fastening element, a landing member comprising a second fastening element mechanically engageable with the first fastening element, and a disposal member for allowing the absorbent article to be secured in a configuration that provides convenient disposal of the absorbent article. The disposal member preferably comprises a second fastening element affixed to the backing surface of at least one of the tape tabs so that the first fastening element of the opposite tape tab will mechanically engage the second fastening element of the disposal member so as to secure the absorbent article in its disposal configuration.

33 Claims, 4 Drawing Sheets





**N-PHENYLACETAMINONITRILE**

??????

Publication number: ()

Publication date:

Inventor(s):

Applicant(s):

Classification:

- international:

- European:

Application number:

Priority number(s):

Abstract not available for ()

Abstract of corresponding document: **EP 0595130 (A1)**

The present invention relates to novel N-phenylacetaminonitriles of the general formula (I) in which R<sup>1</sup> represents hydrogen or in each case optionally substituted alkyl, alkenyl, cycloalkyl, aryl or heterocyclyl and R<sup>2</sup> represents hydrogen or optionally substituted alkyl or R<sup>1</sup> and R<sup>2</sup> together with the carbon atom to which they are bonded represent in each case optionally substituted cycloalkyl or heterocyclyl, R<sup>3</sup> represents halogen, alkyl or alkoxy, R<sup>4</sup> represents hydrogen, halogen, alkyl, haloalkyl or alkoxy, R<sup>5</sup> represents halogen, alkyl or alkoxy and n represents a number 0, 1, 2 or 3, to processes for their preparation and to their use for the preparation of pesticides.



I



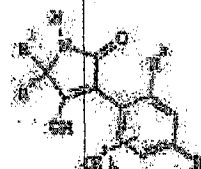
II



III



IV



V

the absorbent core 20 may be varied to accommodate weavers ranging from infants to adults.

While the absorbent core 20 may comprise a single layer of absorbent material such as the configuration described in U.S. Pat. No. 4,610,678 entitled "High-Density Absorbent Structure" which issued to Paul T. Weisman and Steven A. Goldman on Sept. 9, 1986 and which patent is incorporated herein by reference, a preferred embodiment of the absorbent core 20 is a dual-layered absorbent core in a preferred configuration such as is generally described in U.S. Pat. No. 4,573,402 entitled "Absorbent Articles With Dual-Layered Cores" which issued to Paul T. Weisman, Dawn I. Houghton and Dale A. Gelfert on June 16, 1987, and which is incorporated herein by reference, having an asymmetric-shaped upper layer 52 and a lower layer 54.

The upper layer 52 preferably acts as a liquid acquisition/distribution layer comprised primarily of hydrophilic fiber material. The lower layer 54 acts as a fluid storage layer comprised of a mixture of hydrophobic fiber material and particles of an absorbent gelling material (hydrogel material). Both the upper layer 52 and the lower layer 54 preferably comprise an absorbent layer enclosed in a barrier layer. It should be understood, however, that the size, shape, configuration, and total absorbent capacity of the upper layer 52 or the lower layer 54 may be varied to accommodate weaver's ranging from infants through adults. Therefore, the dimensions, shape, and configuration of both the upper layer 52 and the lower layer 54 may be varied (e.g., the upper layer 52 or the lower layer 54 may have a varying caliper, a hydrophilic gradient, a rapid acquisition zone or may contain absorbent gelling material).

The absorbent core 20 is superposed on the backsheet 30 and is preferably associated thereto by a core attachment means 56 such as those well known in the art, for example, pressure-sensitive adhesives, hot melt adhesives or other adhesives, ultrasonic bonding, or heat-pressure sealing. The absorbent core 20 may be secured to the backsheet 30 by a uniform continuous layer of adhesive, a patterned layer of adhesive, or any array of separate lines or spots of adhesive. An adhesive which has been found to be satisfactory is preferably a hot-melt adhesive such as manufactured by Eastman Chemical Products Company of Kingsport, Tenn. and marketed under the trademarks of Resobond A-3 or by Century Adhesives, Inc. of Columbus, Ohio and named under the trademark Century 5271. The core attachment means 56 preferably comprises an open pattern network of filaments of adhesive as is shown in U.S. Pat. No. 4,573,966 entitled "Disposable Waste-Containment Garment" which issued to James A. Minotola and David E. Tucker on Mar. 4, 1986, and which is incorporated herein by reference.

The backsheet 30 is impervious to liquids and is preferably manufactured from a thin plastic film, although other flexible liquid impervious materials may also be used. The backsheet 30 prevents the exudates absorbed and contained in the absorbent core 20 from soiling articles which contact the diaper 20 such as bedclothes and undergarments. Preferably, the backsheet 30 is a polyethylene film having a thickness of from about 0.012 mm (0.5 mil) to about 0.051 mm (2.0 mils), although other flexible, liquid impervious materials may be used. As used herein, the term "flexible" refers to materials which are compliant and which will readily conform to the general shape and contours of the human body.

A suitable polyethylene film is manufactured by Monsanto Chemical Corporation and marketed in the trade as Film No. 8020. The backsheet 30 is preferably embossed and/or matte finished to provide a more clothlike appearance. Further, the backsheet 30 may permit vapors to escape from the absorbent core 20 while still preventing exudates from passing through the backsheet 30.

The size of the backsheet 30 is dictated by the size of the absorbent core 20 and the exact diaper design selected. In a preferred embodiment, the backsheet 30 has a modified hourglass shape extending beyond the absorbent core a minimum distance of at least about 1.3 cm to about 2.5 cm (about 0.5 to about 1.0 inch) around the entire diaper periphery 38.

The topsheet 26 of the body portion 22 of the present invention is compliant, soft feeling, and non-irritating to the wearer's skin. Further, the topsheet 26 is liquid pervious permitting liquids to readily penetrate through the topsheet 26. A suitable topsheet 26 may be manufactured from a wide range of materials such as porous foams, reticulated foams, apertured films, natural fibers (e.g., wood or cotton fibers), synthetic fibers (e.g., polyester or polypropylene fibers) or from a combination of natural and synthetic fibers. Preferably, it is made of a hydrophobic material to isolate the wearer's skin from liquid retained in the absorbent core 20.

A particularly preferred topsheet 26 comprises a single length, polypropylene fibers having a diameter of about 1.5, such as Hercules Type 151 polypropylene fibers marketed by Hercules, Inc. of Wilmington, Del. As used herein, the term "single length fibers" refers to those fibers having a length of at least about 15.9 mm (0.625 inches).

There are a number of manufacturing techniques which may be used to manufacture the topsheet 26. For example, the topsheet 26 may be woven, non-woven, spunbonded, carded, hydroformed, or like. A preferred topsheet 26 is carded and thermally bonded by means well known to those skilled in the fabric art. Preferably, the topsheet 26 has a basis weight from about 15 to about 30 grams per square meter, a minimum dry tensile strength of at least about 400 grams per centimeter in the machine direction and a wet tensile strength of at least about 55 grams per centimeter in the cross-machine direction.

The topsheet 26 and the backsheet 30 are associated together in any suitable manner as is well known in the diaper manufacturing art. As used herein, the term "associated" encompasses configurations whereby the topsheet 26 is directly joined to the backsheet 30 by affixing the topsheet 26 directly to the backsheet 30, and configurations whereby the topsheet 26 is indirectly joined to the backsheet 30 by affixing the topsheet 26 to intermediate members which in turn are affixed to the backsheet 30. In a preferred embodiment, the topsheet 26 and the backsheet 30 are joined directly to each other in the diaper periphery 38 by a flap attachment means 56 such as an adhesive or any other attachment means as is known in the art. In general, the core attachment means 56 that affixes the absorbent core 20 to the backsheet 30 is the same means as the flap attachment means 56 that affixes the topsheet 26 to the backsheet 30. Thus, for example, a uniform continuous layer of adhesive, a patterned layer of adhesive, an array of separate lines or spots of adhesive, or a network or adhesive filaments such as shown in the above-referenced U.S. Pat. No. 4,573,966 may be used.

Elastically contractible leg cuffs 32 are disposed adjacent the periphery 38 of the body portion 22, preferably along each longitudinal edge 40, so that the leg cuffs 32 tend to draw and hold the diaper 20 against the legs of the wearer. While the leg cuffs 32 may comprise any of several means as are well known in the diaper art, a particularly preferred leg cuff construction comprises a side flap 34 and one or more elastic members 36, as is described in detail in the hereinbefore referenced U.S. Pat. No. 3,960,003. In addition, a molded and apparatus 30 suitable for manufacturing a disposable diaper having elastically contractible leg cuffs are described in U.S. Pat. No. 4,081,301 entitled "Method and Apparatus for Continuously Attaching Isolated, Strengthened Elastic Straps to Preformed Isolated Portions of Disposable Absorbent Articles" which issued to Kenneth B. Buell on Mar. 28, 1978, and which patent is incorporated herein by reference. In a preferred embodiment, the elastically contractible leg cuff 32 comprises a side flap 34 and an elastic member 36 comprising an elastic band 38.

The diaper 20 is provided with a fastening system 28 for forming a side closure. Thus, the diaper 20 is fitted to the wearer and the first end region 48 and the second end region 50 are maintained in an overlapping configuration when the diaper 20 is worn.

In a preferred embodiment of the present invention as shown in FIG. 1, the fastening system 28 comprises a closure member 38, preferably comprising a tape tab 60 and a first fastening element 62, disposed adjacent each longitudinal edge 40 of the body portion 22 in the first end region 48, a handling member 64, preferably comprising a second fastening element 62, disposed on the outside of the first fastening element 62, disposed on the outside surface 46 of the body portion 22 in the second end region 50, and disposal means 68 positioned on either side of the body portion 22 for allowing the diaper 20 to be secured in a disposal configuration so as to provide convenient disposal of the diaper 20.

Each closure member 58 is intended to provide a mechanical fastening means for engaging a handling member 64 so as to provide a secure side closure for the diaper 20. Thus, the closure member 58 comprises at least a first fastening element 62. Each closure member 58 also preferably comprises a means for positioning the first fastening element 62 adjacent the handling member 64 so as to achieve a side closure. Thus, the closure member 58 may comprise any of the well known configurations and securing means for achieving a side closure on a diaper such as an inner fastening member secured to the inside surface and/or the outside surface of the body portion, tape tabs, or belts. Preferred closure members 58 for the diaper 20 comprises either an inner fastening member or a tape tab.

An inner fastening member comprises a fastening element or a combination of fastening elements such as a first fastening element and adhesive attachment means positioned on the body portion 22 of the diaper 20. Thus, a preferred inner fastening member consists of a first fastening element comprising a strip or a patch of a hook fastening material. While an inner fastening member may be positioned anywhere on the body portion such as on the inside surface 44 or the outside surface 46, or in the first end region 48 or the second end region 50, an inner fastening member is preferably positioned on the inside surface 44 of the body portion 22 in the first end region 48, one adjacent each

longitudinal edge 40, so as to engage a handling member 64. The first fastening element of each inner fastening member is joined to the body portion and preferably covers an area about 1 inch wide (i.e., generally perpendicular to longitudinal centerline) by about 2.5 inches long (i.e., generally parallel to the longitudinal centerline) at the panels 51 of the body portion 22. An exemplary embodiment of an inner fastening member is described in U.S. Pat. No. 4,699,622 entitled "Disposable Diaper Having an Improved Side Closure" issued to John W. Toussant and Margaret H. Hase on Oct. 13, 1987, which is incorporated herein by reference.

As shown in FIGS. 1 and 2, the closure member 58 most preferably comprises a tape tab 60. Any of the well known configurations and constructions of a tape tab may be used. A preferred tape tab 60 is a Y-shaped tape tab as described in detail in U.S. Pat. No. 3,848,994 entitled "Tape Fastening System for Disposable Diaper" which issued to Kenneth B. Buell on Nov. 19, 1974, and which patent is incorporated herein by reference. Alternatively, preferred tape tabs are described in detail in co-pending U.S. continuation patent application Ser. No. 078,345 entitled "Disposable Diaper Having Wide Tapered Fastening Tapes" filed July 28, 1987 by Harold R. Burdhardt and Kenneth B. Buell, which is incorporated herein by reference. As shown in FIG. 1, a tape tab 60 is provided on both longitudinal edges 40 of the body portion 22, most preferably in the first waist region 48.

A particularly preferred tape tab 60 is illustrated in FIG. 2 and has a fastening surface 70 and a backing surface 72. The fastening surface 70 is that surface of the tape tab 60 designed to engage the handling member 64 of the present invention. Thus, the fastening surface 70 of the tape tab 60 will generally correspond to the inside surface 44 of the body portion 22. The backing surface 72 is that surface opposite of the fastening surface 70 and generally corresponds to the outside surface 46 of the body portion 22. The backing surface 72 is thus generally exposed during wear of the diaper 20.

The preferred tape tab 60 illustrated in FIG. 2 is one which is anchored to both the inside surface 44 and the outside surface 46 of the body portion 22 to create a manufacturer's end (i.e., that attachment of the tape tab 60 to the diaper 20 made during manufacture of the diaper 20). The tape tab 60 has another element which forms the user's end (i.e., that joint made by the person in securing the diaper to the wearer). Thus, the preferred tape tab 60 of the present invention has at least three elements, a first fixed portion 74, a second fixed portion 76, and a connective portion 78. The first fixed portion 74 is that portion of the tape tab 60 which is attached to the inside surface 44 of the body portion 22. The second fixed portion 76 is that portion of the tape tab 60 which is attached to the outside surface 46 of the body portion 22. The first fixed portion 74 and the second fixed portion 76 thus form the manufacturer's end and fixed portion 76 thus form the manufacturer's end of the tape tab 60. The connective portion 78 is that portion of the tape tab 60 which is attached to another portion of the diaper 20, generally the handling member 64, by the user when securing the diaper 20 on the wearer. The connective portion 78 thus forms the user's end. Additionally, the outer surface of the second fixed portion 76 and the outer surface of the connective portion 78 form the backing surface 72 of the tape tab 60 while the inner surface of the first fixed portion 74 and the inner surface of the connective portion 78 form the fastening surface 70 of the tape tab 60.

The fastening surface 70 is that surface of the tape tab 60 designed to engage the handling member 64 of the present invention. Thus, the fastening surface 70 of the tape tab 60 will generally correspond to the inside surface 44 of the body portion 22. The backing surface 72 is that surface opposite of the fastening surface 70 and generally corresponds to the outside surface 46 of the body portion 22. The backing surface 72 is thus generally exposed during wear of the diaper 20.

The preferred tape tab 60 illustrated in FIG. 2 is one which is anchored to both the inside surface 44 and the outside surface 46 of the body portion 22 to create a manufacturer's end (i.e., that attachment of the tape tab 60 to the diaper 20 made during manufacture of the diaper 20). The tape tab 60 has another element which forms the user's end (i.e., that joint made by the person in securing the diaper to the wearer). Thus, the preferred tape tab 60 of the present invention has at least three elements, a first fixed portion 74, a second fixed portion 76, and a connective portion 78. The first fixed portion 74 is that portion of the tape tab 60 which is attached to the inside surface 44 of the body portion 22. The second fixed portion 76 is that portion of the tape tab 60 which is attached to the outside surface 46 of the body portion 22. The first fixed portion 74 and the second fixed portion 76 thus form the manufacturer's end and fixed portion 76 thus form the manufacturer's end of the tape tab 60. The connective portion 78 is that portion of the tape tab 60 which is attached to another portion of the diaper 20, generally the handling member 64, by the user when securing the diaper 20 on the wearer. The connective portion 78 thus forms the user's end. Additionally, the outer surface of the second fixed portion 76 and the outer surface of the connective portion 78 form the backing surface 72 of the tape tab 60 while the inner surface of the first fixed portion 74 and the inner surface of the connective portion 78 form the fastening surface 70 of the tape tab 60.

The fastening surface 70 is that surface of the tape tab 60 designed to engage the handling member 64 of the present invention. Thus, the fastening surface 70 of the tape tab 60 will generally correspond to the inside surface 44 of the body portion 22. The backing surface 72 is that surface opposite of the fastening surface 70 and generally corresponds to the outside surface 46 of the body portion 22. The backing surface 72 is thus generally exposed during wear of the diaper 20.

The preferred tape tab 60 illustrated in FIG. 2 is one which is anchored to both the inside surface 44 and the outside surface 46 of the body portion 22 to create a manufacturer's end (i.e., that attachment of the tape tab 60 to the diaper 20 made during manufacture of the diaper 20). The tape tab 60 has another element which forms the user's end (i.e., that joint made by the person in securing the diaper to the wearer). Thus, the preferred tape tab 60 of the present invention has at least three elements, a first fixed portion 74, a second fixed portion 76, and a connective portion 78. The first fixed portion 74 is that portion of the tape tab 60 which is attached to the inside surface 44 of the body portion 22. The second fixed portion 76 is that portion of the tape tab 60 which is attached to the outside surface 46 of the body portion 22. The first fixed portion 74 and the second fixed portion 76 thus form the manufacturer's end and fixed portion 76 thus form the manufacturer's end of the tape tab 60. The connective portion 78 is that portion of the tape tab 60 which is attached to another portion of the diaper 20, generally the handling member 64, by the user when securing the diaper 20 on the wearer. The connective portion 78 thus forms the user's end. Additionally, the outer surface of the second fixed portion 76 and the outer surface of the connective portion 78 form the backing surface 72 of the tape tab 60 while the inner surface of the first fixed portion 74 and the inner surface of the connective portion 78 form the fastening surface 70 of the tape tab 60.

The fastening surface 70 is that surface of the tape tab 60 designed to engage the handling member 64 of the present invention. Thus, the fastening surface 70 of the tape tab 60 will generally correspond to the inside surface 44 of the body portion 22. The backing surface 72 is that surface opposite of the fastening surface 70 and generally corresponds to the outside surface 46 of the body portion 22. The backing surface 72 is thus generally exposed during wear of the diaper 20.

The preferred tape tab 60 illustrated in FIG. 2 is one which is anchored to both the inside surface 44 and the outside surface 46 of the body portion 22 to create a manufacturer's end (i.e., that attachment of the tape tab 60 to the diaper 20 made during manufacture of the diaper 20). The tape tab 60 has another element which forms the user's end (i.e., that joint made by the person in securing the diaper to the wearer). Thus, the preferred tape tab 60 of the present invention has at least three elements, a first fixed portion 74, a second fixed portion 76, and a connective portion 78. The first fixed portion 74 is that portion of the tape tab 60 which is attached to the inside surface 44 of the body portion 22. The second fixed portion 76 is that portion of the tape tab 60 which is attached to the outside surface 46 of the body portion 22. The first fixed portion 74 and the second fixed portion 76 thus form the manufacturer's end and fixed portion 76 thus form the manufacturer's end of the tape tab 60. The connective portion 78 is that portion of the tape tab 60 which is attached to another portion of the diaper 20, generally the handling member 64, by the user when securing the diaper 20 on the wearer. The connective portion 78 thus forms the user's end. Additionally, the outer surface of the second fixed portion 76 and the outer surface of the connective portion 78 form the backing surface 72 of the tape tab 60 while the inner surface of the first fixed portion 74 and the inner surface of the connective portion 78 form the fastening surface 70 of the tape tab 60.

The fastening surface 70 is that surface of the tape tab 60 designed to engage the handling member 64 of the present invention. Thus, the fastening surface 70 of the tape tab 60 will generally correspond to the inside surface 44 of the body portion 22. The backing surface 72 is that surface opposite of the fastening surface 70 and generally corresponds to the outside surface 46 of the body portion 22. The backing surface 72 is thus generally exposed during wear of the diaper 20.

The preferred tape tab 60 illustrated in FIG. 2 is one which is anchored to both the inside surface 44 and the outside surface 46 of the body portion 22 to create a manufacturer's end (i.e., that attachment of the tape tab 60 to the diaper 20 made during manufacture of the diaper 20). The tape tab 60 has another element which forms the user's end (i.e., that joint made by the person in securing the diaper to the wearer). Thus, the preferred tape tab 60 of the present invention has at least three elements, a first fixed portion 74, a second fixed portion 76, and a connective portion 78. The first fixed portion 74 is that portion of the tape tab 60 which is attached to the inside surface 44 of the body portion 22. The second fixed portion 76 is that portion of the tape tab 60 which is attached to the outside surface 46 of the body portion 22. The first fixed portion 74 and the second fixed portion 76 thus form the manufacturer's end and fixed portion 76 thus form the manufacturer's end of the tape tab 60. The connective portion 78 is that portion of the tape tab 60 which is attached to another portion of the diaper 20, generally the handling member 64, by the user when securing the diaper 20 on the wearer. The connective portion 78 thus forms the user's end. Additionally, the outer surface of the second fixed portion 76 and the outer surface of the connective portion 78 form the backing surface 72 of the tape tab 60 while the inner surface of the first fixed portion 74 and the inner surface of the connective portion 78 form the fastening surface 70 of the tape tab 60.

The fastening surface 70 is that surface of the tape tab 60 designed to engage the handling member 64 of the present invention. Thus, the fastening surface 70 of the tape tab 60 will generally correspond to the inside surface 44 of the body portion 22. The backing surface 72 is that surface opposite of the fastening surface 70 and generally corresponds to the outside surface 46 of the body portion 22. The backing surface 72 is thus generally exposed during wear of the diaper 20.

MENU

SEARCH

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DETAIL

JAPANESE

LEGAL  
STATUS

1 / 1

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-220004

(43)Date of publication of application : 09.08.1994

(51)Int.Cl.

C07C255/29  
C07C233/51  
C07C253/30  
C07C255/31  
C07C255/44  
C07C255/46  
C07C323/59  
C07D207/36  
C07D211/66  
C07D309/14  
C07D317/22  
C07D317/30  
C07D333/24  
C07D333/38  
C07D335/02

(21)Application number : 05-286151 (71)Applicant : BAYER AG

(22)Date of filing : 22.10.1993 (72)Inventor : FISCHER REINER  
BECK GUNTHER

(30)Priority

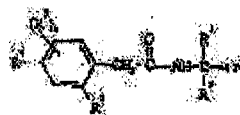
Priority number : 92 4236400 Priority date : 28.10.1992 Priority country : DE

## (54) N-PHENYLACETAMINO NITRILES

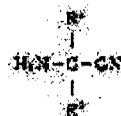
(57)Abstract:

PURPOSE: To provide novel N-phenylacetamino nitriles useful as intermediates for preparing effectively 3-arylpyrrolidine-2,4-diones which are agents for controlling pests.

CONSTITUTION: A compound of formula I (wherein R<sup>1</sup> represents hydrogen, alkyl, alkenyl, cycloalkyl, aryl or heterocyclyl; R<sup>2</sup> represents hydrogen or alkyl; or R<sup>1</sup> and R<sup>2</sup>, together with the carbon atom to which they are bonded, form cycloalkyl or heterocyclyl; R<sup>3</sup>



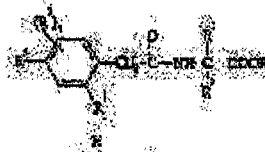
I



II



III



IV

The preferred Y-shaped tape tab 60 of the present invention can be constructed in several ways. The first fixed portion 74, the second fixed portion 76, and the connective portion 78 can each be separate tapes which meet and are joined adjacent the longitudinal edge 40 of the body portion 22 in an area of juncture. A more practical structure for the tape tab 60 is one in which the connective portion 78 and either the first fixed portion 74 or the second fixed portion 76 are a unitary strip of tape material. If the connective portion 78 is unitary with the second fixed portion 76 as shown in FIG. 2, then the first fixed portion 74 is a separate element which is attached to the combined connective portion and the second fixed portion adjacent to the longitudinal edge 40 of the body portion 22.

FIG. 2 also shows the attachment means for securing the tape tab 60 to the body portion 22. These tab attachment means are any of those attachment means which provide an adequate bond, and preferably are any of the pressure-sensitive adhesives well-known to those of ordinary skill in the adhesive art. The outer surface of the first fixed portion 74 is affixed to the inside surface 44 of the body portion 22 by a first tab attachment means 80. The inner surface of the second fixed portion 76 is affixed to the outside surface 46 of the body portion 22 by a second tab attachment means 82. The connective portion 78 is provided with a first fastening element 62 joined to it preferably by the second tab attachment means 82 (alternatively, a third tab attachment means if the connective portion 78 is a separate element from the second fixed portion 76), although an adhesive attachment means may be placed on the first fastening element 62 separately and the combined material joined to the connective portion 78.

Preferred materials for the tape tabs 60 comprises a 35 tape material such as tape code numbers XTP 14,431,0, Y-9576, or Y-9593 available from The Minnesota Mining and Manufacturing Company, St. Paul, Minn. The tape material in the embodiments are preferably a polyethylene film having a tab attachment means affixed to a board. The tape tab attachment means may comprise any of these adhesives which provide an adequate bond with other portions of the diaper, and is preferably any of the pressure-sensitive adhesives well-known to those of ordinary skill in the art. Preferred tab attachment means is a pressure-sensitive adhesive such as code number XTP 14,234 available from The Minnesota Mining and Manufacturing Company, St. Paul, Minn.

As shown in FIG. 2, the tape tab 60 may also have a grip tab 86 at the distal edge 71 in the connective portion 78. The grip tab 86 may be formed by folding over a small margin of the distal edge 71 of the connective portion 78 and attaching it to itself. This forms an end on the connective portion 78 which is easier to grasp by the diaper user when the diaper 20 is to be fitted and attached to the wearer. The grip tab 86 is most beneficial when used when the connective portion 78 is superposed on the first fixed portion 74.

The first fastening element 62 of the closure member 58 forms the closure between the closure member 58 and the leading member 64. Thus, the first fastening element 62 provides an element or elements that engage the second fastening element 66 of the leading member 64 to maintain the first end region 48 and the second end region 50 in an overlapping configuration to provide a secure side closure. The first fastening element 62 may thus comprise any of the well known means for achiev-

ing a closure such as buttons, snaps, hook fastening materials, or loop fastening materials.

The first fastening element 62 may be a separate member joined to and associated with the closure member 58 or a unitary member with the closure member 58. For example, the topsheet 26 may be manufactured so as to mechanically engage the leading member 64 (the topsheet 26 being a unitary first fastening element 62), or a discrete patch or strip of material may be joined with the body portion 22 or the tape tab 60 (a separate first fastening element 62). Preferably, the first fastening element 62 is a separate material joined to the fastening member 70 of the tape tab 60.

The first fastening element 62 is preferably joined to either the body portion 22 or the tape tab 60. As used herein, the term "joined" encompasses configurations whereby the first fastening element 62 is releasably secured to the diaper 20 so that the first fastening element 62 may be removed from the diaper 20 or its location during use and whereby the first fastening element 62 is affixed to the diaper 20 such that the first fastening element 62 is securely fastened to the diaper 20. Joined is also used to denote that the first fastening element 62 may be directly joined to the diaper 20 or may be indirectly joined to the diaper 20 such as by releasably securing or affixing the first fastening element 62 to an intermediate member which in turn is releasably secured or affixed to the diaper 20. Preferably, as shown in FIG. 2, the first fastening element 62 is directly affixed to the connective portion 78 of the tape tab 60 by the second tab attachment means 82.

The first fastening element 62 may be positioned anywhere on the diaper 20. When the closure member 58 comprises an inner fastening member, the first fastening element 62 is preferably positioned in the panel 51 of the first end region 48 adjacent the longitudinal edges 40. When the closure member 58 comprises a tape tab 60, the first fastening element 62 is preferably positioned either on all of or at least a portion of the fastening surface 70, more preferably on all of or at least a portion of the connective portion 78. Most preferably, the first fastening element 62 is disposed on a first area (a portion) of the connective portion 78 on the fastening surface 70 and adjacent the distal edge 71 of the tape tab 60. As an exemplary embodiment of this configuration is discussed in C. Locke Scripps' co-pending U.S. Patent Application entitled "Disposable Absorbent Article With Combination Securing And Adhesive Tape Fastener System", which is incorporated herein by reference.

FIG. 2 shows a preferred first fastening element 62 of the present invention. The first fastening element 62 of the present invention preferably comprises a hook fastening material 84. As used herein, the term "hook fastening material" is used to designate a material having engaging elements 86. Thus, the hook fastening material 84 may also be referred to as a male fastener. It should also be understood that the use of the term "hook" should be non-limiting in the sense that the engaging elements 86 may comprise any shapes as are known in the art so long as they are adapted to engage a complementary securing fastening element 66. As shown, the hook fastening material 84 preferably comprises a base 88 having a first surface and a second surface and a plurality of engaging elements 86 extending from the first surface of the base 88. Each of the engaging elements 86 are shown to comprise a stem 94 supported at one end on the first surface of the base 88 and an en-

larged head 96 positioned at the end of the stem 94 opposite of the base 88.

The preferred hook fastening material 84 of the present invention is intended to engage fibrous elements of a loop fastening material so as to provide a secure fastening device. Thus, the hook fastening material 84 may be manufactured from a wide range of materials. Suitable materials include nylon, polyester, polypropylene, or any combination of these materials. A suitable hook fastening material 84 comprises a number of shaped engaging elements 86 projecting from a woven backing such as the commercially available material designated "Scotchmate" and brand No. F13492 available from Minnesota Mining and Manufacturing Company, St. Paul, Minn. Alternatively, the engaging elements may have any shape such as hooks, T's, or any other shape is well known in the art. A particularly preferred hook fastening material is described in C. Locke Scripps' co-pending U.S. patent application Ser. No. 07/037,841 entitled "Disposable Diaper Having An Improved Fastening Device" filed Jan. 26, 1987, and which is incorporated herein by reference.

The leading member 64 of the fastening system 24 provides a means for securing itself and the closure member 58 together to provide a secure side closure 25 and to maintain the first end region 48 and the second end region 50 in an overlapping configuration. The leading member 64 may be disposed anywhere on the diaper 20 so long as it engages the closure member 58 so as to provide the side closure. For example, the leading member 64 may be disposed on the outside surface 46 in the second end region 50, on any other portion of the diaper 20 which is disposed to engage the closure member 58. In addition, the leading member 64 may either be a discrete separate element affixed to the diaper 20 or a unitary piece of material that is neither divided nor discontinuous with an element of the diaper 20 such as the topsheet 28 or the backsheet 30. While the leading member 64 can assume varying sizes and shapes, it preferably comprises one or more separate patches of material secured to the body portion 22 to allow for a maximum fit adjustment at the waist of the wearer. The preferred embodiment of the diaper 20 illustrated in FIGS. 1 and 5 has an elongated, rectangular-shaped leading member 64 secured to the outside surface 46 of the body portion 22 in the panel 51 of the second end region 50 adjacent each of the longitudinal edges 40.

The leading member 64 preferably comprises a second fastening element 66 engageable with the first fastening element 62 of the closure member 58. Thus, the second fastening element 66 may be manufactured from a wide range of materials and configurations capable of securely engaging the first fastening element 62. For example, the second fastening element 66 may comprise identical complementary elements with the first fastening element 62 or distinct complementary elements with the first fastening element 62. As used herein, the term "identical complementary elements" is used to define elements of the first fastening element 62 and the second fastening element 66 comprise the same configuration or structure that are interfitting. Examples of such systems are described in U.S. Pat. No. 4,322,875 entitled "Two Strip Materials Used For Forming Fasteners" issued to Brown et al. on Apr. 16, 1982 and U.S. Pat. No. 4,701,179 entitled "Fixed Position Fasteners For Disposable Absorbent Carcasses" issued to Kolben-

berger et al. on Oct. 20, 1987. The term "distinct complementary elements" is used herein to designate a system wherein the first fastening element 62 is different from the second fastening element 66 but is engageable therewith such as buttons and holes, a hook fastening material and a loop fastening material, or a male member and a female member. Preferably, the second fastening element 66 comprises a hook fastening material or a hook fastening material depending upon whether the first fastening element 62 is a loop fastening material or a hook fastening material. As shown in FIG. 5, the leading member 64 preferably comprises a second fastening element 66 comprising a plurality of fiber elements such as a loop fastening material 98.

The loop fastening material 98 of the second fastening element 66 provides a plurality of fiber elements that engage the engaging elements 86 of the hook fastening material 84. The loop fastening material 98 may be manufactured from a wide range of materials to provide fiber elements, preferably loops. Such suitable materials include nylon, polyester, polypropylene, or any combination of these materials. A suitable loop fastening material 98 comprises a number of fiber loops projecting from a woven backing such as the commercially available material designated "Scotchmate" brand nylon woven loop No. S13401 available from Minnesota Mining and Manufacturing Company, St. Paul, Minn. A preferred loop fastening material 98 comprises a tricot knit fabric having a plurality of nylon filament loops projecting from a backing of nylon such as the commercially available material designated "Guilford No. 16110" available from Guilford Mills of Greensboro, N.C. Alternatively, the loop fastening material 98 may be a non-woven fabric or any other type of fiber material or loop material which are well known in the art. An inexpensive loop fastening material and a method of making such a loop fastening material is described in U.S. patent application Ser. No. 048,528, entitled "Loop Fastening Material For Fastening Device And Method Of Making Same" filed Apr. 24, 1987, by C. Locke Scripps and J. Richard Noel, which application is incorporated herein by reference.

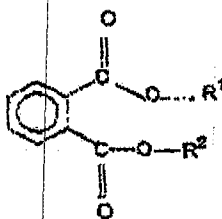
The disposal means 68 of the present invention provides a component that allows convenient and easy disposal of the diaper 20. Thus, the disposal means 68 may be any structure that allows the diaper 20 to be folded or rolled up into a configuration for disposal and secured in that configuration to contain the contents within the soiled diaper. Thus, for example, the disposal means 68 may comprise a number of different elements positioned on either the body portion 22 or the fastening system 24 such as adhesive tape tabs, adhesive attachment means, mechanical fastening elements, a hook fastening material, a loop fastening material, a first fastening element and a second fastening element, or any other element or combination of elements readily known to those of skill in the art.

The disposal means 68 may be positioned anywhere on either the body portion 22 or the fastening system 24. For example, the disposal means 68 may be positioned on the inside surface 44 of the body portion 22, on the outside surface 46 of the body portion 22, in the first end region 48 or in the second end region 50, or on the fastening system 24 such as on an element of one or both of the tape tabs 60. The disposal means 68 may be positioned on the fastening surface 70 or the backing surface 72 of the tape tab 60.

REIVINDICACIONES

1. Procedimiento para la sulfuración de un catalizador metálico de hidrotratamiento que comprende una etapa de tratamiento del catalizador con un agente de sulfuración, **caracterizado** porque a este último se añade un éster de ácido orto-ftálico.

2. Procedimiento según la reivindicación 1, **caracterizado** porque se emplea un éster de ácido orto-ftálico de fórmula general:



en donde los símbolos  $R^1$  y  $R^2$ , que son iguales o diferente, representan, cada uno de ellos, un radical alquilo, cicloalquilo, alilo, alquilarilo o arilalquilo, siendo posible que este radical comprenda de 1 a 18 átomos de carbono y opcionalmente 1 ó más heteroátomos.

3. Procedimiento según la reivindicación 1, **caracterizado** porque es el éster usado es un orto-ftalato de dialquilo, comprendiendo cada uno de los radicales alquilo idénticos de 1 a 8 átomos de carbono, con preferencia orto-ftalato de dimetilo, orto-ftalato de dietilo u orto-ftalato de bis (2-etilhexilo).

4. Procedimiento según cualquiera de las reivindicaciones 1 a 3, **caracterizado** porque la cantidad usada de éster de ácido orto-ftálico es de 0.05 a 5% con respecto al peso de agente de sulfuración y con preferencia de 0.1 a 0.5%.

5. Procedimiento según cualquiera de las reivindicaciones 1 a 4, **caracterizado** porque el agente de sulfuración es una alimentación que ha de ser hidrodesulfurada, disulfuro de carbono, un sulfuro, disulfuro o polisulfuro orgánico, un compuesto de tiofeno o una olefina que comprende azufre.

6. Procedimiento según la reivindicación 5, **caracterizado** porque el agente de sulfuración es disulfuro de dimetilo.

7. Procedimiento según cualquiera de las reivindicaciones 1 a 6, **caracterizado** porque se trabaja en presencia de hidrógeno de acuerdo con la técnica de sulfuración *in situ*.

8. Procedimiento según cualquiera de las reivindicaciones 1 a 6, **caracterizado** porque se trabaja primeramente en ausencia de hidrógeno de acuerdo con la técnica de pre-sulfuración *ex situ*.

9. Procedimiento según cualquiera de las reivindicaciones 1 a 8, **caracterizado** porque el catalizador metálico a sulfurar es un catalizador a base de óxidos de molibdeno, tungsteno, níquel y/o cobalto, depositado sobre un soporte inorgánico poroso.

10. Procedimiento según la reivindicación 9, **caracterizado** porque el catalizador metálico a sulfurar es una mezcla de óxidos de cobalto y de molibdeno, una mezcla de óxidos de níquel y de molibdeno o una mezcla de óxidos de níquel y de tungsteno, estando soportada esta mezcla de óxidos por una alúmina, una sílice o una sílice/alúmina.

11. Uso de un catalizador metálico, sulfurado mediante un procedimiento según cualquiera de las reivindicaciones 1 a 10, en el hidrotratamiento de alimentaciones hidrocarbonadas.

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the first fastening element 62 which is disposed on the fastening surface 70 of the tape tab 60 will engage the second fastening element 66 of the landing member 64

to form a side closure. After the diaper 20 has been soiled, the diaper 20 is removed from the wearer. The soiled diaper 20 is then folded or rolled up into a configuration for disposal. In rolling up the diaper 20, the panels 51 in the second end region 50 are preferably in-folded, and the body portion 32, beginning with the second end region 50, is rolled into a structure such as shown in FIG. 10. The panels 51 are rolled into a structure in which the panels 51 are folded into a structure such as shown in FIG. 11.

FIG. 6, with the tape tabs 60 extending outwardly from the rolled-up diaper 20. As shown in FIG. 7, the first fastening element 62 of one of the tape tabs 60 is then secured to the second fastening element 106 of the disposable means 58 disposed on the other tape tab 60 so as to secure the diaper 20 in its rolled-up configuration so that it may be easily and conveniently disposed in a waste receptacle.

the invention wherein the disposal means 368 comprises an adhesive attachment means 110 positioned on the backing surface 72 of the tape 360, preferably on the backing surface 72 of the tape 360, although it may alternatively be positioned on a portion of the fastening surface 78. The disposal means 368 also preferably comprises a release liner 112 positioned on the adhesive attachment means 110 so

means 110 may comprise any adhesive or glue used in art for such purposes with pressure-sensitive adhesives being preferred. The release liner 112 serves to protect the adhesive attachment means 110 from drying out and from sticking to extraneous surfaces prior to use. Any release liner commonly used for such purposes can be used with this invention. Examples of suitable release liners are BL 3MVA-A, SILOX EL and BL 3MVA-A.

The first three experiments were conducted by Alkrost-Olsen and his colleagues at the Department of Health and Safety, University of Copenhagen, Denmark. In the first experiment, 10 subjects were given a 30-MG-A-SHLOX after having been administered by Alkrost-Olsen's procedure. In this alternative embodiment, after the disposal has been solidified and configured for disposal, the adhesive attachment means 112 is removed from the adhesive attachment means 110 and the adhesive attachment means 116 are secured either to the other tape tab 360 or to the body portion 22 such as the backsheet 30 so as to secure the diaper in its disposal configuration.

FIG. 4 shows a further alternative embodiment of the present invention wherein the disposal means 448 comprises an adhesive attachment means 114 (second tab) attached to the fastening element 70 of the tape tabs positioned on the fastening surface 70 of the tape tabs 440. The first fastening element 62 of the tape tabs 440 is

releasably secured to the fastening surface 70 by the adhesive attachment means 114. Since the first fastening element 62 is releasably secured to the fastening surface 70 by the adhesive attachment means 114, after the diaphragm has been rolled and configured for disposal, the first fastening element 62 is peeled away from the adhesive attachment means 116 and either removed from the tape tab 460 or positioned away from the adhesive to expose the adhesive attachment means 114. The exposed adhesive is used to secure the flange 78, its edge 76, or its surface 74 to the fastening surface 70.

FIG. 3 shows another alternative embodiment of the present invention wherein the disposal means 868 comprises a pressure-sensitive adhesive 114 thus may comprise any of the known adhesives used for such purposes, with pressure-sensitive adhesives being preferred.

The mechanical fastening means comprising a second fastening element mechanically engageable with said first fastening element; and  
said second means joined to said first fastening element;  
wherein following the absorbent article is secured in a configuration that provides convenient disposal of the absorbent article, said disposed means comprising a third mechanical fastening means for securing said third mechanical fastening means, said third mechanical fastening means comprising a second fastening element mechanically engageable with said first fastening element.

The absorbent article of claim 1 wherein said disposing means is positioned in said first end region.  
The absorbent article of claim 2 wherein said disposing means is positioned on said inside surface of said sections.

The absorbent article of claim 3 wherein said disposal means is positioned adjacent each of said longitudinal edges of said body portion.

The absorbent article of claim 2 wherein said disposal means is positioned on said outside surface of said body portion.

The absorbent article of claim 5 wherein said disposal means is positioned adjacent each of said longitudinal edges of said body portion.

The absorbent article of claims 1, 3, 4, 5 or 6 wherein said disposal means is unitary with said body portion.

The absorbent article of claims 1, 2, 3, 4, 5 or 6 wherein said disposal means is a separate element joined to said body portion.

The absorbent article of claim 8 wherein said first and second retaining elements and said second fastening elements are identical complementary elements.

The absorbent article of claim 8 wherein said first and second fastening elements are identical complementary elements.

fastening elements and said second fastening elements are distinct complementary elements.

A disposable absorbent article comprising:  
 a body portion having an inside surface, an outside surface opposite of said inside surface, longitudinal edges, and a first end region and a second end region opposite of said first end region, said body portion comprising a liquid pervious top sheet, a liquid impervious backsheet joined to said top sheet, and an absorbent core disposed between said topsheet and said backsheet; and  
 a medicinal fastening system positioned on said body portion and comprising:  
 a tape disposed adjacent each longitudinal edge of

said body portion in said first and region, each of said tape tabs comprising a flexible portion attached to said body portion, a connective portion joined to said fixed portion and having a distal edge, a fastening surface, a backing surface opposed to said fastening surface, and a first mechanical fastening means for forming a closure for the absorbent article, said first mechanical fastening means comprising a first fastening element joined on at least a portion of said fastening surface of said connective portion of said tape tabs;

prices an adhesive tape 22 116 positioned on the body 15 of the adhesive tape 22 of the diaper. The adhesive tape 22 116 may comprise any one of the adhesive tape tabs as are known in the art. An exemplary adhesive tape 22 116 is described in the above-referenced U.S. Pat. No. 1,948,594. While the adhesive tape 22 116 may be positioned anywhere on the body portion 22 of the diaper, the adhesive tape 22 116 is preferably disposed in the first end region 40, and preferably adjacent the end edge 42 of the diaper, and most preferably transversely centered along the end edge 42, to provide a disposal means 508. Thus, when the diaper is folded or rolled up after soiling, the user releases the adhesive tape 22 116 from its release layer 116 and secures the adhesive positioned on the tape tabs 116 preferably to the backsheet 30 or another portion of the body portion 22 to provide secure closure of the rolled-up diaper.

FIG. 9 shows a still further alternative embodiment

of the present invention wherein the disposal means 908 comprises two adhesive tape tabs 118 and 120, respectively. While the adhesive tape tabs 118 and 120 may be positioned anywhere on the body portion 22 such as adjacent each end edge 42, the adhesive tape tabs 118 and 120 are preferably positioned one adjacent each longitudinal edge of the diaper, more preferably in the first and region 48, and most preferably adjacent the first tab 60. Thus, in this embodiment, the disposal means 908 comprises a separate set of tape tabs that are used either both during wear as a member of the fastening system and after the diaper has been soiled as a disposal means or only after the diaper has been soiled as a disposal means. The adhesive tape tabs 118 and 120 are used as a disposal means 908 by attaching the adhesive disposed on the fastening surface either to the body portion 22 of the diaper such as the backsheet 36 or to each other so as to maintain the diaper in its disposal configuration.

While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of the present invention.

What is claimed is:  
1. A disposable absorbent article comprising a body portion having an inside surface, an outside surface opposite of said inside surface, longitudinal edges, and a first end region, and a second end region opposite of said first end region, said body portion comprising a liquid pervious top sheet, a liquid impervious backsheet joined to said topsheet, and an absorbent core disposed between said topsheet and said backsheet; and  
a mechanical fastening system positioned on said body portion and comprising  
a closure member disposed adjacent each longitudinal edge of said body portion in said first end region, each of said closure members comprising a first mechanical fastening means for forming a closure for the absorbent article, said first mechanical fastening means comprising a first fastening element; and  
a leading member disposed on said body portion in said second end region, said leading member comprising a second mechanical fastening means for forming a closure with said first mechanical fastening means for the absorbent article, said second

The tape 67 which is disposed on the tape tab 60 will engage the end of the landing member 64. After the diaper 20 has been removed from the wearer, the rolled up into a configuration as shown in FIG. 8, the diaper 20, the pants 51 in are preferably folded, and beginning with the second end a structure such as shown in FIG. 9 extending outwardly from the first end 60 of the tape tabs 60 as shown in FIG. 7, the first extending element 106 of the disintegrating element 106 of the other tape tab 60 so as to roll it up into a configuration so it conveniently disposed in a separate embodiment of the pres-

disposal means 348 comprises means 130 positioned on the backing surface 72 of the means 110. The disposal means 130 may alternatively be positioned on the backing surface 70. The disposal means 130 comprises a release liner 112 which may be attached to the release liner 110 by adhesive attachment means 110 so as to be exposed for use until after the adhesive attachment means 110 is removed. Any adhesive or glue used in the attachment of the release liner 112 serves to protect the release liner 112 from drying out. The release liner 112 serves to protect the extraneous surfaces prior to the use of the release liner 110. The release liner 110 is commonly used for such purposes as the protection of extraneous surfaces. Examples of suitable release liners are the MG-A SILOX E1-0 and BL

manufactured by Alkrosil Corporation. The tape was configured for disposal, the adhesive attachment means 110 of the first tab 360 or to the body of the second tab 360 so as to secure the alternative embodiment of the disposal means 468 component 114 (second tab) to the top surface 70 of the tape 60. The adhesive attachment means 110 of the first tab 360 or to the body of the second tab 360 so as to secure the alternative embodiment of the disposal means 468 component 114 (second tab) to the top surface 70 of the tape 60. The adhesive attachment means 110 of the first tab 360 or to the body of the second tab 360 so as to secure the alternative embodiment of the disposal means 468 component 114 (second tab) to the top surface 70 of the tape 60.

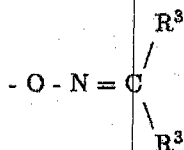
the fastening surface 70 by the means 114. Since the first fastening means 114 is secured to the fastening surface 70, the fastening means 114, after the adhesive is applied to the fastening surface 70, is peeled away from the adhesive 44 and either removed from the fastening surface 70 or peeled away from the adhesive 44. The expression means 114. The expression means the adhesive in its disassembled state, i.e., the adhesive 44, to the back of the fastening means 114 thus may comprise any material suitable for the purpose of being used for such purposes, with the fastening means 114 being preferred. An alternative embodiment of the fastening means 114 is shown in the disposal means 348 com-

[illegible]

an adhesive attachment means 360, preferably a tape 360, on the proximal surface 72 of the distal edge 35 of the adhesive attachment means 360, although it may be positioned on a portion of the fastening surface 72 of each of the second fastening material 106 of the adhesive attachment means 360 also preferably positioned on the adhesive attachment means 360 so that the adhesive will not be the distal fastening element 68 means 110 may comprise a strip of material 110 for each purpose. The adhesive attachment means 360 being preferred, keep the adhesive attachment means 360 out of from sticking out. Any release that can be used with this is in the release lines are BL 3.

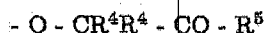
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h) significa un radical de la fórmula



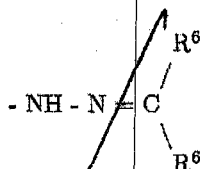
en la que los radicales  $\text{R}^3$ , en cada caso independientemente unos de otros, significan alquilo o, en común con el átomo de C que los une, cicloalquilo,

i) significa un radical de la fórmula



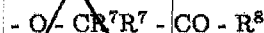
en la que los  $\text{R}^4$ , independientemente unos de otros, significan hidrógeno, alquilo, alquenoilo, alquinoilo, arilo, bencilo, alcoxi, alquenoiloxi, alquinoiloxi o fenoxi y  $\text{R}^5$  significa hidrógeno, alquilo, alquenoilo, alquinoilo, arilo o bencilo,

j) significa un radical de la fórmula



en la que los  $\text{R}^6$  independientemente unos de otros, significan alquilo, hidrógeno o arilo o, en común con el átomo de C que los une, cicloalquilo, o

k) un radical de la fórmula,



en la que los radicales  $\text{R}^7$ , independientemente unos de otros, significan hidrógeno, alquilo, alquenoilo, alquinoilo, arilo, bencilo, alcoxi, alquenoiloxi, alquinoiloxi o fenoxi y  $\text{R}^8$  tiene los significados precedentemente indicados para  $\text{R}$  en los apartados a) hasta k), y

$\text{R}^1$  significa hidrógeno, alquilo, alquenoilo, alquinoilo, cicloalquilo, cicloalquenoilo, estando los 4 grupos mencionados en último término sin sustituir o sustituidos una o múltiples veces con radicales tomados del grupo que consta de fenilo, hidroxi, alcoxi, alquenoiloxi, alquinoiloxi, benciloxi, feniloxi, cicloalquilo, alquiltio, mono- y di-alquilamino, ciano, halógeno y nitro,

y contienen los usuales agentes coadyuvantes de formulación.

Son objeto del invento, además de ello, agentes herbicidas selectivos, que contienen una sustancia activa de la fórmula (I) mencionada o sus sales, en combinación con un herbicida y eventualmente los usuales agentes coadyuvantes de formulación.

En la fórmula (I), los radicales alquilo, alcoxi y alquiltio, así como los correspondientes radicales insaturados, pueden ser en cada caso lineales o ramificados. Tienen preferiblemente hasta cinco átomos de C. Lo correspondiente es válido para los radicales que se derivan de éste, tales como alcoxi, alquilmercapto, alquilamino, dialquilamino y los correspondientes radicales insaturados. Los radicales cicloalquilo y los radicales que se derivan de éste, tales como cicloalquilo, cicloalquilmercapto, tienen preferiblemente de 3 a 10 átomos de C y pueden ser mono-, bi- o tri-cíclicos, tales como p. ej. ciclopentilo, ciclohexilo, cicloheptilo, decahidronaftilo y adamantilo.

El halógeno significa fluoro, cloro, bromo o yodo, preferiblemente fluoro, cloro o bromo, especialmente fluoro o cloro.

Los radicales arilo tienen preferiblemente de 6 hasta 12 átomos de C; son preferidos fenilo, naftilo y bifenililo, especialmente fenilo. Lo correspondiente es válido para los radicales derivados de éstos, tales como ariloxi, arilmercapto, aroilo, aralquilo, aralquilo, aralquilo, aralquilo y aralquilmercapto. El aralquilo es preferiblemente bencilo.



aceptables, exhiben valiosas propiedades farmacológicas cuando se prueban en ensayos in vitro, y de esta manera son útiles como farmacéuticos.

En particular, los compuestos de la invención exhiben actividad  
5 inhibidora de ZAP-70 (proteína de 70 kD asociada con la cadena zeta), de cinasa de adhesión focal (FAK) y/o cinasas de tirosina de proteína Syk. Más particularmente, los compuestos de la invención no son activos en las cinasas de tirosina de las proteínas ZAP-70, FAK y/o Syk. La interacción de cinasa de proteína de la tirosina ZAP-  
10 70, FAK y/o Syk de los compuestos de la invención puede ser demostrada por su habilidad para prevenir la fosforilación de, por ejemplo, LAT-11 (SEC ID NO:1) a través de cinasa de tirosina de la proteína ZAP-70, para prevenir la fosforilación de, por ejemplo, Biot-Y397 (SEC ID NO:2) a través de cinasa de tirosina de la proteína  
15 FAK, y/o para prevenir la fosforilación de, por ejemplo, ácido glutámico polimérico-tirosina (Glu-Tyr) a través de cinasa de tirosina de la proteína Syk humana en, por ejemplo, solución acuosa, por ejemplo como se demuestra de acuerdo con los siguiente métodos de prueba.

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**1. Ensayos de cinasa libres de célula: ensayos de cinasa de ZAP-70 y Syk**

Las ZAP-70, Lck y Syk están comercialmente disponibles de Upstate Biotechnology, Lake Placid, NY.

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**Preparación de LAT-11 (SEC ID NO:1):** El péptido LAT-11

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**SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO**  
**DIVISIÓN DE NUEVAS CREACIONES**

2020  
Bogotá, D.C.,

Doctor  
**EMILIO FERRERO**  
Abogado

ASUNTO                      Radicación      06-39631  
                                 Trámite          011  
                                 Evento          378  
                                 Actuación      430  
                                 Oficio  
                                 Folios          0 6984

|                                 |                                     |                                            |                                  |
|---------------------------------|-------------------------------------|--------------------------------------------|----------------------------------|
| Patente de Invención            | <input checked="" type="checkbox"/> | Patente de Modelo de Utilidad              | <input type="checkbox"/>         |
| Vía PCT (fase nacional)         | <input checked="" type="checkbox"/> | Cap. I <input checked="" type="checkbox"/> | Cap. II <input type="checkbox"/> |
| No. Sol. Internacional          | <u>PCT/EP2004/010608</u>            |                                            |                                  |
| Fecha de Presentación Internal. | <u>22 de septiembre de 2004</u>     |                                            |                                  |

Como resultado del examen de fondo, realizado con fundamento en el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

|                   |                                      |                             |
|-------------------|--------------------------------------|-----------------------------|
| Descripción:      | Folios: 40 a 61                      | como se radicó inicialmente |
| Reivindicaciones: | Folios: 62 a 65                      | como se radicó inicialmente |
| Dibujos:          | Folios: 66 a 71                      | como se radicó inicialmente |
| Prioridad:        | 27 de octubre de 2003, EP 03024663.1 |                             |

2. Objeto de la invención

Titulo de la invención:  
Medios de desecho sobre un pañal absorbente.

El problema planteado en esta solicitud consiste en lograr mejorar el borde superior frontal y/o posterior de un pañal con medios de cierre, evitando la incomodidad y dificultades como irritación o cortes en la piel del usuario particularmente en la porción central superior de la porción de cintura frontal (línea del ombligo)

Para solucionar este problema técnico se desarrolla un pañal con configuración de borde superior mejorada en al menos parte de cintura superior.

Clasificación internacional de Patentes (IPC) en A61F13/15

### 3. Determinación del Estado de la Técnica

La fecha para determinar el estado de la técnica es el 27 de octubre del 2003, de acuerdo al la fecha de prioridad invocada.

Tendiendo en cuenta la anterior fecha indicada, se realiza la búsqueda de las anterioridades de la presente solicitud, encontrándose los siguientes documentos relevantes:

| Nº | Documento | Título                                                                             | Fecha de publicación |
|----|-----------|------------------------------------------------------------------------------------|----------------------|
| D1 | US4963140 | MECHANICAL FASTENING SYSTEMS WITH DISPOSAL MEANS FOR DISPOSABLE ABSORBENT ARTICLES | 1990-10-16           |

### 4. Análisis de patentabilidad (según requisito) (artículo 14 D486)

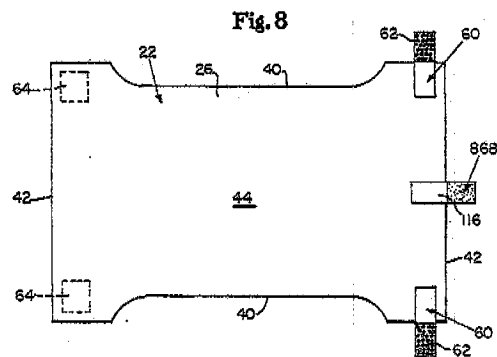
#### Novedad (artículo 16 D486)

Respecto a la reivindicación 1:

La reivindicación 1 dice: "Pañal absorbente (1, 101, 201, 301, 401, 501, 601) que comprende una superficie que enfrenta el cuerpo, una superficie que enfrenta las prendas interiores y un núcleo absorbente (7) entre ellas, dicho pañal comprende además una porción de cintura posterior (4, 304, 404), y una porción de cintura frontal (2), cada una de dichas porciones de cintura comprende un borde superior (8,9; 108, 109, 208, 209; 308, 309; 408, 409; 508, 509; 608, 609) en donde dicho pañal comprende adicionalmente una cinta de desecho (14, 114, 214, 314, 414, 514, 614) unida a al menos una de dichas porciones de cintura, caracterizada por que dicha cinta de desecho está unida a ambas de dichas superficies que enfrentan el cuerpo y dichas superficies que enfrentan las prendas interiores a través y alrededor de dichos bordes superiores (8,9; 108, 109; 208, 209; 308, 309; 408, 409; 508, 509; 608, 609)".

Respecto al estado de la técnica:

D1 describe sistemas de sujeción para artículos absorbentes, y más particularmente un sistema mecánico de sujeción mejorado para proveer una conveniente eliminación de dicho artículo (Col 1 líneas 7-11). La realización preferida de artículos absorbentes desechables de esta invención, es para pañales (Col 3 líneas 43-44). La Fig. 1 muestra un pañal (20) que comprende una porción de cuerpo (22) y un sistema de sujeción (24). La porción del cuerpo (22) comprende una hoja superior permeable a los líquidos (26), un núcleo absorbente (28), un hoja posterior impermeable (30) entre otros (Col 3 líneas 61-68). Dicho pañal comprende además una porción de de cintura posterior (50, segunda región), y una porción de cintura frontal (48, primera región), cada una de dicha porciones de cintura comprende un borde superior (42). En una de la realizaciones de esta invención (Fig. 8) donde los medios de desecho comprende una lengüeta de cinta adhesiva (116) posicionada en el cuerpo de la porción 22 del pañal. La lengüeta de cinta adhesiva (116) puede comprender cualquiera de las lengüetas adhesivas conocidas en el arte, como ejemplo de estas descritas en la patente US 3,848,594. Mientras la lengüeta de cinta adhesiva (116) puede ser posicionada en cualquier parte de la porción del cuerpo (22) del pañal, preferiblemente es dispuesta en la primera región 48 adyacente la final del borde y centrada a lo largo del borde final (42) (Col 15 líneas 1-10).



Respecto a la solicitud en estudio:

De acuerdo a lo descrito en la anterioridad D1 se observa que todas las características técnicas de un pañal absorbente con una cinta de desecho, donde dicha cinta está unida a ambas de dichas superficies que enfrentan el cuerpo y dichas superficies que enfrentan las prendas interiores a través y alrededor de dichos bordes superiores, ya eran conocidas en el estado de la técnica.

Dado lo anterior, el objeto de la invención recogido en la reivindicación 1 ha sido divulgado idénticamente en la anterioridad D1 por lo tanto esta reivindicación y sus dependientes no se pueden considerarse nuevas.

## 7. Conclusión

Los requisitos de patentabilidad de la presente solicitud se encuentran afectados así:

| Nº | Documento Nº | Reivindicación afectada | Requisito que afecta |
|----|--------------|-------------------------|----------------------|
| D1 | US4963140    | 1-17                    | Novedad              |

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de 60 días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente. Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única Nº 10 de 2001.

**ALIX CARMENZA CÉSPEDES DE VERGEL**  
Jefe de División de Nuevas Creaciones

El anterior requerimiento fue notificado por fijación en lista, de fecha 19 JUN 2003

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| <b>CONCEPTO TÉCNICO</b><br>Nº 1495 | <b>EXAMINADOR TÉCNICO</b><br>Código Nº 202090 |
|------------------------------------|-----------------------------------------------|