

Search query (2): [SP]: 1. an absorbent article for encircling a user's lower abdominal region, said absorbent article having a longitudinal direction, a central longitudinal direction, a transverse direction ending in opposing lateral-most side edges, and a depth direction, said absorbent article including an absorbent article front surface and an absorbent article back surface, two leg openings having opening edges, and a waist opening defined by a waist edge with a minimum transverse direction width when said absorbent article is in a relaxed and flattened state, said absorbent article comprising: an absorbent core insert including a liquid permeable topsheet layer, a liquid impermeable backsheet layer, and at least one absorbent core layer sandwiched between said liquid permeable topsheet layer and said liquid impermeable backsheet layer said absorbent core insert including two opposing longitudinal direction ends and opposing lateral direction side edges extending between said opposing longitudinal direction ends, said absorbent core insert forming the crotch portion of said absorbent article asymmetrically shaped front and back panels which together form said waist edge of said absorbent article waist opening, said front panel being elastic along said absorbent article transverse direction, and said back panel being at least extensible along said absorbent article transverse direction said front and back panels being respectively bonded to opposing longitudinal direction ends of said absorbent core insert, and further bonded to each other along bond seams situated inwardly from said absorbent article opposing lateral-most side edges and along said absorbent article front surfaces such that the distance between a bond seam and the closest lateral-most side edge being between about 2.5 percent and 25 percent of the minimum transverse direction width of the waist edge of said absorbent article. 2. the absorbent article of claim 1 wherein said leg openings each include a vertex portion along opening edges, each having an apex along said absorbent article front surface, said bond seams extending from said apex of said vertices to a point on said waist edge located along said absorbent article front surface, such that the distance between a bond seam and the closest lateral-most side edge being between about 2.5 percent and 25 percent of the minimum transverse direction width of the waist edge of said absorbent article. 3. the absorbent article of claim 2, wherein said front and back panels are both elastic along the absorbent article transverse direction. 4. the absorbent article of claim 3, wherein said front and back panels are of different elastic materials. 5. the absorbent article of claim 4, wherein said front and back panels are of different elastic materials having different levels of elasticity, with said front panel demonstrating higher levels of elasticity than said back panel under similar conditions. 6. the absorbent article of claim 3, wherein said front and back elastic panels are selected from the group consisting of elastic film and nonwoven laminates, elastic strand and nonwoven laminates, pre-formed elastic fibers and nonwoven laminates, elastic films, and elastic nonwoven sheets. 7. the absorbent article of claim 6, wherein said front and back elastic panels are selected from the group consisting of film and nonwoven laminates, extruded strand and nonwoven laminates, and pre-formed elastic fibers and nonwoven laminates. 8. the absorbent article of claim 2, wherein said leg openings are elongated along the absorbent article longitudinal direction. 9. the absorbent article of claim 2, wherein said vertices are in the shape selected from the group consisting of inverted v-shaped and inverted u-shaped configurations. 10. the absorbent article of claim 1, wherein said distance between a bond seam and the closest lateral-most side edge being between about 5 percent and 22.5 percent of the minimum transverse direction width of the waist edge of said absorbent article. 11. the absorbent article of claim 3, wherein said front and back panels demonstrate different elastic functionality as a result of being comprised of different elastic materials. 12. the absorbent article of claim 3, wherein said front and back panels demonstrate different elastic functionality as a result of being the same material, bonded at said bond seams under different levels of tension, with said front panel bonded under higher levels of tension than said back panel. 13. the absorbent article of claim 3, wherein said front and back panels demonstrate different retractive force. 14. a method of making an absorbent article comprising steps of: a) producing a first sheet of an elastic material having a longitudinal and transverse direction, with said first sheet being elastic in at least the transverse direction, b) producing a second sheet of at least an extensible material having a longitudinal and transverse direction, with said second sheet being at least extensible in at least the transverse direction and placing said first and second sheets in parallel along their transverse directions on an absorbent article production line c) producing an absorbent core insert having opposing longitudinal direction ends for attachment to said sheets of elastic and at least extensible materials, and opposing lateral side edges extending between said opposing longitudinal direction ends, and bonding the opposing longitudinal direction ends of said absorbent core insert to said sheets of elastic and at least extensible material in a configuration that is perpendicular to said first and second sheet transverse directions while such first and second sheets are under desired levels of tension d) moving said bonded sheets and absorbent core insert through a manufacturing process on said absorbent article production line, along said sheet transverse directions such that differential tensions are applied along said transverse direction to said elastic material compared with said at least extensible material, said tension applied to said elastic material being larger than that applied to said at least extensible material e) cutting elongated leg opening shapes along said sheets' longitudinal direction and adjacent said opposing lateral side edges of said absorbent core insert so that the highest point of the cuts will align with side bond seams f) bringing the elastic material sheet and the extensible material sheet together to form an absorbent article blank having elongated leg openings with distinct vertex configurations, and subsequently bonding said material sheets to one another along side bond seams that are generally aligned with said sheets' longitudinal direction and aligned with said vertex configurations in order to form an absorbent article with said elastic sheet and said at least extensible sheet having the same transverse direction width, while maintaining said sheets under their respective tensions g) cutting said absorbent article from said absorbent article blank and removing such tension such that said elastic sheet transverse direction width narrows with respect to said at least extensible sheet transverse direction width as a result of differential levels of retraction upon or in said sheets, whereby said bond seams rotate from a lateral-most side location to a forwardly positioned location, off of the lateral-most side edge. 15. the method of claim 14, wherein said first and second sheets of material are both elastic. 16. the method of claim 15, wherein said first and second sheets of material are of different elastic materials. 17. the method of claim 14 wherein said bond seams are constructed of temporarily bonded materials. 18. the method of claim 14 wherein said bond seams are temporary bond seams. 19. an absorbent article produced by the method of claim 14. 20. a refastenable absorbent article for encircling a user's lower abdominal region, said absorbent article having a longitudinal direction, a central longitudinal direction, a transverse direction ending in opposing lateral-most side edges, and a depth direction, said absorbent article including an absorbent article front surface and an absorbent article back surface, two leg openings, and a waist opening defined by a waist edge with a minimum transverse direction width when said absorbent article is in a relaxed and flattened state, said absorbent article comprising: an absorbent core insert including a liquid permeable topsheet layer, a liquid impermeable backsheet layer, and at least one absorbent core layer sandwiched between said liquid permeable topsheet layer and said liquid impermeable backsheet layer said absorbent core insert including two opposing longitudinal direction ends and opposing lateral direction side edges extending between said opposing longitudinal direction ends, said absorbent core insert forming the crotch portion of said absorbent article asymmetrically shaped front and back panels which together form said waist edge of said absorbent article waist opening, said front panel being elastic along said absorbent article transverse direction, and said back panel being at least extensible along said absorbent article transverse direction said front and back panels being respectively bonded to opposing longitudinal direction

Results: 8

Search history

Search PN=(WO2016108898) (Results 1)

1:

2: [SP]: 1. an absorbent article for encircling a user's lower abdominal region, said absorbent article having a longitudinal direction, a central longitudinal direction, a transverse direction ending in opposing lateral-most side edges, and a depth direction, said absorbent article including an absorbent article front surface and an absorbent article back surface, two leg openings having opening edges, and a waist opening defined by a waist edge with a minimum transverse direction width when said absorbent article is in a relaxed and flattened state, said absorbent article comprising: an absorbent core insert including a liquid permeable topsheet layer, a liquid impermeable backsheet layer, and at least one absorbent core layer sandwiched between said liquid permeable topsheet layer and said liquid impermeable backsheet layer said absorbent core insert including two opposing longitudinal direction ends and opposing lateral direction side edges extending between said opposing longitudinal direction ends, said absorbent core insert forming the crotch portion of said absorbent article asymmetrically shaped front and back panels which together form said waist edge of said absorbent article waist opening, said front panel being elastic along said absorbent article transverse direction, and said back panel being at least extensible along said absorbent article transverse direction said front and back panels being respectively bonded to opposing longitudinal direction ends of said absorbent core insert, and further bonded to each other along bond seams situated inwardly from said absorbent article opposing lateral-most side edges and along said absorbent article front surfaces such that the distance between a bond seam and the closest lateral-most side edge being between about 2.5 percent and 25 percent of the minimum transverse direction width of the waist edge of said absorbent article. 2. the absorbent article of claim 1 wherein said leg openings each include a vertex portion along opening edges, each having an apex along said absorbent article front surface, said bond seams extending from said apex of said vertices to a point on said waist edge located along said absorbent article front surface, such that the distance between a bond seam and the closest lateral-most side edge being between about 2.5 percent and 25 percent of the minimum transverse direction width of the waist edge of said absorbent article. 3. the absorbent article of claim 2, wherein said front and back panels are both elastic along the absorbent article transverse direction. 4. the absorbent article of claim 3, wherein said front and back panels are of different elastic materials. 5. the absorbent article of claim 4, wherein said front and back panels are of different elastic materials having different levels of elasticity, with said front panel demonstrating higher levels of elasticity than said back panel under similar conditions. 6. the absorbent article of claim 3, wherein said front and back elastic panels are selected from the group consisting of elastic film and nonwoven laminates, elastic strand and nonwoven laminates, pre-formed elastic fibers and nonwoven laminates, elastic films, and elastic nonwoven sheets. 7. the absorbent article of claim 6, wherein said front and back elastic panels are selected from the group consisting of film and nonwoven laminates, extruded strand and nonwoven laminates, and pre-formed elastic fibers and nonwoven laminates. 8. the absorbent article of claim 2, wherein said leg openings are elongated along the absorbent article longitudinal direction. 9. the absorbent article of claim 2, wherein said vertices are in the shape selected from the group consisting of inverted v-shaped and inverted u-shaped configurations. 10. the absorbent article of claim 1, wherein said distance between a bond seam

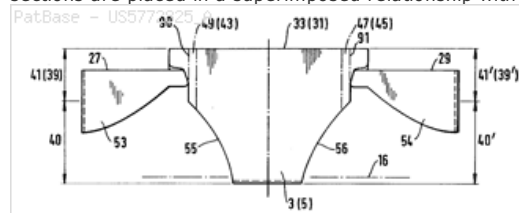
PatBase PDF Export - Page: 2 19/10/2018

2) Family number: 10994705 (US5772825A)

Title: METHOD FOR MAKING AN UNDERGARMENT HAVING SIDE SEAMS

Abstract:

Source: US5772825A PCT No. PCT/US95/16657 Sec. 371 Date Jun. 20, 1997 Sec. 102(e) Date Jun. 20, 1997 PCT Filed Dec. 21, 1995 PCT Pub. No. WO96/19123 PCT Pub. Date Jun. 27, 1996A method for forming an undergarment having side seams from a two-dimensional preform comprises the steps of cutting a continuous web along transverse cut lines to form individual preforms; cutting each preform along a leg contour extending along each longitudinal side of the preform in the region of a central section, wherein each leg contour does not touch the respective longitudinal side, thus forming two gripping flaps; gripping the preform at the gripping flaps; pulling the gripping flaps outwardly away from the longitudinal sides such that the preform is doubled over along a transverse centerline and such that sealing areas in the region of back waist sections are placed in a superimposed relationship with sealing areas in the region of front waist sections; mutually connecting the sealing areas.



International class (IPC 8-9): A41B9/00 A41B9/02 A41B9/12 A61F13/15 A61F13/49 A61F13/496 A61F5/44 B29C53/36 (Advanced/Invention);

A61F5/44 (Advanced/Non-invention);

A41B9/00 A61F13/15 A61F5/44 B29C53/00 (Core/Invention)

International class (IPC 1-7): A41B09/00 A41B9/00 A41B9/12 A61F13/15 A61F5/44 B29C53/36 B32B31/04 B32B31/10 B32B31/18 B32B31/20

CPC: A61F13/15747 Y10T156/1026 Y10T156/1036 Y10T156/1049 Y10T156/1051 Y10T156/1075 Y10T156/108 Y10T156/1317 Y10T156/1343

Y10T156/17 Y10T156/1702 Y10T156/1712 Y10T156/1768

European class: A61F13/15M6F

US class: 156/163 156/164 156/211 156/217 156/226 156/227 156/264 156/267 156/292 156/308.4 156/443 156/494 156/516 156/522 156/538 156/539 156/543 156/566 2/402 604/396

Family:

Publication number	Pub. date	Application number	App. date
AU199646042 A1	19960710	AU19960046042	19951221
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CA2206049 C	20040406	CA19952206049	19951221
CN1170341 A	19980114	CN19951096876	19951221
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DE69418202 T2	19991014	DE19946018202T	19941222
EP0717971 A1	19960626	EP19940120377	19941222
EP0717971 B1	19990428	EP19940120377	19941222
ES2130342 T3	19990701	ES19940120377T	19941222
JP10511020 T2	19981027	JP19960519989T	19951221
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KR100284476 B1	20010502	KR19970704246	19970621
KR19987000809 A	19980430	KR19977004246	19951221
MX9704602 A1	19971031	MX19970004602	19951221
US5772825 A	19980630	US19970849981	19970620
WO9619123 A1	19960627	WO1995US16657	19951221

Priority: EP19940120377 19941222; WO1995US16657 19951221; US19970849981 19970620;

Cited documents: US5626711 A, US5536350 A, US5080741 A, US4650330 A, FR2219636 A5, EP0187728 A2,

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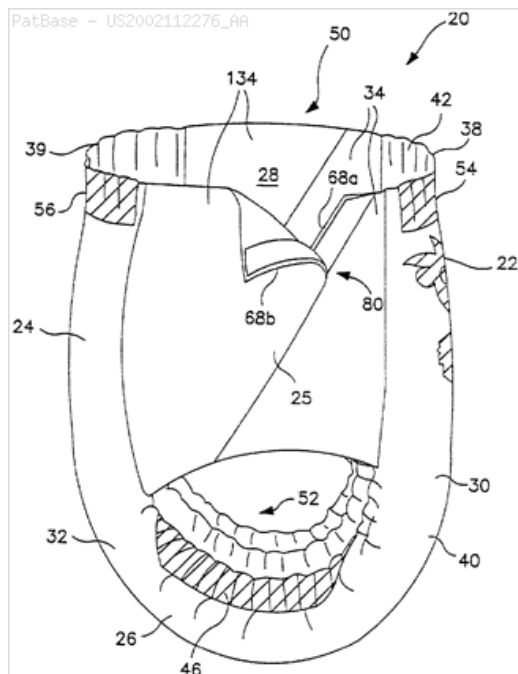
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3) Family number: 28232902 (US2002112276A)

Title: REFASTENABLE PULL-ON TRAINING PANT WITH DIAGONAL SEAMS

Abstract:

Source: US2002112276A A disposable pant garment is made from a web by joining front and back side panels attached to the garment chassis. The side panels have diagonal edges in order to result in side seams on the garment which run diagonally on the garment side. This diagonal side seam provides superior fit and releasability, especially in the case of refastenable side seams such as may be used for training pants. One or more of the side panels may be constructed from a plurality of pieces.



International class (IPC 8-9): A61F13/15 A61F13/56 (Advanced/Invention);
A61F13/56 (Core/Invention)

International class (IPC 1-7): A41B9/00 A61F13/15 A61F13/496

CPC: A61F2013/4909 A61F13/496 A61F13/15756 A61F13/49015 A61F13/4963 A61F13/565

European class: A61F13/15M7 A61F13/496 A61F13/496A A61F13/49D2D2 A61F13/56C

US class: 2/400 2/400P 604/385.01 604/386 604/394

Family:

Publication number	Pub. date	Application number	App. date
AR032845 AA	20031126	AR2002P100638	20020222
AU2002240351 AA	20020912	AU20020240351	20020212
MXPA03007083 A1	20031118	MX2003PA07083	20020212
US2002112276 AA	20020822	US20020056888	20020125
US6976978 BB	20051220	US20020056888	20020125
WO02067835 A2	20020906	WO2002US04122	20020212
WO02067835 A3	20030306	WO2002US04122	20020212
WO02067835 B1	20030814	WO2002US04122	20020212

Priority: US20010790340 20010222; US20020056888 20020125; WO2002US04122 20020212;

Cited documents: WO9960974 A1, WO9960970 A1, WO9960969 A1, WO0037009 A2, WO0037005 A2, WO0023025 A1, US6443940 BA, US6063914 A, US5957908 A, US5939467 A, US5897545 A, US5509913 A, US5386595 A, US5283090 A, US5226992 A, US5224405 A, US5110390 A, US5104116 A, US5062839 A, US5046272 A, US4952550 A, US4944734 A, US4940464 A, US4704116 A, US4663220 A, US4372311 A, US4340563 A, US4315508 A, US4205679 A, US3849241 A, US3802817 A, US3692618 A, US3559648 A, US3542615 A, US3502763 A, US3502538 A, US3341394 A, US3338992 A, US3039466 A, US2834347 A, US2664895 A, US2591079 A, US2545674 A, US2545216 A, JP9066071 A2, EP1174103 A2, EP0217032 B1, EP0217032,

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Inventor(s): KATHLEEN IRENE RATLIFF

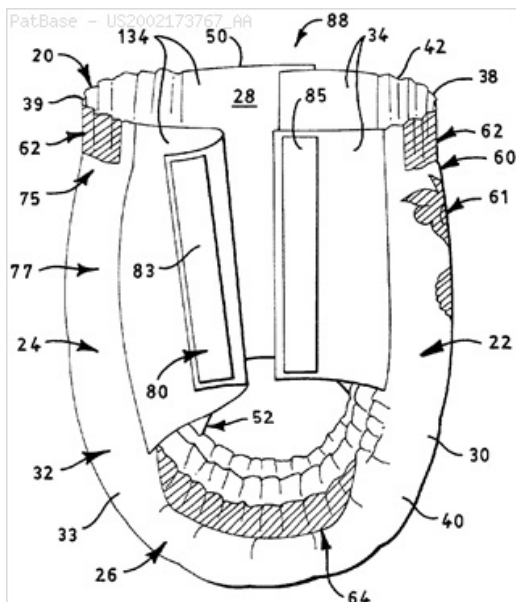
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4) Family number: 28276415 (US2002173767A)

Title: METHOD AND APPARATUS FOR MAKING PREFASTENED AND REFASTENABLE PANT WITH DESIRED WAIST AND HIP FIT

Abstract:

Source: US2002173767A A process for making a prefasted and refastenable pant includes providing a plurality of discrete articles having side panels and waist regions including an activatable retractive material. The side panels can be folded parallel to a longitudinal centerline to overlap at least portions of first and second fastening components. The fastening components are then engaged to form a prefasted and refastenable pant. The retractive material can be activated subsequent to engagement of the fastening components, or subsequent to obtaining position control of the side panels, to provide the pant with a waistband-to-hip circumference ratio of about 95 percent or less. The prefasted and refastenable pant and apparatus for its manufacture are also disclosed.



International class (IPC 8-9): A61F13/15 A61F13/49 A61F13/58 (Advanced/Invention);

A61F13/15 (Advanced/Non-invention);

A61F13/15 A61F13/56 (Core/Invention)

International class (IPC 1-7): A61F13/15 A61F13/20 A61F13/49 B32B31/00

CPC: Y10T156/1051 A61F13/49011 A61F13/15203 A61F13/15593

European class: A61F13/15 A61F13/15M2B A61F13/49D2B

US class: 156/161 156/163 156/164 156/227 156/229 156/85 604/367 604/367P 604/385.03 604/385.030P 604/385.030S 604/387 604/387P

Family:

Publication number	Pub. date	Application number	App. date
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Priority: US20000204495P 20000516; US20010827192 20010405; EP20010933304 20010511; EP20060016918 20010511;

WO2001US15237 20010511; KR20027015353 20021115; WO2001US15237 20021115; US20040007559 20041207; US20090615295 20091110;

Cited documents: WO9965441 A1, WO9815248 A1, WO9724098 A1, WO9723180 A1, WO9533618 A1, WO9532639 A1, WO9527462 A1, WO9518591 A2, WO9518589 A1, WO9119613 A1, WO0037009 A2, WO0035398 A1, WO0035395 A2, WO0023025 A1, USD313076 S1, US7682349 BB, US7156939 BB, US6888143 BB, US6849067 BB, US6846374 BB, US6776316 BB, US6723034 BB, US6596113 BB, US6565691 BB, US6562167 BB, US6514187 BB, US6513221 BB, US6497032 BB, US6481362 BB, US6461344 BA, US6454751 BA, US6447628 BA, US6432248 BA, US6432243 BA, US6409858 BA, US6395115 BA, US6385946 BA, US6328725 BB, US6307119 BA, US6287287 BA, US6240569 BA, US6113717 A, US6036805 A, US6027440 A, US6022432 A, US6022431 A, US5997981 A, US5919334 A, US5916203 A, US5915319 A, US5904802 A, US5897545 A, US5865135 A, US5858515 A, US5855574 A, US5830206 A, US5807368 A, US5803448 A, US5795433 A, US5795350 A, US5788805 A, US5785699 A, US5779831 A, US5772825 A, US5766389 A, US5765495 A, US5765389 A, US5705013 A, US5669996 A, US5660666 A, US5626711 A, US5607416 A, US5556360 A, US5554145 A, US5435802 A, US5399219 A, US5370634 A, US5363784 A, US5353979 A, US5344691 A, US5330598 A, US5304599 A, US5300007 A, US5269776 A, US5226992 A, US5224405 A, US5199623 A, US5197722 A, US5184555 A, US5176615 A, US5140757 A, US5135522 A, US5110403 A, US5104116 A, US5093422 A, US5092863 A, US5092862 A, US5087253 A, US5046272 A, US4940464 A, US4936840 A, US4908247 A, US4885853 A, US4883549 A, US4875668 A, US4865579 A, US4834738 A, US4808252 A, US4778441 A, US4750442 A, US4717375 A, US4710189 A, US4704116 A, US4702468 A, US4699622 A, US4680450 A, US4665306 A, US4663220 A, US4663106 A, US4640726 A, US4615695 A, US4610680 A, US4597573 A, US4543154 A, US4521209 A, US4516760 A, US4515595 A, US4479640 A, US4453709 A, US44408399, US4418513 A, US4402690 A, US4342413 A, US4323534 A, US4279610 A, US4205679 A, US4197621 A, US4186860 A, US4170347 A, US4145763 A, US4053967 A, US4025373 A, US4022458 A, US4022211 A, US4018432 A, US3994486 A, US3918706 A, US3912565 A, US3874043 A, US3870292 A, US3808767 A, US3669800 A, US3632030 A, US3502322 A, US3116920 A, US2714230 A, US2037561 A, US2003075277 AA, US2003066592 AA, US2002123730 AA, US2002003024 AA, US2002003021 AA, US2002002358 AA, US2001018579 AA, US1912724 A, US1912466 A, GB2288314 A1, GB2160817 A1, GB1593600, GB1520740, GB1384622, FR2299254, EP0934739 A2, EP0820747 A1, EP0803602 A1, EP0800808 A1, EP0761193 A2, EP0757550 B1, EP0753292 A2, EP0689816 A2, EP0631766 A1, EP0532486 A1, EP0320989 A2, EP0217032 A2,

Assignee(s): (std): COENEN JOSEPH DANIEL ; ENTIRE INTEREST ; KIMBERLY CLARK CO ; POPP ROBERT LEE ; QUERESHI SHAWN AHMED ; OLSON CHRISTOPHER PETER ; KUEN DAVID ARTHUR
Assignee(s): KIMBERLY CLARK CORP ; KIMBERLY CLARK WORLDWIDE ; KIMBERLY CLARK WORLDWIDE INC ; KIMBERLY CLARK WORLDWIDE INC NEENAH

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZA ZW

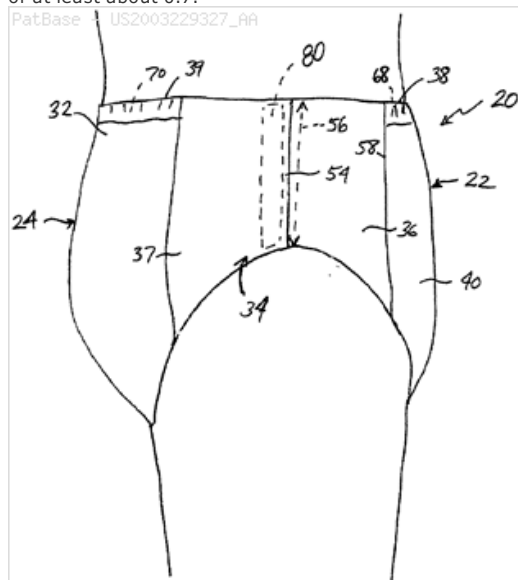
5) Family number: 29776256 (US2003229327A)

Title: ABSORBENT PANT GARMENTS HAVING HIGH LEG CUTS

Abstract:

Source: US2003229327A An absorbent pant garment having high leg cuts. The garment includes an absorbent chassis defining a waist opening

PatBase 1 US2003229327 AA



International class (IPC 1-7): A61F13/15 A61F13/20 A61F13/496

European class: A61F13/496 A61F13/56C K61F13/496A

Family:

Publication number	Pub. date	Application number	App. date
AR2003225907 AA	20031222	AU20030225907	20030319
BRPI0311236 A	20070427 A	BR2003PI11236	20030319
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DE60338421 D1	20111208	DE20036038421	20030319
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KR20050005489 A	20050113	KR20047018867	20030319
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US2003293297 AA	20031211	US20020165185	20020607
US7011653 B1	200606314	US20020165185	20020607
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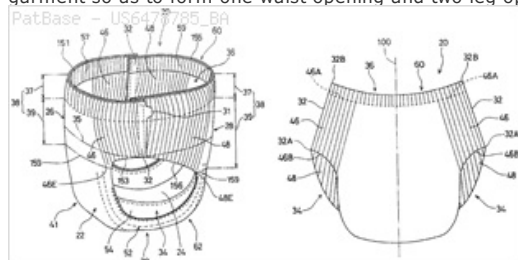
Assignee(s): KIMBERLY CLARK WORLDWIDE INC NEENAH ; OLSON CHRISTOPHER PETER ; SPERL MICHAEL DONALD ; IMSANGJAN W ANN

Inventor(s): IMSANGJAN W : IMSANGJAN ANN W NEW BERLIN

Designated states: AE AG AL AM AT AU AZ BA BB BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IT JP KE KG KP KR KZ LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ

Title: Disposable pant-type diaper having enhanced extensibility around waist opening

Source: US6478785B A disposable garment having enhanced extensibility around waist opening is disclosed. The disposable garment has a front region, a back region and a crotch region between the front region and the back region. The disposable garment comprises a chassis and seams. The chassis comprises a topsheet, a backsheet joined with the topsheet, and an absorbent core interposed between the topsheet and the backsheet. The chassis has a central panel having side edges and a waist edge, and an ear panel extending laterally outwardly from each side edge of the central panel in the front region and the back region. The ear panel is rendered extensible to form an extensible ear. The extensible ear has a higher end edge, a lower end edge, an inner side edge, and an outer side edge. The outer side edge is non-parallel to the inner side edge, and is non-parallel to a longitudinal center line of the garment, and projects laterally outwardly proximate the higher end edge. A lateral width of the extensible ear between the inner side edge and the outer side edge is greater proximate the higher end edge than proximate the lower end edge. The seams join each ear panel along the outer side edge to a corresponding portion in the opposite region of the disposable garment so as to form one waist opening and two leg openings. The seam is non-parallel to the longitudinal center line.



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A61F13/15 A61F13/56 A61F5/44 (Advanced/Non-invention);

A61F13/15 A61F13/56 A61F5/44 (Core/Invention)

International class (IPC 1-7): A61F13/15 A61F13/49 A61F13/56 A61F13/72 A61F5/44

CPC: A61F13/496 A61F2013/49022 A61F2013/49047 A61F13/49011 A61F13/49014

European class: A61F13/496 A61F13/49D2B A61F13/49D2D K61F13/49D2H1 K61F13/49D3A2

US class: 604/385.01 604/385.24 604/392

Family:

Publication number	Pub. date	Application number	App. date
AR019849 AA	20020320	AR1999P102541	19990528
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BRP19815870 A	20010424	BR1998PI15870	19980528
CA2330758 AA	20001101	CA19982330758	19980528
CA2330758 C	20051018	CA19982330758	19980528
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CN1304299 A	20010718	CN19988014079	19980528
DE69814178 D1	20030605	DE19986014178	19980528
DE69814178 T2	20031211	DE19986014178T	19980528
EP1079782 A1	20010307	EP19980928839	19980528
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KR20010043878 A	20010525	KR20007013371	19980528
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TH40498 A	20000928	TH19991001784	19990525
TR200003486 T2	20010621	TR20000003486T	19980528
US6478785 BA	20021112	US20000700563	20001116
WO9960969 A1	19991202	WO1998US10849	19980528
WO9960969 C1	20010201	WO1998US10849	19980528
ZA9903569 A	19991129	ZA19990003569	19990526

Priority: TR19980003486T 19980528; WO1998US10849 19980528; US20000700563 20001116;

Cited documents: WO9736566 A1, WO9428841 A1, WO9324085 A1, US5897545 A, US5685874 A, US5591155 A, US5545158 A, US5383871 A, US5370634 A, US5246433 A, US5171239 A, US4940464 A, US4743241 A, US4610681 A, US3860003 A, EP0526868 A2,

Assignee(s): (std): ASHTON GREGORY ; FUKUDA EIRO ; PROCTER AND GAMBLE ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY

Assignee(s): THE PROCTER AND GAMBLE COMPANY CINCINNATI ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO

Inventor(s): (std): ASHTON GREGORY ; FUKUDA EIRO ; GREGORY ASHTON ; EIRO FUKUDA

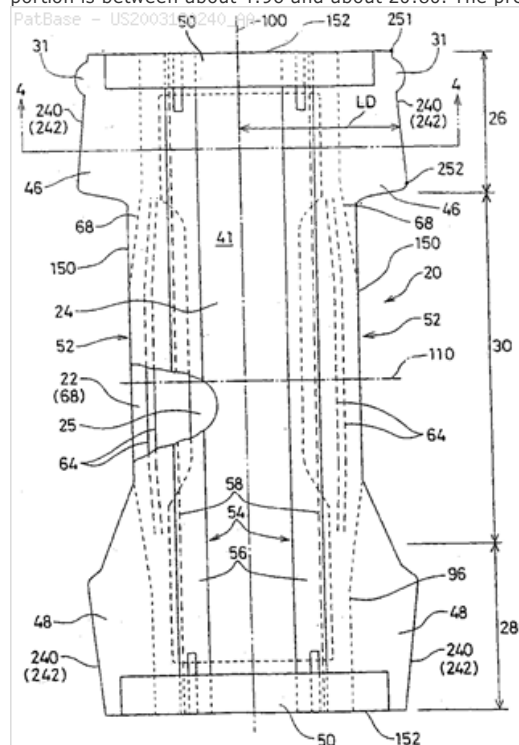
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7) Family number: 40485878 (US2003120240A)

Title: DISPOSABLE PANT-TYPE DIAPER HAVING IMPROVED PROTECTION AGAINST RED MARKING

Abstract:

Source: US2003120240A The present invention is directed to a disposable pull-on garment having a longitudinal center line, a front region, a back region and a crotch region between the front region and the back region. The disposable pull-on garment includes a chassis provided in the front, back and crotch regions. The chassis has edge lines in the front and back regions and includes a liquid pervious topsheet, a liquid impervious backsheet associated with the topsheet, and an absorbent core disposed between the topsheet and the backsheet. The disposable pull-on garment further includes at least one pair of extensible ear panels extending laterally outward from the chassis in the front or back region. Each of the ear panels has an outermost edge line. Each of the ear panels are joined to the chassis along the corresponding edge lines to form a seam, thereby forming two leg openings and a waist opening. At least one of the ear panel has, along the seam, a substantially bonded portion starting from the waist opening and an unbonded portion starting from the leg opening. The ratio in length of the unbonded portion to the substantially bonded portion is between about 4:96 and about 20:80. The present invention is also directed to a method for making such a disposable pull-on garment.



International class (IPC 8-9): A61F13/15 A61F13/20 A61F13/49 A61F13/496 A61F13/56 A61F5/44 (Advanced/Invention);

A61F13/15 A61F5/44 (Advanced/Non-invention)

International class (IPC 1-7): A61F13/15 A61F13/20 A61F13/496 A61F5/44

CPC: A61F13/496 A61F2013/49047 A61F2013/49092 A61F13/565 A61F13/49012 A61F13/4963 A61F13/5622 A61F2013/49023 A61F2013/49087

A61F13/49015 A61F13/49011 A61F13/5655
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US class: 1/1 2/400 604/385.01 604/385.010P 604/385.11 604/385.16 604/385.29 604/394 604/396
Family:

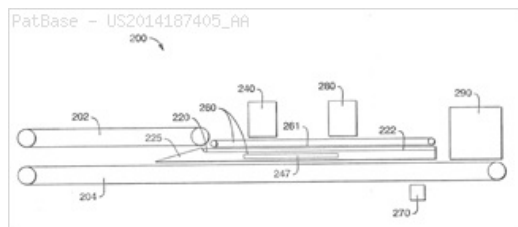
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PE60200 A1	20000908	PE19990000451	19990528
TH40496 A	20000928	TH19991001782	19990525
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US9114043 BB	20150825	US20140268170	20140502
US9173780 BB	20151103	US20120599341	20120830
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ZA9903566 A	19991129	ZA19990003566	19990526

Priority: NZ19980507594 19980528; TR19980003488T 19980528; WO1998US10841 19980528; US20000700559 20001116;
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US20150865344 20150925;

Cited documents: WO9960966, WO9818421 A1, WO9736566, WO9730671 A2, WO9631179 A2, WO9618367, WO9522951, WO9514453, WO9325170, WO9324085, WO04060230, USD308989 S1, US9173780 BB, US9114043 BB, US8672914 BB, US8206366 BB, US6967178 BB, US6902796 BB, US6830566 BB, US6733483 BB, US6649808 BA, US6582414 BA, US6572598 BA, US6569136 BA, US6537644 BA, US6508797 BA, US6443940 BA, US6388166 BA, US6352528 BA, US6297424 BA, US6264643 BA, US5997521 A, US5989236 A, US5941865 A, US5934470 A, US5931827 A, US5876391 A, US5843068 A, US5772649 A, US5766389 A, US5746731 A, US5733628 A, US5725382 A, US5705013 A, US5700255 A, US5690627 A, US5685874 A, US5662638 A, US5653704 A, US5626574 A, US5624420 A, US5612118 A, US5605735 A, US5591155 A, US5569234 A, US5549593 A, US5545158 A, US5531732 A, US5516567 A, US5503076 A, US5496298 A, US5476458 A, US5454803 A, US5443161 A, US5366453 A, US5304162 A, US5285540 A, US5246433 A, US5242436 A, US5234423 A, US5226992 A, US5196000 A, US5171239 A, US5167897 A, US5163932 A, US5156793 A, US5151092 A, US5147345 A, US5143679 A, US5108384 A, US5106385 A, US5100399 A, US5074854 A, US5066289 A, US5054619 A, US5050742 A, US5036978 A, US5006394 A, US4995873 A, US4988345 A, US4988344 A, US4981480 A, US4940464 A, US4938757 A, US4920617 A, US4909804 A, US4909803 A, US4888231 A, US4883549 A, US4842666 A, US4834741 A, US4834735 A, US4808252 A, US4795454 A, US4785996 A, US4743241 A, US4720415 A, US4704115 A, US4695278 A, US4681581 A, US4673402 A, US4670012 A, US4663220 A, US4652487 A, US4619649 A, US4610681 A, US4610678 A, US4573986 A, US4525407 A, US4515595 A, US4475912 A, US4463045 A, US4342314 A, US4325246 A, US3929135 A, US3911173 A, US3860003 A, US3441025 A, US2866459 A, US2703577 A, US2014378931 AA, US2014228798 AA, US2014188068 AA, US2007112322 AA, US2006047260 AA, US2006030831 AA, US2005222549 AA, US2005175269 AA, US2005027274 AA, US2004236299 AA, US2004176735 AA, US2004167490 AA, US2004167489 AA, US2004127876 AA, US2004013852 AA, US2003158532 AA, US2003121588 AA, US2003120240 AA, US2003115837 AA, US2002032427 AA, US2001018579 AA, US2001016720 AA, US1822524 A, JP8038546 A2, GB2244422 A1, EP1550426, EP0983758 A1, EP0657153 A2, EP0587196 A1, EP0547497 A2, EP0526868 A2, EP0483692 A1, EP0323040, EP0320991, EP0241925, **Assignee(s):** (std): ASHTON GREGORY ; BUELL KENNETH BARCLAY ; HAWKINS CRAIG ANDREW ; KLINE MARK JAMES ; THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE ; THE PROCTER AND GAMBLE CO ; VINNAGE JR WILLIAM ROBERT ; VINNAGE WILLIAM ROBERT JR **Assignee(s):** PROCTER AND GAMBLE CO CINCINNATI ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; THE PROCTER AND GAMBLE COMPANY CINCINNATI **Inventor(s):** (std): ASHTON GREGORY ; BUELL KENNETH BARCLAY ; CRAIG A HAWKINS ; CRAIG ANDREW HAWKINGS ; CRAIG ANDREW HAWKINS ; GREGORY ASHTON ; HAWKINS CRAIG ANDREW ; JR VINNAGE WILLIAM ROBERT ; JR WILLIAM ROBERT VINNAGE ; KENNETH B BUELL ; KENNETH BARCLAY BUELL ; WILLIAM ROBERT VINNAGE ; WILLIAM ROBERT VINNAGE JR ; VINNAGE WILLIAM ROBERT JR ; VINNAGE WILLIAM ROBERT ; VINNAGE ROBERT ; KLINE MARK JAMES ; HAWKINS CRAIG A ; HAWKINS ANDREW ; HAWKINGS CRAIG ANDREW ; BUELL KENNETH B ; BUELL BARCLAY ; VINNAGE WILLIAM ROBERT JR ; VINNAGE JR WILLIAM ROBERT **Designated states:** AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

8) Family number: 56828019 (US2014187405A)
Title: METHOD AND APPARATUS FOR FORMING DISCRETE ADJUSTABLE PANT-LIKE DISPOSABLE UNDERGARMENTS
Abstract:

Source: US2014187405A A method and apparatus for producing a pre-fastened adjustable pant-like disposable absorbent undergarment including a fully or partially severed front body panel is disclosed. The method includes first providing a discrete undergarment moving longitudinally in a machine direction. A first panel and second panel are separated in a z-direction to allow for a transport support structure to be passed through a waist opening and a pair of leg openings. While on the transport support structure, the first panel is cut to define a first portion of the front panel and a second portion of the front panel. Finally, the first portion of the front panel and the second portion of the front panel may be joined together with a fastener assembly that connects the first portion and the second portion.



International class (IPC 8-9): A61F13/15 A61F13/496 A61F13/505 A61F13/56 B31F1/00 B31F7/00 (Advanced/Invention)

CPC: B31F7/00 B31F1/0029 B31F1/0051 A61F13/15723 A61F13/15756 A61F13/496 A61F13/5655

US class: 493/356

Family:

Publication number	Pub. date	Application number	App. date
AU2013369007 AA	20140703	AU20130369007	20131211
AU2013369007 BB	20170914	AU20130369007	20131211
BR112015013650 A2	20170711	BR20151113650	20131211
CN104837457 A	20150812	CN201380062393	20131211
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EP2938306 A4	20160907	EP20130868220	20131211
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KR20150102048 A	20150904	KR20157019058	20131211
MX2015007478 A1	20150923	MX20150007478	20131211
MX354118 B	20180213	MX20150007478	20131211
US2014187405 AA	20140703	US20120727745	20121227
WO14102640 A1	20140703	WO20131B60825	20131211

Priority: US20120727745 20121227; EP20130868220 20131211; WO20131B60825 20131211;

Cited documents: WO14076594 A1, WO12009316 A1, WO08056278 A1, WO0200152 A1, WO0187752 A2, WO0037007 A1, WO0035395 A2, US7431791 BB, US7150730 BB, US7077834 BB, US6991696 BB, US6723035 BB, US5924376 A, US5626711 A, US3642119 A, US2012238988 AA, US2011173796 AA, US2008114322 AA, US2003062113 AA, EP1779827 A1, CN1988866 A,

Assignee(s): (std): KIMBERLY CLARK CO ; KIMBERLY CLARK CORP ; KIMBERLY CLARK WORLDWIDE INC

Assignee(s): KIMBERLY CLARK WORLDWIDE INC NEENAH

Inventor(s): (std): AARON MARK VOLP ; BRADLEY WILLIAM SCHOON ; JASON ANDREW VERBOOMEN ; JOSEPH A MLINAR ; MLINAR JOSEPH A ; SCHOON BRADLEY WILLIAM ; SCHOON BRADLEY WILLIAM ; VERBOOMEN JASON ANDREW ; VOLP AARON MARK

Inventor(s): VOLP AARON MARK LARSEN ; VERBOOMEN JASON ANDREW APPLETON ; SCHOON BRADLEY WILLIAM OSHKOSH ; MLINAR JOSEPH A APPLETON

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW