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CINCINNATI, OH 45202

EXAMINER
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* DONALD CARROLL ROE and ELAINE MARY WIGGINS

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Appeal 2015-003112  
Application 12/687,425  
Technology Center 3700

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Before DONALD E. ADAMS, JEFFREY N. FREDMAN, and  
TIMOTHY G. MAJORS, *Administrative Patent Judges*.

*PER CURIAM*

DECISION ON APPEAL

This is an appeal<sup>1</sup> under 35 U.S.C. § 134 involving claims to leg and waist band structures for an absorbent article. The Examiner rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

*Statement of the Case*

*Background*

Appellants' invention "relates generally to legband and waistband structures useful in reusable apparel articles, and more specifically to legband and waistband structures useful in reusable outer covers for

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<sup>1</sup> Appellants identify the Real Party in Interest as The Procter & Gamble Company of Cincinnati, Ohio (*see* Br. 1).

absorbent articles, such as outer covers for diapers, training pants, adult incontinence devices, catamenial products, and the like” (Spec. 1:4–7).

*The Claims*

Claims 1, 3–6, and 9–15 are on appeal. Independent claim 1 is representative and reads as follows (emphasis added):

1. An absorbent article comprising
  - a reusable outer cover, wherein the reusable outer cover is folded over an elastic component to form a tubular sheath,*
  - wherein the sheath has a longitudinal length; and
  - wherein the elastic component has a longitudinal length shorter than the longitudinal length of the sheath when the elastic component is in a relaxed state and moveably disposed within the sheath; and
  - wherein the reusable outer cover further comprises *a bond between the elastic component and the sheath at each end of the longitudinal length of the sheath, and at least one intermediate bond between the elastic component and the sheath between the longitudinal ends of the sheath component,*
  - wherein there is between 1cm and 10cm between each of the bonds, measured along the longitudinal length of the sheath component when the sheath component is fully extended,*
  - wherein at least one intermediate bond is positioned to correspond to a front of a wearer’s thigh.*

*The Issues*

- A. The Examiner rejected claims 1, 3–6, 9–12, 14, and 15 under 35 U.S.C. § 103(a) as obvious over Buell<sup>2</sup> (Ans. 3–5).

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<sup>2</sup> Buell, US 4,081,301, issued Mar. 28, 1978.

B. The Examiner rejected claim 13 under 35 U.S.C. § 103(a) as obvious over Buell and Ekstrom<sup>3</sup> (Ans. 5).

Because the same issue is dispositive for both rejections, we will consider them together.

The Examiner finds that Buell teaches

an absorbent article 2 comprising a reusable outer cover 5 and 6, wherein the reusable outer cover 5 and 6 is folded over an elastic component 4 to form a tubular sheath (Fig 8), wherein the sheath 5 and 6 has a longitudinal length; and an elastic component 4 having a longitudinal length shorter than the longitudinal length of the sheath when the elastic component is in a relaxed state and moveably disposed within the sheath; and wherein the reusable outer cover further comprises a bond 7 and 7' between the elastic component and the sheath at each end of the longitudinal length of the sheath, and at least one intermediate bond between the elastic component and the sheath between the longitudinal ends of the sheath component, wherein at least one intermediate bond is positioned to correspond to a front of a wearer's thigh (Figs. 2, 4, 6, 10 and 11<sup>4</sup>; Col[.] 1, lines 9–17, 27–36, Col[.] 2, lines 29–50; Col[.] 4, lines 35–43; Col[.] 5, line 45 to Col 6, line 30 and Col[.] 10, lines 1–12 and 37–48).

(Ans. 3.)

The Examiner acknowledges that “Buell does not specifically disclose that the spacing is between 1 cm and 10 cm” (*id.*).

The Examiner concludes that it would have been obvious to have “the spacing between the bonds may be between 1 and 10 cm to ensure a strong

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<sup>3</sup> Ekstrom, US 2009/0216209 A1, published Aug. 27, 2009.

<sup>4</sup> We note that Figs. 10 and 11 do not exist in Buell's disclosure.

bond” because “discovering the optimum or workable ranges involves only routine skill in the art” (*id.* at 3–4).

The issue with respect to these rejections are: Does the evidence of record support the Examiner’s conclusion that Buell renders the claims *prima facie* obvious?

*Findings of Fact*

1. Buell teaches that

a continuous elastic ribbon is fed to a diaper web assembly station in a stretched condition. While traveling to the assembly station, an adhesive is applied to discrete lengths of the elastic ribbon at regularly spaced intervals. . . . At the station, the stretched elastic ribbon is adhered to the moisture-impervious backsheet web in the discrete areas of the elastic which are covered by adhesive at predetermined points along the length of said web.

(Buell Abstract; *see also* Ans. 3.)

2. Figure 8 of Buell is reproduced below:

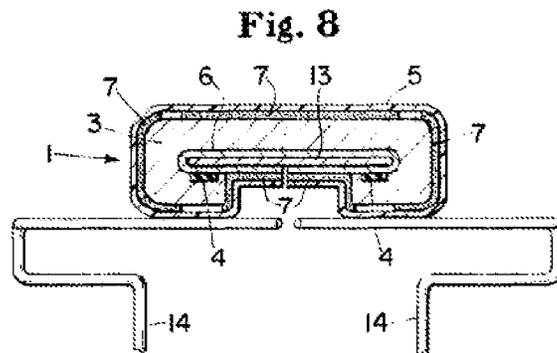


Figure 8 shows that “the moisture-impervious backsheet material **5** is coated on portions of its innermost surface with a flexible adhesive **7**,” in which “those portions of the moisture-impervious web **5** which are laterally aligned with the continuous stretched bands of elastic **4** are preferably not coated

with adhesive 7 prior to entry into the nip between combining rolls” (Buell 4:36–43; *see also* Ans. 4).

3. Buell teaches that

alternative preferred embodiments of adhesive patterns . . . may be employed in the practice of the present invention. . . . [I]t is desired to uniformly gather the elasticized article throughout the area of adherence between the elastic bands 4 and the backsheet 5. The reduced amount of adhesive applied in the centermost areas of the elastic bands 4 has a lesser tendency to restrict expansion or contraction of the elastic, while the greater quantities of adhesive at the end points act to firmly secure the elastic bands 4 to the backsheet 5.

(Buell 10:26–37; *see also* Ans. 4.)

#### *Principles of Law*

“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456 (CCPA 1955).

“[T]he discovery of an optimum value of a variable in a known process is usually obvious.” *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1368 (Fed. Cir. 2007). The rationale for determining the optimal parameters for prior art result effective variables “flows from the ‘normal desire of scientists or artisans to improve upon what is already generally known.’” *Id.* (quoting *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003).)

#### *Analysis*

We adopt the Examiner’s findings of fact and reasoning regarding the scope and content of the prior art (Ans. 3–8; FF 1–3) and agree that claim 1 would have been obvious over Buell. We address Appellants’ arguments below.

Appellants contend that “the cited reference fails to teach a reusable outer cover” (Br. 5).

We are not persuaded. We begin with claim interpretation and specifically with the term “reusable” in claim 1. The Specification defines the term “reusable” to mean “that a referenced material, component, or all of an absorbent article is configured to be restored and/or reused for more than one usage cycle” (Spec. 4:28–29). However, the Specification does not define what constitutes a usage cycle. As the Examiner points out,

Buell’s outer cover is fully capable of being reused. There is no time constraint for reusability as defined by the claim. A[] user may put the outer cover on their body for ten seconds, remove the outer cover, and put the outer cover back on their body. The outer cover would then be reused. [Also], the outer cover could be washed and then reused.

(Ans. 5.)

“[T]he patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002). “‘Functional’ terminology may render a claim quite broad. By its own literal terms a claim employing such language covers any and all embodiments which perform the recited function.” *In re Swinehart*, 439 F.2d 210, 213 (CCPA 1971). Therefore, “[i]f the prior art structure is capable of performing the intended use, then it meets the claim” (*id.*).

Here, the Examiner has reasonably established that the scope of the term “reusable” encompasses the outer cover of Buell. Appellants provide no narrower limitations that exclude the outer cover of Buell.

In referring to Figure 2 of Buell, Appellants contend that “the cited reference also fails to teach, ‘wherein the reusable outer cover is folded over

an elastic component to form a tubular sheath,' as recited in claim 1” (Br. 5). Appellants argue that “the disposable diaper [of Buell] is being folded after it has been configured” (*id.* at 6).

This argument is unpersuasive. As the Examiner explains, “Appellant[s] admit[] that Buell discloses [a] reusable outer [cover that] is folded; see Appeal Brief page 6, lines 1–3. Appellant[s are] arguing about the method of making the absorbent article. However, Appellant[s have] not claimed a method” (Ans. 6; *see also* FF 2). The patentability of product-by-process claims is not dependent on process limitations. *See In re Thorpe*, 777 F.2d 695, 697 (Fed. Cir. 1985) (“even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself.”) Moreover, the bonds, as claimed, encompass bonds that are either permanent or non-permanent.

Appellants argue that “[f]igure 6 of Buell illustrates that the elastic band is sandwiched between the topsheet and the backsheet. Thus, Buell fails to teach a reusable outer cover folded over an elastic component to form a tubular sheath. Buell fails to teach that any material has been folded over the elastic component” (Br. 6–7).

We are not persuaded. As the Examiner explains, “[t]his is not the figure Examiner has relied upon in the office action to disclose the folding over limitation,” and “[t]he reusable outer cover 5 is also shown [in Figure 6] as being folded over the elastic component 4” (Ans. 6–7; *see also* FF 2).

Appellants contend that

Buell also fails to teach, “wherein there is between 1 cm and 10cm between each of the bonds, measured along the longitudinal length of the sheath component when the sheath component is fully extended,” and “wherein at least one

intermediate bond is positioned to correspond to a front of a wearer's thigh," as recited in independent claim 1.

(Br. 7.)

We are not persuaded. As the Examiner explains

Buell discloses that the spacing of the adhesive is a result effective variable (Col[.] 10, lines 37–48). Buell discloses that the spacing of the adhesive affects the uniformity of the gathering. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made [] that the adhesive is disposed between 1 cm and 10 cm between each of the bonds, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

(Ans. 7; see also FF 1, 3.) See *In re Aller*, and *Pfizer, Inc. v. Apotex, Inc.*

Appellants do not identify any secondary consideration, such as unexpected results, that overcomes the prima facie case of obviousness based on routine optimization of the spacing between the bonds as disclosed by Buell.

We also agree with the Examiner that “[t]he limitation of ‘one element corresponding in position to another’ adds little patentable weight. . . . any portion of Buell’s absorbent article will definitely correspond in position to another portion of the absorbent article. As long as there are two elements, they correspond to one another in position” (Ans. 8.) See *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, *In re Schreiber*, and *In re Pearson*. That is, the location of the intermediate bond is not required to be at the front of the outer cover, or even at the wearer’s thigh, but rather is required to “correspond” to that location without any specific degree of correspondence required.

Appellants contend that “the Office Action fails to provide some articulated reasoning to support the conclusion of obviousness” (Br. 8).

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This argument is unpersuasive for the reasons discussed above.

#### SUMMARY

In summary, we affirm the rejection of claim 1 under 35 U.S.C. § 102(b) as being obvious over Buell. Claims 3–6, 9–12, 14, and 15 fall with claim 1.

We affirm the rejection of claim 13 under 35 U.S.C. § 103(a) as obvious over Buell and Ekstrom.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED