

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MIGAKU SUZUKI and HIROAKI FUKUI

Appeal No. 2000-0117
Application No. 08/770,676

ON BRIEF

Before COHEN, FRANKFORT and NASE, Administrative Patent Judges.
FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 12. The ground of rejection set forth in the final rejection of claim 3 (Paper No. 8, mailed January 23, 1998) was not repeated in the examiner's answer, therefore, we assume that the rejection of claim 3 has been withdrawn by the examiner.¹

¹ Ex parte Emm, 118 USPQ 180, 181 (Bd. App. 1957).

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BACKGROUND

The appellants' invention relates to an absorbent article or diaper comprising a main body (10) having a waist hole (1) and first and second leg holes (2, 2) each having a front end and a rear end. The main body comprises a top sheet (12) made of a non-woven, liquid permeable material which faces toward a wearer's body, a back sheet (11) made of a liquid impermeable material disposed outwardly of the top sheet (12) and an absorbent core (13) interposed therebetween. The top sheet (12), back sheet (11) and absorbent core (13) are secured together to form the integral article (10). The top sheet comprises a dual-layered sheet material (21, 22), which has two sets of elongated elastic members (6a, 6b) interposed and attached therebetween. The elongated elastic members are disposed in a selected path with portions of the elastic members crossing over the crotch region of the article in a criss-cross pattern to provide a leg gather (4) disposed along each of the leg holes (2, 2). The elastic members (6a, 6b) are bonded to the top sheet in a stretched state in the regions along the leg holes (2), however, the central sections

(6c) of the elastic members (6a, 6b) traversing the crotch region are not bonded to the top sheet. The elastic members (6a, 6b) are severed at the central sections (6c) so that those sections snap back to define unstretched tail portions (T) extending from the cross-over portions to eliminate undesirable deformation of the article in the crotch region. Appellants' invention also relates to a method of manufacturing an absorbent article which is formed from the elements set forth above, wherein the method includes the steps of bonding the elastic members to the top sheet except in the crotch region, cutting the elastic members in the area not bonded, combining the top sheet with the back sheet and then severing the resultant combination at predetermined cutting lines to define leg holes. An understanding of the invention can be derived from a reading of exemplary claims 1, 4, 8, 11 and 12, which appears in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

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|---|-----------|---------------|
| DesMarais et al. (DesMarais) 9, 1990 | 4,892,536 | Jan. |
| Igaue et al. (Igaue) 1992 | 5,171,239 | Dec. 15, |
| Matsushita 1994 | 5,340,424 | Aug. 23, |
| Tabata ² (Japanese Patent) | 4-28364 | Jan. 30, 1992 |
| Nomura ³ (Japanese Publication) | 5-42180 | Feb. 23, 1993 |

Claims 1, 4 through 6, 8 and 10 through 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsushita in view of Igaue and Daio.

Claims 2, 7 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsushita in view of Igaue and Daio as applied to claim 1, and further in view of DesMarais and UniCharm.

² Both the brief and answer refer to this reference as "Daio." For consistency, we will continue to refer to this reference as "Daio."

³ Both the brief and answer refer to this reference as "UniCharm." For consistency, we will continue to refer to this reference as "UniCharm."

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 22, mailed December 20, 2000) for the examiner's complete reasoning in support of the rejections, and to the substitute brief (Paper No. 16, filed December 7, 1998) and reply briefs (Paper Nos. 19 and 23, filed June 3, 1999 and February 20, 2001, respectively) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Prior to beginning our analysis we make the following preliminary notes. First, the examiner has withdrawn the

final rejection on claims 5 and 6 under 35 U.S.C. § 112, second paragraph, as being "no longer applicable because they were overcome by an amendment filed subsequent to the FINAL rejection" (answer, page 2).

Second, on pages 6 and 7 of their brief, appellants have grouped the claims as standing or falling together, i.e., claims 1 and 4 through 6 have been grouped together, claims 8 and 10 through 12 have been grouped together, and claims 2, 7 and 9 have been grouped together, however claim 9 does not stand and fall with claims 2 and 7. Accordingly, we have selected claim 1 from the first group, claim 8 from the second group, and claims 2 and 9 from the third group as being representative and will decide the appeal as to each of the respective claim groupings on the basis of the claim(s) selected therefrom.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of

obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967),

cert. denied, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellants' disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. See, e.g., Grain Processing Corp. v. American Maize-Products Co., 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

With this as background, we analyze the prior art applied by the examiner in the rejection of the claims on appeal.

Looking first to the examiner's rejection of claims 1 and 4 through 6 (appellants' Group I) under 35 U.S.C. § 103(a) as being unpatentable over Matsushita in view of Igaue and Daio, the examiner states that

Matsushita '424 clearly teaches all of the claimed elements and steps except for forming the topsheet by positioning between two sheets of material the elastic members, i.e. a topsheet comprising a dual layered topsheet with the elastic mem[b]lers in between. See especially the Figures and Column 4, lines 22-28 of Matsushita '424, i.e. Matsushita teaches attachment to the backsheet (answer, page 4).

The examiner further notes that

Igaue et al. '239 teaches . . . that elastic members may be attached to the topsheet and/or backsheet, i.e. interchangeable connections, and Daio teaches, e.g. Figures 2, 4 and 5 as compared to 8 and 10, that elastic members may be attached to one sheet or between dual layers of one sheet (answer, pages 4 and 5).

From these teachings, the examiner concludes that attaching the elastic members of Matsushita's invention to the topsheet, as taught by Igaue, and also replacing Matsushita's topsheet with a dual layered topsheet with the elastic members positioned therebetween, as suggested by Daio, would have been obvious to one of ordinary skill in the art.

Appellants argue that "[n]either Matsushita alone nor in combination with Igaue or Daio discloses or suggests having a dual-layered top sheet between which are positioned the elastic elements as claimed" (brief, page 19). Appellants further argue that the examiner failed to recognize that even though Igaue discloses portions of the elastic members traversing the crotch region bonded to the top sheet, "the elastics nevertheless still are positioned centrally **under** the

core. See Col. 3, ll. 18-20" (brief, page 19). Appellants support this argument by stating that

[n]one of the prior art appear to disclose or suggest attaching the elastic members traversing the crotch section **above** the absorbent core. This feature is embodied in claims 1 and 4, for example, by recitation of the relative positioning of the back sheet, absorbent core and top sheet. Specifically, the absorbent core is recited as being positioned between the dual-layered top sheet and the back sheet. Thus, since claims 1 and 4 recite a dual-layered top sheet between which is interposed two sets of elastic members, and since the elastic members 'extend continuously to a mid-point of the leg holes,' the elastic members of the claimed invention are necessarily positioned **above** the absorbent core. This is not the case in either Matsushita, Igaue or Daio (brief, page 20).

We are in agreement with appellants, in that the examiner has failed to establish a prima facie case of obviousness with respect to claim 1. Our analysis of the collective teachings of the prior art references reveals that a dual-layered top sheet having elastic members therebetween is neither disclosed nor suggested. The examiner relied on Daio to provide this teaching, but Daio discloses a dual-layered bottom sheet (2, 6) having elastic members (4) therebetween (Figure 2). Although Daio teaches in another embodiment that the elastic members (4, 5) can be affixed to the top sheet (1) and that an

absorbent core and single bottom sheet (2A) are then superposed, there is no specific teaching or suggestion of a "dual-layered" top sheet with the elastic elements positioned therebetween as set forth in appellants' claim 1.

Furthermore, we find that the collective teachings of Matsushita and Igaue also do not disclose or suggest a dual-layered top sheet with an elastic member positioned therebetween. For these reasons, we will not sustain the examiners rejection of claim 1 under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue and Daio.

Independent claim 4 also requires "forming the top sheet by positioning, between two sheets of material in elongated web form, a pair of elastic members" As we noted above, none of the references relied upon by the examiner discloses or suggests a top sheet formed by two sheets with a pair of elastic members therebetween. Therefore, we will not sustain the examiner's rejection of claim 4 under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue and Daio. Moreover, since claims 5 and 6 depend from independent claim 4 and, thus, include all of the limitations set forth in

the independent claim, we will also not sustain the examiner's rejection of these claims under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue and Daio.

We now turn to the examiner's rejection of claims 8 and 10 through 12 under 35 U.S.C. § 103(a) over Matsushita in view of Igaue and Daio. Appellants argue that claim 8 requires "two sets of elastic members '*selectively secured to said top sheet,*' wherein the first and second sets of elastics extends across the central section between the first and second leg holes" (brief, page 22). Appellants further state that

even if the portions of the elastics traversing the Igaue crotch region are bonded to the top sheet, the Igaue elastics nevertheless still are positioned centrally **under** the core. See Col. 3, ll. 18-20. . . . [T]o the extent that Igaue et al. suggests that the elastics traversing the crotch section may be attached to the bottom side of the top sheet, Igaue is referring to that portion of the elastics between the intersection point and the edge of the absorbent core as best seen in FIG. 4. Beyond the edge of the absorbent core, the elastics are positioned **beneath** the absorbent core in distinction with claims 8 and 10-12. Matsushita and Daio are similarly deficient insofar as they both at most disclose the attachment of the elastic members traversing the crotch section beneath the absorbent core (brief, pages 22-23).

In determining obviousness/nonobviousness, an invention must be considered "as a whole," 35 U.S.C. § 103(a), and claims must be considered in their entirety. Medtronic, Inc. v. Cardiac Pacemakers, Inc., 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983). Furthermore, we must point out, however, that all of the features of the secondary reference need not be bodily incorporated into the primary reference (see In re Keller, supra, at 642 F.2d 425, 208 USPQ 881) and the artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment (see Lear Siegler, Inc. v. Aeroquip Corp., 733 F.2d 881, 889, 221 USPQ 1025, 1032 (Fed. Cir. 1984)).

Upon our analysis of claim 8 and of the collective teachings of the prior art references, we are not in agreement with appellants. Matsushita discloses placing the elastic members (10a, 10b) between the top and bottom sheets and bonding the elastic to the bottom sheet except in the crotch region so that "each of said portions may be cut at one location so that these portions may be snapped back"

(Matsushita, col. 4, lines 25-28). Matsushita does not disclose that the elastic can be bonded to the top sheet. However, Igaue discloses a top sheet (6), a bottom sheet (7, 9), an absorbent core (8) between the top and bottom sheets and elastic members (4A₁, 4B₁) along the leg holes (15) attached to the top sheet (col. 3, lines 14-18). Daio, as we noted above, discloses that elastic members (4, 5) can be affixed to the top sheet(1) and that an absorbent core and a bottom sheet (2A) are then superposed. Therefore, upon review of the collective teachings of the references, one having ordinary skill in the art, at the time of appellants' invention, would look to both Igaue and Daio to provide a teaching for bonding the elastic to the top sheet in Matsushita's invention for the purpose of effectively utilizing the elasticity of the top sheet (Igaue, col. 2, lines 63-68).

Claim 8, as a whole, requires the elastic member cross-over/crotch portions to be severed to produce elastic portions retracted toward the first and second cross portions secured to the sheet. The claim also requires that the elastic

members are to be secured to the sheet "where they extend along the leg holes, and central sections of the first and second cross-over portions spaced from the leg holes are not secured to said sheet" (claim 8, lines 23-25). This limitation does not restrict the elastic members to be **above** the absorbent core. Therefore, claim 8 does not require that the elastic members in the crotch region be positioned "over" the absorbent core, as asserted by appellants. Moreover, claim 8 also does not require a dual-layered top sheet as further asserted by appellants. Since we find appellants' arguments unpersuasive and that the collective teachings of Matsushita, Igaue and Daio disclose and suggest the invention as claimed, we will sustain the examiner's rejection of claim 8 under 35 U.S.C. § 103(a).

The appellants have grouped claims 8 and 10 through 12 as standing or falling together (brief, page 6). Thereby, in accordance with 37 CFR § 1.192(c)(7), claims 10 through 12 fall with claim 8. Thus, it follows that the decision of the examiner to reject claims 10 through 12 under 35 U.S.C. § 103(a) will also be sustained.

The next rejection for our review is of claims 2, 7 and 9 under 35 U.S.C. § 103(a) over Matsushita, Igaue and Daio as applied to claim 1 and further in view of DesMarais and UniCharm. Claim 2 depends from independent claim 1 which requires a "dual-layered top sheet" having elastic members positioned therebetween. As noted above, neither Matsushita, Igaue nor Daio disclose or suggest a dual-layered top sheet with an elastic member provided therebetween. DesMarais discloses an absorbent article having a top sheet (24), back sheet (12) and absorbent core (16) intermediate the two sheets. The top sheet has a passageway (22) for allowing communication of solid waste materials to the core, thereby isolating waste from the skin of the wearer. UniCharm discloses elastic elements (11) for the leg openings which are adhered to the back sheet (12) except in the center part (11a) where the elastic elements are cut such that they snap back. However, like the other references relied upon by the examiner, DesMarais and UniCharm do not disclose or suggest a dual-layered top sheet having the elastic member therebetween as set forth in independent claim 1. Therefore, for the

reasons set forth above, we will not sustain the examiner's rejection of claim 2 under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue, Daio, DesMarais and UniCharm.

With respect to claim 7, independent claim 4 from which claim 7 depends also requires "forming the top sheet by positioning, between two sheets of material in elongated web form, a pair of elastic members" Reiterating our above discussion, none of the references disclose or suggest a top sheet formed by two sheets with a pair of elastic members therebetween. Therefore, we will also not sustain the examiner's rejection of claim 7 under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue, Daio, DesMarais and UniCharm.

Appellants have presented separate arguments with respect to the patentability of claim 9.⁴ Claim 9 depends from independent claim 8, which does not require the "dual-layered top sheet." Appellants contend that claim 9 is patentably

⁴ See pages 7 and 31 of the appellants' brief.

distinct because the claim recites "an aperture in the top sheet" to create "a pocket-like structure into which waste material may be disposed and retained" (brief, page 28). However, as noted by the examiner, both DesMarais and UniCharm disclose an aperture in the top sheet for the explicit purpose of collecting waste (see Figure 1 in DesMarais and Figure 4 in UniCharm). Although appellants' argument is focused on a limitation not present in either claims 8 or 9, i.e., the pocket-like structure into which waste may be disposed, we note that DesMarais does disclose this feature.⁵ Appellants further argue that claim 9 requires "that the elastics extend above the absorbent core and be attached to the top sheet" (brief, page 29, footnote). However, as previously noted, this limitation is not present in claim 9. Moreover, independent claim 8, from which claim 9 depends, also does not recite that the elastic members extend above the absorbent core. The claim states that the elastic members around the leg holes are attached to the top sheet. As we stated

⁵ See Figure 3, which discloses a pocket (30) for collecting and retaining waste that passes through the aperture (26) wherein the pocket is created by the elastic members (28, 32) located in the top sheet (18).

previously, such a limitation does not necessarily restrict the elastic members to be above the absorbent core.

Therefore, for the reasons set forth above, we will sustain the examiner's rejection of claim 9 under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue, Daio, DesMarais and UniCharm.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 and 4 through 6 under 35 U.S.C. § 103(a) as being unpatentable over Matsushita, Igaue and Daio will not be sustained.

The decision of the examiner to reject claims 8 and 10 through 12 under 35 U.S.C. § 103(a) as being unpatentable over the collective teachings of Matsushita, Igaue and Daio will be sustained.

The decision of the examiner to reject claims 2 and 7 as being unpatentable under 35 U.S.C. § 103(a) over Matsushita, Igaue, Daio, DesMarais and UniCharm will not be sustained.

The decision of the examiner to reject claim 9 as being unpatentable under 35 U.S.C. § 103(a) over the collective teachings of Matsushita, Igaue, Daio, DesMarais and UniCharm will be sustained.

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

AFFIRMED-IN-PART

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