UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY H. KNAUF

Appeal No. 2007-0419
Application No. 09/978,524
Technology Center 1700

Decided: March 29, 2007

Before: SPIEGEL, LANE and NAGUMO, *Administrative Patent Judges.*

SPIEGEL, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C . § 134 from the Examiner's final rejection of claims 1-12. Claims 13-21 are also pending, but are withdrawn from consideration as being directed to a non-elected invention. We have jurisdiction under 35 U.S.C. § 6(b). We affirm-in-part, reverse-in-part and add a new ground of rejection.

I. Introduction

Claim 1 is illustrative of the subject matter on appeal and reads as follows:

> A method for extrusion coating a lightweight web comprising:
>
> feeding a length of a lightweight web along with a length of carrier web to an extruder with the lightweight web atop the carrier web;
>
> extruding a polymer film coating onto the lightweight web and carrier web in the extruder so that a surface of the lightweight web is coated by the extruded coating to provide an extrusion-coated lightweight web; and
>
> separating the extrusion-coated lightweight web from the carrier web.

The dependent claims further limit the lightweight web, carrier web and polymer film coating recited in the method of claim 1. Specifically, the lightweight web is limited to a web which deforms when subjected to a tension of about 0.5 pli or less (claim 3) or has an MD curl of less than about 3 inches as measured by TAPPI UM 427 (claim 8) or has insufficient strength to withstand forces imposed upon it by an extruder coating station in the absence of the underlying carrier web (claim 9). The lightweight web may be a nonwoven fabric (claim 5), a paper web (claim 6) or a metal foil (claim 7). The carrier web may be a heavyweight web (claim 10) or a second lightweight web (claim 11). The polymer film coating may comprise a coextrusion of at least two layers of polymer film (claim 12) or may be made of certain types of polymers (claim 4).

In reaching our decision, we have given careful consideration to the Appellant's specification and claims and to the respective positions articulated by the Appellant and the Examiner. We make reference to the Examiner's Answer ("Answer," mailed 26 July 2006) for the Examiner's reasoning in support of the

rejections and to Appellant's Appeal Brief ("Brief," filed 05 June 2006) for the Appellant's arguments thereagainst.

The Examiner relies on the following references in her rejections:

Backwell	3,620,872	16 November 1971
Peterson	3,840,421	08 October 1974
Anderson	4,963,303	16 October 1990
Marrocco, III et al. (Marrocco)	5,646,231	08 July 1997
Enlow et al. (Enlow)	6,254,712	03 July 2001

II. Issues

Claims 1, 3, 4 and 6-11 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Backwell in view of Marrocco. Claim 5 stands rejected under 35 U.S.C. § 103(a) over Backwell in view of Marrocco as applied to claim 1 and further in view of Anderson. Claim 12 stands rejected under 35 U.S.C. § 103(a) over Backwell in view of Marrocco as applied to claim 1 and further in view of Enlow.

Claims 1-4 and 8-11 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Peterson in view of Backwell, further in view of Marrocco.

III. Discussion

A. Rejections based on Backwell and Marrocco

1. claims 1, 3-4 and 6-11

Appellant has not argued that claims 4 and 9-11 are separately patentable from claim 1 upon which they depend. Therefore, the patentability of claims 4 and 9-11 rise or fall with the patentability of claim 1.

Backwell discloses a method of processing a web material supported on a carrier and subsequently separating the processed web and carrier to obviate

extensibility and heat distortion of the web material (col. 1, ll. 6-27). The carrier may be a web of polyester film, a paper-foil laminate, synthetic rubber, stainless steel (col. 1, ll. 28-40). A coating of non-self-supporting polymeric material, e.g., vinylidene chloride copolymers, polyolefins, wax/copolymer blends and cellulosic derivatives, is applied to the carrier, e.g., by melt extrusion, aqueous dispersion coating, solvent-based lacquering or hot melt coating (col. 1, ll. 47-52). The polymeric coating is subsequently processed to add a print layer, an adhesive layer and one or more supporting layers of web-forming materials, thereby producing a self-supporting assembly (col. 1, ll. 54-58). The supporting layers may be applied by extrusion coating (col. 1, ll. 54-58; col. 2, ll. 10-11 and 45-46) and may be made of polymers, e.g., polyethylene, polypropylene, ethylene-vinyl acetate copolymer or vinylidene chloride copolymers, or may be paper or metal foil (col. 1, ll. 59-65; col. 2, ll. 10-11 and 45-46). The coated assembly is then separated from the carrier (col. 1, ll. 13-27).

The Examiner only relies on Marrocco for its disclosure that art recognized coating techniques include "coating from solution, spray coating of solution, spin coating, coating from a latex, powder coating, laminating preformed films, spray coating molten droplets, and coating from the melt" (col. 21, ll. 5-9).

According to the Examiner, the claimed lightweight web reads on either the non-self-supporting polymeric material layer or the laminated non-self-supporting polymeric material and adhesion layers of Backwell. The Examiner maintains that the limitations of claim 1 are met by the carrier web moving either the non-self-supporting polymeric material layer or the laminated layers to the

extruder ("feeding a length of a lightweight web along with a length of carrier web to an extruder with the lightweight web atop the carrier web") where a supporting layer made of polymeric material is extrusion coated thereon to produce a self-supporting assembly ("extruding a polymer film coating onto the lightweight web and carrier web in the extruder so that a surface of the lightweight web is coated by the extruded coating to provide an extrusion-coated lightweight web") which is then separated from the carrier web ("separating the extrusion-coated lightweight web from the carrier web"). [Answer, ¶ bridging pp. 4-5.]

Appellant does not dispute that Backwell teaches the coating of lightweight webs. Rather, Appellant argues that claim 1 requires the lightweight web to be formed separately from the carrier web. [Brief, p. 4, ¶ 2.]

When examining claims for patentability, claims are interpreted as broadly as is reasonable and consistent with the specification. In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Here, the plain language of claim 1 does not require that the lightweight web exist independently of the carrier web at the beginning of the method. Claim 1 simply requires that "a lightweight web along with a ... carrier web" be fed into an extruder. The claimed methods are open as to how the lightweight web comes to be on top of the carrier web and the "comprising" language of the claimed methods does not exclude the presence of additional steps or layers. We find that the Examiner has shown that Backwell describes a method of coating lightweight webs meeting all the limitations of claim 1. Thus, the broad language of claim 1 is anticipated by Backwell. Since anticipation is the epitome of obviousness (In re

Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982)), we sustain the Examiner's rejection of claim 1, as well as of claims 4 and 9-11, under § 103(a) over Backwell in view of Marrocco. Moreover, since claim 1 is anticipated by Backwell, the Examiner's reliance on Marrocco is harmless. Accordingly, it is unnecessary to consider the Examiner's argument that Marrocco teaches "that laminating preformed films is functionally equivalent to coating from melt, solution or latex" (Answer, p. 5, ¶ 2).

Claims 3 and 8 limit the lightweight web treated in the method of claim 1 to a web which deforms when subjected to a tension of about 0.5 pli or less (claim 3) or has an MD curl of less than about 3 inches as measured by TAPPI UM 427 (claim 8). The specification broadly defines "lightweight" webs, in relevant part, as "webs which ... have insufficient strength to allow them to be effectively extrusion coated using existing ... known extrusion systems and methods or which ... have not heretofore been deemed suitable to be extrusion coated." For example, according to the specification, webs which deform when subjected to tensions of about 0.5 pli or less are generally considered "lightweight," while "[w]ebs which may be subjected to tensions of over about 0.5 pli without exhibiting undesirable deformations can generally be extrusion coated using known systems and methods." [Specification ¶ bridging pp. 4-5.] Further according to the specification, failed attempts to extrusion laminate lightweight webs in the prior art "have resulted in the substrate being highly distorted if not destroyed and having measured curls far in excess of 3 inches" (p. 6, ¶ 4). In other words, webs which exhibit deformations when subjected to tensions of

about 0.5 pli or less or which have an MD curl of less than about 3 inches as required by claims 3 and 8, respectively, have been generally considered as not being amenable to extrusion coating using known extrusion systems because the webs cannot withstand the forces applied to them in these systems.

The Examiner argues that since Backwell shows how to treat any type of lightweight web without breakage or deformation, the burden has shifted to Appellant to show that lightweight webs having the specifically recited property could not be treated using the Backwell method (Answer, p. 5, ¶ 4; p. 10, ¶ 4). Essentially, the Examiner contends that the limitations recited in claims 3 and 8 are inherent in the definition of a lightweight web. Indeed, Backwell discloses methods for coating webs that cannot support themselves. In particular, Backwell discloses "applying to the said carrier a coating of polymeric material, the coating in itself being nonself-supporting but capable of subsequent separation from said carrier when the coating has become part of a self-supporting assembly . . ." (col. 1, ll. 17-20, emphasis added). The Backwell webs that are "nonself-supporting" appear to meet all the criteria set out by Appellant for lightweight webs as recited in claims 3 and 8. The burden is on Appellant to prove otherwise. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977). Since the Examiner did not cite the aforementioned passage in Backwell or explain how the disclosure in Backwell related to the definition of lightweight web in Appellant's specification, we

denominate our affirmance of the Examiner's rejection of claims 3 and 8 as unpatentable under § 103(a) as a new ground of rejection.

Claims 6 and 7 require the lightweight web used in the method of claim 1 to be either a paper web or a metal foil, respectively. Instead of the extrusion coated polymeric supporting layer of Backwell corresponding to the recited extrusion coated polymer film, the Examiner changes her position and equates Backwell's supporting layer to the recited lightweight web because Backwell alternatively discloses that the supporting layer may be made of paper or metal foil (Answer, p. 10, ¶ 2). For such a process, the Examiner has not pointed to any evidence or explained why the Backwell paper or foil supporting layers are "lightweight webs" as Appellant uses that term. Therefore, we reverse the rejection of claims 6 and 7 under § 103(a) over Backwell in view of Marrocco.

2. claim 5

Acknowledging that neither Backwell nor Marrocco teach or suggest that the lightweight web used in the method of claim 1 is a nonwoven fabric, the Examiner looks to Anderson to satisfy this deficiency (Answer, p. 7, ¶ 8 - p. 9, ¶ 2). Anderson is directed to polyimide ultrafiltration membranes useful for the recovery of dewaxing aids used in solvent dewaxing processes (col. 1, ll. 7-23). Anderson describes casting porous membranes on various backing (support) materials, in particular, a non-woven fabric backing for certain uses of the membrane (col. 3, ll. 56-64). Specifically, using the membrane in high temperature ultrafiltration processes requires the use of a temperature resistant backing layer, e.g., Nomex,® a non-woven felt material (col. 3, ll. 59-64).

According to the Examiner, it would have been obvious "to have used a non-woven fabric backing as other material to which it is desired to apply a coated finish in Backwell in view of Marrocco, III et al since Anderson teaches that metal plate or moving non-woven fabric backing can be used as a suitable backing for applying a casting solution in certain applications" (Answer, sentence bridging pp. 7-8). However, the Examiner has not explained why one of ordinary skill in the art would have treated a high temperature resistant support backing, e.g., the non-woven fabric described in Anderson, using a method designed to obviate heat distortion of the support layer as instantly claimed. It is improper to use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). Therefore, we reverse the rejection of claim 5 under § 103(a) over Backwell in view of Marrocco as applied to claim 1 above and further in view of Anderson.

3. claim 12

Acknowledging that neither Backwell nor Marrocco teach applying the polymer film coating as a coextrusion of at least two layers of polymer film, the Examiner looks to Enlow to satisfy the deficiency (Answer, p. 8, ¶¶ 4-6). Enlow discloses that when producing protective and decorative films comprising a clear coat, a color coat and a size coat, these layers can be extruded in series or coextruded as a multi-layer film onto the carrier (col. 14, ll. 1-7). Appellant does not dispute that coextrusion of films is known (Brief, p. 11, ¶ 3). Rather, Appellant argues that "the prior art does not teach or suggest the ability to apply

an extrusion coating to a lightweight web that is separable from a carrier web on which it resides" (id.). Backwell discloses applying an extrusion coating to a web that is separable from a carrier web as explained above. Failure to consider the references together is inappropriate in view of the fact that the rejection was made under § 103. Cable Elec. Prods. Inc. v. Genmark, Inc., 770 F.2d 1015, 1025, 226 USPQ 881, 886-87 (Fed. Cir. 1985); In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Therefore, Appellant's argument is not persuasive. Consequently, we will sustain the Examiner's rejection of claim 12 under § 103(a) over Backwell in view of Marrocco as applied to claim 1 above and further in view of Enlow.

B. Rejection of claims 1-4 and 8-11 based on Peterson, Backwell and Marrocco

Peterson discloses a method of printing and/or embossing a continuous web of stretchable thermoplastic material ("lightweight web") (col. 1, ll. 49-52) comprising feeding a relatively non-stretchable carrier belt, e.g., stainless steel ("carrier web") (col. 3, ll. 10-11), through a first work station where adhesive is applied to the belt (col. 3, ll. 25-34) and then through a second work station where a web of stretchable material, e.g., vinyl, is pressed into contact with the adhesive to firmly adhere the web to the belt (col. 3, ll. 50-60). Preferably, the web has a width less than the width of the belt (col. 3, ll. 61-62). The adhered web is carried to various processing stations for printing (col. 4, ll. 3-28). After print processing, a sheet of protective clear vinyl material ("polymer film coating") can be applied to the surface of the web (col. 4, ll. 53-61) and the completed web

passes through a stripping station where it is separated from the carrier belt (col. 5, ll. 23-28).

Backwell and Marrocco have been discussed above.

According to the Examiner, Peterson differs from claim 1 in failing to disclose applying the protective clear vinyl material by extrusion coating (Answer, p. 6, ¶ 4). The Examiner relies on Marrocco as teaching that coatings may be formed by laminating preformed films or by extrusion onto substrates and Backwell as teaching that a coating of vinyl material maybe formed on a printed vinyl material by extrusion (Answer, p. 6, ¶¶ 5 and 7). The Examiner concludes that it would have been obvious to apply the protective clear vinyl material layer of Peterson by extrusion coating instead of by laminating a preformed sheet in view of Marrocco's disclosure that coatings may be formed by laminating preformed films or by extrusion onto substrates and, as necessary, further in view of Backwell's disclosure of applying a coating of vinyl material onto a printed vinyl material by extrusion (Answer, p. 6, ¶¶ 6 and 8). As to claims 3-4 and 8-11, the Examiner reiterates her arguments above based on the disclosures of Backwell and Marrocco without Peterson.

On the one hand, Appellant contends that adding Peterson to the above obviousness rejection of claims 1, 3-4 and 8-11 over Backwell and Marrocco is unnecessary and duplicative (Brief, p. 7, ¶ 3). However, we view the rejection based on Peterson as an essentially independent rejection from that based on Backwell insofar as the Examiner's rationale, which we found to be tantamount to anticipation, is based on an entirely different logic than the obviousness of

substituting one method of coating (extruding) for another (lamination). On the other hand, Appellant contends that the addition of Peterson to the previous rejection does not rectify the alleged deficiencies of Backwell and Peterson. The Examiner responds that Peterson adds a teaching of coating width which Backwell and Marrocco lack (Answer, p. 11, ¶ 1). However, coating width limitations are only recited in claim 2.

We will sustain the rejection of claims 1, 3-4 and 8-11 under § 103(a) over Peterson, Backwell and Marrocco because the ordinary worker would have substituted the known method of applying a protective coating by extrusion, taught by Backwell, for the lamination coating method exemplified by Peterson. We find that Peterson's stretchable thermoplastic material also appears to meet inherently the additional limitations of claims 3 and 4 and we again designate our affirmance of the rejection of claims 3 and 8 as a new ground of rejection. As to claim 2, the Examiner acknowledges that Peterson fails to disclose the width of the protective clear vinyl material as being greater than the width of the lightweight web (Answer, p. 7, ¶ 1). However, the Examiner concludes that it would have been obvious to use a protective clear vinyl material having a width greater than the width of the lightweight web with the expectation of "protecting" the edges of the web (id., p. 7, ¶¶ 2-3). Appellant responds that "this proffered justification is not the reason for Appellant overlapping the coating onto the carrier web and has no basis" (Brief, p. 10, ¶ 3).

"Obviousness is not to be determined on the basis of purpose alone." In re Graf, 343 F.2d 774, 777, 145 USPQ 197, 199 (CCPA 1965). However, when

relying on multiple references or a modification of the prior art, it is incumbent on the Examiner to identify some suggestion to combine references or make the modification. In re Jones, 958 F.2d 347, 351, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992) (stating that there must be some suggestion to combine, "either in the references themselves or in the knowledge generally available to one of ordinary skill in the art"). Here, the Examiner has provided a reason for the modification, which we find sensible and which Appellant has not materially challenged, to modify the prior art, i.e., to protect the edges of the lightweight web. The fact that the Examiner's reason is not the same as Appellant's is insufficient to rebut the prima facie conclusion of obviousness presented by the Examiner. In re Dillon, 919 F.2d 688, 693-94, 16 USPQ2d 1897, 1901-02 (Fed. Cir. 1990). Therefore, we will sustain the rejection of claim 2 under § 103(a) over Peterson, Backwell and Marrocco.

IV. Conclusion

To summarize, the rejection of claims 1, 2, 4 and 9-12 under 35 U.S.C. § 103(a) is AFFIRMED; the rejection of claims 3 and 8 under 35 U.S.C. § 103(a) is AFFIRMED ON NEW GROUNDS; and, the rejection of claims 5-7 under 35 U.S.C. § 103(a) is REVERSED.

37 CFR § 41.50(b) (2004) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." 37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with

respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

> (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

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; REVERSED-IN-PART; NEW GROUNDS OF REJECTION

/Carol A. Spiegel/	)
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Administrative Patent Judge	)
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Sally G. Lane	) APPEALS AND
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