

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. 39

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte
ERWIN C. SHEPARD,
DEWAYNE R. HARTLEROAD,
and PAUL H. MITCHELL

Appeal No. 2002-0679
Application No. 08/684,351

ON BRIEF

Before LIEBERMAN, DELMENDO and MOORE, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 1 through 21, 23 through 28, 30, 45 and 48, which are all the claims pending in this application.

THE INVENTION

The invention is directed to a sealed bladder inflated with a gas or liquid. The bladder comprises a laminated membrane having thermoplastic polyurethane as a first layer of the laminate. A second layer of the laminate is directed to a copolymer of ethylene and vinyl alcohol. The contact between the first and second layer consists essentially of hydrogen bonding. Additional limitations are described in the following illustrative claims.

THE CLAIM

Claim 1 is illustrative of appellants' invention and is reproduced below.

1. A sealed bladder inflated with a media in the form of either a gas or liquid, comprising:

a laminated membrane comprising

a first layer including a thermoplastic urethane that provides elasticity to said laminated membrane; and

a second layer including at least one copolymer of ethylene and vinyl alcohol, said second layer providing selective imperviousness from gaseous fluids to said laminated membrane;

wherein contact between said first and second layers occurs upon laminating said first and second layers together at a temperature of between about 300° to about 465° F and consists essentially of hydrogen bonding.

THE REFERENCES OF RECORD

As evidence of anticipation and obviousness, the examiner relies upon the following references:

Martin	4,513,058	Apr. 23, 1985
Kralik	4,660,831	Apr. 28, 1987
Smith	5,294,112	Mar. 15, 1994
Mitchell et al. (Mitchell)	5,952,065	Sep. 14, 1999

THE REJECTION

Claims 1, 2, 5, 11, 12, 16 through 18, 21 and 45 stand rejected under 35 U.S.C. §102(b) as anticipated by Martin.

Claims 1 through 21, 23 through 28, 30, 45 and 48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Martin and Kralik

Claims 1 through 3, 5 through 7, 9 through 13, 15 through 19, 21, 23 through 26, 28, 30, 45 and 48 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 25 of U. S. Patent No. 5,952,065.¹

¹Although the examiner restates the obviousness-type double patenting rejection, we consider both of the rejections together.

OPINION

We have carefully considered all of the arguments advanced by the appellants and the examiner and agree with the appellants that the rejections of the claims under §§ 102(b) and 103(a) are not well founded. Accordingly, we reverse both rejections. We, however, agree with the examiner that the rejection of the grounds of obviousness-type double patenting is well founded. Accordingly, we affirm this rejection.

The Rejection over Martin

In order for a claimed invention to be anticipated under 35 U.S.C. § 102(b), all of the elements of the claim must be found in one reference. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

Martin is directed to an inflatable polyurethane bladder. See column 12, lines 11-12. The bladder is prepared by applying a coating solution containing a polymer resin to a polyurethane film. See column 1, lines 38-42. The class of coating films applied include, among a limited number of coating resins, an ethylene vinyl alcohol polymer. See column 2, lines 58-60. An ethylene vinyl alcohol polymer is exemplified in Example IV. We find that the coating solution, “contains a small percent of an attack solvent which is capable of dissolving the polyurethane film.” See column 1, lines 45-48. We find that

utilization of the attack solvent provides improved bonding without dissolving the urethane resin. See column 1, lines 50-52. As stated by Martin, “[b]y limiting the concentration of the attack solvent, a fusion-type attachment can be obtained between the coated layer and the polyurethane film.” See column 3, lines 22-26. Finally, we find that the coating is usually applied at room temperature, column 3, lines 45-48, and dried at a temperature of 180 to 200° F. See column 3, lines 54-57.

In the statement of the rejection, however, the examiner does not address the limitation of the claimed subject matter directed to the phrase, “wherein contact between said first and said second layers occurs upon laminating said first and second layers together at a temperature of between about 300° to about 465° F and consists essentially of hydrogen bonding.” Only in the section directed to Response to Argument does the examiner state that, “[t]here is nothing in the instant disclosure showing that the hydrogen bonding is only occurred by contacting polyurethane layer and ethylene vinyl alcohol copolymer layer at temperature of 300° to 465° F.” See Answer, page 7. The issue before us, however, is not whether hydrogen bonding is present between polyurethane and ethylene vinyl alcohol copolymer in Martin, but whether the contact is one that “consists essentially of hydrogen bonding.” This is never addressed by the examiner and as such in and of itself constitutes reversible error as the burden of proof rests with the examiner to establish a prima facie case of anticipation and this element of the claim has not been addressed.

The Rejection under § 103(a)

The rejection of the claims as being unpatentable over Smith in view of Martin and Kralik ultimately relies upon the disclosure of Martin for its teaching of a layer of polyurethane next to a layer of ethylene vinyl alcohol copolymer. Smith is directed to a bladder for holding pressurized air in a ball. See column 1, lines 11-12 and column 2, lines 8-9. The bladder contains a series of thermoplastic elastomeric bands over an inner core bonded together. See column 2, lines 10-12. The bladder comprises an inner core which is preferably made of polyester or polyether urethane. See column 2, lines 52-57. We find a disclosure of an alternative bladder wherein an inner core made of saran (polyvinylidene chloride) and at least two outer bands of polyurethane material form a bladder. See column 5, line 62 to column 6, line 3. There is however no disclosure of a laminate of ethylene vinyl alcohol copolymer and thermoplastic polyurethane.

Kralik is likewise directed to an inflatable game ball having a bladder formed of at least two layers of material. See column 1, lines 37-48. The bladder preferably contains an outer and inner layer both made of polyurethane. See column 2, lines 51-53. There is no disclosure of any polymers other than polyurethane.

Accordingly, this rejection ultimately relies upon Martin for its teaching and disclosure of layers of polyurethane and ethylene vinyl alcohol copolymer. Each of the independent claims before us requires contact at a temperature of 300° to about 465° F and requires that the contact “consists essentially of hydrogen bonding.” See claims 1, 7,

11, 17 and 24. As we discussed above in the rejection on the grounds of anticipation, the examiner has not addressed the limitation directed to “consists essentially of hydrogen bonding,” and this omission constitutes reversible error as the burden of proof likewise rests with the examiner to establish a prima facie case of obviousness.

For the foregoing reasons, we determine that the examiner has neither established a prima facie case of anticipation nor obviousness in view of the references of record.

Accordingly, the rejections are not sustained.

The Rejection Under Obviousness-type Double Patenting

All proper double patenting rejections rest on the fact that a patent has been issued and a later issuance of a second patent will continue protection beyond the date of expiration of the first patent of the very same invention claimed therein or of a mere variation of that invention which would have been obvious to those of ordinary skill in the relevant art. See In re Kaplan, 789 F.2d 1574, 1579-80, 229 USPQ 678, 683 (Fed. Cir. 1986).

Our analysis of the examiner's rejection of claim 1 under the doctrine of judicially created double patenting parallels that for a § 103 rejection. While the double patenting rejection is analogous to a failure to meet the non-obviousness requirement of 35 U.S.C. § 103, that section is not itself involved in double patenting rejections because the patent principally underlying the rejection is not usually prior art. In re Braat, 937 F.2d 589, 592-93, 19 USPQ2d 1289, 1291-92 (Fed. Cir. 1991); In re Longi, 759 F.2d 887,

892-93, 225 USPQ 645, 648 (Fed. Cir. 1985); In re Braithwaite, 379 F.2d 594, 600 n.4, 154 USPQ 29, 34 n.4 (CCPA 1967). When considering whether the claimed subject matter is an obvious variation of the invention defined in the claims of the Mitchell patent, the disclosure of the patent may not be used as prior art. The specification however can always be used as a dictionary to learn the meaning of a term in the patent claim. In re Boylan, 392 F.2d 1017, 1018 n.1, 157 USPQ 370, 371 n.1 (CCPA 1968).

It is appellants' position that the claims of Mitchell fail to give rise to obviousness type double patenting as the Mitchell claims do not disclose or suggest contact at the temperatures required by the claimed subject matter. We disagree.

Claim 1 of Mitchell requires a membrane comprising two layers wherein one layer is a thermoplastic polyurethane and the second layer is a copolymer of ethylene and vinyl alcohol. Furthermore, claim 1 of Mitchell specifically requires that the reactive contact "consists essentially of hydrogen bonding." In contrast, the claimed subject matter likewise requires the same components and that the contact is one which "consists essentially of hydrogen bonding." The claims further contain a product by process limitation of "laminating said first and second layers together at a temperature of between about 300° to about 465° F." It is well settled however, that when appellants' product and that of the prior art appear to be identical or substantially identical, the burden shifts to the appellant to provide evidence that the prior art product does not necessarily or inherently

possess the relied-upon characteristics of appellants' claimed product. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 597 (CCPA 1980); In re Best, 562 F.2d 1252, 1255-56, 195 USPQ 430, 433-34 (CCPA 1977). We conclude that inasmuch as the laminate of Mitchell is prepared from the identical materials and has the requisite contact, "which consists essentially of hydrogen bonding," the claimed limitation likewise requiring contact which "consists essentially of hydrogen bonding," is met. Furthermore, the appellants have not argued that the laminate of the claimed subject matter differs from that of Mitchell let alone provided evidence that the product of the claimed subject matter differs from the product of the Mitchell patent. Accordingly, we find no more than an obvious variation between the claimed subject matter and that of the claims of Mitchell.

The appellants further argue that the claims are of a different scope stating that, "there must be evidence that the variation of the narrower claims is obvious over the broader claims to find a double patenting problem." See Brief, page 18. We do not find any patentable distinction in scope between the claims of the Mitchell patent and that of the claimed subject matter. We acknowledge that the claims of Mitchell are directed to a cushioning device. The appellants at least imply that the scope of a cushioning device is broader than the scope of the sealed bladder of the instant claimed subject matter. In this respect, we find that claim 25 of the patent is directed to a membrane "useful as a cushioning device." We find no unequivocal distinction between the membrane of claim 25 and the bladder of the instant claimed subject matter or for that matter from the

cushioning device of claim 1 of Mitchell.

Our position is supported by Mitchell which in defining the term “cushioning device,” states that “a cushioning device [is] otherwise referred to herein as a membrane in accordance with the teachings of the present invention.” See Mitchell column 7, lines 48-50. Furthermore, the term “bladder,” utilized in the claimed subject matter, is ordinarily defined as “a membranous sac in animals that serves as the receptacle of a liquid or contains gas: something (as the rubber bag inside a football) resembling a bladder.”² Accordingly, even if the claims of Mitchell are broader than those of the claims subject matter herein, we conclude that the claims of the instant application are merely an obvious variation of the claims of the Mitchell patent. See *In re Vogel*, 422 F.2d 438, 441, 164 USPQ 619, 622 (CCPA 1970).

As such, claims 1 through 3, 5 through 7, 9 through 13, 15 through 19, 21, 23 through 26, 28, 30, 45 and 48 at issue constitute an extension of protection within the meaning of obviousness-type double patenting and the rejection is sustained as to those claims.

DECISION

The rejection of claims 1, 2, 5, 11, 12, 16 through 18, 21 and 45 under 35 U.S.C. §102(b) as anticipated by Martin is reversed.

²Webster's 9th New Collegiate Dictionary, p. 157 (Merriam-Webster Inc., Springfield, MA, 1986).

The rejection of claims 1 through 21, 23 through 28, 30, 45 and 48 under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Martin and Kralik is reversed.

The rejection of claims 1 through 3, 5 through 7, 9 through 13, 15 through 19, 21, 23 through 26, 28, 30, 45 and 48 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 25 of U. S. Patent No. 5,952,065 is affirmed.

The decision of the examiner is affirmed-in-part.

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

PAUL LIEBERMAN
Administrative Patent Judge

ROMULO H. DELMENDO
Administrative Patent Judge

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