

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

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PAUL G. CAREY, JESSE B. THOMPSON  
and RANDY C. ACEVES

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Appeal No. 1997-3868  
Application No. 08/538,838

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ON BRIEF

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Before, KIMLIN, OWENS, and KRATZ, Administrative Patent Judges.  
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 1-20, 30 and 31, which are all of the claims pending in this application.

BACKGROUND

Appellants' invention relates to a method of encapsulating a device, such as an array of solar cells, to protect the device from adverse environmental conditions. An

understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A process for encapsulating a device without adversely affecting the operation and efficiency of the device while protecting it from adverse environmental conditions, comprising:
  - forming a pair of fluoropolymer laminates consisting of three layers by positioning only a layer of fluoropolymer material on a layer of adhesive material having a release liner on an opposite side thereof;
  - positioning the thus formed pair of laminates in a laminator apparatus;
  - removing the release liner of each of the pair of fluoropolymer laminates; and
  - passing the device to be encapsulated through the laminator apparatus such that the adhesive material and the fluoropolymer material of each of the pair laminates are secured on opposite sides of the device.

In addition to admitted prior art<sup>1</sup>, the prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Bennett 1940	2,191,704	Feb. 27,
Turner 1976	3,970,502	Jul. 20,
Anagnostou et al. (Anagnostou) 1978	4,083,097	Apr. 11,

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<sup>1</sup> Appellants' specification at page 9, lines 14-16 and 19-22.

Staats 1977	4,056,422	Nov. 01,
Kasper et al. (Kasper) 1988	4,759,816	Jul. 26,
Nath et al. (Nath) 1993	5,238,519	Aug. 24,
Watkin (Published British patent application)	2,042,802	Sep. 24, 1980

Claims 1, 3, 4, 7-14 and 16-20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission. Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission, and further in view of Nath. Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission, and further in view of Anagnostou. Claims 2 and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watkin<sup>2</sup> in view of Bennett, Kasper or the prior art admission, and further in view of either Turner or Staats. Claims 30 and 31 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watkin in view of either Bennett or the prior art admission.

OPINION

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<sup>2</sup> We regard the examiner's inadvertent omission of the Watkin reference from the statement of rejection at page 4 of the answer as harmless error. See, e.g., page 3 of the final rejection, item No. 6, pages 2 and 3 of the answer and item No. 9, page 7 of the brief.

Upon careful review of the entire record including the respective positions advanced by appellants and the examiner, we find ourselves in agreement with appellants that the examiner has failed to carry the burden of establishing a prima facie case of obviousness with respect to the grounds of rejection set forth in the answer. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1471-1472, 223 USPQ 785, 787-788 (Fed. Cir. 1984). Accordingly, we will not sustain any of the examiner's stated rejections.

All of the claims on appeal are directed to a lamination process which includes the steps of: (1) forming fluoropolymer laminates that are each composed of a fluoropolymer material, an adhesive material and a release material and (2) laminating a device, such as an array of electrically connected solar cells, to a pair of such fluoropolymer laminates to secure a fluoropolymer laminate on opposite sides of the device after removing the release material (liner) from each fluoropolymer laminate on that side.

As explained by the examiner (answer, page 5), Watkin discloses a process for the lamination of a plastic material,

which may be a fluoropolymer material, to a solar cell array. Watkin (page 2, lines 87-103) teaches that the plastic material (fluoropolymer) can include a heat-activated adhesive which may be considered a part of the plastic web rather than requiring a removable release liner on an adhesive side of a fluoropolymer laminate, which liner is removed so that the laminate may be joined with the device (solar cell array) to be adhered thereto, as claimed herein. While Watkin (page 2, lines 103-107) does refer to a release liner for the bottom plastic web material, that release liner is for a second adhesive layer on the side of the plastic web that is remote from the array that is to be joined to the plastic material in the lamination step. Apparently recognizing this difference in appellants' process over the process disclosed by Watkin, the examiner refers to several secondary references<sup>3</sup> to allegedly show "this additional limitation as conventional" (answer, page 7, middle paragraph). However, the examiner has not offered a convincing explanation detailing why one of

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<sup>3</sup> Bennett, Kasper or an alleged prior art admission in the rejection of claims 1, 3, 4, 7-14 and 16-20 and Bennett or the prior art admission in the rejection of claims 30 and 31.

ordinary skill in the art would have been led to modify the particular process of Watkin based on the disparate teachings of those secondary references.

Concerning those secondary references, we note that Bennett refers to "ever-tacky gummed sheets or strips" (column 1, line 9) that may be used with such items as a sign for a show window (column 2, lines 30-42). Kasper is concerned with adhesive coated members including a base paper (see, e.g. column 1, lines 6-10 and column 2, lines 52-62) that may be subsequently assembled with a base member, such as "signs, labels, tags, credit, business or membership cards, etc." (column 2, lines 6-10). The admitted prior art (specification, page 9, lines 14-16 and 19-22) concerns a commercially available pressure sensitive sandwiched adhesive. Here, the examiner has not established that one of ordinary skill in the art would have been motivated from those disparate references in combination with Watkin to somehow modify the process of Watkin to arrive at the claimed subject matter as set forth in either of the separately rejected

claims 1 or 11<sup>4</sup>, the only independent claims on appeal. In this regard, unlike the secondary references, the process of Watkin employs continuous webs of plastic material that are coated with a heat-activated adhesive for use in a particular lamination process without the use of a release liner for that adhesive. The examiner dismisses the claimed process differences over the process of Watkin as "being held/seen to be ANCILLARY AT BEST (and trivial at worst)" (answer, page 7).

However, such a statement simply does not furnish a viable rationale for a modification of the process of Watkin that one of ordinary skill in the art would have been led to make from the prior art teachings being relied upon. In order

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<sup>4</sup> We note that an amendment (Paper No. 13, page 2) directed that the words "pair of" be entered before the term "fluoropolymer" in line 3 of claim 11. However, the term "fluoropolymer" appears twice in that line and the amendment did not direct at which occurrence of that term the added words were to be entered. Notwithstanding that impreciseness in the amendment directions, the words "pair of" were clerically entered after the second occurrence of "fluoropolymer." A reading of the claim and the copy of claim 11 in the appendix to the brief would appear to suggest that appellants desired that amendment to be entered prior to the first occurrence of "fluoropolymer." We leave it to appellants and the examiner to straighten out this matter prior to final disposition of this application.

for a prima facie case of obviousness of appellants' claimed invention to be established, the prior art must be such that it would have provided one of ordinary skill in the art with both a suggestion to carry out appellants' claimed process and a reasonable expectation of success in doing so. See In re Dow Chemical Co., 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). "Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." Id. The mere possibility that the prior art could be modified such that appellants' process is carried out is not a sufficient basis for a prima facie case of obviousness. See In re Brouwer, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996); In re Ochiai, 71 F.3d 1565, 1570, 37 USPQ2d 1127, 1131 (Fed. Cir. 1995).

Moreover, the examiner has not proven that the additional references that are variously applied in rejecting some of the dependent claims in each of the several separately stated rejections cure the above-noted deficiencies.

Thus, the present record indicates that the examiner used impermissible hindsight when rejecting the claims. See W.L.

Gore & Associates v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984); In re Rothermel, 276 F.2d 393, 396, 125 USPQ 328, 331 (CCPA 1960). Accordingly, we will not sustain the examiner's § 103 rejections of the appealed claims.

#### CONCLUSION

The decision of the examiner to reject claims 1, 3, 4, 7-14 and 16-20 under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission; claims 5 and 6 under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission, and further in view of Nath; claim 15 under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission, and further in view of Anagnostou; claims 2 and 13 under 35 U.S.C. § 103 as being unpatentable over Watkin in view of Bennett, Kasper or the prior art admission, and further in view of either Turner or Staats; and claims 30 and 31 under 35 U.S.C. § 103 as being unpatentable over Watkin in view of either Bennett or the prior art admission is reversed.

REVERSED

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
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	)	
	)	
	)	BOARD OF PATENT
TERRY J. OWENS	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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PETER F. KRATZ	)	
Administrative Patent Judge	)	

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APPEAL NO. - JUDGE KRATZ  
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DECISION: **ED**

Prepared By:

**DRAFT TYPED:** 20 Mar 02

**FINAL TYPED:**