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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN P. BAETZOLD,
AUDREY A. SHERMAN, BRIAN T. WEBER,
JOHN J. STRADINGER, MIKHAIL L. PEKUROVSKY,
SUMAN K. PATEL, and FRANK T. SHER

Appeal 2019-001451
Application 15/115,717
Technology Center 1700

Before GEORGE C. BEST, N. WHITNEY WILSON, and
SHELDON M. McGEE, *Administrative Patent Judges*.

BEST, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner's decision to reject claims 1–11 and 13 of Application 15/115,717.
Final Act. (April 9, 2018). We have jurisdiction under 35 U.S.C. § 6(b).

For the reasons set forth below, we *affirm*.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37
C.F.R. § 1.42. Appellant identifies 3M Company and 3M Innovative
Properties Co. as the real parties in interest. Appeal Br. 2.

BACKGROUND

The '717 Application describes surface-modified pressure sensitive adhesive articles, and methods for preparing such articles. Spec. 1. For ease of reference, we reproduce Figure 1B from the Specification below.

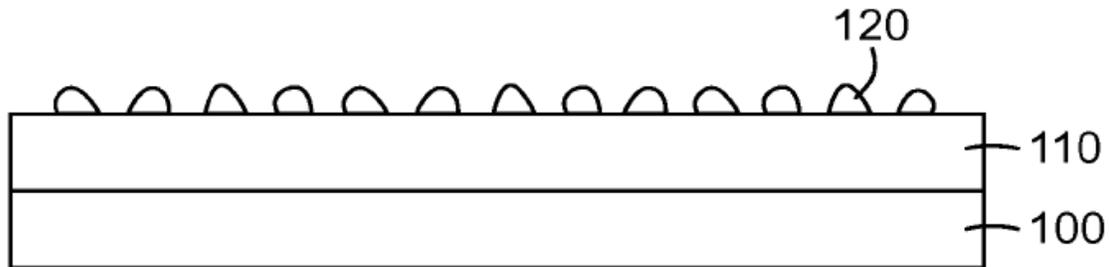


FIG. 1B

Figure 1B shows a cross-sectional view of an exemplary embodiment of the '717 Application's disclosure. Spec. 4.

As shown in Figure 1B, the '717 Application's Specification describes an adhesive article comprising substrate layer 100, adhesive layer 110, and non-pressure sensitive adhesive structures 120 on the surface of adhesive layer 110. Spec. 34.

Claim 1 is representative of the '717 Application's claims and is reproduced below from the Claims Appendix of the Appeal Brief.

1. An adhesive article comprising:

a substrate comprising a first major surface and a second major surface;

a layer of pressure sensitive adhesive comprising a first major surface and a second major surface,

wherein the second major surface of the pressure sensitive adhesive layer is disposed on the first major surface of the substrate; and

a plurality of non-pressure sensitive adhesive structures disposed on the first major surface of the pressure sensitive adhesive layer,

the plurality of non-pressure sensitive adhesive structures being arrayed in a random or non-random pattern,

wherein the non-pressure sensitive adhesive structures are applied to the first major surface of the pressure sensitive adhesive layer *by direct contact printing*, and

wherein *the non-pressure sensitive adhesive structures are not embedded in the pressure sensitive adhesive layer*,

wherein *the adhesive article is optically clear*.

Appeal Br. 9 (emphasis, some paragraphing, and indentation added).

REJECTION

On appeal, the Examiner maintains the following rejection: Claims 1–11 and 13 are rejected under 35 U.S.C. § 103 as unpatentable over the combination of Walter² and Hannington.³ Final Act. 2.

DISCUSSION

For the purpose of this Appeal, Appellant groups all of the rejected claims together. We, therefore, select independent claim 1 as representative of the group of claims on appeal. 37 C.F.R. § 41.37(c)(1)(iv). Dependent claims 2–11 and 13 will stand or fall with claim 1.

Appellant argues that the Examiner erred in finding that the combination of Walter and Hannington describes or suggests the limitations

² US 5,591,290, issued January 7, 1997.

³ US 2005/0039847 A1, published February 24, 2005.

in claim 1 requiring that (1) the non-pressure sensitive adhesive structures are applied to the first major surface of the pressure sensitive adhesive layer by direct contact printing, (2) the adhesive article be optically clear, and (3) the non-pressure sensitive adhesive structures not be embedded in the pressure sensitive adhesive layer. Appeal Br. 3.

We address each of Appellant's arguments below.

First, Appellant argues that Walter is silent as to the printing methods used to apply the non-pressure sensitive adhesive structures to the first major surface of the pressure sensitive adhesive layer. *Id.*

This argument is not persuasive of reversible error. As the Examiner points out, the requirement for use of "direct contact printing" is a process limitation in a product claim. It has long been the case that structural claims, such as claims directed to an article or apparatus, must be distinguished from the prior art in terms of structure. *See In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997). Thus, the "direct contact printing" limitation is only entitled to a patentable weight if application of the non-pressure sensitive adhesive structures by direct contact printing results in an adhesive article that is structurally different from adhesive articles in which the non-pressure sensitive adhesive structures are applied to the pressure sensitive adhesive layer by other printing methods. Appellant has not identified any such structural difference and, therefore, the argument that Walter fails to suggest the use of direct contact printing is not persuasive of reversible error.

Second, Appellant argues that the Examiner erred by finding that Walter describes or suggests an optically clear article. Appeal Br. 3–5.

This argument is not persuasive of reversible error.

In rejecting claim 1, the Examiner found that Walter describes an adhesive article that is optically clear. Final Act. 3 (citing Walter, col. 6, ll.

38–41, col. 4, ll. 45–46). The cited portions of Walter describe Walter’s substrate and non-pressure sensitive adhesive structures as being “transparent.” The Examiner further found that

Walter clearly discloses that the materials forming the adhesive article are transparent (Column 1, lines 16 – 18; Column 4, lines 23 – 67; column 6, lines 38 – 41, wherein the adhesive materials of the prior and Appellant[’s S]pecification overlap.), thereby allowing light to transmit through the layers from the visible light spectrum as stated in Appellant[’s S]pecification. Therefore, Walter clearly discloses the limitation of the adhesive article being optically clear.

Answer 8–9.

In response, Appellant argues that “Walter only ever uses the description ‘transparent’, which is a very general term and does not teach the more restrictive optically clear limitation. Further, Walter only talks about individual elements as being transparent and not the entire article whereas current claim 1 requires the entire article be optically clear.” Appeal Br. 3–4.

To determine whether the Examiner erred by finding that Walter describes or suggests an adhesive article that is optically clear, we begin by construing the claim term in question. During prosecution, the PTO gives the language of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account any definitions or other enlightenment provided by the written description contained in the application’s specification. *In re Morris*, 127 F.3d 1048, 1054–55 (Fed. Cir. 1997).

In this case, the ’717 Application’s Specification defines the term “optically clear”: “Unless otherwise indicated, ‘optically clear’ refers to an adhesive or article that has a high light transmittance over at least a portion

of the visible light spectrum (about 400 to about 700 nm), and that exhibits low haze.” Spec. 9. We, therefore, adopt this interpretation of that claim term.⁴

Next, we turn to the question of how a person of ordinary skill in the art at the time of the invention would have understood Walter’s description of the various elements of Walter’s adhesive article as “transparent.” The ordinary meaning of the term transparent is “having the property of transmitting light without appreciable scattering so that bodies lying beyond are seen clearly.” *Transparent / Definition of Transparent by Merriam-Webster*, MERRIAM-WEBSTER.COM, <https://www.merriam-webster.com/dictionary/transparent> (last visited September 18, 2019). Based upon this definition, a person of ordinary skill in the art at the time of the invention would understand Walter to be describing an adhesive article made from components each of which has a high transmission of light for at least a portion of the visible light spectrum and exhibits low haze.

Appellant argues that the person of ordinary skill in the art would not necessarily understand that Walter is describing the composite article is necessarily exhibiting the claimed property. Appeal Br. 4–5 (“Appellant[] point[s] out that individual elements can be transparent and when they are put together the resultant article can be non-transparent, much less not

⁴ In the Reply Brief, Appellant points out that “in the adhesive arts, typically materials that are described as being optically clear and having high transmission and low haze in general have at least 90% transmission and less than 5% haze.” Reply Br. 2. To the extent that Appellant is seeking to redefine the term “optically clear” to incorporate these numerical limitations, we reject such an attempt. The ’717 Application’s Specification sets forth a definition, and that definition shall be applied.

optically clear which requires high visible light transmission and low haze.”). Appellant’s argument is based upon the refraction of light at an interface between two materials having different indices of refraction. *Id.* According to Appellant, refraction causes visible light to be scattered, causing a decrease in transmission and an increase in haze. *Id.* at 4.

Appellant provides an illustrative example:

On[e] common method for creating a light diffusing pressure sensitive adhesive is to disperse transparent particles within the pressure sensitive adhesive matrix. Because the transparent particles have a refractive index different from the pressure sensitive adhesive matrix, when rays of visible light pass through the matrix and encounter the transparent particles, the rays are diffracted and scattered to increase the haze. This effect is desired with light diffusing pressure sensitive adhesives, but it is not desired in the present optically clear pressure sensitive adhesives.

Id.

Appellant’s argument is not persuasive. Appellant’s example does not deal with the situation at hand, which is a simple interface between two materials. Rather, the example describes the effects of randomly distributing particles with a mismatched index of refraction throughout a matrix. A person of ordinary skill in the art at the time of the invention would have understood that light is not necessarily scattered at the interface between two materials with different indices of refraction. Consider, for example, a light ray striking the interface between air and water in a direction that is normal to the surface. The light ray passes through the interface with no change in direction and no scattering.

Third, Appellant argues that the Examiner erred by finding that Walter describes or suggests an adhesive article with non-pressure sensitive

adhesive structures that are not embedded in the pressure sensitive adhesive layer. Appeal Br. 3. Indeed, Appellant argues that “Walter in fact teaches and requires that the non-pressure sensitive adhesive structures are embedded in the pressure sensitive adhesive layer.” *Id.*

This argument is not persuasive of reversible error.

In rejecting claim 1, the Examiner found that Walter discloses a product wherein the non-pressure sensitive adhesive structures are not embedded in the pressure sensitive adhesive layer. Final Act. 3 (citing Walter, Abstract, Figs. 3–5, col. 8, ll. 22–31); *see also* Walter, col. 6, ll. 5–9 (“In embodiments of the invention, the layer of non-adhesive material 22 is printed either directly on the layer of pressure sensitive adhesive 16 or the coating of release layer 20. For purposes of illustration, non-adhesive material 22 is shown in FIG. 3 as being printed directly on release layer 20.”). As shown in Figure 3, after printing, the non-adhesive material is not embedded in the coating of release layer 20.

Appellant states that the embodiment shown in Figure 3 “shows printing onto the release sheet 18, but the teachings of Walter make it clear that printing onto the adhesive layer gives the same result.” Appeal Br. 6. Appellant further argues that “it is abundantly clear in Figs[.] 4 and 5 that the non-adhesive structures 24 are embedded in the adhesive layer 16. There is no way to look at these figures and come to any other conclusion.” *Id.*

We agree with Appellant that Walter’s Figures 4 and 5 show that, after relamination of the release sheet onto the substrate, non-adhesive structures 22 are embedded in adhesive layer 16. Appellant’s Appeal Brief, however, fails to address the structure of the adhesive article described by Walter prior to relamination of the release sheet onto the substrate.

As the Examiner states, “[w]hile Walter does show the non-adhesive structures going into the adhesive layer, this action does not occur until the adhesive layer with the non-adhesive material is brought into contact with a secondary surface. Therefore, Walter discloses the claimed adhesive article structure.” Answer 10.

In response, Appellant argues that

the only point at which non-adhesive structures are present on the surface of the adhesive layer and not embedded is an intermediate step. There is no teaching in Walter to an article that has non-adhesive structures on the surface and not embedded. The Examiner is comparing an intermediate of Walter to the article of the present disclosure. This is not a valid comparison as one would have to go against the teachings of Walter to prepare articles with non-adhesive structures not embedded in the adhesive surface.

Reply Br. 3–4.

Appellant’s response is not persuasive. Appellant admits that Walter’s production process results in creation of an intermediate structure that has non-adhesive structures on the surface of the adhesive layer. Walter, therefore, describes an adhesive article that meets every limitation of claim 1. Final Act. 2–3. Appellant does not identify any case law that stands for the principle that a claimed structure is not rendered obvious by a structure that arises as an intermediate in a prior art production process.

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
1-11 and 13	§ 103 Walter and Hannington	1-11 and 13	

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