

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER D. PIERCE

Appeal 2007-4542
Application 10/372,691
Technology Center 3700

Decided: February 25, 2008

Before TONI R. SCHEINER, ERIC GRIMES, and LORA M. GREEN,
Administrative Patent Judges.

GREEN, *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 1-5, 7-11, and 24. We have jurisdiction under 35 U.S.C. § 6(b). Claim 1 is representative of the claims on appeal, and reads as follows:

1. A method for preparing a paper or paperboard core or tube comprising bonding together one or more plies of paper or paperboard material with an adhesive comprising an energy absorbing ingredient that absorbs radiant energy having a peak wavelength of from about 400nm to about 100,000nm.

The Examiner relies on the following references:

Jansson	US 4,655,738	Apr. 7, 1987
Drummond	US 5,547,451	Aug. 20, 1996
Drummond	US 6,296,600 B1	Oct. 2, 2001

We affirm.

DISCUSSION

Claims 1-4, 8, and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Drummond '451.

Drummond '451 is relied upon for teaching "a method of preparing a paperboard tube comprising binding multiple plies . . . together with an energy absorbing adhesive at multiple locations," wherein the adhesive is subjected/exposed to radiant heat (Answer 4). Drummond '451 is also cited for teaching that other frangible adhesives that can be used include heavily filled, resinous, aqueous emulsion type adhesives, such as, for example, polyvinylacetate dispersed in water together with a tackifying alcohol and an inert filler such as clay, silicon dioxide, calcium carbonate, talc, and the like (*id.*). According to the Examiner, the "aforementioned ingredients of the glue composition taught by Drummond ['451] (e.g. clay) inherently have a visible color and thus absorb radiant energy because the visible spectrum is generally from about 400 nm to about 700 nm. This clearly falls within the range of from about 400 nm to about 100,000 nm." (*Id.*)

In order for a prior art reference to serve as an anticipatory reference, it must disclose every limitation of the claimed invention, either explicitly or inherently. *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

Appellant asserts that he is “not claiming the use of an energy absorbing adhesive, but use of an adhesive that comprises energy absorbing ingredients.” (Br. 5¹.) According to Appellant, “Drummond [’451] does not disclose adhesives comprising an energy absorbing agent,” and thus fails to anticipate the claimed invention.

Appellant’s arguments are not convincing. As noted by the Examiner, Drummond ’451 teaches adhesives that may include, *inter alia*, a filler such as clay (Drummond ’451, col. 8, ll. 18-28). As clay has a visible color, it would absorb light in the visible range, and Appellant has not provided any argument or evidence to refute the Examiner’s finding that clay inherently has a visible color and thus absorbs radiant energy because the visible spectrum is generally from about 400 nm to about 700 nm. Moreover, as the clay is a filler in the adhesive, it meets the limitation that the “adhesive compris[es] an energy absorbing ingredient that absorbs radiant energy having a peak wavelength of from about 400nm to about 100,000nm.” Thus, the rejection is affirmed as to claim 1. As Appellant does not argue claims 3, 8, and 24 separately, they fall with claim 1. 37 CFR § 41.37(c)(1)(vii).

As to claim 2, Appellant argues that Drummond ’451 “fails to disclose applying [exposing, sic] an adhesive to a source of radiant energy, and then

¹ All references to the Brief (Br.) are to the corrected Brief dated October 12, 2005.

using the adhesive to bond substrates together, as is required in claim 2.”
(Br. 5.)

Claim 2 is drawn to the method of claim 1, further comprising “applying the adhesive to at least one surface of at least one ply, exposing the applied adhesive to a source of radiant energy, bringing the adhesive present on said at least one surface of said one ply together with at least one surface of a second ply whereby said surface of said at least one ply is bonded to said surface of said second ply.” As noted by the Examiner, Drummond ’451 teaches the use of radiant heat. Specifically, Drummond ’451 teaches heating the edges of a liner layer, such that when the liner edge portions are subsequently overlapped with one another, “a low strength bonding means . . . in the form of a heat seal will be positioned between such overlapped liner layer edge portions.” (Drummond ’451, col. 8, ll. 58-67.) In addition, claim 2 does not require the steps to be performed in the order recited. Thus, we agree with the Examiner that Drummond ’451 anticipates claim 2, and the rejection is affirmed as to that claim.

As to claim 4, Appellant argues that Drummond ’451 fails to disclose a pigment or dye as the energy absorbing ingredient (Br. 5). But the Examiner has found that the clay reads on a pigment or dye (Answer 4), and we agree, since a clay would be expected to change the color of the adhesive. The Appellant has not presented any evidence or argument to refute that finding. Thus, the rejection is affirmed as to claim 4.

Claims 1-3, 7-11, and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Jansson. As Appellant does not argue the claims

separately, claims 2, 3, 7-11, and 24 stand or fall with claim 1, and we focus our analysis on claim 1. 37 CFR § 41.37(c)(1)(vii).

Jansson is cited for teaching “a method of preparing a paperboard tube comprising binding single or multiple plies . . . together with an energy absorbing adhesive at multiple locations.” (Answer 4-5.) Jansson is also cited for teaching an adhesive joining strip that is subjected to alternative sources of energy, including constant heat, high frequency heat, or ultrasonic heat energy, which the Examiner notes is near infrared radiation (NIR) that has a peak wavelength from about 750 nm to about 5000 nm (*id.* at 5).

Therefore, according to the Examiner, “Jansson discloses both exposing the materials and adhesive with a radiant energy source coherent and non-coherent producing peak wavelengths within both claimed ranges i.e. about 400 nm to about 100,000 nm and about 750 nm to about 5,000 nm.” (*Id.*)

Appellant argues that “Jansson does not disclose adhesives comprising an energy absorbing ingredient,” and thus cannot anticipate the claimed invention (Br. 6). According to Appellant, an energy absorbing adhesive is not being claimed, but rather, the claims are drawn to the use of an adhesive that comprises energy absorbing agents (*id.*).

Claim 1 is drawn to a “method for preparing a paper or paperboard core or tube comprising bonding together one or more plies of paper or paperboard material with *an adhesive comprising an energy absorbing ingredient* that absorbs radiant energy having a peak wavelength of from about 400nm to about 100,000nm.” (Emphasis added.) There is nothing in the limitation “*an adhesive comprising an energy absorbing ingredient*” that precludes the adhesive itself from being the energy absorbing agent. Note that our mandate is to give claims their broadest reasonable interpretation.

In re American Academy of Science Tech Center, 367 F.3d 1359, 1364 (Fed. Cir. 2004). “An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.” *In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989). Thus, we agree with the Examiner’s finding that Jansson anticipates claim 1, and as the remaining claims stand or fall with claim 1, the rejection is affirmed as to all of the claims.

Claims 1-3, 8, 10, 11, and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Drummond ’600. As Appellant does not argue the claims separately, claims 2, 3, 8, 10, 11, and 24 stand or fall with claim 1, and we focus our analysis on claim 1. 37 CFR § 41.37(c)(1)(vii).

Drummond ’600 is cited for teaching “a method of preparing a paperboard tube comprising binding multiple plies . . . together with an energy absorbing adhesive at multiple locations.” (Answer 5.) Drummond ’600 is also cited for disclosing the use of foamers for adding NIR energy to the adhesive (*id.*). Thus, according to the Examiner, Drummond ’600 discloses “both exposing the materials and adhesive with a radiant energy source [of, *sic*] coherent and non-coherent producing peak wavelengths within both claimed ranges i.e. about 400 nm to about 100,000 nm and about 750 nm to about 5,000 nm.” (*Id.*)

Appellant argues again that “the use of an energy absorbing adhesive” is not being claimed, but rather the claims are drawn to the “use of an adhesive that comprises energy absorbing ingredients.” (Br. 6.)

This argument is not found to be persuasive for the reasons set forth with respect to the anticipation rejection over Jansson, and the rejection is affirmed. Moreover, Drummond '600 also teaches the use of clay fillers for the adhesives (Drummond 600, col. 2, ll. 29-32), and thus the analysis of the anticipation rejection over Drummond '451 also applies to this rejection. Thus, we agree with the Examiner's finding that Drummond '600 anticipates claim 1, and as the remaining claims stand or fall with claim 1, the rejection is affirmed as to all of the claims.

Claims 4, 5, 7, and 9-11 stand rejected under 35 U.S.C. § 103(a) as being obvious over Drummond '600.

According to the Examiner:

Drummond '600 . . . is unclear whether or not the adhesive has a pigment such as carbon black however due to appellant's failure to traverse the examiner's assertion of Official Notice previously asserted in the Final Rejection of 9/13/04 the process of substituting well known adhesives, such as one comprising carbon black, in order to produce the desired product . . . is taken to be Admitted Prior Art.

(Answer 6.)

“In rejecting claims under 35 U.S.C. § 103, the [E]xaminer bears the initial burden of presenting a prima facie case of obviousness.” *In re Rijckaert*, 9 F.3d 1531, 1532, (Fed. Cir. 1993) (citations omitted). The Supreme Court has recently emphasized that “the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007).

Appellant argues that “Drummond ’600 fails to disclose or even suggest, as the energy absorbing agent, a pigment or dye as required by claim 4 or carbon black, as required in claim 5.” (Br. 7.)

The Examiner took official notice that adhesives containing pigments such as carbon black are well known in the art,² and Appellant has not disputed that finding. Thus, we agree it would have been obvious to use known adhesives containing pigments such as carbon black in the method of Drummond ’600, and the rejection is affirmed as to claims 4 and 5. In addition, as Appellant has not presented any argument to refute the obviousness of claims 7 and 9-11, the rejection is also affirmed as to those claims.

CONCLUSION

In summary, we affirm the rejection of claims 1-4, 8, and 24 under 35 U.S.C. § 102(b) as being anticipated by Drummond ’451; the rejection of claims 1-3, 7-11, and 24 under 35 U.S.C. § 102(b) as being anticipated by Jansson; the rejection of claims 1-3, 8, 10, 11, and 24 under 35 U.S.C. § 102(b) as being anticipated by Drummond ’600; and the rejection of claims 4, 5, 7, and 9-11 35 U.S.C. § 103(a) as being obvious over Drummond ’600.

² The Examiner first took Official Notice in the Non-Final Rejection mailed January 30, 2004 (p. 4). If an applicant does not seasonably traverse the taking of official notice during examination, then the object of the official notice is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 711, 713 (CCPA 1943).

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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

Ssc:

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