

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIRONOBU SHINOHARA

Appeal 2008-0161
Application 10/645,533
Technology Center 1700

Decided: May 23, 2008

Before CHARLES F. WARREN, JEFFREY T. SMITH, and
LINDA M. GAUDETTE, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from a final rejection of claims 1-9, 21, and 22. We have jurisdiction under 35 U.S.C. § 6.

Appellant's invention relates to a conductive polymer film comprising a polymer film and a conductive polymer adhered to the surface thereof. The polymer film comprises an acetyl cellulose material or a norbornene

material, and a layer of the conductive polymer has a thickness of 3 µm or less. According to Appellant, the conductive polymer film has high transparency, and an antistatic function or electromagnetic wave shielding function, and is used in a display such as a liquid crystal display (LCD).

(Spec. 1). Representative claim 1 appears below:

1. A protective film for a polarizing plate comprising a polymer film and a conductive polymer adhered to the surface thereof, wherein the conductive polymer comprises polythiophene or polythiophene derivatives, the polymer film comprises an acetyl cellulose material or a norbornene material, a layer of the conductive polymer has a thickness of 3 µm or less, and the conductive polymer film has a visible light transmission of 78% or more and a surface resistivity of 10^3 - 10^{12} Ω/square.

The prior art set forth below is relied upon by the Examiner as evidence of obviousness:

Bennett	4,674,840	Jun. 23, 1987
Hani	5,334,424	Aug. 2, 1994
Fujimaki	6,191,837	Feb. 20, 2001
Babinec	6,203,727	Mar. 20, 2001

Appellant appeals the rejection of claims 1-9 and 21-22 under 35 U.S.C. § 103(a) as follows:

Claims 1-9 and 22 over Fujimaki in view of Bennett;

Claims 1-9 and 22 over Fujimaki in view of Hani;

Claim 21 over Fujimaki in view of Hani, and further in view of Babinec;

Claim 21 over Fujimaki in view of Bennett, and further in view of Babinec.

Appellant also appeals the rejection of claim 21 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

35 U.S.C. § 112, first paragraph, Rejection

Claim 21 stands rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the original Specification in such a way as to enable one skilled in the art to make and/or use the invention.

Appellant contends “that a dopant is disclosed on page 5, lines 10-20. These dopants may be used alone or as mixtures of two or more (page 5, line 20). Appellant contends that a polystyrene comprising sulfur is adequately supported in this passage.” (App. Br. 13).

The issue before us is whether Appellant has shown that the Examiner erred in rejecting the subject matter of claim 21 as not meeting the written description requirement of 35 U.S.C. § 112, first paragraph? We answer this question in the negative.

The Examiner contends that the Specification does not have a written description for the subject matter of claim 21. Specifically, the Examiner states (Ans. 8):

While the disclosure supports dopants comprising polymers styrenesulfonic acid or styrenesulfonic acid alkali salts, no support could be found in the disclosure as originally filed for a dopant of polystyrene comprising sulfur. The Examiner takes the position that the inventors did not have in their possession the concept of using polystyrene containing sulfur as a dopant when the

sulfur is present as anything but a sulfonic acid moiety. However, claim 21 encompasses all polystyrene containing sulfur, not just polymers of a styrenesulfonic acid or styrenesulfonic acid alkali salt.

An *ipsis verbis* disclosure is not necessary to satisfy the written description requirement of § 112. Instead, the disclosure needs only to reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question. *See In re Edwards*, 568 F.2d 1349, 1351-52 (CCPA 1978). The Specification page 5 as originally filed describes examples of suitable dopants, inclusive therein are examples of styrenesulfonic compounds. However, polystyrenesulfonic acid itself is not representative of “polystyrene comprising sulfur” as claimed in claim 21, which is a generic term, particularly in view of the openended term “comprising,” that includes any manner of sulfur containing substituents on polystyrene or a copolymer of polystyrene and not merely a sulfonic acid moiety. Thus, we agree with the Examiner, that the inventor did not have in his possession the concept of using polystyrene containing sulfur as a dopant.

Accordingly, we affirm the Examiner’s 35 U.S.C. § 112, first paragraph, rejection of claim 21 as lacking an adequate written description for the subject matter presently claimed.

35 U.S.C. § 103 Rejections

Appellant appeals the rejections of claims 1-9 and 21-22 under 35 U.S.C. § 103(a).¹ Claims 1-9 and 22 stand rejected over Fujimaki in view

¹ Appellant has acknowledged each of the prior art references cited in rejecting the claims. However, Appellant’s arguments focus on

of Bennett; claims 1-9 and 22 stand rejected over Fujimaki in view of Hani; claim 21 stands rejected over Fujimaki in view of Hani, and further in view of Babinec; and claim 21 stands rejected over Fujimaki in view of Bennett, and further in view of Babinec.

We have thoroughly reviewed each of Appellant's arguments for patentability. However, we are in complete agreement with the Examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we affirm the Examiner's rejections for substantially the reasons set forth by the Examiner in the Answer, which we adopt and incorporate herein.

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). “[A]nalysis [of whether the subject matter of a claim would have been obvious] 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 Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41 (2007) quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *In re Bozek*, 416 F.2d 1385, 1390 (CCPA 1969) (“Having established that this knowledge was in the art, the examiner could then

independent claim 1. Appellant not presented separate arguments for each of the rejections. Therefore, our analysis will be limited to claim 1.

properly rely, as put forth by the solicitor, on a conclusion of obviousness ‘from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference.’’’); *In re Hoeschele*, 406 F.2d 1403, 1406-07 (CCPA 1969) (“[I]t is proper to take into account not only specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. . . .”).

Appellant contends that the present invention is directed to a protective film for a polarizing plate, whereas Fujimaki is concerned with a polarizing plate itself, and Hani and Bennett are concerned with a liquid crystal substrate and the substrate having formed thereon a conductive electrode. Thus, the usage of the present invention and the cited references are quite different. Appellant further contends that that the proposed modification of Fujimaki by application of any one of Bennett, Hani, and Babinec is beyond the intended purpose of Fujimaki. (App. Br. 13).

The issue before us is whether Appellant has shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 103. The issue turns on whether the Examiner has established that norbornene resin, and either cellulose acetate, or cellulose acetate butyrate polymer are functionally equivalent to a glass substrate in a LCD display, and, if so, whether the Appellant has adequately rebutted the Examiner's position by establishing that this substitution for a glass substrate would not have been obvious to a person of ordinary skill in the art.

Appellant acknowledges that it is conceivable that norbornene resin, and either cellulose acetate, or cellulose acetate butyrate polymer are functionally equivalent and that this arrangement could afford anti-static

protection to the liquid crystal display. (App. Br. 12). However, Appellant contends that this arrangement would not protect the polarizing plate against water absorption. Appellant further contends that proposed modification of the combined disclosures would render the resulting film inoperable when viewed in light of the claimed intended purpose.² (App. Br. 12).

Appellant's arguments are not persuasive. We agree with the Examiner that the cited references are concerned with similar LCD technologies. (Ans. 10). Bennett and Hani both discuss the suitability of replacing glass with plastic materials (norbornene resin, cellulose acetate, and cellulose acetate butyrate). (Bennett, cols. 1-2; Hani, col. 1). Fujimaki discloses that the electroconductive film can dissipate static electricity whether located on the polarizing film or transparent substrate. (Fujimaki, col. 9, ll. 26-30). Thus, the cited references establish that a person of ordinary skill in the art would have reasonably expected that a LCD display could have been formed comprising an electroconductive film formed on a norbornene resin polarizing film, cellulose acetate polarizing film, or cellulose acetate butyrate polymer polarizing film.

Regarding the rejections of claim 21 under 35 U.S.C. § 103(a), we affirm these rejections advanced by the Examiner. Appellant has only presented arguments as to independent claim 1 (rejections discussed above) and has not otherwise presented separate arguments on the merits for the rejections of claim 21. In this regard, Appellant does not assert non-obviousness based on the additional limitations set forth claim 21 subject to

² Appellant has not argued that the conductive polymer of Bennett and Hani do not describe or suggest the claimed thickness of 3 µm or less, and visible light transmission property.

these rejections by explaining how the additional references applied thereto by the Examiner fail to establish the obviousness of the additional features recited in this separately rejected dependent claim. Because we do not find Appellant's arguments persuasive as to independent claim 1, it follows that these arguments are unpersuasive as to claim 21.

Appellant discusses and reproduces portions of the Specification in the Brief (6-8). This discussion does not describe the relevance to the cited prior art. That is, Appellant has not indicated which comparative examples are representative of the prior art and how the properties of these comparative examples relate to the properties of the prior art. The burden is on Appellant to establish the significance of the comparative data. *See In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972). Furthermore, the data relied upon by Appellant is not commensurate in scope with the claimed invention. *See In re Greenfield*, 571 F.2d 1185, 1189 (CCPA 1978). The data relied upon by Appellant in the Specification merely shows a few films. However, the claims on appeal are much broader.

For the foregoing reasons and those presented in the Answer, the rejections of claims 1-9, 21, and 22 under 35 U.S.C. § 103(a) are affirmed.

ORDER

The rejections of claims 1-9, 21, and 22 under 35 U.S.C. § 103(a) are affirmed. The rejection of claim 21 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

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AFFIRMED

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