

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HISAO TAKAHASHI,
KAZUHIKO SASE, and HIDEKI OKUDE

Appeal 2008-2189
Application 10/380,822
Technology Center 1700

Decided: May 29, 2008

Before EDWARD C. KIMLIN, CHUNG K. PAK, and
THOMAS A. WALTZ, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 through 28, all of the claims pending in the above-identified application. We have jurisdiction pursuant to 35 U.S.C. § 6.

We AFFIRM.

STATEMENT OF THE CASE

The subject matter on appeal is directed to a paper container for long-term storage that is designed to open a liquid take-out port "easily and neatly." (Spec. 7). In one embodiment described in Figure 8 of the application, Appellants illustrate a through hole 17, which serves as a liquid take out port, that is covered from the outside with a reclosable upper plate 19 and is covered from the inside with a synthetic resin film (layered material) (Spec. 2, 3, 25, and 26). Appellants state that this synthetic resin film 21 (layered material), which is composed of a thin paper layer 26 coated on both sides with a synthetic resin layer, is bonded to the reclosable upper plate 19. According to Appellants, when the reclosable upper plate 19 is pulled open via a hinge, the through hole is exposed by cutting-off the portion of the synthetic resin film 21 bonded to the upper plate 19 "easily and without any difficulty." (Spec. 3, 25, and 26). Further details of the appealed subject matter are recited in representative claims 1 and 6, which are reproduced below:

1. A paper container comprising:

a laminate structure having a base material made of paper,

wherein at least outermost and innermost surfaces of the laminate structure are constituted by synthetic resin layers,

wherein the base material is provided with a through-hole serving as a liquid take-out port, and

wherein the through-hole is covered from inside by a layered material of at least two layers including at least one synthetic resin layer and at least one thin paper layer integrated to each other.

6. A paper container comprising:

a container material of a laminate structure having a base material made of paper,

wherein at least outermost and innermost surfaces of the laminate structure are constituted by synthetic resin layers,

wherein the container material is provided with a first through-hole serving as a liquid take-out port,

wherein a lower plate made of a synthetic resin provided with a second through-hole of a size equivalent to or smaller than the first through-hole is bonded to a surface of the container material,

wherein the second through-hole of the lower plate is positioned in the first through-hole formed in the container material,

wherein an upper plate having an engaging projection fitted in the second through-hole of the lower plate from a surface side of the container material, and a synthetic resin film bonded to a periphery of the first through-hole and a top surface of the engaging projection of the upper plate from a rear side of the container material define an opening device, and

wherein the synthetic resin film comprises a thin paper integrally laminated thereto to form a layered material comprising two or more layers.

As evidence of unpatentability of the claimed subject matter, the Examiner has relied upon the following references:

Hambleton Yasui	4,673,126 EP 0 444 862 A1	Jun. 16, 1987 Sep. 4 1991
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Mori

EP 0 972 634 A2

Jul. 13, 1999

The Examiner has rejected the claims on appeal as follows:

- 1) Claims 1, 2, 4-7, 9, 10, 12-21, and 23-28 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Yasui and Hambleton; and
- 2) Claims 3, 8, 11, and 22 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Yasui, Hambleton, and Mori.

The Appellants appeal from the Examiner's decision rejecting the claims on appeal under 35 U.S.C. § 103(a).

ISSUE

Have Appellants shown reversible error in the Examiner's determination that one of ordinary skill in the art would have been led to use Hambleton's barrier film as Yasui's barrier film within the meaning of § 103?

FINDINGS OF FACT

1. Appellants do not dispute the Examiner's finding that Yasui teaches at col. 3, ll. 34-46 a tightly sealed paper container made of a laminate body (laminate structure) having a paper board 3 (base material) laminated on the outermost layer 4 (outermost surface) and innermost layer 5 (innermost surface) by thermoplastic synthetic resins. (*Compare Ans. 3-7 with App. Br. 8-12 and Reply Br. 4-6*).

2. Appellants do not dispute the Examiner's finding that Yasui teaches (col. 4, ll. 35-51) the tightly sealed paper container having a second through-hole 9, which serves as a liquid take out port. (*Compare Ans. 3-7 with App. Br. 8-12 and Reply Br. 4-6*).
3. Yasui teaches (col. 4, ll. 35-51) that its through-hole is covered from the inside by a barrier film 14, where the barrier film's periphery surface is laminated to the inner surface of the container and the barrier film's surface covering the second through hole is bonded to the coupling projection 12 of a reclosable top board 11 covering the second through-hole from the outside of the container.
4. Yasui discloses that when the reclosable top board 11 is pulled open via a hinge or tag 16, the portion of the barrier film 14 bonded to the coupling projection 12 of the top board 11 is cut away from the barrier film 14 laminated to the container material 2 so that the second through hole 9 is opened (col. 2, ll. 33-44 and col. 4, ll. 35-51).
5. Yasui discloses (col. 3, ll. 48-53 and Fig. 3) that the bottom board 8 is made of a synthetic resin and positioned in a first through hole 6 to provide the second through-hole 9 of a size smaller than the first through-hole for receiving the coupling projection 12 of the top board 11, and is bonded to the outer surface of the container material 2.
6. Appellants do not dispute the Examiner's finding on page 7 of the Answer that Yasui discloses (col. 4, ll. 36-37) the barrier film 14 is

composed of "aluminum foil or the like." (*Compare Ans. 7 with App. Br. 8-12 and Reply Br. 4-6*).

7. Yasui, however, does not disclose a barrier film made from a paper laminate.
8. Appellants do not dispute the Examiner's finding on page 7 of the Answer that Hambleton teaches (col. 3, ll. 67-68) a moisture barrier closure having a membrane liner 52 (barrier film) composed of "a moisture proof coated paper, plastic, or foil" to cover the opening 16 in a reclosable moisture barrier paper carton. (*Compare Ans. 7 with App. Br. 8-12 and Reply Br. 4-6*).
9. Appellants do not dispute the Examiner's finding that Hambleton teaches (col. 2, ll. 5-10 and col. 3, ll. 40-54) that the membrane liner 52 (barrier film) is composed of kraft paper laminated on its interior side with a PVDC emulsion (synthetic resin) and laminated on its exterior side with polyethylene film (synthetic resin). (*Compare Ans. 3-7 with App. Br. 8-12 and Reply Br. 4-6*).
10. Hambleton teaches (col. 3, l. 55 through col. 4, l. 41) that when the reclosable section 36 is pulled via a hinge, the portion of the membrane liner 52 (barrier film) connected to the reclosable section 36 is also pulled apart from the remaining membrane liner 54 so that its reclosable opening of the carton is opened.

PRINCIPLES OF LAW

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, if any. *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, 1741 (2007).

ANALYSES

Rejection of claims 1, 2, 4-7, 9, 10, 12-21, and 23-28 under 35 U.S.C.

§ 103(a) as unpatentable over the combined disclosures of Yasui and Hambleton¹

Yasui teaches a paper container made of a paper laminate having a through hole 9, which serves as a liquid take out port, that is covered from the outside with the coupling section of the reclosable top board 11 and is covered from the inside with the barrier film 14. (FF 1 and 2). Yasui teaches that this barrier film 14 and the coupling section of the reclosable top board 11 are bonded together so that when the reclosable top board 11 is pulled via a hinge, the through hole 9 is exposed by cutting away the portion of the barrier film 14 bonded to the coupling section of the top board 11. (FF 3 through 5).

¹ Appellants base their arguments for patentability solely on the limitations of claims 1 and 6. Therefore, we select claims 1 and 6 as the representative claims consistent with 37 C.F.R. § 41.37(c)(1)(vii) (2005).

Although Yasui teaches that its barrier film is made of "aluminum foil or the like," it does not explicitly mention the claimed paper laminate as its barrier film. (FF 6 and 7). However, Hambleton teaches using a moisture barrier liner 52 (barrier film) for covering the opening 16 of a reclosable paper container bonded to the cover 18 having a reclosable second section 36 (reclosable top board) (FF 8 and 9). Hambleton teaches that when the reclosable second section 36 (reclosable top board), which is bonded to the moisture barrier liner 52 (barrier film), is pulled via a hinge, the portion of the moisture barrier liner (barrier film) covering the opening is pulled apart, exposing the through hole. (FF 10).

Hambleton teaches that this membrane liner (barrier film) can be selected from "*a moisture proof coated paper, plastic, or foil*" to cover the opening 16 of a reclosable moisture barrier paper container. (FF 8). Hambleton teaches the moisture proof coated paper is composed of kraft paper coated (laminated) one side with a PVDC emulsion (synthetic resin) and coated (laminated) on the other side with polyethylene (synthetic resin). (FF 8 and 9).

Given the above teachings, we concur with the Examiner that one of ordinary skill in the art would have been led to use known, easily pulled apart, moisture barrier films, such as the moisture proof coated paper taught by Hambleton, as Yasui's barrier film, with the reasonable expectation of successfully providing a moisture proof barrier film that can be easily pulled apart to provide a reclosable opening of the moisture proof container. This is especially true in this case since Hambleton teaches that its moisture proof

coated paper barrier film is interchangeable with the aluminum foil barrier film taught by Yasui for such purpose. [FF 8].

Accordingly, based on the factual findings set forth in the Answer and above, we affirm the Examiner's decision rejecting claims 1, 2, 4-7, 9, 10, 12-21, and 23-28 under 35 U.S.C. § 103(a).

Rejection of claims 3, 8, 11, and 22 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Yasui, Hambleton, and Mori²

The Examiner has determined that the prior art references applied would have rendered the subject matter defined by claim 3 obvious to one of ordinary skill in the art. The Appellants do not challenge the Examiner's findings and conclusions directed to the additional features recited in this claim. (App. Br. 6-13 and Reply Br. 2-6). Instead, Appellants restate the arguments advanced in connection with the 35 U.S.C. § 103(a) rejection of independent claims 1 and 6 discussed above. *Id.*

Accordingly, for the reasons set forth at pages 3 through 8 of the Answer and above, we affirm the Examiner's decision rejecting claims 3, 8, 11, and 22 under 35 U.S.C. § 103(a).

ORDER

The decision of the Examiner is affirmed.

² Appellants do not separately argue the individual claims rejected under 35 U.S.C. § 103(a) over the combined disclosures of Yasui, Hambleton, and Mori (App. Br. 8-12 and Reply Br. 4-6). Therefore, we select claim 3 to decide this issue on appeal regarding claims 3, 4, 11, and 22 consistent with 37 C.F.R. § 41.37(c)(1)(vii) (2005).

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TIME PERIOD

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).

AFFIRMED

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