UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RUBEN GARCIA CRUZ

Appeal 2008-2327
Application 10/356,837
Technology Center 1700

Decided: September 4, 2008

Before BRADLEY R. GARRIS, CHUNG K. PAK, and
PETER F. KRATZ, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-27. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellant claims a food casing comprising a polymer and a silicon-based barrier control agent wherein the polymer is substantially

impermeable to moisture and gas and wherein the silicon-based barrier control agent permits moisture and gas to permeate the casing.

Representative independent claim 1 reads as follows:

1. A food casing, comprising a polymer-based film comprising a mixture of:

a polymer; and

a silicon-based barrier control agent;

wherein the polymer is substantially impermeable to moisture and gas, and

wherein the silicon-based barrier control agent permits moisture and gas to permeate the casing at a permeation greater than if no silicon-based barrier control agent were present.

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

Smith	4,442,868	Apr. 17, 1984
Stenger	4,944,970	Jul. 31, 1990
Keller	5,691,043	Nov. 25, 1997
Lichtenhan	6,362,279 B2	Mar. 26, 2002
Kong	6,576,329 B2	Jun. 10, 2003

Claims 1, 2, 7, 9-11, 16, and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Keller.

Under 35 U.S.C. § 103(a): Claim 8 is rejected as being unpatentable over Keller in view of Stenger; and claims 18-27 are rejected as being unpatentable over Keller in view of Smith.

Claims 1-3, 7, and 9-17 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kong.

Under 35 U.S.C. § 103(a): Claims 4-6 are rejected as being unpatentable over Kong in view of Lichtenhan; claim 8 is rejected as being unpatentable as being unpatentable over Kong in view of Stenger; and claims 18-27 are rejected as being unpatentable over Kong in view of Smith.

Concerning the § 102 rejections, Appellant has not separately argued the dependent claims with any reasonable specificity. As for the § 103 rejections of the remaining dependent claims, Appellant does not specifically address, much less identify error in, the obviousness rationale expressed by the Examiner in rejecting these claims. Since it is the only claim argued with reasonable specificity, we will focus on sole independent claim 1 in assessing the merits of the rejections before us.

For the reasons expressed in the Answer and below, we will sustain each of the rejections advanced in this appeal.

The § 102 rejection based on Keller

Keller discloses a multilayer polymer film for wrapping items such as foods comprising a core layer and a skin layer (col. 1, ll. 13-35, col. 3, ll. 2-5). The skin layer comprises a polymer such as polypropylene compounded with an anti-blocking agent such as silica, preferably a non-meltable silicone resin such polysiloxane in an amount up to 5000 ppm (i.e., 0.5 wt%) (col. 7, ll. 57-67, col. 8, ll. 26-56). In an exemplified embodiment, the skin layer comprises ethylene-propylene-butylene terpolymer containing 2000 ppm (i.e., 0.2 wt.%) of a polymethylsilsesquioxane non-meltable silicone resin (para. bridging cols. 12-13). The Examiner finds that Keller's silicone-based anti-blocking agent such as the above noted polymethylsilsesquioxane would necessarily permit moisture and gas to

permeate the skin layer at a permeation rate greater than if no such agent were present as required by claim 1. (Ans. 3, 15-18).

Appellant argues that the Examiner has failed to show that the silicon-based anti-blocking agent of Keller would inherently improve moisture and gas permeation as required by claim 1. (App. Br. 11-12, Reply Br. 6).

A rejection which relies upon inherency must be based on fact and/or technical reasoning to reasonably support a determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1463-64 (BPAI 1990).

Significantly, the Examiner has provided detailed technical reasoning in support of the determination that Keller's silicon-based agent would inherently improve moisture and gas permeability (Ans. para. bridging 16-17, last para. on 18). This reasoning includes the non-meltable, particulate nature of the anti-blocking agent and its lack of compatibility with the polymer matrix which the Examiner reasonably determines would improve permeability (e.g., by creating micro voids) in the polymer matrix (*id.)*. To further support the inherency determination, the Examiner provides a basis in fact by finding that Keller's polymethylsilsesquioxane is similar to the oligomeric silsesquioxane disclosed by Appellant (Ans. 18). Inherency also is supported by the fact that the polymethylsilsesquioxane of Keller is present in a concentration of 2000 ppm (i.e., 0.2 wt.%) (para. bridging cols. 12-13) which is within Appellant's disclosed concentration range including the most preferred range of about 0.2 to about 1% by weight (Spec. para. bridging 10-11).

We consider the Examiner's inherency position to be reasonably supported by the technical reasoning and facts presented in the Answer and

discussed above. Moreover, Appellant's Briefs do not identify any error in this technical reasoning or fact which militates against inherency. Based on this appeal record, therefore, we agree with the Examiner's finding that Keller's silicon-based agent including the exemplified polymethylsilses-quioxane inherently performs the moisture and gas permeation function recited in claim 1.

Appellant also argues that, even if Keller's silicon-based agent inherently renders the skin layer permeable to moisture and gas, claim 1 still would not be anticipated (App. Br. 11, Reply Br. 6). According to Appellant, this is because Keller's "core layer does not have a silicon-based barrier control agent, and therefore prevents gas and moisture permeability through the core layer" whereas claim 1 requires moisture and gas to permeate "the casing" (App. Br. 11.).

The deficiency of this argument is that no evidence has been provided by Appellant to support the assertion that Keller's core layer is not permeable to moisture and gas. In fact, this assertion is undermined by the disclosure of Keller. Specifically, Keller expressly teaches that the core layer may comprise a plurality of voids and expressly teaches how to form such voids (col. 7, ll. 15-37).

The argument under consideration is further deficient because it is more limited in scope than claim 1. As explained by the Examiner, the food casing of claim 1 reads on the skin layer of Keller, and claim 1 does not exclude the presence of an underlying layer of any kind (e.g., a core layer of the type taught by Keller) (Ans. para. bridging 16-17; para. bridging 17-18). In this regard, we note that Appellant does not point to any Specification

disclosure which reflects that the Examiner's claim interpretation is not reasonable and consistent with the Specification.

In summary, the record before us reasonably supports the Examiner's finding that the claim 1 food casing is compositionally and functionally indistinguishable from the food film (i.e., casing) of Keller. At best, therefore, Appellant has merely discovered a new property of a previously known composition. It is well settled that the discovery of a new property to a previously known composition, even when that property is unobvious from the prior art, cannot impart patentability to claims directed to the known composition. *In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990).

For the reasons set forth above and in the Answer, we sustain the § 102 rejection based on Keller of independent claim 1 and of dependent claims 2, 7, 9-11, 16, and 17. For these same reasons, we also sustain the § 103 rejections of dependent claim 8 based on Keller in view of Stenger and of dependent claims 18-27 based on Keller in view of Smith.

The Rejections based on Kong

Kong discloses a multilayer packaging film which contains discreet microglobules of silicone grafted polymer (col. 1, ll. 5-11, col. 7, ll. 37-65). The film is described as having low water vapor transmission rate characteristics and low oxygen transmission rate characteristics which make the film ideally suited for packaging food products (col. 5, ll. 7-11). The Examiner finds that Kong satisfies each requirement of claim 1 (Ans. 4-5, 19-20).

Appellant argues that Kong's "[l]ow water vapor and low oxygen transmission rates are the opposite of the presently claimed invention, which requires a greater transmission rate" (App. Br. 12). Inconsistently, Appellant also argues that "all embodiments recited by *Kong* prevent permeation of gas and moisture" (Reply Br. 7). These arguments are unpersuasive.

Contrary to Appellant's contention, gas and moisture permeation is not prevented in all of Kong's embodiments. Kong discloses such permeability by teaching that the inventive film has "low water vapor transmission rate characteristics and low oxygen transmission rate characteristics" (col. 5, ll. 9-10). Moreover, we perceive no merit in Appellant's belief that these low transmissions rates of Kong "are the opposite of the presently claimed invention" (App. Br. 12). Claim 1 does not exclude low permeability or transmission rates as Appellant seems to believe.

In addition, Appellant emphasizes Kong's disclosure of "packaging food products including liquids" (col. 5, ll. 11-12) and questions "how a claim requiring increased moisture permeation can be anticipated by a reference that teaches a film for packaging liquids" (App. Br. 12). Appellant does not explain why a film suitable for packaging a liquid (e.g., oil) somehow would be incapable of allowing moisture permeation. More importantly, Appellant's view on this matter is fully rebutted by Kong's above-discussed explicit teaching that patentee's film transmits water vapor.

As with the Keller reference, the record of this appeal supports a finding that Kong teaches, either expressly or inherently, a food film (i.e., casing) which is compositionally and functionally indistinguishable from the food casing defined by claim 1. As previously noted, Appellant at best has merely discovered a new property of a previously known composition (i.e.,

the claim 1 casing) and such a discovery cannot impart patentability to claims which are directed to the known composition. *Spada*, 911 F.2d at 708.

In the light of the foregoing and for the reasons set forth in the Answer, we sustain the § 102 rejection based on Kong of independent claim 1 and of dependent claims 2, 3, 7, and 9-17. We likewise sustain the § 103 rejections of dependent claims 4-6 based on Kong in view of Lichtenhan, of dependent claim 8 based on Kong in view of Stenger and of dependent claims 18-27 based on Kong in view of Smith.

Conclusion

The decision of the Examiner 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).

AFFIRMED

ls/cam

HOWREY LLP-HN
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DRIVE, SUITE 200
FALLS CHURCH VA 22042-7195