

The opinion in support of the decision being entered today
is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY H. ANDERS
and DANIEL W. KING

Appeal 2006-2334
Application 09/909,913
Technology Center 1700

Decided: July 31, 2007

Before CHUNG K. PAK, CHARLES F. WARREN, and
PETER F. KRATZ, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

DECISION ON APPEAL

Applicants appeal to the Board from the decision of the Primary Examiner finally rejecting claims 1 through 7, 9 through 11, 14 through 20, 27, 29 through 34, 37 through 42, 92 through 94, 97 through 101, and 103 in the Office Action mailed April 15, 2005. Subsequently, the Examiner held claims 4, 5, and 30 drawn to allowable subject matter, leaving claims 1 through 3, 6, 7, 9 through 11, 14 through 20, 27, 29, 31 through 34,

37 through 42, 92 through 94, 97 through 101, and 103 for our consideration. 35 U.S.C. §§ 6 and 134(a) (2002); 37 C.F.R. § 41.31(a) (2005).

We reverse the decision of the Primary Examiner.

Claims 1 and 27 illustrate Appellants' invention of a method of treating food items comprising muscle protein, and is representative of the claims on appeal:

1. A method of treating food items having individual muscle protein fibers at least partially covered by a collagen protein layer, said method comprising the step of pressing said food items using a pliable material which conforms to and at least partially surrounds said food items during said step of pressing, wherein pressure is applied to said food items in said step of pressing using pliable material in a manner effective for rupturing said collagen protein layer sufficiently to form an opening therethrough.

27. A method of treating food items, said food items comprising muscle protein and said method comprising the step of pressing said food items between a first layer of a pliable material having a first surface and a second layer of a pliable material having a second surface, wherein said first and second surfaces conform to and at least partially surround said food items in said step of pressing and wherein an amount of pressure is applied to said food items in said step of pressing in the range of from about 2 to about 120 psig.

The Examiner relies on the evidence in these references:

Wittig	GB 957,356	May 6, 1964
Nordin	US 3,347,679	Oct. 17, 1967
Peterson	US 4,467,497	Aug. 28, 1984
Gould	US 4,657,771	Apr. 14, 1987
Margolis	US 5,082,678	Jan. 21, 1992
Ludwig	US 5,564,332	Oct. 15, 1996

Appellant requests review of the following grounds of rejection (Br. 2-3) all advanced on appeal:¹

claims 1 through 3, 6, 7, and 10 under 35 U.S.C. § 102(b) as anticipated by Peterson (Answer 5-6);

claims 1 through 3, 6, 7, 9 through 11, 27, 29, 31 through 34, 92 through 94, 101, and 103 under 35 U.S.C. § 103(a) as unpatentable over Margolis in view of Peterson (*id.* 6-8);

claims 14, 18, 37, 40, 97, and 99 under 35 U.S.C. § 103(a) as unpatentable over Margolis in view of Peterson further in view of Gould (*id.* 8);

claims 19, 20, 41, 42, and 100 under 35 U.S.C. § 103(a) as unpatentable over Margolis in view of Peterson and Gould further in view of Ludwig (*id.* 8-9);

claims 14 through 16, 37, and 38 under 35 U.S.C. § 103(a) as unpatentable over Margolis in view of Peterson further in view of Nordin (*id.* 9-10); and,

claims 17, 39, and 98 under 35 U.S.C. § 103(a) as unpatentable over Margolis in view of Peterson further in view of Wittig (*id.* 10).

The dispositive issues in this appeal involve Peterson alone and as combined with Margolis. Thus, we decide this appeal based on appealed claims 1 and 27. 37 C.F.R. § 41.37(c)(1)(vii) (2005).

The Examiner contends Peterson teaches a method of pressing meat between two pliable rubber belts which have first and second surfaces that conform to and at least partially surround the meat when passing between successive pairs of rollers of a conveyor, wherein the method “would have inherently ruptured the meat collagen due to the use of identical materials and method steps as those claimed by” Appellants (Answer-5-6, 10-11, and 12-19). The Examiner finds Peterson’s method *prima facie* anticipates claim 1 as a matter of fact (*id.* 5-6).

¹ The Examiner withdrew the ground of rejection of claim 1 under 35 U.S.C. § 102(b) based on Klassen (Answer 4).

The Examiner contends Margolis teaches a method of pressing boneless meats wherein “the pressing means including rolling devices and pressure plates” but does not teach “two pliable conveyor belt surfaces” (Answer 6). The Examiner concludes it would have been *prima facie* “obvious to one of ordinary skill in the art to incorporate the pliable belts and rollers” of Peterson into Margolis’ method “since both are directed to methods of pressing meat” and Margolis teaches carrying out a pressing step by any economical and effective means that can include rollers such as the rollers of Peterson which “would have provided multiple presses and thus forced the heated meat of Margolis to exude more juices” (*id.* 6-7).

Appellants contend Peterson is not anticipatory because the reference discloses a device which mangles and mashes frozen meat chunks between a pair of converging conveyor belts to produce thin slices, wherein the apparatus maintains “a channel-shaped space of flat rectangular cross section and of decreasing height in the direction of conveyance (Br. 11; Reply Br. 5-6). Appellants contend the conveyor belts are not formed of pliable material which conform to the shape of the frozen meat chunks and “must completely resist any such conformation,” pointing out that the plastic and rubber materials for the belts are reinforced (Br. 11-13; Reply Br. 6-7 and 9-10). Appellants contend Peterson discloses at column 3, lines 15-32, that because of the manner the product is processed “the connective tissue of the product does not rupture,” (Reply Br. 12-13). Appellants contend Margolis discloses a method of heating meat to remove liquefied fat therefrom by the application of pressure during which the elevated temperature of the meat is maintained so the fat remains liquefied (Br.

16-17). Appellants thus contend that the references are not combinable because of the difference in the processing temperature and state of the meat during processing, one of ordinary skill would not use Peterson's apparatus in Margolis' method (*id.* 18-19).

The dispositive issues in this appeal are whether the Examiner has established a *prima facie* case of anticipation over Peterson and whether the Examiner has established a *prima facie* case of obviousness over the combined teachings of Margolis and Peterson, which combination is the basic combination of references in the grounds of rejection under § 103(a).

The plain language of claim 1 specifies a method comprising at least the step of using any manner of pliable material which conforms to and at least partially surrounds to any extent any manner of food item in any manner effective for rupturing any collagen protein layer at least partially covering muscle protein fibers thereof in any manner sufficient to form an opening through the collagen protein layer. The plain language of claim 27 specifies a method comprising at least the step of using two surfaces of any pliable material which conforms to and at least partially surrounds to any extent any manner of food item with an applied pressure in the range of from about 2 to about 120 psig. The transitional term "comprising" opens the claims to include any manner of additional steps, apparatus components and processing conditions. *See, e.g., Vehicular Techs. Corp. v. Titan Wheel Int'l Inc.*, 212 F.3d 1377, 1383, 54 USPQ2d 1841, 1845 (Fed. Cir. 2000); *Genentech Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981).

Thus, the pliable material can be urged into interaction with the food item by solid materials to which the pliable materials can be attached or caused to move, such as by a plunger and cup system or by a roller system of a belt conveyor (*see* Specification, e.g., ¶¶ 0045-0068 and Figs. 1, 2, 8, and 9). The interaction between the pliable belt and the food item such that the surfaces of the pliable material conforms to and at least partially surrounds the food item, can be initiated by the pliable material or by the food item and can occur at any point in the step of processing. Indeed, it is apparent from Specification Figs. 1 and 2 that surfaces of pliable material 10 do not conform to and at least partially surround boneless meat 2 until fixed and moveable solid materials 6,8 urge the pliable material surfaces 10 to completely squeeze or press meat 2 which occurs at the end of the step, wherein, as seen in Fig. 2, *only* the upper and lower surfaces of the individual pieces of compressed meat 2 conform to and are at least partially surrounded by pliable material 10 (*id.*, e.g., ¶¶ 0045-0047). Thus, the food item can cause the pliable material to conform and at least surround it and/or the pliable material can cause the food item to conform to and be at least partially surrounded by it, as evinced by Specification Fig. 2.

We find Peterson would have disclosed to one of ordinary skill in this art a method wherein flat pieces of frozen meat, which can be boneless, are mangled and rolled during passage through a channel-shaped space of flat rectangular cross-section of decreasing height maintained by a two belt conveyor, to obtain frozen meat pieces of a desired reduced thickness without loss of meat juice and blood because the processing conditions maintain the meat in frozen state (Peterson, e.g., Abstract, col. 1, l. 27 to col.

3, l. 2, and Fig.). The channel 14 is formed by belts 6,12 surrounding rows of rollers 5,11, wherein the belts can be rubber, such as rubber bands, or plastic that can be reinforced with textile or wire cloth (*id.*, e.g., col. 1, l. 60 to col. 2, l. 43). One of ordinary skill in the art would reasonably infer from this disclosure that the belts 6,12 can comprise pliable material.² In the sole illustrative embodiment, the stiff rolls 5,11 are paired and spaced such that “the meat slice, during its passage through the channel, always will be in a nip of any of the pairs of rolls,” that is, “[t]he distance between successive pairs of rolls is less than the size of the slice,” and belts 6,12 can have a honeycomb surface that holds the meat slice in place (*id.*, col. 3, ll. 3-26, and 28-31). In the embodiment, “[e]ach step of this treatment is adapted to the structure of the meat so that the connective tissue thereof does not rupture” (*id.*, col. 3, ll. 26-28).

We find Margolis would have disclosed to one of ordinary skill in this art a method for removing fat from a boneless meat food item by heating the item to cause the fat therein to at least partially liquefy and applying pressure to the heated meat to exude a substantial portion of the liquefied fat therefrom (Margolis, e.g., Abstract, col. 2, ll. 42-57, col. 3, l. 16 to col. 5, l. 42). The pressure is applied generally at about 2.5 to 14 psi such that the product does not “have a texture or appearance which is

² It is well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, *see In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968), presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

rubbery or otherwise unacceptable when compared to a product which has not been” so subjected,” and any method can be used which applies pressure in this manner (*id.*, col. 4, ll. 19-54 and col. 5, ll. 10-25). Margolis exemplifies applying pressure in “a rolling manner . . . by rolling a pressure-applying device across the surface of the heated (cooked) patty . . . such as a rolling pin . . . applied in only a relatively narrow band across the surface of the patty,” and applying “uniform pressure to the entire surface of the heated patty by means such as a pressure plate” wherein the heated patty can be on an inclined surface which can be perforated (*id.*, col. 4, l. 52 to col. 5, l. 9, col. 5, ll. 26-42, and Example 1, col. 7, ll. 11-53).

A discussion of the remaining applied references is not necessary to our decision.

Considering first the ground of rejection under § 102(b) over Peterson, it is well settled that the Examiner has the burden of making out a *prima facie* case of anticipation in the first instance by pointing out where each and every element of the claimed invention, arranged as required by the claim, is described identically in the reference, either expressly or under the principles of inherency, in a manner sufficient to have placed a person of ordinary skill in the art in possession thereof. *See In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990). It is also well settled that in order to establish that a claim element is inherent in the single prior art reference, it must be established by evidence that such limitation is necessarily present in the description in the reference and that it would be recognized as such by one of ordinary skill in the art, as “[t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient.

(citations omitted)” *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981).

The Examiner’s contention that Peterson’s illustrative embodiment results in inherently rupturing the meat collagen is, as Appellants contend, directly contradicted by the direction therein to conduct the method such that the connective tissue of the meat item does not rupture. Thus, the claim element “pressure is applied to said food items in said step of pressing using pliable material in a manner effective for rupturing said collagen protein layer sufficiently to form an opening therethrough” is not present in the description of the method set forth in the reference.

Therefore, the Examiner has not established a prima facie case of anticipation, and accordingly, we reverse the ground of rejection of claims 1 through 3, 6, 7, and 10 under 35 U.S.C. § 102(b).

Turning now to the ground of rejection under § 103(a) based on the combined teachings of Margolis and Peterson, we agree with Appellants that one of ordinary skill in this art would not have combined these references in view of the significant difference in processing conditions. Margolis processes meat with heat such that fat remains liquefied for exudation during pressing and Peterson processes meat in frozen state such that meat juice is not lost during processing. While the Examiner correctly points out that one of ordinary skill in this art could use Peterson’s apparatus as the pressing means in Margolis’ method, the mere common meat pressing function does not suggest using an apparatus taught for processing a frozen meat item to process a heated meat item. Indeed, for a prima facie case, the Examiner must adduce evidence or scientific reasoning establishing that one of

ordinary skill would have reasonably expected that Peterson's apparatus can be used under Margolis' processing conditions to achieve the results taught by Margolis. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.").

Therefore, the Examiner has not established a prima facie case of obviousness, and accordingly, we reverse the ground of rejection of claims 1 through 3, 6, 7, 9 through 11, 27, 29, 31 through 34, 92 through 94, 101, and 103 under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Margolis and Peterson. The same basic combination was applied in the grounds of rejection of dependent claims 14 through 16, 18 through 20, 37 through 42, and 97 through 100 under 35 U.S.C. § 103(a), and in the absence of a prima facie case of obviousness, we reverse these grounds of rejection as well.

The Primary Examiner's decision is reversed.

REVERSED

Remand

We decline to exercise our authority under 37 C.F.R. § 41.50(b) (2006) and enter new grounds of rejection of claims 27, 29 through 34, 37 through 42, 92 through 94, 97 through 101, and 103, which include claim 30, all of which do not contain the limitation "step of pressing using pliable material in a manner effective for rupturing said collagen protein layer sufficiently to form an opening therethrough" over Peterson alone and as combined with any other prior art. For example, we interpreted independent

claim 27 to specify the pliable material conforms to and at least partially surrounds the food item in any manner, which engagement can be viewed from the perspective of the pliable material or the food item and can involve only the upper and lower surfaces of the food item (*see above* pp. 5-6). Thus, we agree with the Examiner's determination that the method of Peterson employing the apparatus taught therein would at least meet the limitation of the engagement of the pliable material and the food item specified in these claims. Furthermore, the application of pressure by Peterson's apparatus so as not to disrupt the collagen connective material would reasonably appear on this record to fall within the pressure range specified in claim 27 as well as independent claims 92 and 101.

We point out that consideration of Peterson in this manner constitutes a "new" ground of rejection on this record to which Appellants have not had an opportunity to respond. *See In re Kronig*, 539 F.2d 1300, 1302, 190 USPQ 425, 426 (CCPA 1976).

Accordingly, we remand this application to the Examiner to take appropriate action consistent with current examining practice and procedure to consider the application of Peterson along with any other prior art developed by the Examiner, to pending independent claims 27, 92, and 101 and claims dependent thereon under 35 U.S.C. § 102(b) and/or § 103(a), as appropriate, in view of our comments above along with other issues that arise from the record, and determine whether a new ground or grounds of rejection should be entered with respect to one or more of these claims. 37 C.F.R. § 41.50 (a)(1) (2006).

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Our decision includes a remand and, thus, shall not be considered final for judicial review. We will enter an order making our decision final for this purpose upon conclusion of the proceedings outlined above on remand before the Examiner. 37 C.F.R. § 41.50 (e) (2006).

We hereby remand this application to the Examiner, via the Office of a Director of the Technology Center, for appropriate action in view of the above comments.

REVERSED AND REMANDED

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