The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANNA BERGGREN, MARIE LOUISE JOHANSSON, KARE LARSSON, ANNE-MARIE LINDBERG, and JORGEN WIKLANDER

Appeal 2006-1883
Application 09/926,586
Technology Center 1700

Decided: December 26, 2006

Before BRADLEY R. GARRIS, CHARLES F. WARREN, and NANCY J. LINCK, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 15, 16, 19-25, 29, 36, and 37.[1]

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[1]On page 2 of the Answer, the Examiner states that "[c]laim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

The subject matter on appeal relates to a sports drink comprising one or more micronutrients in combination with viable lactobacilli having a positive effect on human intestinal mucosa. The appealed subject matter also relates to a method of treating stress systems, gastrointestinal disturbances, and lesions of the mucosal membrane of the intestines in an individual in need thereof which comprises providing the aforementioned sports drink to the individual for ingestion thereof. This appealed subject matter is adequately represented by claims 15 and 25 which read as follows:

> 15. A sports drink comprising one or more micronutrients selected form the group consisting of ascorbic acid, vitamin E, carotenoids, pyridoxine, thiamine, riboflavin, niacin, cobalamin, folacin, Q10, flavonoids, copper, magnesium, manganese, selenium, zinc and chromium in combination with additives for sports drinks, and viable lactobacilli having a positive effect on human intestinal mucosa.
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> 25. A method of treating stress symptoms, gastrointestinal disturbances, and lesions of the mucosal membrane of the intestines in an individual in need thereof, comprising providing the sports drink according to claim 15 to the individual wherein the sports drink is ingested by the individual in an amount sufficient to treat stress symptoms, gastrointestinal disturbances and lesions of the mucosal membrane.

The references set forth below are relied upon by the Examiner as evidence of obviousness:

Molin	WO 89/08405	Sep. 21, 1989
Masuyama	AU 719204	Feb. 25, 1998
Kurppa	WO 98/46091	Oct. 22, 1998
Portman	US 6,051,236 A	Apr. 18, 2000
Connolly	US 2002/0090416 A1	Jul. 11, 2002

Ann Przybyla Wilkes, “Diet and Performance Beverages Respond to Increased Demands,” *Food Product Design* (Oct. 1992) http://www.foodproductdesign.com/archive/1992/1092DE.html

The following rejections under 35 U.S.C. § 103(a) are before us on this appeal:[2]

Claims 15, 25, 36, and 37 are rejected over Connolly in view of Kurppa;

Claims 16, 19-21, and 29 are rejected over Connolly in view of Kurppa and further in view of Molin and Wilkes;

Claim 24 is rejected over "the above combined references as applied to the above claims and further in view of Masuyama"; and

Claims 22 and 23 are rejected over "the above combination of references as applied to the above claims, and further in view of Portman".

Answer 3-6.

We refer to the Brief and Reply Brief and to the Answer for a complete discussion of the contrary viewpoints expressed by the Appellants and the Examiner concerning the above noted rejections.

OPINION

We will sustain each of these rejections for the reasons expressed by the Examiner and below.

The rejection based on Connolly and Kurppa of claims 15, 25, 36, and 37

Like the Examiner, we find that Connolly discloses a nutritional composition in the form of a drink for oral administration to a subject requiring enhanced protein absorption and utilization which comprises

[2] Only certain of the rejected claims have been separately argued in the manner required by our regulation at 37 C.F.R. § 41.37(c) (1)(vii)(2004). We will individually consider these separately argued claims in our assessment of the rejections before us.

probiotic bacteria including lactobacilli (e.g., see the abstract and paragraphs [0009]-[0011], [0033]-[0036], and [0070]). The composition is particularly directed to the field of sports nutrition for athletes who consume large quantities of proteins which can be deleterious to the intestinal lining (see paragraphs [0001] and [0004]). The probiotic organisms of Connolly's composition help repair and maintain healthy intestinal linings (see paragraphs [0037] and [0038]) and enhance the aforementioned absorption and utilization of proteins (see paragraph [0009]). Connolly further discloses "[a] method of enhancing protein absorption and utilization from the gastrointestinal tract of a subject in need of such enhanced protein absorption and utilization comprising the oral administration of a combination of milk protein concentrates and probiotic bacteria" (page 4, "claim" 1).

According to the Examiner, appealed claim 15 distinguishes from Connolly by virtue of the micronutrients recited therein. The Examiner finds that Kurppa discloses a sports drink which contains such micronutrients (e.g., see the Abstract and Example 2 on page 5) and concludes that it would have been obvious for one with ordinary skill in this art to provide the sports drink of Connolly with micronutrients of the type taught by Kurppa.

The Appellants argue that no motivation exists for combining these reference teachings in the manner proposed by the Examiner (Br. 6). We cannot agree. An artisan would have been motivated to provide Connolly's sports drink with the micronutrients of Kurppa in order to obtain the benefits thereof as taught by Kurppa (e.g., see the paragraph bridging pages 1-2).[3]

[3]It is questionable whether claim 15 distinguishes from the sports drink of Connolly by virtue of the recited micronutrients. This is because Connolly discloses preparing his

The Appellants also argue that Connolly's invention is in the form of a powdered preparation rather than a sports drink as required by appealed claim 15 (Br. 6). This is incorrect. Connolly expressly teaches mixing his powdered preparation with an appropriate liquid medium such as milk (e.g., see paragraph [0070]).

The Appellants further argue that the Connolly reference contains no teaching or suggestion of the claim 15 limitation "viable lactobacilli having a positive effect on human intestinal mucosa" (Br. 5). We cannot agree. Connolly expressly teaches that his probiotic bacteria include lactobacilli such as Lactobacillus plantarum (e.g., see paragraph [0035] in comparison with the first sentence in the last paragraph on Spec. 3). Moreover, Connolly likewise expressly teaches that his probiotic organisms help to repair and maintain the intestinal lining (e.g., see paragraph [0037]). These circumstances persuade us that Connolly's sports drink satisfies the claim 15 limitation under review.

With regard to method claim 25, the Appellants additionally argue that the Connolly reference contains no teaching or suggestion of the here claimed method wherein the sports drink of claim 15 is provided to an individual "in need thereof" (Br. 8-10). This argument is unpersuasive. As previously explained, the sports drink of Connolly is formulated to provide a number of gastrointestinal benefits including the enhancement of protein absorption (e.g., see paragraph [0007]), thereby avoiding prior art problems with protein metabolization such as deterioration of the intestinal lining (e.g., see paragraph [0004]). Furthermore, Connolly expressly teaches a

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sports drink with milk (e.g., see paragraph [0070]), and milk such as cow's milk is known to contain the claim 15 micronutrients copper and magnesium. For example, see the definition of milk in *Hawley's Condensed Chemical Dictionary*, 14th Ed.

method of enhancing protein absorption and utilization from the gastrointestinal tract of a subject "in need of" such enhanced protein absorption and utilization which comprises the oral administration of his sports drink (e.g., see "claim" 1 on page 4).

Finally, we observe that the Appellants, on page 4 of their Reply Brief, separately discuss for the first time dependent claims 36 and 37. However, this discussion merely points out what the claims recite without even asserting that the recited subject matter would not have been obvious over the applied prior art. We here emphasize that, according to our regulation at 37 C.F.R. § 41.37(c)(1)(vii)(2005), "[a] statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim." Therefore, these dependent claims have been separately discussed but have not been separately argued on this appeal.

In light of the foregoing, we hereby sustain the Examiner's Section 103 rejection of claims 15, 25, 36, and 37 as being unpatentable over Connolly in view of Kurppa.

The rejection based on Connolly, Kurppa, Molin, and Wilkes of claims 16, 19-21, and 29

Concerning the references additionally applied in this rejection, the Examiner relies on Molin's disclosure of a health drink that contains lactobacilli of the type recited in dependent claim 16 as well as micronutrients of the type recited in independent claim 15, and the Examiner relies on Wilkes' disclosure of beverages containing minerals to improve athletic performance (Answer paragraph bridging pages 4-5). The Examiner's resulting conclusion of obviousness regarding this rejection is expressed on page 5 of the Answer. We need not reiterate this obviousness

conclusion since it corresponds to the Examiner's obviousness conclusion in the rejection based on Connolly and Kurppa. In this latter regard, we point out that the specific lactobacilli recited in claim 16 include those disclosed by Connolly such as Lactobacillus plantarum (e.g., see paragraph [0063]). Viewed from this perspective, the additionally applied references to Molin and Wilkes appear to be cumulative.

With respect to this rejection, the Appellants argue that neither Molin nor Wilkes contains any teaching or suggestion of the previously discussed independent claim 15 limitation "viable lactobacilli having a positive effect on human intestinal mucosa." However, as detailed above, the primary reference to Connolly satisfies this limitation. It necessarily follows that the Appellants' argument against this rejection is unconvincing of error therein.

For these reasons, we also hereby sustain the Examiner's Section 103 rejection of claims 16, 19-21, and 29 as being unpatentable over Connolly, Kurppa, Molin, and Wilkes.

The Rejection based on (at least) Connolly, Kurppa, and Masuyama of claim 24

The Examiner finds that Masuyama discloses it was known in this prior art to form freeze dried lactobacilli into a tablet and concludes that Masuyama would have suggested forming into a tablet the combination of Connolly's lactobacilli, in a freeze dried state, and Kurppa's micronutrients (Answer 6).

The Appellants' sole argument regarding this rejection is that, "[w]hen [Masuyama is] combined with Mollin [sic, Molin], Wilkes, Connolly and Kurppa, there is still nothing which provides any reasonable suggestion or provides any motivation to select viable lactobacilli having a positive effect on human intestinal mucosa and combining the same with

additives and micronutrients as claimed" (Br. 11; underlining deleted). Thus, this argument is simply a reiteration of the argument advanced against the rejection based on Connolly and Kurppa. As earlier explained, this argument is without persuasive merit.

Accordingly, we hereby sustain the Section 103 rejection of claim 24 as being unpatentable over (at least) Connolly, Kurppa, and Masuyama.

The Rejection based on (at least) Connolly, Kurppa, and Portman of claims 22 and 23

In the paragraph bridging pages 6-7 of the Answer, the Examiner, expresses her obviousness position as follows:[4]

> Claims 22 and 23 further require additional ingredients to make a beverage. Connolly discloses the use of milk protein or any other related protein along with probotic [sic, probiotic] bacteria, which have a positive effect on the intestinal mucosa as above (page 1, para. 0007-0009). The claims do not exclude the use of even milk protein, because whey is a part of milk. Portman discloses the use of whey protein in sports beverages with ingredients within the claimed amounts except for the lactobacillus (col. 9, lines 40-65). Connolly discloses high levels of the claimed bacteria, which could amount to the amount claimed depending on the amount taken (page 1, para. 0001 and col. 5, claim 15). Therefore, it would have been obvious to make a sports beverage containing the claimed ingredients as shown by Portman and to combine it with the beverage of Connolly because Connolly discloses that it is known to use the claimed bacteria in a sports beverage.

The Appellants' countervailing nonobviousness viewpoint, taken from page 12 of the Brief, is set forth below:

> [T]he rejection is untenable because Claims 22 and 23 would not have been obvious in view of the combination of <u>Connolly</u>[,] <u>Kurppa</u>, <u>Mollin</u> [sic, <u>Molin</u>], and <u>Wilkes</u> for at least the reasons

[4] This obviousness position is also expressed with identical or substantially identical language on page 6 of the Final Office Action mailed December 29, 2004.

> discussed above noting that each of Claims 22 and 23 ultimately depend from independent Claim 15. Furthermore, Claims 22 and 23 would not have been obvious in view of the combination of these four publications based simply on the fact that Portman does not provide any further evidence that one would have selected "viable lactobacilli having a positive effect on human intentional mucosa" and combining the same with micronutrients as claimed.
>
> Claims 22 and 23 require whey proteins in a certain concentration range in addition to the viable lactobacilli and micronutrients as set forth in Claim 15.[5] While Portman describes using whey proteins, Portman describes nothing of particular relevance to the claimed invention. Thus, since Connolly[,] Kurppa, Mollin [sic, Molin], and Wilkes fail to provide the requisite disclosure for the claimed sports drink including lactobacilli, the combination of Connolly[,] Kurppa, Mollin [sic, Molin], and Wilkes with Portman also fails to provide any, let alone the requisite, disclosure for the claimed sports drink.

As revealed by the aforequoted nonobviousness viewpoint, the Appellants' argument concerning this rejection corresponds to that advanced against the rejection based on Connolly and Kurppa, and is unconvincing as detailed above.

On page 4 of the Reply Brief, the Appellants present an additional argument concerning claim 22 specifically and in particular concerning the lactobacillus concentration range recited in this claim. This argument is based on unexplained assumptions and calculations involving the lactobacillus concentrations disclosed by Connolly. Significantly, this argument does not appear in the Brief. Therefore, its presentation in the Reply Brief is the first time the Appellants have contested the Examiner's

[5] This statement, that claims 22 and 23 recite a certain concentration range of whey proteins, does not constitute an argument. 37 C.F.R. § 41.37(c)(1)(vii).

position in the Final Office Action and Answer concerning the here claimed lactobacillus concentration range.

The Appellants offer no reason, and we perceive none independently, for this belated presentation of argument against the Examiner's unpatentability position concerning this specific claim limitation. Accordingly, it is appropriate to invoke the established and sound practice of considering as waived an issue not raised by an appellant in the opening Brief, which here is the issue of patentability based on the lactobacillus concentration range recited in claim 22. *Cross Med. Prods. v. Medtronics Sofamor Danek, Inc.*, 424 F.3d 1293, 1320-21 n.3, 76 USPQ2d 1662, 1683 n.3 (Fed. Cir. 2005); *Becton Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 800, 17 USPQ2d 1097, 1103 (Fed. Cir. 1990). As a consequence of this invocation, we will not consider or further comment upon the above discussed argument on page 4 of the Reply Brief regarding claim 22.

Under the circumstances recounted above, we hereby sustain the Section 103 rejection of claims 22 and 23 as being unpatentable over (at least) Connolly, Kurppa, and Portman.

Conclusion

We have sustained each of the Section 103 rejections advanced by the Examiner on this appeal.

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)(I)(iv)(2005).

AFFIRMED

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