

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

Paper No. 44

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte EGBERT A. PFISTERER,
ROBERT MCCAIG,
JAMES J. FITZPATRICK,
and
ROBERT M. GRAHAM

Appeal No. 2001-2247
Application No. 08/955,717

ON BRIEF

Before LIEBERMAN, TIMM, and MOORE, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 1 through 8, which are all the claims pending in this application.

THE INVENTION

The invention is directed to a method of brewing a low alcohol content malt

beverage. A portion of the method requires pitching a wort with a yeast slurry to provide a cell count of about 80 to about 180 million yeast cells per ml. The pitched wort is thereafter fermented under specific temperature and time conditions followed eventually by electrolyzing the resultant brew to remove H₂S. Additional limitations are described in the following illustrative claim.

THE CLAIM

Claim 1 is illustrative of appellants' invention and is reproduced below:

1. A method of brewing a malt beverage having a low alcohol content, including the steps of:
 - (a) preparing a malt and cereal infusion having an extract content below about 14%;
 - (b) boiling said infusion to make a wort;
 - (c) adding a predetermined quantity of hops to said wort;
 - (d) aerating said wort to secure yeast growth;
 - (e) pitching said wort with a yeast slurry to provide a cell count of about 80 to about 180 million yeast cells per ml;
 - (f) fermenting the pitched wort at a temperature of 3 to 10°C for 1 to 40 hours;
 - (g) removing the yeast from the fermented wort;
 - (h) filtering the resulting brew;
 - (i) electrolyzing the resultant brew by passing said resultant brew past a pair of two copper electrodes to remove the H₂S; and

- (j) adjusting the alcohol concentration of the brew with carbonated water to a preselected level, and then aging the resultant brew for at least 24 hours.

THE REFERENCES OF RECORD

As evidence of obviousness, the examiner relies upon the following references:

Helm et al. (Helm)	3,544,329	Dec. 1, 1970
Reuther	5,242,694	Sep. 7, 1993

THE REJECTION

Claims 1 through 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Reuther in view of Helm.

OPINION

We have carefully considered all of the arguments advanced by the appellants and the examiner and agree with the appellants that the rejection of the claims under Section 103(a) is not well founded. Accordingly, we reverse this rejection.

The Rejection under Section 103(a)

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The examiner relies upon a combination of two references to reject the claimed subject matter and establish a prima facie case of obviousness.

The principal issue before us for consideration is directed to the limitation of

pitching the wort, “to provide a cell count of about 80 to about 180 million yeast cells per ml.”¹ In this respect, the reference to Reuther states that “yeast is added to the wort to provide thirteen (13) to seventeen (17) million viable cells per milliliter.” See column 3, lines 1-5. Furthermore, the secondary reference to Helm, directed to the removal of hydrogen sulfide from fermented beverages by electrolysis, likewise discloses a fermentation process wherein, “a relatively high concentration of yeast is used, for example, about 10 to 20 million cells per millilitre.” See column 5, lines 53-55. Based upon the finding in Reuther, the examiner states that, “[w]ith respect to the amount of yeast added, this is a result effective variable.” See Answer, page 4. Furthermore, the examiner concludes that although, “Appellants may be using about 3 times what the prior art teaches does not overcome the obviousness of using that amount.” See Answer, page 6. We disagree.

The examiner has based his conclusion on Reuther, who teaches beneficial results when adding Yeast in an amount of 13 to 17 million viable cells per ml. However, Reuther teaches addition of a maximum amount of 17 million viable cells per milliliter. The minimum amount of yeast cells per milliliter required by the claimed subject matter are about 80 million cells per milliliter.

It is well settled that, “where the general conditions of a claim are disclosed in the

¹We interpret the term “about 80” to mean about 80 million yeast cells. Our position is supported by both the interpretation of the examiner and appellants. See the substitute Appeal Brief (Paper No. 42) wherein appellant states that the claimed invention requires “a pitching rate of from 80 million to 180 million yeast per ml.” See Page 4. See Appeal Brief, page 3. The examiner likewise concurs. See Answer, pages 4 and 6.

prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). However, contrary to the examiner's assertion, "the general conditions of a claim" are not within the prior art. The examiner has not shown any teaching or suggestion in Reuther to use more than 17 million viable cells per milliliter and also has not established why one of ordinary skill in the art would have been led to amounts more than necessary to achieve the desired result taught by Reuther.

Our position is further supported by the teaching in Helm that the concentration of yeast utilized therein of about 10 to 20 million cells per milliliter constitutes a relatively high concentration of yeast. See column 5, lines 53-55. Accordingly, why would the person having ordinary skill in the art be motivated to utilize a concentration of yeast fourfold that of the maximum disclosed by Helm and almost fivefold the amount disclosed by Reuther?

For the foregoing reasons, we determine that the examiner has not established a prima facie case of obviousness in view of the references of record. Accordingly, the rejection of claims 1 through 8 under 35 U.S.C. § 103 is reversed.

Because we reverse on this basis, we need not reach the issue of the sufficiency of the showing of unexpected results. In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987).

DECISION

The rejection of claims 1 through 8 under 35 U.S.C. § 103(a) as being unpatentable over Reuther in view of Helm is reversed.

The decision of the examiner is reversed.

REVERSED

PAUL LIEBERMAN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CATHERINE TIMM)	APPEALS
Administrative Patent Judge)	AND
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JAMES T. MOORE)	
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