

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CHARLES E. WYMAN

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Appeal No. 94-2999  
Application 07/672,286<sup>1</sup>

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ON BRIEF

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Before JOHN D. SMITH, GARRIS and OWENS, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on an appeal from the refusal of the examiner to allow claims 8 through 28 which are all of the claims remaining in the application.

The subject matter on appeal relates to a method of sterilizing a fermentation vessel and to a process for producing

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<sup>1</sup> Application for patent filed March 20, 1991.

Appeal No. 94-2999  
Application 07/672,286

alcohol which includes a step of sterilizing a fermentation vessel. The aforementioned sterilization is effected via an alcohol in aqueous solution obtained from a distillation or purification facility associated with the method/process. This appealed subject matter is adequately illustrated by independent claims 8 and 25, a copy of which taken from the appellant's brief is appended to this decision.

The references relied upon by the examiner as evidence of obviousness are:

|                          |           |               |
|--------------------------|-----------|---------------|
| Heden                    | 3,997,400 | Dec. 14, 1976 |
| Feldman et al. (Feldman) | 4,431,838 | Feb. 14, 1984 |
| Tegtmeier                | 4,845,033 | Jul. 4, 1989  |
| Harandi et al. (Harandi) | 5,167,937 | Dec. 1, 1992  |

Claims 8 through 28 are rejected under the first paragraph of 35 U.S.C. § 112 for failing to comply with the written description requirement set forth in this paragraph. It is the examiner's basic position that the appealed claims are rendered in violation of the written description requirement by virtue of the claim term "only" because "[t]he specification does not specifically set forth that alcohol should be the "only" sterilant used and that no other sterilant can be used" (answer, page 2).

Claims 8 through 28 are also rejected under 35 U.S.C. § 103 as being obvious over Tegtmeier in view of Heden and either

Appeal No. 94-2999  
Application 07/672,286

Harandi or Feldman. According to the examiner, "[i]t would have been obvious and within the purview of a routineer in the art to sterilize the fermentation vessel of the primary reference [Tegtmeier] with alcohol as the secondary reference [Heden] teaches that alcohol is a known sterilant for fermentation vessels" and that "[i]t would have been obvious to a routineer in the art that the alcohol produced in the fermentation process could have been used as the source of alcohol for the sterilization" and that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to return the alcohol used to sterilize the reactor set forth above to the distillation tower as such is known in the art as shown by Harandi ... and Feldman ... to save on waste of the particular stream and that this alcohol could then be returned to the product stream for further processing as the chemical makeup of the streams would be the same as the stream coming from the fermentation step, only higher in alcohol concentration" (final Office action, pages 3-4).

We will not sustain either of these rejections.

We fully share the appellant's view that the § 112, first paragraph, rejection of the appealed claims is improper for the reasons fully detailed on pages 5 through 12 of the reply brief.

Appeal No. 94-2999  
Application 07/672,286

The contrary opinion expressed by the examiner in his answers is simply unpersuasive. As a consequence, we cannot sustain the examiner's § 112, first paragraph, rejection of claims 8 through 28.

We also cannot sustain the § 103 rejection advanced by the examiner on this appeal. From our perspective, the examiner has committed both factual as well as legal errors in his aforementioned conclusion that "[i]t would have been obvious to a routineer in the art that the alcohol produced in the fermentation process could have been used as the source of alcohol for the sterilization". By long established legal principle, it was improper for the examiner to have reached an obviousness conclusion on the grounds that "the alcohol produced in the fermentation process could have been used as the source of alcohol for the sterilization". See In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (mere fact that prior art could be modified does not make modification obvious unless prior art suggested desirability of modification). Moreover, the examiner's obviousness conclusion is predicated on factual error in the sense that none of the applied references teaches that "the alcohol produced in the fermentation process [is an acceptable] ... source of alcohol for the sterilization."

Appeal No. 94-2999  
Application 07/672,286

In this latter regard, we emphasize that only the appellant has taught in his specification disclosure that "the alcohol produced in the fermentation process [is an acceptable] ... source of alcohol for the sterilization" of the fermentation vessel. It is well settled that "[t]o imbue of one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W.L. Gore v. Garlock, 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983). In light of the deficiencies of the applied prior art, the examiner's conclusion that the here claimed subject matter would have been obvious could only have resulted from "the insidious effect of a hindsight syndrome." It follows that we also cannot sustain the § 103 rejection of claims 8 through 28 as being obvious over Tegtmeier in view of Heden and either Harandi or Feldman.

Appeal No. 94-2999  
Application 07/672,286

The decision of the examiner is reversed.

**REVERSED**

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|------------------------------|---|-----------------|
| JOHN D. SMITH                | ) |                 |
| Administrative Patent Judge) | ) |                 |
|                              | ) |                 |
|                              | ) |                 |
| BRADLEY R. GARRIS            | ) | BOARD OF PATENT |
| Administrative Patent Judge) | ) | APPEALS AND     |
|                              | ) | INTERFERENCES   |
|                              | ) |                 |
| TERRY J. OWENS               | ) |                 |
| Administrative Patent Judge) | ) |                 |

Appeal No. 94-2999  
Application 07/672,286

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**APPENDIX**

8. A method of sterilizing a fermentation vessel used in a batch fermentation process that includes an associated alcohol distillation or purification facility for purifying alcohol produced in the fermentation vessel to a higher alcohol concentration, wherein said fermentation vessel is intermittently emptied of fermented product, including alcohol, and cleaned, comprising the steps of:

withdrawing a sterilizing alcohol in aqueous solution from the distillation or purification facility with a sufficient concentration of alcohol to kill undesirable microorganisms;

sterilizing said emptied and cleaned fermentation vessel by introducing only said sterilizing alcohol in aqueous solution into the fermentation vessel;

withdrawing said sterilizing alcohol in aqueous solution from the fermentation vessel following the sterilization of said fermentation vessel and returning the sterilizing alcohol in aqueous solution to said distillation or purification facility.

25. A process for producing alcohol, comprising the steps of:

placing a batch of fermentable feedstock or substrate in a fermentation vessel with water and alcohol producing fungi;

allowing the fungi to ferment the feedstock or substrate to produce a mixture having a liquid fraction comprising alcohol and water and a solid fraction comprising residual solid by-products of the fermentation process;

removing the liquid and solid fractions from the fermentation vessel;

separating the solid fraction from the liquid fraction;

Appeal No. 94-2999  
Application 07/672,286

purifying the alcohol in the liquid fraction to a higher purity alcohol/water mixture having a higher alcohol concentration than was produced by the fermentation step;

withdrawing a portion of the higher purity alcohol/water mixture; and

spraying only said withdrawn portion of the higher purity alcohol/water mixture into the fermentation vessel in vapor form to sterilize the fermentation vessel.