

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 WILLIAM J. SCHMIDT

Appeal No. 2005-2193
Application No. 09/385,405

ON BRIEF

Before WARREN, TIMM and FRANKLIN, *Administrative Patent Judges*.
Timm, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 71-83, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

INTRODUCTION

In the process of encapsulating products such as drugs and vitamins, a certain amount of the encapsulation material is lost to waste (specification, p. 2, ll. 7-8). This waste contains gelatin, additives added to the gelatin base, and the substances being encapsulated (e.g., the drugs and vitamins) (specification, p. 2, l. 19 to p. 3, l. 3). The waste may also contain colorings

Appeal Number: 2005-2193
 Application Number: 09/385,405

and preservatives (*Id.*). The claims are directed to a method of treating the waste material to obtain a purified gelatin that can be recycled back to the encapsulation process.

Claim 71 is illustrative:

71. A method of treating a waste material containing gelatin comprising:

(a) combining the waste material and a solvent for the gelatin under conditions sufficient to form a first liquid containing gelatin, said waste material containing at least one first component which can not effectively be separated from the first liquid into a non-solvent based layer;

(b) separating the first liquid into a solvent based layer containing the gelatin and said at least one first component and a non-solvent based layer; and

(c) treating the solvent based layer with a process which removes the first component from the solvent based layer to form a second liquid containing gelatin having a higher purity than the first liquid being at least substantially devoid of the first component.

The Examiner maintains rejections under 35 U.S.C. § 112, ¶ 1 as well rejections over prior art references.¹ To support the rejections over prior art, the Examiner relies on the following prior art references:

Schmidt et al. (Schmidt) US 5,288,408 Feb. 22, 1994

Benoit Dutre & Gun Tragardh, *Purification of Gelatin by Ultrafiltration with a Forced Solvent Stream along the Membrane Permeate Side: An Experimental Approach*, 25 J. Food Engineering 233 (1995)(Dutre)

The Examiner states in the Answer that claims 71-83 are rejected under 35 U.S.C. § 112, ¶ 1, § 102(b), and § 103 as set forth in Office Action, Paper No. 35 (Answer 6, § 10). We find the following rejections under those grounds in Paper No. 35:

1. Claims 71-83 rejected under the written description requirement of 35 U.S.C. § 112, ¶ 1;
2. Claim 72 rejected under the enablement requirement of 35 U.S.C. § 112, ¶ 1;

¹ The rejections made under 35 U.S.C. § 112, ¶ 2 have been withdrawn (Answer 6, § 10).

Appeal Number: 2005-2193
Application Number: 09/385,405

3. Claims 71-73, 75-81, and 83 rejected under 35 U.S.C. § 102(b) as being anticipated by Schmidt;²
4. Claims 71-73, 75-81, and 83 rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmidt;³ and
5. Claims 74 and 82 rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of Schmidt and Dutre.

We have considered the issues as developed in the Brief filed June 14, 2004. Appellant states that the claims stand or fall together (Brief 10). Therefore, for each rejection we select a single representative claim to review the issues on appeal. We sustain the rejections under 35 U.S.C. § 102(b) and § 103(a) for the reasons provided by the Examiner. We do not sustain the rejections under 35 U.S.C. § 112, ¶ 1. Our reasons follow.

OPINION

Because our reasoning with regard to the prior art rejections illuminates the reasoning with regard to the rejections under 35 U.S.C. § 112, ¶ 1, we begin our discussion with the prior art rejections. Namely, we begin with the rejections over Schmidt. As Appellant addresses the 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) rejections together, so shall we.

Schmidt is Appellant's prior patent and it is directed to recycling gelatin-based encapsulation waste material. Appellant argues that the method of Schmidt and that of the present application "are similar except that [Schmidt] does not require a waste gelatin material which must have a first component as defined herein." (Brief 19). According to Appellant, "the

² Appellant lists claims 71-83 as rejected. The error is harmless.

³ Appellant again lists the claims rejected as 71-83. Again, the error is harmless.

Appeal Number: 2005-2193
Application Number: 09/385,405

present invention is concerned with removing contaminants of the waste stream (i.e. first components) which have an affinity for the solvent based layer” whereas Schmidt is concerned with removing contaminants having an affinity for the non-solvent layer (*Id.*).

Appellant bases the above argument on a disclosure in Schmidt of separating the lower aqueous phase (solvent based layer) from the upper oil phase (non-solvent based layer) using a sight glass, the upper oil phase containing lubricating or coating oils, active ingredients, coloring and preservative which may themselves be subject to recycling (Brief 20 citing Schmidt, col. 4, l. 1+). Appellant’s argument ignores the further disclosure in the next paragraph of Schmidt disclosing the treatment of the lower aqueous (solvent) phase. Here, Schmidt states that “[n]ext, the lower phase is hot filtered to remove *any remaining* traces of oil or other contaminants.” (Schmidt, col. 4, ll. 22-23 emphasis added). Schmidt is treating the same or substantially the same starting materials as Appellant (gelatin waste from encapsulation processing) with the same or substantially the same sight glass separation and hot filtration process as Appellant (compare specification, p. 10, ll. 1-9 to Schmidt, col. 3, l. 64 to col. 4, l. 5 and specification, p. 13, ll. 11-13; p. 15, ll. 10-17; p. 17, ll. 1-10 with Schmidt, col. 4, ll. 22-31). Under the circumstances it is reasonable to conclude that the process of Schmidt is treating “first components” as claimed. *See In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657-58 (Fed. Cir. 1990); *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433-34 (CCPA 1977).

We note that nowhere in Appellant’s specification is a distinction made between oily type materials and particulates that can be effectively separated from the first liquid into the non-solvent based layer and those that cannot. Nor is there any disclosure of which of these oily components “have an affinity for the solvent.” The encapsulation waste material treated by Schmidt is the same or substantially the same as that of Appellant. Appellant has provided no

Appeal Number: 2005-2193
Application Number: 09/385,405

convincing evidence or argument showing that, indeed, the Schmidt waste would not contain the claimed first component treated as claimed. Because the materials and processing are the same or substantially the same, it is eminently fair and acceptable to shift the burden to Appellant and require him to prove that the prior art process is patentability different from the claimed process. *In re Best*, 562 F.2d at 1254, 195 USPQ at 433. This is particularly true, where, as here, the reference represents work done by the same inventor. Appellant is in a better position to make the required comparisons than is the PTO. *In re Best*, 562 F.2d at 1254, 195 USPQ at 433-34.

We also note that the claims are said to stand or fall together (Brief 10). We select claim 71 to represent the issues on appeal and this claim does not include the language “having an affinity for the solvent”, that language is contained in claim 72. Claim 71 merely requires that the waste material contain “at least one first component which can not effectively be separated from the first liquid into a non-solvent based layer.” Any component that remains in the lower aqueous layer (solvent layer) after separation facilitated by sight glass is a “first component” as claimed. Schmidt and the specification both describe using a sight glass to determine where to separate the phases (compare specification, p. 10, ll. 2-5 with Schmidt, col. 4, ll. 1-5). Schmidt and the specification both describe treating gelatin waste from encapsulation processes. It follows that both processes result in a waste material containing at least one first component “which can not effectively be separated from the first liquid into a non-solvent layer” as claimed.

The Examiner has established anticipation and such has not been sufficiently rebutted by Appellant.

We also agree with the Examiner’s analysis under 35 U.S.C. § 103(a). Schmidt further describes hot filtering to remove any remaining traces of oil or other contaminants and also indicates that further residue may be recaptured for further separation and purification if desired.

Appeal Number: 2005-2193
Application Number: 09/385,405

The object is to obtain a recycled gelatin product with chemical and physical properties identical to virgin gelatin such that reuse may be successfully accomplished (col. 2, ll. 48-51). It would have been within the capabilities of one of ordinary skill in the art to select known filters in order to obtain the required recycled gelatin product. The Examiner has established a *prima facie* case of obviousness with respect to the subject matter of claims 71-73, 75-81, and 83.

The Examiner rejects claims 74 and 82 under 35 U.S.C. § 103(a) over the combination of Schmidt and Dutre on the basis that the use of tangential flow tubular membrane ultrafiltration was known in the art of gelatin purification and, therefore, it would have been obvious to have used such a filtration technique in the process of Schmidt. Appellant argues that the filtration process of Dutre cannot be used in step (c) of the claimed process because the technique of Dutre is designed to separate fluids or ions and is not capable of removing residual oil droplets or emulsified oils (Brief 26-27).

Appellant's argument is not persuasive because claims 74 and 82 are not limited to treating any particular "first component." This language is not limited either by the claims or by the specification to any particular residual oil droplets or emulsified oils, it encompasses the treatment of ionic impurities. Dutre indicates that the filtration technique removes small molecular species (impurities) from gelatin (Dutre, p. 234, ll. 38-42).

The Examiner has established a case of *prima facie* obviousness with respect to the subject matter of claims 74 and 82 over Schmidt and Dutre in addition to establishing a *prima facie* case of obviousness of claims 71-73, 75-81, and 83 over Schmidt. The burden, therefore, shifts to Appellant to prove non-obviousness through evidence of secondary *indicia* such as

Appeal Number: 2005-2193
Application Number: 09/385,405

unexpected results. When such evidence is presented we must determine whether the totality of the evidence supports obviousness.⁴

Appellant argues that the Schmidt Declaration provides evidence of surprising and unobvious results (Brief 21-25). However, the tests discussed in the Schmidt Declaration compare processes in which the solvent based layer is subjected to treatment by a cartridge filter alone with processes in which a tangential flow filter is added. The two-step filtration process including the tangential flow filter is not commensurate in scope with the subject matter sought to be patented by claim 71. This problem applies to claim 74 as well. While claim 74 requires a tangential flow filter, that claim does not require cartridge filtration. The processes of the Schmidt Declaration require the presence of both filters.

Turning to the rejections under 35 U.S.C. § 112, ¶ 1, based on the similarities between the specification and the disclosure of Schmidt, we like the Examiner find no material difference between the processes. That being the case, it appears from all the evidence before us that Appellant was in possession of the claimed process and has enabled those of ordinary skill in the art to make and use the same. Given the discussion of the starting material of gelatin waste, such would appear to inherently contained the claimed “first component” and impurities having affinity of the solvent. It would appear that these materials would be removed using the processes described in the specification without the need for undue experimentation. We emphasize that this determination is based on the record before us. If, in the future, Appellant succeeds in showing that the claimed first component and materials having affinity for the

⁴ Evidence of secondary indicia such as unexpected results cannot be used to overcome a rejection based on anticipation. *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Appeal Number: 2005-2193
Application Number: 09/385,405

solvent are not inherently present in the starting material of Schmidt, the Examiner should revisit the questions of written descriptive support and enablement.

OTHER ISSUES

The Examiner states in the Answer at page 12 that “[s]hould the Board of Patent Appeals and Interferences find that the language in question has basis in the originally filed disclosure, then the double patenting rejection [previously made] will have to be revisited.” Should prosecution continue the Examiner should determine whether the double patenting rejection should be reinstated.

CONCLUSION

In summary, we sustain the rejection of claims 71-73, 75-81, and 83 under 35 U.S.C. § 102(b) and the rejection of claims 71-83 under 35 U.S.C. § 103(a). We do not sustain the rejection of claims 71-83 under 35 U.S.C. § 112, ¶ 1. As all the claims remain rejected, we affirm the decision of the Examiner.

Appeal Number: 2005-2193
Application Number: 09/385,405

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective Sep. 13, 2004; 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sep. 7, 2004)).

AFFIRMED

CHARLES F. WARREN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CATHERINE TIMM)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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BEVERLY A. FRANKLIN)	
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