

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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* BURTON M. BAUM

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Appeal No. 1997-3170  
Application No. 08/330,597

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ON BRIEF

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Before PAK, WALTZ, and JEFFREY T. SMITH, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 7 through 14, 29 and 35 through 49, which are all of the claims pending in the above-identified application.

Claims 1 and 29 are representative of the subject matter on appeal and read as follows:

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1. A food grade liquid rinse aid composition, suitable for dilution to form an aqueous rinse, the composition consisting essentially of:

(a) about 5 to 50 wt-% of a sorbitan fatty acid mono ester containing greater than about 15 moles of alkylene oxide per mole of sorbitan;

(b) about 0.2 to 25 wt-% of a defoamer composition selected from the group consisting of an alkali metal or alkaline earth metal salt of a fatty acid, a silicone, a fatty acid ester of glycerol, and mixtures thereof; and

(c) about 10 to 95 wt-% of an aqueous diluent; wherein the rinse aid composition is formulated from the above components approved as food additives and displays adequate sheeting properties during the rinse cycle of mechanical warewashing, at a concentration of at least about 50 parts of the nonionic surface active agent per million parts of the rinse.

29. A cast solid food grade rinse aid composition, suitable for dilution to form an aqueous rinse, the composition consisting essentially of:

(a) about 5 to 50 wt-% of a sorbitan fatty acid mono ester containing greater than about 15 moles of alkylene oxide per mole of sorbitan;

(b) about 0.2 to 25 wt-% of a defoamer composition selected from the group consisting of an alkali metal or alkaline earth metal salt of a fatty acid, a silicone, a fatty acid ester of glycerol, and mixtures thereof; and

(c) about 10 to 95 wt-% of an aqueous diluent; wherein the rinse aid composition is formulated from the above components approved as food additives and displays adequate sheeting properties during the

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rinse cycle of mechanical warewashing, at a  
concentration of at least about 50 parts of the nonionic  
surface active agent per million parts of the rinse.

In support of his rejections, the examiner relies on  
the following prior art references:

Chun et al. (Chun)	5,133,892	Jul. 28, 1992
Corring	5,160,448	Nov. 3, 1992
Gandolfo et al. (Gandolfo)	EP 0 008 830 A1	Mar. 19, 1980 (Published European Patent Application)
Suzuki et al. (Suzuki)	62-288697	Dec. 15, 1987 <sup>1</sup> (Published Japanese Kokai Patent Application)

The appealed claims stand rejected as follows:

1) Claims 1, 9, 10, 29 and 35 through 49 under 35

U.S.C.

§ 103 as unpatentable over the disclosure of Corring;

2) Claims 29, 35 through 38 and 47 through 49 under 35

U.S.C. § 103 as unpatentable over the disclosure of Chun;

3) Claims 1, 7 through 14, 29 and 35 through 49 under

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<sup>1</sup>Our reference to this published Japanese Patent Application is to the corresponding English translation of record.

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35 U.S.C. § 103 as unpatentable over the combined disclosures of either Corring or Chun, and Gandolfo; and

4) Claims 1, 7 through 14, 29 and 35 through 49 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Suzuki and Gandolfo.

We have carefully reviewed the claims, specification, and applied prior art, including all of the arguments advanced by both the examiner and appellant in support of their respective positions. This review leads us to conclude that the examiner's § 103 rejections are not well founded. Accordingly, we will not sustain the examiner's § 103 rejections for essentially those reasons set forth in the Brief. We add the following primarily for emphasis and completeness.

The claimed subject matter is directed to a food grade rinse aid composition in solid and liquid form. See claims 1 and 29. The food grade rinse composition consists essentially of a particular sorbitan fatty acid mono ester, a particular defoamer, and an aqueous diluent. *Id.* This composition must be capable of displaying adequate sheeting properties during the rinse cycle of mechanical warewashing.

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Contrary to the examiner's assertion at pages 7 and 9 of the Answer, the preambular limitation "rinse aid" recited in claims 1 and 29 is not merely an intended use of the invention. When the preambular limitation "rinse aid" is read in light of pages 6-9 of the specification, it gives life and meaning to the invention as claimed. *See, e.g., In re Paulsen*, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673-74 (Fed. Cir. 1994); *Gerber Garment Technology, Inc. v. Lectra Sys., Inc.*, 916 F.2d 683, 688, 16 USPQ2d 1436, 1441 (Fed. Cir. 1990); *Corning Glass Works v. Sumitomo Elect.*

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*U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989). According to the specification (pages 7 and 8):

For the purposes of this invention, the term "aqueous rinse" is directed to aqueous compositions containing concentrations, typically less than 1000 ppm of active sheeting agent materials and compatible defoamers and other additives, that are directly applied to the dishware to obtain rinsing. The term "sheeting agent" refers to the individual component or components of the rinse agent that causes the aqueous rinse to sheet. The term "rinse agent" reflects the concentrate[d] material which is diluted with an aqueous diluent to form the aqueous rinse. The term "ware[,]" "table ware[,]" "kitchen ware" or "dishware" refers to various types of articles used in the preparation, serving and consumption of foodstuffs including pots, pans, baking dishes, processing equipment, trays, pitchers, bowls, plates, saucers, cups, glasses, forks, knives, spoons, spatulas, grills, griddles, burners, and the like. The term "rinsing" or "sheeting" relates to the capacity of the aqueous rinse when in contact with ware to form substantially continuous thin sheets of the aqueous rinse which drain[s] evenly from the ware leaving little or no spotting upon evaporation of the water.

Thus, we interpret the term "[a] food grade . . . rinse aid composition" as including only those components which are useful for "aqueous" rinsing of dishware, kitchenware, or table ware. In other words, it precludes the presence of dishwashing detergents since they cannot be used during the rinse cycle of mechanical warewashing. This interpretation is

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also supported by the applied prior art references, namely Chun and Suzuki, which distinguish rinse aids from dishwashing detergents.

Having interpreted the claims on appeal as indicated above, we agree with appellant that none of the applied prior art references teaches or would have suggested the claimed food grade rinse aid composition. As argued by appellant (Brief, page 10), Chun does not teach or suggest adding a defoamer to its rinse aid composition. There is no evidence that the rinse aid composition described in Chun needs a defoamer, much less the claimed defoamer.

As also argued by appellant (Brief, pages 11 and 12), Corring is not directed to the claimed food grade rinse aid composition. Rather, it is directed to a cleaning composition containing components which are precluded by the claims on appeal. The examiner, however, has not explained why it would have been obvious to remove those components and the corresponding functions from the cleaning composition described in Corring.

As further argued by appellant (Brief, pages 15 and 16), Suzuki does not teach, nor would have suggested, a rinse aid

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composition having a combination of the claimed sorbitan fatty acid mono ester and the claimed defoamer. There is no dispute that Suzuki describes a rinse aid composition having the claimed sorbitan fatty acid mono ester. However, the examiner has not referred to any evidence establishing the desirability of adding the claimed defoamer in the rinse aid composition of the type described in Suzuki.

Although the examiner relies on Gandolfo to demonstrate obviousness of adding the claimed defoamer in the composition of the type described in Chun, Corring, or Suzuki, Gandolfo teaches adding such defoamer to detergents containing particular ingredients which suffer from foaming problems. Nowhere does Gandolfo teach that the rinse aid composition of the type described in Chun or Suzuki requires any defoamer, much less the claimed defoamer. The examiner simply has not supplied any evidence that the rinse aid composition of the type described in Chun or Suzuki suffers from foaming problems.

In view of the foregoing, we reverse the examiner's decision rejecting all of the appealed claims under 35 U.S.C. § 103.

*OTHER ISSUES*

We note that Suzuki teaches a rinse aid composition containing certain surface active agents in addition to the claimed sorbitan fatty acid mono ester. See page 5. It is not clear whether these surface active agents are known to function as defoamers. Although the specification discloses some of these surface active agents as defoaming agents (pages 14 and 15), there is no evidence that one of ordinary skill in the art knew that such surface active agents also function as defoaming agents. Upon return of this application, the examiner is to determine the known functions of the surface active agents described in Suzuki and, based on that determination, reassess the collective teachings of Suzuki and Gandolfo to ascertain whether they affect the patentability of the claimed subject matter.

We also note that the terms "the nonionic surface active agent[s]" and "the rinse," recited in claims 1 and 29 do not have any antecedent basis. It is difficult to determine whether they refer to the "sorbitan fatty acid mono ester" and the "rinse aid composition," respectively or something else. Upon return of this application, both the examiner and

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appellant are advised to clarify the language involved.

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*CONCLUSION*

For the reasons indicated *supra*, we are constrained to reverse the examiner's decision rejecting all of the appealed claims under 35 U.S.C. § 103 over the applied prior art and return this application to the examiner for appropriate action consistent with the above instructions.

*REVERSED and REMANDED*

CHUNG K. PAK	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
THOMAS A. WALTZ	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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	)	
	)	
JEFFREY T. SMITH	)	
Administrative Patent Judge	)	

CKP:hh

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