

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ELIZABETH J. GLADFELTER, TINA O. OUTLAW,  
JAMES L. COPELAND, RHONDA K. SCHULZ,  
DANIEL K. BOUCHE, and JEFF W. PETERSON

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Appeal 2008-1748  
Application 10/890,348  
Technology Center 1700

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Decided: August 5, 2008

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Before CHARLES F. WARREN, THOMAS A. WALTZ, and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Primary Examiner's final rejection of claims 34, 37, and 42-46, which are the only claims pending in this application (App. Br. 5). We have jurisdiction pursuant to 35 U.S.C. § 6(b).<sup>1</sup>

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<sup>1</sup> An Oral Hearing for this appeal was held on July 8, 2008.

According to Appellants, the invention is directed to a cleaning composition comprising an alkaline source, a builder, a nonionic surfactant, a bleaching agent, and a film containing the cleaning composition, where the cleaning composition is in granular form and constructed for a single use application (App. Br. 8). Independent claim 34 is illustrative of the invention and a copy of this claim is reproduced below:

34. A packaged warewashing detergent composition comprising:
- (a) a cleaning composition provided in a granular form comprising:
    - (i) a source of alkalinity comprising about 5 wt. % to about 60 wt. % of silicate and about 5 wt. % to about 70 wt. % sodium carbonate to provide a pH of between about 10 to 12;
    - (ii) a builder comprising 27 wt. % to 35 wt. % sodium tripolyphosphate;
    - (iii) nonionic surfactant comprising polyoxypropylene-polyoxyethylene condensate;
    - (iv) about 0.5 to about 20 wt. % bleaching agent comprising percarbonate; and
  - (b) a film containing the granular cleaning composition, the film comprising an aqueous soluble film comprising polyvinyl alcohol, wherein the packaged warewashing detergent composition is constructed for a single use application, and wherein the granular form is not a compressed solid or a cast solid.

The Examiner has relied on the following prior art references as evidence of unpatentability:

Hardy

4,536,314

Aug. 20, 1985

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Gladfelter

5,078,301

Jan. 7, 1992

### ISSUES ON APPEAL

Claims 34, 37, and 42-46 stand rejected under 35 U.S.C. § 102(e) as anticipated by Gladfelter (Ans. 3).

Claims 34, 37, and 42-46 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hardy (Ans. 3).

Appellants contend that Gladfelter does not teach a granular cleaning composition, nor a cleaning composition where the granular form is not a compressed or cast solid<sup>2</sup> (App. Br. 11). Appellants further contend that their Specification differentiates between “granular” and “pelletized,” as do external sources (App. Br. 12-13).

Appellants contend that Gladfelter does not teach single use applications, only multiple use (App. Br. 14).

Appellants contend that Hardy does not disclose the amounts of silicate as claimed, nor the lower range of percarbonate bleach (App. Br. 16). Appellants also contend that Hardy doesn't teach a single use application, discloses only the acid precursors enclosed in a water soluble bag, not the entire detergent, and is directed to an aqueous liquid product, not a granular product (App. Br. 17).

Appellants contend that Hardy does not teach the combination of polyoxyethyl/polyoxypropyl copolymers with sodium percarbonate, nor the desirability of such a combination (App. Br. 19).

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<sup>2</sup> We note that the Examiner has objected to the negative limitation in claim 34 “wherein the granular form is not a compressed solid or a cast solid” in the final rejection dated July 18, 2006, page 2 (*see* fn. 3 at App. Br. 11). However, we also note that the Examiner has not made any objections under § 132 or “new matter” rejections under § 112, ¶ 1, in the Answer.

Appellants contend that it is not appropriate for the Examiner to take Official Notice of facts (that water soluble bags were known to deliver a warewashing detergent composition) where the facts asserted to be well-known are not capable of instant and unquestionable demonstration as well-known without citing a prior art reference (App. Br. 20). Appellants further contend that they have timely challenged the Examiner's Official Notice (Reply Br. 2-3). Appellants also separately argue several of the dependent claims (App. Br. 21-22).

The Examiner contends that the "pellets" disclosed by Gladfelter are within the definition of "granules" presented in Appellants' Specification (Ans. 4-5).

The Examiner contends that the "single use application" as claimed is merely an intended use and does not distinguish over the composition as claimed (Ans. 5).

The Examiner contends that Hardy discloses ranges overlapping the claimed ranges for silicate and sodium percarbonate (Ans. 5). The Examiner also contends that Hardy clearly teaches the composition in powder form, and exemplifies combinations of nonionic surfactants and bleaches (Ans. 6).

The Examiner admits that Hardy only specifically mentions enclosing an additive in the water soluble bag, but contends that the reference makes clear that such pouches are well known in the art for delivering detergents to wash water (Ans. 6). The Examiner states that Appellants have failed to traverse this "official notice" and thus it has become "already admitted prior art" (Ans. 7).

Accordingly, we determine the following issues presented from the record in this appeal: (1) have Appellants established that the Examiner

committed reversible error in determining that the “granular form” as claimed includes the “pellets” disclosed by Gladfelter, and (2) have Appellants established that the Examiner committed reversible error in determining that Hardy discloses the claimed ingredients in overlapping ranges, with the cleaning composition in powder form, and suggests that it was known in the art to use water soluble bags to deliver the entire cleaning composition?

Accordingly, from the record presented in this appeal, we determine that the Examiner has committed reversible error with regard to the rejection over Gladfelter. Therefore, we cannot sustain the rejection of the claims on appeal under § 102(e) over Gladfelter essentially for the reasons in the Briefs, as well as those reasons set forth below. We also determine that Appellants have not established that the Examiner committed reversible error in the rejection over Hardy. Therefore, we sustain the rejection of the claims on appeal under § 103(a) over Hardy essentially for the reasons in the Answer, as well as those reasons set forth below. Accordingly, the decision of the Examiner to reject the claims on appeal is AFFIRMED.

#### OPINION

##### A. The Rejection over Gladfelter

The claims on appeal stand rejected under 35 U.S.C. § 102(e) as anticipated by Gladfelter (Ans. 3).

Under § 102, anticipation requires that the prior art reference disclose, either expressly or under the principles of inherency, every limitation of the claim. *See In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986). Implicit in our review of the Examiner’s anticipation analysis is that the claim must first have been correctly construed to define the scope and meaning of each

contested limitation. *See Gechter v. Davidson*, 116 F.3d 1454, 1457 (Fed. Cir. 1997). The specification is generally the single best guide to understanding the meaning of a disputed term to one of ordinary skill in the art. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005).

The Examiner finds that Gladfelter teaches a “pelletized” warewashing composition (Ans. 3). The Examiner, as discussed above, contends that pellets “falls within the scope of a granule” as that term is recited in the claims on appeal (Ans. 5), since the specific particle sizes Appellants disclose for granules encompass the same or similar sizes as the pellets of Gladfelter (Ans. 4-5, citing the Specification 6:11).

It is undisputed that the claims on appeal require a cleaning composition “in granular form” where the granular form “is not a compressed solid or a cast solid” (*see, e.g.*, claim 34 on appeal as reproduced above). Appellants’ Specification discloses that the inventive package contains cleaning chemicals “in granular, compressed, pelletized, or extruded solid form, or cast solid form” (Spec. 6:12-15). Appellants further teach that the alkaline chemical compositions used in the claimed system “may take any number of forms including granular, compressed solid, or cast solid” with granular solids including any particle solids “ranging in diameter from microns to centimeters” (Spec. 11:2-6). The granular solids may be formed through any variety of means known to those of skill in the art, while compressed solids can likewise be formed by processes known in the art, such as extrusion, tableting, and pelletizing (Spec. 11:6-11). Appellants teach that the films used to package the cleaning system must have sufficient strength to allow their use in packaging of “solid granular, compressed or pelletized, or blocked chemical agents” (Spec. 28:13-17).

From the review of Appellants' Specification above, we determine that the meaning and scope of "granular" as recited in the claims on appeal and understood by one of ordinary skill in this art does not include pellets, regardless of the size. First, we determine that the Specification clearly teaches granules and pellets as separate embodiments of the form of the cleaning composition. Secondly, we determine that the Specification clearly teaches that pellets are compressed solids, which are excluded from the scope of the claims on appeal by the negative limitation "wherein the granular form is not a compressed solid or a cast solid" (*e.g.*, *see* claim 34). We further determine that Gladfelter teaches that "pellets" (also called briquettes, tablets, pellets, nuggets, etc. (col. 7, ll. 16-20)) are solidified by a variety of mechanisms, including compressive molding, compressive pelletizing, casting, etc. (col. 13, ll. 18-23). We therefore determine that the scope and meaning of "granular" as claimed would not have included the pellets disclosed by Gladfelter, in light of Appellants' Specification and the prior art.

For the foregoing reasons, we cannot sustain the Examiner's rejection of the appealed claims based on § 102(e) over Gladfelter since every limitation of the claims is not disclosed by the reference.

#### B. The Rejection over Hardy

The claims on appeal stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hardy (Ans. 3).

We determine the following Factual Findings from the record presented in this appeal:

- (1) Hardy discloses detergent compositions, normally in particulate form, including amounts of silicate, sodium

carbonate, sodium tripolyphosphate, a nonionic surfactant such as polyoxyethylene/polyoxypropylene copolymers, and bleaches such as sodium percarbonate, overlapping the amounts recited in claim 34 on appeal (Ans. 3-4; Hardy, col. 3, ll. 18-54; col. 10, ll. 40-44; col. 13, ll. 38-41 and 60-63; col. 14, ll. 7-34; col. 15, ll. 1-6, 28-29, and 45-49; col. 16, l. 67-col. 17, l. 2; col. 23, ll. 12-15; col. 24, ll. 29-33; and Example 4, col. 27-col. 28);

- (2) Hardy teaches that the additive products may be enclosed in bags or containers such as those of polyvinyl alcohol so that the containers prevent egress of their contents when dry but are adapted to release their contents on immersion in an aqueous solution (Ans. 4; Hardy, col. 18, ll. 9-53).

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations, if any. *See Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). “[A]nalysis [of whether the subject matter of a claim is obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740 (2007). “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR, supra, citing Sakraida v. AG Pro, Inc.*, 425

U.S. 273, 282 (1976). Generally, a finding of overlapping ranges for the prior art and the claimed values constitutes a prima facie case of obviousness for those values. *See In re Peterson*, 315 F.3d 1325, 1329-30 (Fed. Cir. 2003); *In re Geisler*, 116 F.3d 1465, 1469-70 (Fed. Cir. 1997).

As shown by FF (1) listed above, we determine that Hardy discloses every ingredient in overlapping amounts with the claimed ingredients of the cleaning composition. Contrary to Appellants' argument (App. Br. 16), the prior art is not required to disclose every amount of the claimed range to establish prima facie obviousness. *See Peterson, supra; Geisler, supra*. As also shown by FF (1) listed above, we determine that Hardy discloses a cleaning composition in particulate (or "granular") form. Contrary to Appellants' arguments (App. Br. 17), we determine that Hardy clearly teaches a particulate or granular form to the cleaning composition, although ultimately the composition will be immersed in water (Hardy, col. 10, ll. 37-44; and col. 16, l. 67-col. 17, l. 2). As shown by FF (2) listed above, we determine that Hardy teaches use of a water-soluble polyvinyl alcohol film to encompass and later release some of the additives of the cleaning composition. Although we agree that Appellants have timely traversed the Examiner's "official notice" (Reply Br. 2-3), we also agree with the Examiner that it would have been within the creativity of one of ordinary skill in this art to use a water-soluble film around any one or all of the cleaning composition ingredients. *See KSR*, 127 S. Ct. at 1740. This is further evidenced by Gladfelter (assigned to the assignee of this application), who teaches that "[s]ingle use domestic detergent packets comprising powdered or pelletized detergent within a water soluble single use packet are known in the art." Gladfelter, col. 2, ll. 3-6.

Appellants argue that Hardy does not teach a single use application (App. Br. 17). This argument is not persuasive. We agree that Hardy is silent as to a single use or multiple use application. We determine that such silence would have inferred a single use application, the most common type of domestic use. However, we also determine that either type of use would have been well within the ordinary skill in the art, since both uses were known in the art and the use depends on many factors such as the size and type of warewashing machine. We determine that “constructed for a single use application” (as recited in claim 34 on appeal) connotes no difference in the packaged warewashing detergent composition other than the *amount* of cleaning composition present in the package. In other words, a single use application for a large warewashing machine could actually contain the same or more cleaning composition than that needed for a multiple use application in a smaller capacity machine.

Appellants also argue that Hardy does not teach the specific claimed combination of surfactant and bleaching agent (App. Br. 19). This argument is not well taken since Hardy generally teaches the claimed surfactants and bleaching agents, as well as disclosing a specific example to a nonionic surfactant and a bleaching agent (Ans. 6; FF (1) listed above).

Appellants present specific arguments regarding the rejection of dependent claims 42-46 (App. Br. 21-22). However, we find these arguments unpersuasive since Appellants admit that such grades of acetate removal and molecular weight for water-soluble polyvinyl alcohol films were well known in the art (Spec. 29:11-30:15).<sup>3</sup> Additionally, it is noted

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<sup>3</sup> It is axiomatic that admitted prior art in an applicants’ specification may be used in determining the patentability of a claimed invention (*In re Nomiya*,

that Gladfelter teaches that these same polyvinyl alcohol films with varying molecular weights and degree of hydrolysis (% acetate removal) were known in the art and commercially available (Gladfelter, col. 3, ll. 25-50).

For the foregoing reasons and those stated in the Answer, we determine that Hardy discloses and suggests every limitation required by the claims on appeal. Therefore, we determine that the Examiner has established a prima facie case of obviousness in view of Hardy, which prima facie case has not been adequately rebutted by Appellants' arguments. We note that Appellants have not presented any evidence of secondary considerations. Thus, we sustain the Examiner's rejection of the claims on appeal under § 103(a) over Hardy.

C. Summary

The rejection of claims 34, 37, and 42-46 under § 102(e) over Gladfelter is reversed.

The rejection of claims 34, 37, and 42-46 under § 103(a) over Hardy is affirmed.

The decision of the Examiner is therefore affirmed.

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509 F.2d 566, 570-71 (CCPA 1975)); and that consideration of the prior art cited by the Examiner may include consideration of the admitted prior art found in an applicants' specification (*In re Davis*, 305 F.2d 501, 503 (CCPA 1962); *cf.*, *In re Hedges*, 783 F.2d 1038, 1039-40 (Fed. Cir. 1986)).

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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