

The opinion in support of the decision being entered today is not binding precedent of the Board.

Paper 86

By: Trial Section Merits Panel  
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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HENKEL CORPORATION

Junior Party,  
(U.S. Application Nos. 09/446,434 and 09/446,578)

v.

THE PROCTOR & GAMBLE COMPANY

Senior Party,  
(U.S. Patent No. 6,399,564)

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Patent Interference No. 105,174 (SCM)

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Before: SCHAFFER, SPIEGEL and MEDLEY, Administrative Patent Judges.<sup>1</sup>

SPIEGEL, Administrative Patent Judge.

**DECISION - REHEARING - Bd. R. 125(c)**

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<sup>1</sup>As part of the Board's efforts under the Government Paperwork Elimination Act, signatures on papers originating from the Board are being phased out in favor of a completely electronic record. Consequently, in this case papers originating at the Board will not have signatures. The signature requirements for the parties have not changed. See e.g., 37 C.F.R. § 10.18.

## **I. Introduction**

Following the “Decision - Rehearing - Bd. R. 125(c)” (Paper 81, filed 31 March 2005), the parties, Henkel Corporation (“Henkel”) and The Procter & Gamble Company (“P&G”), were ordered to brief whether an interference-in-fact exists between any of the claims of U.S. Patent No. 6,399,654 and either of the Henkel application claims not shown to be unpatentable.

## **II. Findings of Fact (FF)**

The following findings of fact are supported by a preponderance of the evidence.

1. The subject matter of the interference is defined by one count (Paper 1, p. 6):

### Count 1

A tablet according to claim 1 of U.S. Patent No. 6,339,654  
or  
A tablet according to U.S. Application No. 09/446,434.

2. Claim 1 of the ‘654 patent reads:

A detergent tablet comprising a compressed portion and a non-compressed portion wherein:

- a) said compressed portion comprises a mould and dissolves at a faster rate than said non-compressed portion on a weight by weight basis, measured using a SOTAX dissolution test method;
- b) said non-compressed portion is in solid, gel or liquid form;
- c) said non-compressed portion is delivered onto said mould of said compressed portion; and
- d) said non-compressed portion is partially retained within said mould; and wherein said non-compressed portion is affixed to said compressed portion by forming a coating over the non-compressed layer to secure it to the compressed portion or by hardening.

3. The SOTAX dissolution test method measures the average weight of each portion which dissolves per minute in deionized water (Ex 2001, c. 10, I. 62 - c.

11, l. 17).<sup>2</sup>

4. Claim 31 of the '434 application is illustrative and reads:

A detergent tablet comprising a compressed region and a solidified solution or melt region wherein:

- a) the compressed region comprises a recess and the dissolution rate of the compressed region is greater than the dissolution rate of the solidified solution or melt region;
- b) the solution or melt is delivered into the recess and the solidified solution or melt region is at least partially retained within the recess and
- c) the solidified solution or melt region is affixed to the compressed region by hardening.

5. For reasons set forth in the "DECISION - PRELIMINARY MOTIONS - Bd. R. 125(a)," the Board found that the original disclosure of the involved '434 specification only conveyed possession of a detergent tablet having a solidified solution or melt region occupying no more than 40% of the surface of the tablet ("Decision," Paper 73, pp. 18-26).
6. Similarly, the Board also found that the original disclosure of the involved '578 specification only conveyed possession of a detergent tablet having a solidified

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<sup>2</sup> The '564 patent describes the

SOTAX Dissolution Test Method: The SOTAX machine consists of a temperature controlled waterbath with lid. 7 pots are suspended in the waterbath. 7 electric stirring rods are suspended from the underside of the lid, in positions corresponding to the positions of the pots in the waterbath. The lid of the waterbath also serves as a lid on the pots.

The SOTAX waterbath is filled with water and the temperature gauge set to 50°C. Each pot is then filled with 1 liter of deionised water and the stirrer set to revolve at 250 rpm. The lid of the waterbath is closed, allowing the temperature of the deionised water in the pots to equilibrate with the water in the waterbath for 1 hour.

Equal weight of the compressed and non-compressed portion is weighed out. The compressed portion is placed in first pot and the non-compressed portion is placed in a second pot. The lid is then closed. The compressed and non-compressed portions are visually monitored until they completely dissolves [sic]. The time is noted when the compressed portion and the non-compressed portions have completely dissolved. The dissolution rate of the compressed portion or the non-compressed portion is calculated as the average weight (g) of each portion dissolved in deionised water per minute.

solution or melt region occupying no greater than 40% by volume of the tablet  
(id., pp. 26-37).

7. As a result of the Decision and the "ORDER - MISCELLANEOUS - Bd. R. 104(a)" ("Order," Paper 77), new claims 41 and 44 were added to Henkel applications '434 and '578, respectively, and the remaining patentable claims of the parties are:

Henkel '434 application	41
Henkel '578 application	44
P&G '564 patent	1-14

8. Henkel '434 application claim 41 reads:

A detergent tablet comprising a compressed region and a solidified solution or melt region wherein:

- a) the compressed region comprises a recess and the dissolution rate of the compressed region is greater than the dissolution rate of the solidified solution or melt region;
- b) the solution or melt region is delivered onto the recess and the solidified solution or melt region is at least partially retained within the recess;
- c) the solidified solution or melt region is affixed to the compressed region by hardening; and
- d) the solidified solution or melt region comprises no more than 40% of the surface of the detergent tablet.

9. Henkel '578 application claim 44 reads:

A detergent tablet comprising (a) a compressed region containing an active detergent ingredient, and (b) a solidified melt or solution region comprising an active detergent ingredient, wherein the tablet as a whole dissolves in less than 40 minutes in a dishwashing machine, wherein the dissolution rate of the compressed region is greater than the dissolution rate of the solidified melt or solution region, wherein the solidified melt or solution region is solidified in a recess formed in the compressed portion, and wherein the solidified melt or solution region comprises no more than 40% by volume of the detergent tablet.

10. The “solidified solution or melt region” recited in the ‘434 and ‘578 application claims corresponds to the “non-compressed portion” of the detergent tablet in the ‘564 patent claims and is defined in the ‘434 and ‘578 applications as the region in which ingredient (I) is mainly located (Paper 73, pp. 6, 13, 22 and 30).
11. A “JUDGMENT - NO INTERFERENCE-IN-FACT - Bd. R. 127” (“Judgment,” Paper 78) was entered sua sponte because the record, including the subject matter of Henkel’s involved claims, did not appear to teach or suggest a detergent tablet wherein “the compressed portion dissolves at a faster rate than the non-compressed portion on a weight by weight basis, measured using a SOTAX dissolution method” (id., p. 12).
12. Henkel timely filed “HENKEL CORPORATION’S REQUEST FOR REHEARING OF JUDGMENT OF NO INTERFERENCE-IN-FACT” (Paper 79).
13. Henkel pointed out that “P&G’s ‘564 claims had always recited the SOTAX test and Henkel’s original claims had always recited differential dissolution rates in the form they are recited in ‘434 claim 41 and ‘578 claim 44” (id., p. 6; see also pp. 4-5).
14. Henkel argued, in part, that once the interference was declared, a rebuttable presumption existed that there was no patentable distinction between the dissolution rates as recited in P&G’s claims and in Henkel’s claims (id.).
15. Upon reconsideration, the sua sponte Judgment was vacated and the parties were ordered to brief whether an interference-in-fact exists between the claims of the ‘564 patent and either of the remaining Henkel application claims not shown

- to be unpatentable (“DECISION - REHEARING - Bd. R. 125(c),” Paper 81, pp. 2-3).
16. Each party was to address specifically whether the subject matter of any of P&G’s involved claims anticipates or renders obvious the subject matter, including the expressly recited less than 40% surface area and 40% volume limitations, of Henkel’s ‘434 application claim 41 or ‘578 application claim 44, respectively, and whether the subject matter of either of Henkel’s ‘434 application claim 41 or ‘578 application claim 44 anticipates or renders obvious the subject matter, including the expressly recited differential dissolution rate “on a weight by weight basis, using a SOTAX dissolution test method,” of any of P&G’s ‘564 patent claims (*id.*).
  17. Henkel timely filed “HENKEL CORPORATION’S PAPER IN SUPPORT OF INTERFERENCE-IN-FACT” (Paper 82).
  18. P&G timely filed “THE PROCTER & GAMBLE COMPANY’S MISCELLANEOUS MOTION 7” (Paper 83) wherein it argued that there is no interference-in-fact.
  19. Although both parties were authorized to file oppositions (Paper 81, p. 3), only Henkel filed “HENKEL OPPOSITION 7” (Paper 85).
  20. The parties relied, in part, on declarations by Drs. Blasey (“Blasey II,” Ex 2029) and Scheper (“Scheper II,” Ex 1021).
  21. Both Drs. Blasey and Scheper testified that

[a] person of ordinary skill in the art ... would be someone with training, education, or knowledge of detergent formulations, chemical engineering, or chemistry, with a Bachelor's degree in one of those fields and at least a few years of experience in the detergent profession. [Ex 1008, ¶ 18; Ex 2020; ¶ 6.]

22. Drs. Blasey and Scheper are persons of ordinary skill in the art based on their educational backgrounds and professional experience (Ex 1008, ¶¶ 2-3, 7 and 18; Ex 2020, ¶¶ 2-3 and 6).

Other findings of fact follow below.

### III. Discussion

#### A. Legal standard

“An interference exists if the subject matter of a claim of one party would, if prior art, have anticipated or rendered obvious the subject matter of a claim of the opposing party and vice versa.” 37 CFR § 41.203(a). A patentable distinction in either direction requires a finding of no interference-in-fact. See Medichem S.A. v. Rolabo S.L., 353 F.3d 928, 932-34, 69 USPQ2d 1283, 1287-88 (Fed. Cir. 2003); Eli Lilly & Co. v. Board of Regents of the University of Washington, 334 F.3d 1264, 67 USPQ2d 1161 (Fed. Cir. 2003); Winter v. Fujita, 53 USPQ2d 1234 (Bd. Pat. App. & Int. 1999).

“[A] claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference.” Celeritas Technologies, Ltd. v. Rockwell, 150 F.3d 1354, 1360, 47 USPQ2d 1516, 1522 (Fed. Cir. 1998). “Absence from the reference of any claimed element negates anticipation.” Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Whether an invention would have been obvious is a legal conclusion based on the totality of the evidence, see Richardson-Vicks Inc. v. Upjohn Co., 122 F.3d 1446, 1483, 44 USPQ2d 1181, 1187 (Fed. Cir. 1997), including underlying factual inquiries of (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. See Graham v. John Deere Co., 383 U.S. 1, 17-18, 146 USPQ 459, 467 (1966).

**B. Burden of proof on P&G**

Our withdrawn decision (Paper 78) held that the subject matter of P&G's claims were patentably distinct from the subject matter of Henkel's '434 application claim 41 and '578 application claim 44. Specifically, we held that P&G's express claim limitation that "the compressed portion dissolves at a faster rate than the non-compressed portion on a weight by weight basis, measured using a SOTAX dissolution method" was not anticipated or rendered obvious by the limitation "the dissolution rate of the compressed region is greater than the dissolution rate of the solidified solution or melt region" appearing in Henkel's '434 application claim 41 and '578 application claim 44. As Henkel pointed out in its request for reconsideration (Paper 79), these limitations were in the parties' respective claims when the interference was declared. Thus, a presumption existed that the limitations did not patentably distinguish the parties' claims. Chiong v. Roland, 17 USPQ2d 1541, 1544 (Bd. Pat. App. & Int. 1990). A party challenging this status quo has the burden of proof. 37 CFR § 41.121(b). As P&G asserts that there is no interference-in-fact, it bears the burden of proof.

### **C. Summary of P&G's position**

P&G's argument for no interference-in-fact relies on a single difference between the parties' claims relating to the dissolution rate. Henkel's claims broadly require that "the dissolution rate of the compressed region is greater than the dissolution rate of the solidified solution or melt region" while P&G's claims more specifically require that "the compressed portion dissolves at a faster rate than the non-compressed portion on a weight by weight basis, measured using a SOTAX dissolution method." P&G argues that when Henkel's claims are taken as prior art, the generic limitation does not anticipate or suggest the specific method for determining the dissolution rates required by P&G's claims.<sup>3</sup>

As part of its argument, P&G points out that neither Henkel's '578 nor '434 application expressly defines the phrase "dissolution rate" (Paper 83, p. 16, ll. 11-12 and p. 17, ll. 14-15). P&G then states: "As such, one skilled in the art must construe the term in light of the specification" (*id.*, p. 16, ll. 12-13 and p. 17, ll. 15-16). P&G then asserts that Henkel's specifications provide a number of possible constructions for the phrase, i.e., (1) that "dissolution rate" means "measuring the effect of one region of the tablet to the dissolution of the tablet as a whole" (*id.*, p. 16, ll. 15-17 and p. 17, ll. 17-19, original emphasis); (2) that the phrase means "measuring the total dissolution time of one region and comparing it to the total time of a second region as the tablet as a whole

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<sup>3</sup> Implicit in P&G's argument is that the method of determining the dissolution rate is a substantive limitation on the scope of the subject matter claimed. In other words, we understand P&G's argument to assert implicitly that there are detergent tablets that would meet Henkel's dissolution rates limitation, but would be excluded by P&G's limitation requiring that the dissolution rates be determined "on a weight by weight basis, measured using a SOTAX dissolution test method." We express no view on the correctness of this assertion and proceed under the assumption that it is correct.

dissolves” (id., p. 16, l. 22 - p. 17, l. 1 and p. 18, ll. 5-7); and, (3) that “dissolution rate” in Henkel’s claims are measured on a percent of the surface basis (id., p. 17, ll. 8-10 and p. 18, ll. 12-14). Henkel’s claims, when so interpreted, P&G argues, would not teach or suggest measuring dissolution rate “on a weight/time basis, of equal weights of a one region compared to a second region (separately from the tablet as a whole) ...” said to be required by P&G’s claims (id., p. 16, ll. 17-20 and p. 17, ll. 20-21). We note that the use of weight/time basis and the use of equal weights of the materials separately from the tablet as a whole are not expressly stated in P&G’s claims, but apparently are implicit in the claim limitation “on a weight by weight basis, measured using a SOTAX dissolution method.”

In support of its argument, P&G relies on the testimony of Dr. William M. Scheper, Ph.D. (Ex 1021). Dr. Scheper testifies that it is his opinion that there are a number of ways one skilled in the art would consider the phrase “dissolution rate” based on Henkel’s specifications. First, the phrase can be considered as referring to the dissolution rate of one region of the tablet as compared to the dissolution rate of the tablet as a whole (id., ¶ 10 and ¶ 11). Dr. Scheper also refers to the Barford patent (Ex 2005) as showing that the phrase “rate of dissolution” is used in the Henkel applications in a manner analogous to its use in the Barford patent and refers to the effect of the compressed portion on the rate of dissolution of the tablet as a whole (Ex 1021, ¶ 12). Dr. Scheper also testifies that, alternatively, the Henkel limitation could refer to measuring the total dissolution rate of one region and comparing it to the total time of a second region as the tablet as a whole dissolves (id., ¶ 10 and ¶ 11). Dr. Scheper

further testifies that the limitation in Henkel's claims requiring that the solidified solution or melt (i.e., non-compressed) region comprises no more than 40% of the surface of the detergent tablet ('434 application claim 41) or no more than 40% of the volume of the tablet ('578 application claim 44) implies that the dissolution rate in those claims is based "on a percent of the surface" (Ex 1021, ¶ 10) or "on a surface basis" (*id.*, ¶ 11). Dr. Scheper concludes his testimony by stating that, in his opinion, "the subject matter claimed in the '578 and '434 applications fail to teach or subject [sic, suggest] the claims of the '564 [P&G] patent" (*id.*, ¶ 13).

#### **D. Analysis of P&G's position**

Since P&G relies solely on the SOTAX dissolution rate limitation to distinguish its claims, we confine our comments to the obviousness of this limitation. P&G proffers at least three interpretations of the meaning of Henkel's "dissolution rate" limitation. It is unnecessary for us to decide which, if any, of these interpretations is correct because P&G has not met its burden of proof to establish facts sufficient for us to hold that one of ordinary skill in the art would have concluded that the determination of the dissolution rate "on a weight by weight basis, using a SOTAX dissolution test method" is not obvious.

The status quo in an interference is presumed to be correct. A party seeking to change the status quo has the burden of showing that it is entitled to the relief requested. 37 CFR § 41.121(b). This burden applies whether or not the motion is opposed. In a motion for no interference-in-fact the moving party bears the burden and must establish that all of one party's claims are patentably distinct from all of the other

party's claims, i.e., that the involved claims of one party are neither anticipated nor rendered obvious by the subject matter of the opponent's claims when each of the opponent's involved claims are treated as prior art. 37 CFR § 41.203(a) (definition of "interfering subject matter"). "Anticipate" and "obvious" have their usual meanings in patent law. To anticipate, the "prior art" claim must describe each element of the opponent's claim. In re Paulsen, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994). As in patentability and validity determinations, "prior art" which fails to describe, either expressly or inherently, each and every element of the opponent's claim does not anticipate. Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571, 7 USPQ2d 1057, 1064 (Fed. Cir. 1988); Kalman v. Kimberly Clark Corp., 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983). Thus, a showing that any claimed element is absent will defeat anticipation.

The determination of non-obviousness involves the familiar considerations mandated by Graham v. John Deere Co., 383 U.S. 1, 17-18, 146 USPQ 459, 467 (1966): (1) the scope and content of the prior art; (2) the level of ordinary skill in the relevant art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness, if any. See McNeil-PPC, Inc. v. L. Perrigo Co., 337 F.3d 1362, 1368, 67 USPQ2d 1649, 1653 (Fed. Cir. 2003). Obviousness (and non-obviousness) is determined from the perspective of a hypothetical person having ordinary skill in the art. Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 454, 227 USPQ 293, 297 (Fed. Cir. 1985); Kimberly-Clarke v. Johnson & Johnson, 745 F.2d 1437, 1453, 223 USPQ 603, 612-14 (Fed. Cir. 1984) (discussion the origin and

significance of the hypothetical ordinarily skilled artisan in detail). This hypothetical person of ordinary skill in the art is presumed to know all applicable prior art. In re Carlson, 983 F.2d 1032, 1038, 25 USPQ2d 1207, 1211 (Fed. Cir. 1992); In re Nilssen, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988).

To meet the burden of proof, consideration of both the prior art and the level of ordinary skill in the art cannot be avoided. Therefore, a party asserting no interference-in-fact must show (a) the existence of differences between its claims and the claims of its opponent and (b) that, in light of the scope and content of the prior art and the level of ordinary skill in the art, there is no prior art when combined with the opponent's claims that would render the movant's claimed subject matter as a whole obvious. It is the movant's burden to establish both the level of ordinary skill in the art and the scope and content of the prior art necessary to make the non-obviousness determination.

While P&G has pointed out differences between its claims and Henkel's claims, P&G has not established either the level of ordinary skill in the art or the scope and content of the prior art. Thus, P&G has not established that the subject matter of its claims would have been non-obvious over Henkel's claims to a person of ordinary skill in the art.

Specifically, P&G has not established that measuring dissolution rates on a weight by weight basis using a SOTAX dissolution test method is not part of the relevant prior art known to the hypothetical person having ordinary skill in the art. In other words, P&G has not established that the subject matter of P&G's claims, particularly measuring dissolution rates on a weight by weight basis using a SOTAX

dissolution test method, would not have been obvious to a person of ordinary skill in the art when the scope and content of the prior art and the level of ordinary skill in the art are considered. It is P&G's burden to provide some evidentiary basis to prove non-obviousness.

We do not mean to imply that P&G in attempting to show non-obviousness must prove that no prior art exists that, when combined with the "prior art" Henkel claims, would render the subject matter of its claims obvious. The proofs may, for example, be in the form of testimony of a person skilled in the relevant art, e.g., an inventor, that he is unaware of any prior art and/or other reasons that would teach or suggest modifying the subject matter of the "prior art" claims to account for the differences. "Other reasons" might include testimony that any modifications necessary to the "prior art" do not reflect conventional or routine practices or other matters well known in the art, expert testimony relating to lack of knowledge of information in the prior art which would supply motivation to modify the "prior art" claim(s), or that the claimed subject matter demonstrates unexpected results or one of the other secondary considerations of non-obviousness when compared to the "prior art" claim(s).

Here, P&G has focused solely on a comparison of the parties' claims and what the claims alone might teach or suggest without any consideration of the level of ordinary skill in the art and the scope and content of the prior art. In short, P&G has failed to provide an evidentiary basis to prove non-obviousness.

**E. Conclusion**

Since P&G has failed to meet its initial burden of proof rebutting the presumption that an interference-in-fact exists, we do not reach “HENKEL CORPORATION’S PAPER IN SUPPORT OF INTERFERENCE-IN-FACT” (Paper 82) or “HENKEL OPPOSITION 7” (Paper 85).

In view of the Decision (Paper 73), “HENKEL CORPORATION’S SUBMISSION OF EXHIBITS 2027 and 2028” (Paper 76), the “ORDER - MISCELLANEOUS” entering the amendments to Henkel applications ‘434 and ‘578 (Exs 2027 and 2028) (Paper 77) and the foregoing DECISION, this interference is being concurrently redeclared.

cc (via fax and first class mail):

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