

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* KISHOR KUMAR MISTRY,  
BRYAN DAVID GREY,  
HELEN MARIE CLARE COULTER,  
and JANINE ANDREA PRESTON

---

Appeal 2008-5489  
Application 10/479,945  
Technology Center 1700

---

Decided: January 13, 2009

---

Before BRADLEY R. GARRIS, CHUNG K. PAK, and  
CATHERINE Q. TIMM, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1 and 4-12. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

## STATEMENT OF THE CASE

The invention relates to the use of a fabric conditioner in a swellable polymer matrix for use in a detergent product. (Spec. 6, ¶ 2). Appellants' Specification dictates that the invention is the particular combination of the fabric conditioner as the active ingredient in a known swellable polymer matrix, the combination of which provides that the fabric conditioning particle is released in the rinse cycle, rather than in the wash cycle. (Spec. 7, ¶ 2). Claim 1 is illustrative of the subject matter on appeal:

1. A particulate composition comprising particles having a polymeric matrix including a fabric conditioning active ingredient in which the fabric conditioning active ingredient is released during a rinse cycle of a laundry operation and wherein the polymeric matrix is formed of a co-polymer of (a) an ethylenically unsaturated hydrophobic monomer with (b) a free base monomer wherein the free base monomer has the formula



wherein R<sub>1</sub> is hydrogen or methyl, R<sub>2</sub> is alkylene containing at least two carbon atoms, X is O or NH, R<sub>3</sub> is at least 4 carbon atoms and R<sub>4</sub> is hydrogen or a hydrocarbon group.

Appellants request review of the sole rejection maintained by the Examiner, namely, the rejection of claims 1 and 4-12 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over International Application Publication No. WO 97/24178 to Langley et al. ("Langley").

Since no claims are argued separately from the others, we decide this Appeal on the basis of representative independent claim 1. *See* 37 C.F.R. § 1.37(c)(1)(vii) ("When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single

claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone.”).

## II. ANTICIPATION

### A. ISSUE ON APPEAL

Appellants do not contend that the polymer matrix material taught by Langley is different from that claimed. (*See generally* App. Br.). Rather, Appellants contend that Langley does not teach a fabric conditioning agent as the active ingredient in the polymer matrix taught by Langley. (App. Br. 3 and 5). The Examiner contends that page 9, lines 18-23, of Langley teach that “suitable detergent active ingredients include fabric conditioners.” (Ans. 3 and 4).

An issue on appeal arising from the contentions of Appellants and the Examiner is: does Langley anticipate a “fabric conditioning active ingredient” included in a polymer matrix, as called for in claim 1, within the meaning of 35 U.S.C. § 102? We answer this question in the negative.

### B. FACTUAL FINDINGS

The following Findings of Fact (FF) are directed to the above identified issue on appeal:

1. Langley states that the active ingredient that is incorporated into the polymer matrix “can be any active ingredient which can usefully be incorporated into the detergent concentrate and which should preferably be released from the matrix only after dilution of the concentrate into the wash water.” (Langley 6, ll. 19-25).

2. The examples of “active ingredients” taught by Langley include an enzyme, bleach activator, an optical brightener or a photobleach. (Langley 6, ll. 25-28).

3. Langley also teaches that “[t]he detergent may also contain other conventional detergent ingredients such as, e.g., fabric conditioners including clays, foam boosters, suds suppressors, anti-corrosion agents, soil-suspending agents, anti-soil-redeposition agents, dyes, bactericides, optical brighteners, or perfumes.” (Langley 9, ll. 18-23).

#### C. PRINCIPLES OF LAW

“To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). “[R]ejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described ‘in the prior art.’” *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972). In order to anticipate, the reference “must clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.” *Id.*

Therefore, in order to anticipate, a reference must identify something falling within the claimed subject matter with sufficient specificity to constitute a description thereof within the purview of § 102. *In re Schaumann*, 572 F.2d 312, 317 (CCPA 1978).

#### D. ANALYSIS

Langley teaches that fabric conditioners may be included as a “conventional detergent ingredient” in a “detergent,” which we understand

to be the detergent product. (FF 3). However, nowhere does Langley dictate that these “other conventional detergent ingredients” are the same as the “active ingredients” that are *included* in the polymer matrix. (FF 1). Also, Langley does not specifically list fabric conditioners among the examples of active ingredients. (FF 2). Thus, Langley does not disclose the claimed invention without picking and choosing from unrelated teachings of the reference. *Arkley*, 455 F.2d at 587. Therefore, Langley does not teach the invention with sufficient specificity to anticipate claim 1 under 35 U.S.C. § 102. *Schaumann*, 572 F.2d at 317. Accordingly, we cannot sustain the Examiner’s rejection based on 35 U.S.C. § 102.

## II. OBVIOUSNESS

### A. ISSUE ON APPEAL

The Examiner contends that “it would have nonetheless been obvious to the skilled artisan to produce the claimed composition, as the reference teaches each of the claimed ingredients with the claimed proportions.” (Ans. 4). Appellants contend that there is no suggestion in Langley to include the “other conventional detergent ingredients” as the “active ingredient” in the polymer matrix taught by Langley and that the examples of active ingredients teach away from using a fabric conditioner as an active ingredient. (App. Br. 6).

An issue on appeal arising from the contentions of Appellants and the Examiner is: would it have been obvious to one of ordinary skill in the art, having the teachings of Langley, to include a fabric conditioner as an active ingredient in the polymer matrix? We answer this question in the affirmative.

## B. FACTUAL FINDINGS

The additional following Findings of Fact are directed to the above identified issue on appeal:

4. Langley states that the encapsulation of an active ingredient is advantageous in that the active ingredient remains entrapped within the polymer matrix particles under detergent storage and releases the active ingredient under wash conditions. (Langley 2, ll. 19-31; 20, ll. 13-16).

5. Appellants' Specification indicates that it was well known in the art that fabric conditioners "are applied separately from the laundry detergent product and are normally introduced into the laundry operation during one of the rinse cycles." (Spec. 1, ¶ 2).

## C. PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.").

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 127 S. Ct. at 1739. The question to be asked is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*, at 1740. “[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *Id.*

A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. *Merck & Co v. Biocraft Laboratories*, 874 F.2d 804, 807 (Fed. Cir. 1989). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments. *In re Susi*, 440 F.2d 442, 446 n.3 (CCPA 1971).

#### D. ANALYSIS

Applying the preceding legal principles to the Factual Findings in the record of this appeal, we determine that the Examiner has established a *prima facie* case of obviousness.

Langley does not provide any limitation as to what may constitute an active ingredient. Rather, Langley teaches that the active ingredient may be “any active ingredient which can usefully be incorporated into the detergent concentrate.” (FF 1). An active ingredient takes an active role in the laundering process, as opposed to an inert ingredient (such as a dye or perfume) which provides no active role in the laundering process. One of ordinary skill in the art would define a fabric conditioner as an ingredient

that takes an active role in the laundering process. Also, Langley clearly teaches that fabric conditioners are incorporated into a detergent product. (FF 3).

Further, we note that “optical brighteners” are considered both “active ingredients” and “other conventional detergent ingredients.” (FF 2 and 3). Thus, the mere designation of fabric conditioners as “other conventional detergent ingredients” does not distinguish these ingredients from active ingredients that one of ordinary skill in the art would include in a polymer matrix.

Although Langley also teaches that the active ingredient “should preferably be released from the matrix only after dilution of the concentrate into the wash water” (FF 1), we note that releasing a fabric conditioner in the rinse water is “after dilution of the concentrate into the wash water,” since the rinse water is provided after the wash water. Also, this requirement is preferential only, which along with the specific examples of “active ingredients” recited in Langley, does not teach away from other alternatives which would be apparent to one of ordinary skill in the art. *Merck*, 874 F.2d at 807; *Susi*, 440 F.2d at 446 n.3.

Appellants’ Specification indicates that it was well known to introduce fabric conditioners and detergents separately. (FF 5). Yet, Langley teaches including fabric conditioners in the detergent product. (FF 3). Thus, one of ordinary skill in the art at the time of the invention would have used the polymer matrix of Langley as a mechanism to keep the included fabric conditioners separate from the rest of the detergent product, since Langley teaches that encapsulating active ingredients in a polymer matrix keeps the active ingredients separate from the detergent. (FF 4). The

Appeal 2008-5489  
Application 10/479,945

use of the polymer matrix to keep the fabric conditioner separate from the detergent product would be no more than the predictable use of the polymer matrix according to its established functions. *KSR*, 127 S. Ct. at 1740.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Langley, to include a fabric conditioner as an active ingredient in the polymer matrix. Accordingly, we sustain the Examiner's rejection based on 35 U.S.C. § 103.

#### IV. CONCLUSION

In summary:

1. We do not sustain the Examiner's rejection of claims 1 and 4-12 under 35 U.S.C. § 102(b) as anticipated by Langley; and
2. We sustain the Examiner's rejection of claims 1 and 4-12 under 35 U.S.C. § 103(a) as obvious over Langley.

#### V. DECISION

We affirm the Examiner's decision.

#### VI. TIME PERIOD FOR RESPONSE

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

AFFIRMED

cam

JOANN VILLAMIZAR  
CIBA CORPORATION/PATENT DEPT.  
540 WHITE PLAINS ROAD  
P. O. BOX 2005  
TARRYTOWN NY 10591