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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/478,013	09/05/2014	Michael Lee Vatter	13045	1156

27752                      7590                      11/20/2018  
THE PROCTER & GAMBLE COMPANY  
Global IP Services  
Central Building, C9  
One Procter and Gamble Plaza  
CINCINNATI, OH 45202

EXAMINER
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BABSON, NICOLE PLOURDE

ART UNIT	PAPER NUMBER
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1619

NOTIFICATION DATE	DELIVERY MODE
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11/20/2018

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MICHAEL LEE VATTER, TIMOTHY JAMES FELTS, and  
JORGE MAX SUNKEL

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Appeal 2017-003326  
Application 14/478,013<sup>1</sup>  
Technology Center 1600

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Before FRANCISCO C. PRATS, TIMOTHY G. MAJORS, and  
RACHEL H. TOWNSEND, *Administrative Patent Judges*.

TOWNSEND, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a method of reducing hair frizz, which have been rejected as anticipated and obvious. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

STATEMENT OF THE CASE

“Traditionally, hair care compositions that deliver shine and control frizz are based on oils and silicone fluids.” (Spec. 1.) “Although these products may provide a shiny look, they also impart negative greasy look

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<sup>1</sup> Appellants identify the real party in interest as The Procter & Gamble Co. (Br. 1.)

and oily feel on the hair.” (*Id.*) Appellants’ invention “relates to a hair treatment or styling composition comprising viscoelastic particles” that provide anti-frizz benefit and smooth feel to the hair. (*Id.* at 1–2.)

Claims 16–19 are on appeal.<sup>2</sup> Claim 16 is representative and reads as follows:

16. A method of reducing hair frizz comprising:

a) applying a hair frizz reducing composition to the hair comprising from about 1 wt% to about 80 wt% of viscoelastic particles, wherein the viscoelastic particles comprise from about 0.5 wt% to about 50 wt% crosslinked polymer swelled in about 50 wt% to about 99.5 wt% volatile solvent; from about 99 wt% to about 20 wt% of a carrier; wherein the viscoelastic particle has a dried storage modulus of about 85 to about 10,000 Pascals, and a dried loss modulus of about 50 to about 10,000 Pascals; and wherein the carrier comprises less than 2 wt% nonvolatile solvent;

b) allowing the hair to dry;

c) depositing viscoelastic particles on the hair having dried storage modulus of about 85 to about 10,000 Pascals, and a dried loss modulus of about 50 to about 10,000 Pascals;

d) resulting in a hair frizz reduction.

(Br. 6.)

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<sup>2</sup> Claims 1–15 and 20 are also pending, but stand withdrawn from consideration. (Non-Final 1, (Jul. 30, 2015).)

The following grounds of rejection by the Examiner are before us on review:

Claims 16 and 19 under 35 U.S.C. § 102(a)(1) as anticipated over Pham<sup>3</sup> as evidenced by Momentive.<sup>4</sup>

Claims 16–19 under 35 U.S.C. § 103 as being unpatentable over Pham, as evidenced by Momentive, and Laurent.<sup>5</sup>

## DISCUSSION

### *Anticipation*

The Examiner finds that Pham teaches a non-sticky moisturizing cosmetic composition for hair that includes a suitable viscoelastic particle polymer, such as SFE 839, and water. (Final Action 3–4.) The Examiner relies on Momentive only to establish that SFE 839 has the claimed amount of viscoelastic particles in the claimed amount of volatile solvent—“5.5% silicone solids (i.e. cross-linked polymer) dispersed in cyclopentasiloxane (i.e. volatile solvent).” (*Id.*)

The Examiner notes that Pham teaches that the inventive non-sticky cosmetic compositions are applied to the hair and allowed to dry, and that Pham does not indicate the compositions are rinsed from the hair prior to drying. (*Id.*) The Examiner concludes, therefore, that the viscoelastic particle would necessarily be deposited on the hair upon drying of the composition that has been applied to it. (*Id.*) The Examiner notes further

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<sup>3</sup> Pham et al., US 2002/0131946 A1, published Sept. 19, 2002.

<sup>4</sup> SFE839 Technical Data Sheet, Momentive, available at <https://www.momentive.com/products/showtechnicaldatasheet.aspx?id=14443>; accessed July 17, 2015. (Non-Final 3.)

<sup>5</sup> Laurent et al., US 2005/0196368 A1, published Sept. 8, 2005.

that, in light of the fact that Pham teaches a composition that includes the components claimed, and that such compositions are applied to the hair and allowed to dry, that hair frizz reduction would necessarily result, even if that was not the intended use of the composition. (*Id.* at 4.) The Examiner notes that the preamble's recitation of the intended use is not considered a limitation because there is no active step in the body of the claim regarding that use; the claims, instead simply require application of the composition to the hair and letting it dry so as to deposit the viscoelastic particles on the hair, which steps result in hair frizz reduction. (*Id.*)

We agree with the Examiner's factual findings and conclusion that Pham anticipates claim 16.

Appellants argue that the Examiner has failed to establish how one of ordinary skill in the art would have known that choosing a composition as claimed in the carrier as claimed would have resulted in reducing hair frizz when applied to hair and allowed to dry thereon, and that for this reason the Examiner has failed to establish that all steps of the method are disclosed. (Br. 3.) That argument is not persuasive. The positive method steps of claim 16 are applying a particular composition to the hair and letting the hair dry. As the Examiner explained (Ans. 3–4), Pham describes applying its composition to the hair and provides no indication that the composition is removed before the hair dries. (Pham ¶¶ 57, 58.)

It is determined that the generally described inventive compositions of Pham are a non-sticky moisturizer only after example compositions within the scope of the invention have been applied and left to dry. (Pham ¶ 82 (evaluation for stickiness is determined “after product was applied and dried”, ¶¶86–88 (describing that Pham inventive composition were

evaluated for stickiness.) Thus, it is implicit in Pham's disclosure that the inventive non-sticky compositions are for topical application to the hair and not washed off, i.e., left to dry, to provide non-sticky moisturization.

“[W]hen considering a prior art method, the anticipation doctrine examines the natural and inherent results in that method without regard to the full recognition of those benefits or characteristics within the art field at the time of the prior art disclosure.” *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1377–78 (Fed. Cir. 2005) (“In some cases, the inherent property corresponds to a claimed new benefit or characteristic of an invention otherwise in the prior art. In those cases, the new realization alone does not render the old invention patentable.”). While Pham does not disclose that the composition would result in frizz reduction, i.e., “does not recognize” the composition would result in frizz reduction, that lack of disclosure is not dispositive in assessing whether Pham anticipates claim 16.

First, as the Examiner explained, Pham teaches applying a non-sticky moisturizing composition that includes viscoelastic compounds and water to hair and letting that composition dry on the hair. (Pham ¶¶ 4, 38, 54, 57, 58, 78, 82, 84.) Second, as the Examiner explains, Pham teaches a composition that includes a viscoelastic compound as claimed and water as claimed is such a non-sticky moisturizing composition. That is, composition 3B and 3C set forth in Example 2, Table 3 of Pham meet the claimed amount of carrier with less than 2% non-volatile solvent required by the claim (44.75 and 33.95 wt % water, respectively) and the amount of viscoelastic particles required by the claim (15 and 25 wt % SFE 839, respectively).

We note that the Pham compositions that include SFE 839 include additional ingredients. However, that does not preclude finding the

composition meets the claimed composition for application to the hair. That is because the claimed composition that is to be applied to the hair is recited using the open-ended transitional phrase “comprising.” In particular, the claim recites “a hair frizz reducing composition . . . comprising.” “In the patent claim context, the term ‘comprising’ is well understood to mean ‘including but not limited to’.” *CIAS, Inc. v. Alliance Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007). Thus, the presence of additional ingredients that are including in the inventive Pham composition 3B and 3C that include SFE 839 is not precluded by claim 16.

While Pham does not specifically teach applying compositions 3B and 3C to the hair and drying it thereon, we find that to be implicit in Pham’s disclosure that the Pham inventive compositions, “non-sticky moisturizer for . . . hair” (Pham ¶ 4), which compositions 3B and 3C are (Pham ¶ 78 (describing compositions prepared, including 3B and 3C, that are “within the scope of the invention”)), are products “for topical application to . . . hair” (Pham ¶ 57), to be “spread over and/or rubbed into the . . . hair” (Pham ¶ 58). We note that “no ‘actual creation or reduction to practice’ is required” to establish anticipation, nor does anticipation require disclosure in *ipsisssimis verbis*. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009). Rather, “[a]s long as the reference discloses all of the claim limitations and enables the ‘subject matter that falls within the scope of the claims at issue,’ the reference anticipates.” *Id.* Because Pham discloses all of the limitations of the composition as claimed and the method steps and enables the method steps with the claimed composition, we conclude that it anticipates claim 16.

As the Examiner noted, frizz reduction would have appeared to one of ordinary skill in the art to be an inherent property of the composition recited

in claim 16 that is dried upon the hair, because the only positive steps to reach that result that are claimed are applying the composition to the hair and letting it dry on the hair. Pham teaches those positive steps as noted above. We find the situation here to be analogous to those claims found inherently anticipated in *Perricone*.

In *Perricone*, independent claims reciting particular skin benefits together with methods of achieving those benefits (i.e., topically applying a particular compound) were found inherently anticipated over a prior art reference that applied the same composition in the same step required by the claim. *Perricone*, 432 F.3d at 1377–78. The Court held that even if the benefit was not recognized at the time of the prior art reference, the prior art still anticipated the claim. *Id.*

Similarly, here, that Pham did not recognize the inherent result to the hair after applying inventive compositions of Pham, such as 3B and 3C, to the hair and letting it dry thereon, would be less frizz after it was applied to hair and left to dry does not render the claimed invention patentable because Pham teaches a composition including the claimed elements is to be used in the claimed manner. *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1376 (Fed. Cir. 2001) (explaining that newly discovered results of known processes are not patentable because those results are inherent in the known processes). Composition 3B and 3C set forth in Example 2, Table 3 of Pham meet the claimed amount of carrier with less than 2% non-volatile solvent required by the claim (44.75 and 33.95 wt % water, respectively) and the amount of viscoelastic particles required by the claim (15 and 25 wt % SFE 839, respectively).

As the Examiner pointed out, Appellants' Specification teaches that SFE 839 is a viscoelastic particle within the scope of the claim (Spec. 8) and water is a carrier (Spec. 16) within the scope of the invention, and as the Examiner points out it has 0% non-volatile solvent in it. The composition of Pham is intended to be applied to the hair and left to dry thereon. (Pham ¶¶ 57–58 (describing application of the compositions of the invention to the hair or skin), ¶¶ 82, 84 (noting that after the film dries is when stickiness of the film is determined).) Thus, Appellants' claims is not a claim to a new product, or a new use of an old product. Appellants' claim does not recite any limitations that are not found in Pham.

Appellants' argument that the Specification states that “it has been found that viscoelastic particles that are swelled in non-volatile solvents create a greasy appearance on hair at the levels claimed (Comparative Example D)” (Br. 3), is not evidence establishing no anticipation. First, there is no requirement that the method is performed in some manner so as not to result in a greasy appearance of the hair. Second, as discussed above, Pham teaches all of the claimed components of the composition and the steps of the method and thus would be expected to achieve that which is claimed. Appellants have not provided any evidence to establish Pham's composition does not result in the claimed reduction of frizz, or amended their claims to include a claim element that differentiates Pham from the claimed composition.

Thus, for the foregoing reasons, we sustain the Examiner's rejection of claim 16 as being anticipated by Pham.

We note that claim 19 has the exact same compositional requirements as claim 16, and the exact same affirmative steps as required by claim 16.

The only difference between the two claims is the result observed of the hair after carrying out those steps. In claim 19, the result is increased hair shine. Appellants' arguments regarding this claim are the same as those made for claim 16. (Br. 3 (referring to both claims 16 and 19).) Just as hair frizz reduction would have been believed to be an inherent result of the composition of Pham by one of ordinary skill in the art because the compositional elements recited by the claim are present in Pham, and the steps required by the claim are taught by Pham, so too would an increase in hair shine have been believed to be an inherent result of the composition of Pham. For all the reasons discussed above, therefore, we do not find Appellants' arguments as to the patentability of claim 19 to be persuasive.

*Obviousness*

The Examiner finds that Pham does not teach the step of heat styling the hair, a limitation required by claims 17 and 18. (Non-Final 6.) The Examiner contends that such a step would have been obvious in light of the teachings of Laurent. (*Id.*) The Examiner points out that Laurent teaches a process for shaping hair fibers comprising applying a cosmetic composition containing glycerol to the hair and then heat styling it. (*Id.*) The Examiner finds that it would have been obvious to one of ordinary skill in the art to have replaced the Laurent glycerol composition with the Pham composition to "eliminate the unpleasant stickiness associated with glycerol compositions similar to those in Laurent." (*Id.*) The Examiner notes that Pham teaches that "previous hair and skin formulations comprising humectant polyols such as glycerol were unpleasant to the user due to a sticky, tacky feeling when

applied, which is overcome in their compositions (e.g. paragraph 0003, 0088).” (*Id.*)

Appellants repeat the arguments made that we noted above regarding the alleged failure of Pham and thus the failure of the Examiner to establish obviousness of the invention set forth in claim 16. (Br. 4–5.) Appellants further argue that the Examiner has failed to show a motivation to modify Pham with Laurent. (*Id.*) We do not find Appellants’ arguments persuasive. First, although the Examiner includes claims 16 and 19 in the obviousness rejection, it is clear that the Examiner’s obviousness rejection is only directed at the dependent claims that require heat styling. In particular, the Examiner states: “Regarding Claims 16 and 19, the teachings of Pham et al. are described supra.” (Non-Final 6.) Thus, we do not find any failure in the Examiner’s rejection to establish that Pham renders obvious claims 16 and 19.

Second, the Examiner has provided explicit reasoning supported by evidence in Pham as to why one of ordinary skill in the art would have found it obvious to substitute Pham’s composition for the glycerol composition of Laurent. The frizz reduction and shine enhancement would have been an inherent result of that obvious substitution, whether recognized or not. This is not a case where the Examiner has relied on an unknown property of prior art for a *teaching*. Rather, the express teachings of the references render the claimed method obvious and the claimed effects of frizz reduction and shine enhancement are simply a new heretofore unrecognized benefit that is the natural result of the combination of the Pham composition in the Laurent method and “of no patentable consequence.” *In re Kao*, 639 F.3d 1057, 1070 (Fed. Cir. 2011); *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981)

("[M]ere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not distinguish a claim drawn to those things from the prior art.").

Thus, for the foregoing reasons, we sustain the Examiner's rejection of claim 17 as being unpatentable over Pham and Laurent.

Claim 18 has not been argued separately and therefore falls with claim 17. 37 C.F.R. § 41.37(c)(1)(iv).

#### SUMMARY

We affirm the rejection of claims 16 and 19 under 35 U.S.C. § 102(a)(1) as anticipated over Pham as evidenced by Momentive.

We affirm the rejection of claims 16–19 under 35 U.S.C. § 103 as being unpatentable over Pham, as evidenced by Momentive, and Laurent.

#### TIME PERIOD FOR RESPONSE

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

AFFIRMED