United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/859,990	01/02/2018	Halil GEVGILILI	085137-572967	3713
143687 POLSINELL I	7590 08/27/202 PC (L'Oreal USA)	EXAMINER		
PO Box 14031	,	MATTISON, LORI K		
Kansas City, M	IO 64114-0310			
			ART UNIT	PAPER NUMBER
			1619	
			NOTIFICATION DATE	DELIVERY MODE
			08/27/2025	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DC-IPDocketing@Polsinelli.com LBrabson@Polsinelli.com patentdocketing@polsinelli.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HALIL GEVGILILI and SEMRA SENTURK-OZER¹

Appeal 2025-000420 Application 15/859,990 Technology Center 1600

Before: ULRIKE W. JENKS, JOHN G. NEW, and CHRISTOPHER G. PAULRAJ, *Administrative Patent Judges*.

NEW, Administrative Patent Judge.

DECISION ON APPEAL

¹ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a) (2021). Appellant identifies L'Oréal as the real party-in-interest. App. Br. 2.

I. SUMMARY

Appellant files this appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 39–45 as unpatentable under 35 U.S.C. § 103(a) as being obvious over the combination of Molenda et al. (US 2011/0165103 A1, July 7, 2011) ("Molenda"), Salvador et al. (US 2004/0115155 A1, June 17, 2004) ("Salvador"), Walker et al. (US 2016/0175209 A1, June 23, 2016) ("Walker"), Bourdin et al.² (FR 2 999 077 A1, December 11, 2012) ("Bourdin"), and A. Parsons, *Does The Reverse Hair Washing Method Really Work?*, BUSTLE (March 14, 2016); *available at*: https://www.bustle.com/articles/143339-i-tried-using-conditioner-before-shampoo-for-a-week-heres-what-happened (last visited August 11, 2025) ("Parsons").

We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.

II. NATURE OF THE CLAIMED INVENTION

Appellant's invention is directed to hair conditioning compositions and to methods for conditioning hair using such hair conditioning compositions. Spec. 69.

² An English-language translation of this reference is of record and used by the Examiner and Appellant, as well as the Board for the purposes of this Decision. All citations to Bourdin in this Decision are to the English translation of record.

III. REPRESENTATIVE CLAIM

Independent claim 39 is representative of the claims on appeal and recites:

39. A method of treating hair comprising application of a hair conditioning composition to the hair immediately prior to cleansing the hair with a shampoo according to a reverse wash routine, the reverse wash routine comprising:

applying the hair conditioning composition to the hair before applying a shampoo to the hair;

optionally rinsing the hair conditioning composition from the hair;

after applying the hair conditioning composition to the hair and optionally rinsing the hair conditioning composition from the hair, cleansing the hair with a shampoo, wherein the hair conditioning composition comprises:

- (a) about 1 to about 5 wt.%, of Bis(C13–15 alkoxy) PG-amodimethicone;
- (b) about 1 to about 5 wt.% of divinyldimethicone/dimethicone copolymer;
- (c) about 0.1 to about 4 wt.% of polyquaternium-53;
- (d) about 0.1 to about 5 wt.% of at least one cationic surfactant;
- (e) about 1 to about 15 wt.% of at least one non-silicone fatty compound;
- (f) about 75 to about 90 wt.% of water;
- (g) about 1 to about 10 wt.% of one or more water-soluble solvents;
- (h) about 0.01 to about 3 wt.% of one or more thickening agents; and
- (i) optionally, about 0.1 to 5 wt.% of one or more nonionic surfactants.

App. Br. 24.

IV. ISSUES AND ANALYSES

We review appealed rejections for reversible error based on the arguments and evidence Appellant provides for each issue Appellant identifies. 37 C.F.R. § 41.37(c)(1)(iv); *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (*cited with approval in In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (holding that "it has long been the Board's practice to require an applicant to identify the alleged error in the examiner's rejections")). "After evidence or argument is submitted by the applicant in response, patentability is determined on the totality of the record, by a preponderance of evidence with due consideration to persuasiveness of argument." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

We decline to adopt the Examiner's findings and conclusions that the claims are obvious over the cited prior art. We explain our reasoning below.

<u>1.</u> The Examiner's findings and conclusions

The Examiner notes that Appellant has elected a species of the composition of independent claim 39 for purposes of prosecution. Final Act.

- 2. The elected species names the following constituents:
 - A) one amino functional silicone-bis(C13-15 alkoxy) PG-amodimethicone;
 - B) nonionic silicone polymerdivinyldimethicone/dimethicone copolymer;
 - C) one ampholytic polymer- polyquaternium-53;
 - D) at least one cationic surfactant dipalmitoylethylhydroxyethylmonium methosulfate, behentrimonium chloride, and cetrimonium chloride;
 - E) At least non-silicone fatty compound- cetyl esters, cetyl alcohol, C14-15 alcohols, cetearyl alcohol, isotridecyl alcohol and myristyl alcohol;

- F) At least one nonionic surfactant- C1rC13 Pareth-3 and CirC13 Pareth-23;
- G) Thickening agent- present: hydroxyethylcellulose;
- H) At least one water-soluble solvent- isopropyl alcohol and glycerin;

-and-

I) At least one additional component- water, preservatives, pH adjuster and fragrance.

Id. at 2–3.

The Examiner finds that Molenda teaches aqueous hair conditioning compositions that condition damaged and healthy hair homogeneously, such that the conditioned hair has shine, elasticity, volume, body, and is manageable. Final Act. 4 (citing Molenda, Abstr., ¶¶ 9, 17). The Examiner finds that Molenda teaches that its compositions comprise an aqueous emulsion of divinyldimethicone/dimethicone copolymer at a concentration of 0.01 to 10 wt%. *Id.* (citing Molenda ¶ 17). The Examiner also finds that Molenda teaches that the aqueous divinyldimethicone/dimethicone copolymer emulsion further comprises C12–13 Pareth-23 and C12–13 Pareth-3 as nonionic emulsifiers, and is sold under the trade name Dow Corning HMW 2220. *Id.* (citing Molenda ¶ 18).

The Examiner finds that Molenda teaches that the conditioning composition comprises at least one cationic polymer as a conditioning agent, which can be polyquaternium-53, at 0.01–10 wt%. Final Act. 4 (citing Molenda ¶¶ 23, 31). The Examiner finds that Molenda teaches that the conditioning composition used in the method comprises one or more cationic surfactant(s), which may be behentrimonium chloride and/or cetyltrimethyl ammonium chloride (i.e., cetrimonium chloride) at a

concentration of 0.01–10 wt%. *Id.* (citing Molenda ¶¶ 28, 29, 31). The Examiner finds that Molenda further teaches that its compositions additionally comprise at least one C8–24 fatty alcohol, which can include myristyl alcohol, cetearyl alcohol, and cetyl alcohol at a concentration that is usually less than 20 wt%. *Id.* (citing Molenda ¶ 80).

The Examiner also finds that Molenda teaches that its composition comprises: (1) water; (2) nonionic conditioning agents, which can include glycerin, at 3%; (3) organic solvents, including isopropanol, at 10 wt% or less; (4) preservatives, including ethylene diamine tetraacetic acid, at 0.01–2.5%; (5) fragrances; (6) salts including sodium chloride; and (7) pH adjusting agents. Final Act. 4 (citing Molenda, Abstr., ¶¶ 22, 36, 38, 81, 84, 88, 128, Ex. 8–10).

The Examiner acknowledges that Molenda does not teach or suggest the inclusion of bis-(C13–15 alkoxy) PG-amodimethicone, or the claimed range for the concentration of water, dipalmitoylethylhydroxyethylmonium methosulfate, cetyl esters, CIS alcohols, isotridecyl alcohol, and hydroxyethylcellulose. Final Act. 5. The Examiner further acknowledges that Molenda neither teaches nor suggests the claimed step of "after applying the hair conditioning composition to the hair and optionally rinsing the hair conditioning composition from the\ hair, cleansing the hair with a shampoo." *Id.*

The Examiner therefore points to Salvador, which teaches a hair conditioning composition comprising about 20% to about 95% water, and about 0.01% to about 10% of a hydrophobic silicone compound. Final Act. 5 (citing Salvador ¶¶ 43, 97). The Examiner notes that Salvador discloses that bis-(C13–C15 alkoxy) PG amodimethicone is a commercially

available hydrophilic silicone for use in the hair conditioner as a silicone conditioning agent. *Id.* (citing Salvador ¶¶ 100, 105, 108). The Examiner also finds that Salvador teaches that the combination of a high melting point fatty compound, such as cetyl stearate and cetyl palmitate (i.e., cetyl esters) at about 0.1% to about 15%, together with a cationic surfactant and an aqueous carrier, provides a gel matrix. *Id.* at 5–6 (citing Salvador ¶ 86, 88, 91). The Examiner finds Salvador teaches that such a gel matrix is suitable for providing various conditioning benefits, such as a slippery and slick feel on wet hair, hair softness, moisturized feel, and fly-away control on dry hair. *Id.*

The Examiner further finds that Salvador teaches that inclusion of a cellulose polymer, hydroxyethyl cellulose, at about 0.001% to about 5%, is useful in providing hair volume control benefits, while not decreasing conditioning benefits, such as fly-away control. *Id.* (citing Salvador ¶¶ 46, 48, 50).

The Examiner next turns to Walker, which teaches a hair conditioning composition comprising from about 0.1% to about 20% of one or more unsaturated fatty materials selected from a group consisting of: (1) an unsaturated fatty acid; (2) an unsaturated fatty alcohol; (3) an unsaturated amine; (4) an unsaturated amide; and (5) an unsaturated phospholipid. Final Act. 6 (citing Walker Abstr.). The Examiner finds that Walker teaches inclusion of about 0.05% to 20% of a lipid enhancing agent, including tridecyl alcohol (1-tridecanol, tridecanol, isotridecanol/isotridecyl alcohol), myristyl alcohol (1-tetradecanol), pentadecyl alcohol (1-pentadecanol, pentadecanol, i.e., C-15 alcohol), cetyl alcohol, stearyl alcohol and cetearyl alcohol. *Id.* (citing Walker ¶ 31, Tables 1–9). The Examiner finds that

Walker defines a "lipid enhancing agent" as a material which further improves upon the hair fiber benefit provided by the lipid, such as decreased combing. *Id.* (citing Walker ¶ 24).

The Examiner then points to Bourdin, which teaches hair compositions, preferably conditioners. Final Act. 6 (citing Bourdin, 10). The Examiner finds that Bourdin teaches surfactants for use in its compositions, including behenyltrimethylammonium chloride, cetyltrimethylammonium chloride, and dipalmitoylethylhydroxyethylammonium methosulphate at between 0.01 and 30% by weight. *Id.* (citing Bourdin, 4, claims 6, 7).

The Examiner finds that Parsons teaches that "the internet's current favorite hair hack" is the "Reverse Wash System" Final Act. 6 (quoting Parsons, 2). The Examiner notes that Parsons states that the "Reverse Wash System" is "a method to achieve more voluminous hair by applying conditioner *before* shampoo." *Id.* (quoting Parsons, 2 (emphasis in original)). The Examiner finds that Parsons teaches that the Reverse Wash System consists of the following steps: "1 Apply conditioner to wet hair. Let it soak in for a minute or more. Rinse! 2 Shampoo as you would normally. So there you have it!" *Id.* at 7 (quoting Parsons 3). The Examiner finds that Parsons thus teaches applying a hair conditioner to hair immediately prior to cleansing the hair. *Id.*

The Examiner finds that Parsons teaches that the Reverse Wash System permits wide-toothed combs to easily comb through hair and that the conditioned hair had noticeably increased volume. Final Act. 7 (citing Parsons 5, 6). The Examiner notes that Parsons teaches that the conditioned

hair still had volume even after heat styling, and was soft and frizz-free in addition to having more volume. *Id.* (citing Parsons, 11, 15).

The Examiner concludes that it would have been obvious to a person of ordinary skill in the art to have modified Molenda's composition and method by modifying the concentration of water to about 20% to about 95%, the concentration of glycerin to 3%, and the concentration of isopropanol to an amount exceeding 10%, and adding about 0.01% to about 10% bis-(C13–C15 alkoxy) PG amodimethicone, about 0.1% to about 15% cetyl stearate and cetyl palmitate (i.e., cetyl esters), 0.001% to about 5% hydroxyethylcellulose, about 0.05% to 20% of lipid enhancing agents including tridecyl alcohol (1-tridecanol, tridecanol, isotridecanol/isotridecyl alcohol) and pentadecyl alcohol, and 0.01–30% by weight dipalmitoylethylhydroxyethylammonium methosulphate, and applying the hair conditioning composition to wet hair, letting it soak in for a minute or more, optionally rinsing, and then shampooing, as suggested by the combined teachings of Molenda, Salvador, Walker, Bourdin, and Parsons. Final Act. 7.

The Examiner reasons that the prior art references are all directed to hair conditioners which condition and volumize hair and a method to do so. Final Act. 8. The Examiner notes that bis-(C13–C15 alkoxy) PG amodimethicone is a hydrophilic silicone hair conditioning agent; and that dipalmitoylethylhydroxyethylmonium methosulfate is a preferred surfactant for hair conditioners that is functionally equivalent to Molenda's behentrimonium chloride and cetyltrimethyl ammonium chloride hair conditioning surfactants. *Id.* The Examiner also finds that cetyl stearate and cetyl palmitate (i.e., cetyl esters) are high melting point fatty compounds

used in hair conditioners which interact with other reagents to produce a gel matrix to provide conditioning benefits; and that tridecyl alcohol (1-tridecanol, tridecanol, isotridecanol/isotridecyl alcohol) and pentadecyl alcohol (1-pentadecanol, pentadecanol; i.e., C-15 alcohol) are functionally equivalent to Molenda's fatty alcohols, all of which are taught as lipid enhancing agents in hair conditioners. *Id*.

Furthermore, the Examiner reasons that hydroxyethylcellulose is cellulose polymer used in hair conditioners to provide hair volume control benefits while not deteriorating conditioning benefits. *Id.* The Examiner reasons that a skilled artisan would have been motivated to combine the references, with a reasonable expectation of success, to meet the needs of consumers by providing a composition and method for conditioning damaged hair which increases conditioning and decreases combing and flyaway control, while still providing noticeably increased volume. *Id.*

<u>2.</u> <u>Analysis</u>

We are not persuaded that the Examiner has satisfactorily established a *prima facie* case that the claims on appeal would have been obvious over the cited prior art.

Molenda, Salvador, Walker, and Bourdin, that are relied upon by the Examiner as teaching the constituents, each present large numbers of alternative constituents and/or ranges for each of those that the Examiner relies upon. By way of example, Molenda teaches over a hundred suitable cationic polymers in addition to the claimed polyquaternium-53, including polyquaternium-1 through polyquaternium-87, twenty-one silicone

Appeal 2025-000420 Application 15/859,990

quaternium species, and "polymers known with their CTFA category name Quaternium" (e.g., 20 species listed), amongst others. Molenda ¶¶ 23–26.

The Examiner concludes that a person of ordinary skill in the art would have found it obvious to modify the composition of Molenda, with the teachings of Salvador, Walker, and Bourdin by:

[M]odifying the amount of water to be about 20% to about 95%, the amount of glycerin to be 3%, and the amount of isopropanol to an amount exceeding 10%, and adding about 0.01% to about 10% bis-(C13–C15 alkoxy) PG amodimethicone, about 0.1% to about 15% cetyl stearate and cetyl palmitate (i.e. cetyl esters), 0.001 to about 5% hydroxyethylcellulose, about 0.05% to 20% of lipid enhancing agents including tridecyl alcohol (1-tridecanol, tridecanol, isotridecanol/isotridecyl alcohol) and pentadecyl alcohol (1-pentadecanol, pentadecanol; i.e.[,] 15 alcohols), and 0.01–30% by weight dipalmitoylethylhydroxyethylammonium methosulphate.

Final Act. 7–8. The Examiner reasons that:

Bis-(C13-C15 alkoxy) PG amodimethicone is a hydrophilic silicone hair conditioning agent; dipalmitoylethylhydroxyethylmonium methosulfate is a preferred surfactant for hair conditioners that is functionally equivalent to Molenda's behentrimonium chloride and cetyltrimethyl ammonium chloride hair conditioning surfactants; cetyl stearate and cetyl palmitate (i.e.[,] cetyl esters) are high melting point fatty compounds used in hair conditioners which interact with other reagents to produce a gel matrix to provide conditioning benefits; tridecyl alcohol (1tridecanol, tridecanol, isotridecanol/isotridecyl alcohol) and pentadecyl alcohol (1-pentadecanol, pentadecanol; i.e. c15 alcohol) functionally equivalent to Molenda's fatty alcohols all of which are taught as lipid enhancing agents in hair conditioners; and hydroxyethylcellulose is cellulose polymer used in hair conditioners to provide hair volume control benefits while not deteriorating conditioning benefits.

Id. at 8. The Examiner concludes that:

With regard to the recited pH range and amounts of bisamodimethicone/aminofunctional (C13–C15 alkoxy) PG silicone, divinyldimethicone/dimethicone copolymer/nonionic polymerpolyquaternium-53/ampholytic dipalmitoylethylhydroxyethylmonium methosulfate. behentrimonium chloride+ cetrimonium chloride/cationic surfactant, water, hydroxyethyl cellulose/thickening agent, fatty alcohol/non-silicone fatty compound, glycerin+ isopropanol/ water-soluble solvent, the combined teachings Molenda, Salvador, Walker and Bourdin suggest the parameters with amounts that overlap or fall within the claimed range.

Id. at 8–9.

We recognize that Molenda, Salvador, Walker, and Bourdin are all directed to hair conditioner compositions. Consequently, a mere mixing and matching of known constituents disclosed by the various references as components of hair conditioner compositions would likely be obvious to a person of ordinary skill in the art if the resulting composition yields no more than just another hair conditioner, even if drawing from amongst a diverse possibility of alternatives. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007) (holding that the "combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results"). In making such an obviousness determination, the Court explained, "it will be necessary ... to look to interrelated teachings of multiple patents ... and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *Id.* at 418.

However, we find that there is a larger problem with the Examiner's rejection of the claims on appeal.

Parsons is relied upon by the Examiner as teaching the limitations of claim 39 reciting:

[A]pplying the hair conditioning composition to the hair before applying a shampoo to the hair;

optionally rinsing the hair conditioning composition from the hair;

after applying the hair conditioning composition to the hair and optionally rinsing the hair conditioning composition from the hair, cleansing the hair with a shampoo.

App. Br. 24 (Claims App'x).

Parsons refers to this procedure as the "Reverse Wash System." Parsons, 2. However, Parsons expressly cautions the reader with a "Warning: Not all shampoo and conditioners are created for this purpose. You're best using a system that's designed to work in reverse." *Id.*; *see also id.* at 3 ("[I]t's recommended to use a shampoo-conditioner combo that's specifically formulated for this purpose [i.e., the reverse washing method]").

Furthermore, Appellant's Specification, and the Declaration of Dr. Semra Senturk-Ozer (the "Senturk-Ozer Declaration"), a named inventor of the claimed invention, disclose that hair conditioners formulated for the reverse wash method recited in the claims were well known in the art at the time of filing. *See* Spec. Ex. 2(a) (comparing results of the claimed composition "in a reverse wash routine with a commercial benchmark reverse wash conditioner in a home use test."); Senturk-Ozer Decl. ¶ 9 (testifying that the commercial benchmark reverse wash conditioner used in Example 2(a) of the Specification was TRESemmé Beauty-Full Volume Shampoo and Conditioner, which is also disclosed by Parsons as being "a system that's designed to work in reverse." *Id.* (citing Parsons 2–3)).

To summarize, hair conditioners formulated to work in the claimed reverse wash method were known in the art at the time of Appellant's filing. However, none of the other references cited by the Examiner (Molenda, Salvador, Walker, or Bourdin) teach or suggest that their hair conditioner compositions are designed or formulated for a reverse wash method application. For example, Molenda teaches that "[t]he compositions of the present invention can be either a conditioning-cleansing compositionshampoo or a conditioning composition typically used after use of cleansing compositions." Molenda ¶ 14. Molenda further teaches that, for an exemplary embodiment "[t]he above composition was used as a leave-in conditioner from a pump spray bottle on damaged hair which was freshly washed and towel-dried. In dry state it was observed that hair was easily comb[-]able, had elasticity, volume and body." *Id.* ¶ 97; *see also id.* ¶ 99 (same).

Similarly, Salvador teaches that:

Although some consumers prefer the ease and convenience of a shampoo which includes conditioners, a substantial proportion of consumers prefer the more conventional conditioner formulations which are applied to the hair as a separate step from shampooing, usually subsequent to shampooing. Conditioning formulations can be in the form of rinse-off products or leave-on products, and can be in the form of an emulsion, cream, gel, spray, and mousse.

Salvador ¶ 6. And Walker teaches that:

The most common hair care rinse-off compositions are shampoos and rinse-off conditioners. Shampoos contain detersive surfactants and they are used for cleansing hair, while rinse-off conditioners are typically used after shampoo, they are substantially free of detersive surfactants, they contain conditioning agents to improve hair feel, reverse hair damage and protect against further damage.

Walker ¶ 15.

None of the references cited by the Examiner teach or suggest that their compositions are formulated, or suitable, for application in the reverse wash system recited in the claims. The Examiner has therefore not established a nexus between the commercially-available reverse wash systems that were known in the art, as taught by Parsons, and the compositions of Molenda, Salvador, Walker, or Bourdin, which do not teach or suggest that their compositions are suitable for that method. In other words, the Examiner has not established a reason why a person of ordinary skill in the art would have been motivated, with a reasonable expectation of success, to combine the teachings of Molenda, Salvador, Walker, and Bourdin to arrive at a hair conditioner composition that could be used in the claimed reverse-wash manner. This is especially so in view of the teachings of Parsons, cautioning the viewer against using hair conditioners not specially formulated for the reverse wash method.

Because we find that the Examiner has thus failed to establish a *prima* facie case that the claims are obvious over the cited prior art, we reverse the Examiner's rejection of independent claims 39 and 44. Furthermore, because dependent claims 40–43 and 45 depend from the independent claims, we similarly reverse the Examiner's rejection of those claims.

V. CONCLUSION

The rejection of claims 39–45 as unpatentable under 35 U.S.C. § 103 is reversed.

REVERSED

Appeal 2025-000420 Application 15/859,990

DECISION SUMMARY

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
39–45	103	Molenda, Salvador, Walker, Bourdin, Parsons		39–45