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LONDA, BRUCE S. NORRIS MCLAUGHLIN & MARCUS, PA 875 THIRD AVE, 8TH FLOOR NEW YORK, NY 10022			PALLAY, MICHAEL B	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MARTIN HOFFMANN and CLAUDIA ARBTER

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Appeal 2014-004146  
Application 12/182,795<sup>1</sup>  
Technology Center 1600

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Before JEFFREY N. FREDMAN, RICHARD J. SMITH, and  
DAVID COTTA, *Administrative Patent Judges*.

COTTA, *Administrative Patent Judge*.

#### DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to an aqueous composition for conditioning keratin fibers. The Examiner rejected the claims on appeal as obvious under 35 U.S.C. § 103(a).

We affirm.

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<sup>1</sup> The real party in interest is Kao Germany GmbH. Reel/frame 030186/0381; *see also* App. Br. 2.

STATEMENT OF THE CASE

Claims 1–3, 5–7, 9–11, 15, 18, and 20 are on appeal.<sup>2</sup> Claim 1, the only independent claims on appeal, reads as follows:

1. An aqueous composition for conditioning keratin fibres comprising at least one cationic polymer with multiple cationic sites and with multiple ester groups in its molecule, at least one cationic cellulose derivative and at least one cationic silicone compound selected from the group consisting of Quaternium-80 and quaternized graft polymers of organopolysiloxane and polyethyloxazoline, wherein the weight ratio of cationic polymer to cationic cellulose derivative is 0.1:1 to 2:1.

As the result of a restriction requirement, Appellants elected the following species without traverse: “cationic cellulose derivative polyquaternium-67, cationic silicone compound quaternium-80, cationizable silicone compound amodimethicone, fatty alcohol cetylstearyl alcohol, and emulsifier behentrimonium chloride.” Ans. 2.

We limit discussion and consideration to the elected species, and take no position respecting the patentability of the broader generic claims, including the remaining, non-elected species. *See Ex parte Ohsaka*, 2 USPQ2d 1461 (Bd. Pat. App. Int. 1987).

The claims stand rejected as follows:

Claims 1–3, 5–7, 9–11, 18, and 20 under 35 U.S.C. § 103(a) as

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<sup>2</sup> Appellants identify claims 8, 13, 14, and 19 as also on appeal. App. Br. 1. These claims were withdrawn from consideration under 37 C.F.R. 1.142(b) as being drawn to nonelected inventions and species. Final Act. 2. Accordingly, we do not consider these claims to be part of this appeal.

unpatentable over the combination of Brautigam<sup>3</sup> and the LUSTREPLEX™ Brochure.<sup>4</sup>

Claims 1–3, 5–7, 9–11, 15, 18, and 20 under 35 U.S.C. § 103(a) as unpatentable over the combination of Brautigam, the LUSTREPLEX™ Brochure, and Lighten.<sup>5</sup>

REJECTION OF CLAIMS 1–3, 5–7, 9–11, 18, AND 20 OVER  
BRAUTIGAM AND THE LUSTREPLEX™ BROCHURE

The Examiner found that Brautigam discloses conditioning compositions comprising cationic conditioning agents. Final Act. 4. Among the suitable cationic agents disclosed are quaternium 80 (the elected cationic silicone compound) and polyquaternium 10. *Id.* The Examiner further found that Brautigam teaches that cationic conditioning agents could be used “alone or in combination with each other.” *Id.* The Examiner determined, however, that Brautigam “does not specifically disclose polyquaternium-67 [the elected cationic cellulose derivative] and polyquaternium-70 [a cationic polymer with multiple cationic sites and with multiple ester groups].” *Id.* at 5.

The Examiner found that the LUSTREPLEX™ Brochure taught the “addition of polyquaternium-70 and dipropylene glycol to ‘any shampoo system to create lustrous, healthy-looking hair by controlling the onset of frizz, retaining its natural shine and conditioning the hair.’” *Id.* The LUSTREPLEX™ Brochure also discloses that “LUSTREPLEX (i.e.,

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<sup>3</sup> Brautigam et al., US Patent Publication No. 2005/0152863 A1, published July 14, 2005 (“Brautigam”).

<sup>4</sup> LUSTREPLEX™ Brochure, Croda Inc., dated Nov. 7, 2005 (“LUSTREPLEX™ Brochure”).

<sup>5</sup> Lighten, US Patent No. 5,007,531, issued Apr. 16, 1991 (“Lighten”).

polyquaternium-70 and dipropylene glycol) (1%), polyquaternium-67 (0.5%), and polyquaternium-10 (0.2%)] are all anionic compatible quaternaries on the market for use as conditioners in shampoo formulations.” *Id.* at 5–6.

The Examiner concluded that it would have been obvious to “add the polyquaternium-70 and polyquaternium-67 of ‘LUSTREPLEX’ to the composition of Brautigam et al., or to add such polyquaternium-70 to the composition of Brautigam et al. and substitute such polyquaternium-67 for the polyquaternium-10 of the composition of Brautigam.” Ans. 3. The Examiner concluded that it would have been obvious to do so because it is obvious to combine compositions that are taught to be useful for the same purpose and because Brautigam “specifically teaches that cationic conditioning agents are used in combination with each other.” Final Act. 7.

Appellants contend that the person of ordinary skill would not be motivated to combine a cationic polymer, cationic cellulose derivative and a cationic silicone compound into a single composition because, “after reading the cited prior art, a skilled artisan would be discouraged from combining all three cationic compounds.” App. Br. 6.

We agree with the Examiner that it would have been obvious to add polyquaternium 67 and 70 to the composition of Brautigam because Brautigam specifically teaches the addition of cationic polymers (including polyquaternium 10) as conditioning agents, *see* Brautigam ¶¶ 66 and 67, and because the LUSTREPLEX™ Brochure teaches that polyquaternium 10, 67 and 70 (as well as Guar HTC) are all “anionic compatible quaternaries on

the market” as conditioners in shampoo formulations.<sup>6</sup> LUSTREPLEX™ Brochure 5. *See In re Kerkhoven*, 626 F.2d 846, 850 (CCPA 1980) (“It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose.”); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. at 417 (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.”).

Appellants argue that the LUSTREPLEX™ Brochure teaches away from the claimed combination because it teaches “the *detrimental effects* of PQ-10 and PQ-67.” Reply Br. 3. As evidence, Appellants assert that the LUSTREPLEX™ Brochure’s teaches that:

- Polyquaternium 67 “displays the same amount of dulling as a control sample that did not contain any cationic polymer;”
- Polyquaternium 67 “showed no difference in humidity resistance than the control, which suggests that PQ-67 is completely worthless when it comes to humidity resistance.”
- Polyquaternium 67 “did not help to maintain the shine of the hair;” and
- Polyquaternium 67 “exhibited noticeable build-up.”

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<sup>6</sup> Appellants do not dispute that it would have been obvious to add polyquaternium 70 to the composition of Brautigam. App. Br. 6 (“[T]he prior art would lead the skilled artisan to combining only a cationic polymer (Polyquaternium-70) with a cationic silicone.”).

Reply Br. 3–4.<sup>7</sup>

We disagree with Appellants that the effects of polyquaternium 67 are “detrimental” at least with respect to dulling, shine, and humidity resistance. With respect to dulling, the LUSTREPLEX™ Brochure teaches that polyquaternium 67 “displays about the same amount of dulling as the control shampoo.” LUSTREPLEX™ Brochure 9. With respect to humidity resistance, the LUSTREPLEX™ Brochure teaches polyquaternium 67 “showed no visual difference from the control.” *Id.* at 7. And with respect to shine retention, the LUSTREPLEX™ Brochure teaches that polyquaternium 67 may not have “help[ed] maintain the shine of the hair,” but its 84% shine retention exceeded the control’s 80% shine retention. *Id.* at 8. Thus, for dulling, shine, and humidity resistance, polyquaternium 67 exhibited no detrimental effects as compared to the control.

The LUSTREPLEX™ Brochure does teach that polyquaternium 67 displays a “build-up tendency.” It states:

The images on the right are the virgin hair tresses treated with 3 cycles of conditioning active shampoo followed

**Least Build-up** LUSTREPLEX>Guar HTC>Polyquaternium-67> Polyquaternium-10 **Most Build-up**

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<sup>7</sup> Appellants also cite to evidence regarding the “detrimental effects” of polyquaternium 10. We need not address the LUSTREPLEX™ Brochure’s teachings regarding the effects of polyquaternium 10 here because the Examiner did not propose to add polyquaternium 10 to the composition of Brautigam. Rather, the Examiner asserted that it would have been obvious to “add the polyquaternium-70 and polyquaternium-67 of LUSTREPLEX to the composition of Brautigam et al., or to add such polyquaternium-70 to the composition of Brautigam et al. and substitute such polyquaternium-67 for the polyquaternium-10 of the composition of Brautigam.” Ans. 3. Either of these alternatives would satisfy all of the limitations of claim 1 even if polyquaternium 10 – which is disclosed in Brautigam – were omitted.

by 3 wash cycles with the control shampoo. The images show LUSTREPLEX is almost completely washed from the hair fiber indicating it will not build up. . . . The other active shampoos display a build-up tendency.

*Id.* at 14. Notwithstanding this teaching, we find that the person of ordinary skill in the art would not have been discouraged from using polyquaternium 67. That polyquaternium 67 may be somewhat inferior to polyquaternium 70 with respect to some properties does not render the use of polyquaternium 67 nonobvious. *See In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994) (finding the use of epoxy obvious even though the art taught “deficiencies of epoxy-impregnated material,” noting “[a] known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use”). This is particularly true given that the LUSTREPLEX™ Brochure also teaches that polyquaternium 67 provides benefits. *See e.g., id.* at 10 (teaching that polyquaternium 67 reduces the combing force required to detangle unbleached hair by 30%, an amount comparable to the 29% force reduction provided by polyquaternium 70).

Appellants argue that the LUSTREPLEX™ Brochure does not teach a single composition comprising both polyquaternium 67 and polyquaternium 70. App. Br. 6. Appellants assert “LUSTREPLEX *substitutes* Polyquaternium-70 with Polyquaternium-67, suggesting to the skilled artisan that the polymers cannot or should not be used in the same composition.” *Id.* at 7. We disagree.

The LUSTREPLEX™ Brochure provides comparative testing information for four separate compositions comprising four different anionic compatible quaternaries. That the four anionic compatible quaternaries were

tested separately does not mean that they cannot be combined and used together. Brautigam expressly teaches that multiple cationic conditioning agents can be combined. *See* Brautigam ¶ 71 (“Cationic conditioning agents are used alone or in combination with each other.”); *see also id.* ¶ 69 (“It is also possible to use mixtures of various cationic polymers.”). Moreover, Appellants do not point to any specific teaching in the LUSTREPLEX™ Brochure that the four anionic compatible quaternaries cannot be used together. The LUSTREPLEX™ Brochure’s silence with respect to combinations of quaternaries should not be taken as teaching away from such combinations. *See DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1364 (Fed. Cir. 2006) (“[M]ere failure to discuss immediate use of his leuco indigo *solution* for dyeing is not the same thing as Brochet stating in his article that . . . his leuco indigo solution may only be concentrated in paste form. We will not read into a reference a teaching away from a process where no such language exists.”).

Accordingly, we affirm the Examiner’s rejection of claim 1 as unpatentable over the combination of Brautigam and the LUSTREPLEX™ Brochure. Because they were not argued separately, claims 2, 5–7, 9–11, 18, and 20 fall with claim 1.

REJECTION OF CLAIMS 1, 2, 5–7, 9–11, 15, 18, AND 20 OVER  
BRAUTIGAM, LUSTREPLEX™ BROCHURE, AND LIGHTEN

Appellants challenge the Examiner’s rejection of claims 1, 2, 5–7, 9–11, 15, 18, and 20 over Brautigam, the LUSTREPLEX™ BROCHURE and Lighten using the same arguments discussed above. App. Br. 9. We affirm the Examiner’s rejection of claims 1, 2, 5–7, 9–11, 15, 18, and 20 for the reasons discussed above.

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REJECTIONS OF CLAIM 3 OVER BRAUTIGAM AND LUSTREPLEX™  
BROCHURE ALONE OR WITH LIGHTEN

The Appeal brief includes a separate section addressing the Examiner's rejection of claim 3 over the combination of Brautigam and the LUSTREPLEX™ Brochure. It also includes a separate section addressing the Examiner's rejection of claim 3 over the combination of Brautigam, the LUSTREPLEX™ Brochure, and Lighten. Both of these sections, however, simply incorporate the arguments discussed above. App. Br. 9. We do not find these arguments persuasive for the reasons already discussed.

SUMMARY

For these reasons and those set forth in the Examiner's Answer, the rejections of claims 1–3, 5–7, 9–11, 15, 18, and 20 are affirmed.

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).

AFFIRMED