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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte IMKE MEYER and MIRJAM KNUPFER

Appeal 2019-006534
Application 14/784,418
Technology Center 1600

Before DONALD E. ADAMS, RICHARD M. LEBOVITZ, and
MICHAEL A. VALEK, *Administrative Patent Judges*.

ADAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from Examiner’s decision to reject claims 1–7, 10–12, 14–16, 20, and 21 (*see* Br. 3). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as “Symrise AG” (Appellant’s March 21, 2019 Appeal Brief (Br.) 1).

STATEMENT OF THE CASE

Appellant’s disclosure “relates to the area of cosmetics and refers to the use of sclareolide as a potent agent for lightening skin and hair” (Spec.

¶ 2). Claims 1, 2, 10–12, 14, and 15 are reproduced below:

1. A composition comprising

(a) sclareolide; and

(b1) at least one skin lightening agent

wherein the sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition; and,

the skin lightening agent is present in an amount of from 0.001 to about 5% by weight based on the total weight of the composition.

(Br. 35.)

2. The composition of claim 1, wherein the skin lightening agent (component b1) is selected from the group consisting of kojic acid and phenylethyl resorcinol, beta- and alpha-arbutin, hydroquinone, nicotinamide, dioic acid, Mg ascorbyl phosphate and vitamin C and its derivatives, mulberry extract, Bengkoang extract, papaya extract, turmeric extract, nutgrass extract, licorice extract (containing glycyrrhizin), alpha-hydroxy-acids, 4-alkylresorcinols, 4-hydroxyanisole and mixtures thereof.

(*Id.*)

10. The composition of claim 1, which is a cosmetic composition, a pharmaceutical composition or a dietary supplement composition.

(*Id.* at 37.)

11. A medicament comprising the composition of claim 1 including an effective amount of sclareolide for fighting diseases requiring an inhibition of melanin formation in melanocytes,

wherein sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition.

(Id.)

12. A medicament comprising the composition of claim 1 including an effective amount of sclareolide for fighting diseases requiring an inhibition of interleukin-(IL-) 1a biosynthesis,

wherein sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition.

(Id.)

14. The composition of claim 1, comprising an effective amount of sclareolide for lightening skin and hair,

wherein sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition.

(Id.)

15. A composition comprising the combination of

(a) sclareolide, and

(b) at least one skin lightening agent

wherein the skin lightening agent is phenylethyl resorcinol, and

wherein sclareolide and phenylethyl resorcinol are present in a ratio of about 20:80 to about 80:20 by weight.

Grounds of rejection before this Panel for review:

Claims 1–7, 10–12, 14–16, 20, and 21 stand rejected under 35 U.S.C. § 103 as unpatentable over the combination of Michio,² Gerke,³ and Baldo.⁴

Claims 1–7, 10–12, 14–16, 20, and 21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–13 of Krutmann '783⁵ in view of Baldo.

Claims 1–7, 10–12, 14–16, 20, and 21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–13 of Krutmann '135⁶ in view of Baldo.

Obviousness:

ISSUE

Does the preponderance of evidence relied upon by Examiner support a conclusion of obviousness?

² Michio, JP 2007-022960 A, published Feb. 1, 2007 (English translation provided with Appellant's Appeal Brief).

³ Gerke et al., WO 02/30385 A2, published Apr. 18, 2002 (English translation provided with Appellant's Appeal Brief (the pages of this document are not paginated, therefore, all reference to a page of this document refers to the document as if it were numbered consecutively beginning with the first page)).

⁴ Baldo et al., WO 2010/078985 A2, published July 15, 2010.

⁵ Krutmann et al., US 2018/0153783 A1, published June 7, 2018. Examiner and Appellant refer to this document as co-pending Application 15/576,484, Notice of Allowance mailed May 19, 2020.

⁶ Krutmann et al., US 2018/0147135 A1, published May 31, 2018. Examiner and Appellant refer to this document as copending Application 15/577,433, Notice of Allowance mailed May 21, 2020.

FACTUAL FINDINGS (FF)

FF 1. Michio “relates to whitening cosmetics excellent in the whitening effect which inhibits the melanism of the skin by ultraviolet rays with high safety” (Michio ¶ 1; *see also* ¶ 38 (Michio’s disclosure relates to a composition that “excels in melanin generation depressor effect,” which can be used in “various whitening cosmetics”); *see generally* Ans.⁷ 3).

FF 2. Michio discloses cosmetic compositions comprising whitening agents and the melanin generation depressant, “[hydrogenation SUKURARE] and its acylation derivative” (*see* Michio ¶¶ 9–11, and 38 (alteration original); *see also* Br. 14 (Appellant recognizes that Michio’s “term [SUKURARE] is synonymous with sclareol” (alteration original)); *see generally* Ans. 3 and 11–14).

FF 3. Michio discloses that anti-inflammatory agents, such as Vitamin C, can be added to skin whitening cosmetic formulations to inhibit inflammation caused by ultraviolet rays (*see* Michio ¶ 3).

FF 4. Michio discloses that skin whitening agents include “blended kojic acid, arbutin, hydroquinone monobenzyl ether, hydrogen peroxide, [and] etc.” (Michio ¶ 3; *see also* Ans. 3).

FF 5. Gerke discloses “sunscreens or ‘after-sun’ preparations” comprising, *inter alia*, sclareol or sclareolide, “as active ingredients in an amount of more than 0.001 [wt.%] based on the preparation” (Gerke 4; *see id.* at 5 (Gerke discloses that “[a] particularly preferred embodiment of [its] invention is [a] cosmetic preparation[] containing light stabilizers, characterized in that they contain 0.01 to 5% by weight of anti-inflammatory

⁷ Examiner’s May 22, 2019 Answer.

diterpenoids with a Labdan structure, in particular from the group Sclareol, Sclareolide . . . or a mixture thereof in a suitable cosmetic carrier.”); *see also* Ans. 4).

FF 6. Baldo:

relates to a composition comprising, in a cosmetically acceptable carrier:

- a) at least one depigmenting agent and
- b) at least one system for screening out both UVA radiation and UVB radiation;
- c) and optionally at least one desquamating agent;
- d) said composition having a critical wavelength λ_C of greater than 370 nm.

(Baldo 1:16–24; *see* Ans. 4.)

FF 7. Baldo discloses that its depigmenting agents include vitamin C, arbutin, resorcinol, and esters thereof, and hydroxylated diphenylmethane derivatives, such as phenylethyl resorcinol (Baldo 4:2–18; 5:7–9, and 6:6–20; *see also* Ans. 4).

FF 8. Baldo discloses that “[t]he amount of depigmenting agent in the compositions of the invention preferably ranges from 0.0001% to 20% by weight, relative to the total weight of the composition” (Baldo 4:35–38; *see also* Ans. 4).

FF 9. Baldo discloses that its compositions may comprise additional active agents including “anti-inflammatory agents” (Baldo 53:8–25; *see* Ans. 4).

ANALYSIS

Based on the combination of Michio, Gerke, and Baldo, Examiner concludes that, at the time Appellant’s invention was made, it would have been prima facie obvious to formulate a composition comprising at least one each of a depigmenting, or skin whitening, agent and an anti-inflammatory

agent (*see generally* Ans. 4–6). In this regard, Examiner finds that the combination of Michio, Gerke, and Baldo disclose concentration ranges for the depigmenting (claimed “skin lightening agent”) and anti-inflammatory (claimed “sclareolide”) agents that encompass the concentration ranges set forth in Appellant’s claimed invention (*see id.* at 5–6). *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1322 (Fed. Cir. 2004) (“[W]here there is a range disclosed in the prior art, and the claimed invention falls within that range, there is a presumption of obviousness.”). In addition, Examiner reasons that the determination of specific operable concentration ranges, or ratios, of depigmenting and anti-inflammatory agents requires no more than routine optimization of the ranges made obvious by the combination of Michio, Gerke, and Baldo (*see* Ans. 5–6). *In re Aller*, 220 F.2d 454, 456 (CCPA 1955) (“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.”).

As explained below, we find no error in Examiner’s *prima facie* case of obviousness.

Claim 1:

We are not persuaded by Appellant’s contention that “[t]he cited references do not teach or suggest a combination of sclareolide and a skin lightening agent, much less in the recited amounts” (Br. 9; *cf.* FF 1–9). As Examiner explains, Michio discloses that exposure to UV radiation, i.e., sun light, causes inflammation of the skin and “Gerke [discloses] that sclareol and sclareolide both possess anti-inflammatory activity” (Ans. 11; *see* FF 1–4 (Michio discloses a composition comprising skin whitening agents

including “blended kojic acid, arbutin, hydroquinone monobenzyl ether, hydrogen peroxide, [and] etc.”); FF 5 (Gerke discloses “sunscreens or ‘after-sun’ preparations” comprising, *inter alia*, the anti-inflammatory sclareol or sclareolide)). Baldo discloses sunscreen compositions comprising depigmenting, i.e., whitening, agents and anti-inflammatory agents (*see, e.g.*, FF 6–9). Thus, the combination of Michio, Gerke, and Baldo makes obvious the inclusion of sclareolide, as an anti-inflammatory agent, in a sunscreen composition comprising at least one skin lightening agent (*see* FF 1–9). Therefore, we are not persuaded by Appellant’s contention that sclareolide is unrelated to sclareol and dihydro sclareol and, therefore, a person of ordinary skill in this art would not have found it *prima facie* obvious to include sclareolide, as an anti-inflammatory, in a composition comprising a whitening agent (*see* Br. 10–11; *see also id.* at 19).

For the same reasons, because Michio discloses that sun causes skin inflammation, we are not persuaded by Appellant’s contention that Examiner’s finding that Michio’s disclosed skin lightening compounds lack anti-inflammatory properties is an “acknowledg[ement] that the anti-inflammation effect in [Michio] is directed to compounds ‘**other**’ *than sclareol*” and, thus, “[t]he knowledge of a person of ordinary skill in the art that sclareolide is an anti-inflammatory compound ***suitable for whitening compositions*** would be [] required antecedent to a finding of [a] *prima facie* case of obviousness herein” (Br. 18).

We are not persuaded by Appellant’s contention that Michio teaches away from a composition comprising sclareol in favor of a hydrogenated sclareol and its acylation derivative and, therefore, teaches away from Appellant’s claimed invention (*see id.* at 11–18). Michio discloses the use

of a hydrogenated sclareol and its acylation derivative as a melanin generation depressant (*see* FF 2). As Appellant recognizes, although Michio recognizes that UV radiation, i.e., exposure to sun light, causes inflammation of the skin and that an anti-inflammatory may be added to skin whitening compositions, Michio's disclosure relates to a composition that "excels in melanin generation depressor effect," which can be used in "various whitening cosmetics" (FF 1–3; *see* Br. 17 ("[t]he entire gist of . . . [Michio is] not at all [concerned with] anti-inflammation")). Examiner's rejection, however, is based on the use of sclareolide, as an anti-inflammatory, in a composition, such as a sunscreen (*see* Ans. 11–12; *see also id.* at 4). Thus, Appellant's teaching away contention is not pertinent to Examiner's rationale for relying on Michio.

Because, as discussed above, Examiner's rejection is based on the use of sclareolide as an anti-inflammatory, we are not persuaded by Appellant's contention that "a person of ordinary skill in the art would not have had a reasonable expectation that sclareolide would *also* act as a skin lightener, because there is no disclosure linking Gerke . . . to [Michio]" (Br. 19). For the same reasons, we are not persuaded by Appellant's contention that "[a] person of ordinary skill in the art would have no expectation that the use of sclareolide would also work to provide the needed skin lightening which is achieved by sclareol" (Br. 18).

For the foregoing reasons, we are not persuaded by Appellant's contention that it would not have been obvious to formulate a composition suggested by the combination of Michio, Gerke, and Baldo that comprises an anti-inflammatory sclareolide and a skin lightening agent in amounts that fall within the ranges required by Appellant's claim 1 (*see* Br. 35; *cf.* FF 5).

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

In re Keller, 642 F.2d 413, 425 (CCPA 1981); *see also In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references. . . . [The reference] must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole.”). Therefore, we are not persuaded by Appellant’s contention that a composition suggested by the combination of Michio, Gerke, and Baldo must meet Baldo’s requirement to maintain a critical wavelength (Br. 20; *cf.* Ans. 13).

“Disclos[ure of] a multitude of effective combinations does not render any particular formulation less obvious.” *Merck & Co. Inc. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989). Therefore, we are not persuaded by Appellant’s intimation that Baldo’s disclosure of “thousands of possible permutations of depigmenting agents” supports a conclusion of non-obviousness (Br. 20).

For the foregoing reasons, we are not persuaded by Appellant’s contention that Examiner’s rejection is based on improper hindsight (*see* Br. 18–19).

Secondary Consideration:

Appellant relies on the Meyer Declaration⁸ to support a contention that Appellant has “shown a strong synergistic effect to separate combinations of sclareolide . . . [with three] skin lightening agents[:] phenylethyl resorcinol, butyl resorcinol and kojic acid” and that “the use of the tested combinations of sclareolide and 3 separate skin lighteners could more than probatively be extended to other skin lighteners” (Br. 21). We are not persuaded.

In order to be persuasive of non-obviousness, “[e]vidence of secondary considerations must be reasonably commensurate with the scope of the claims.” *In re Huai-Hung Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011). As Examiner explains, the “0.000025 – 0.00025%” sclareolide concentration set forth in the examples of the Meyer Declaration does not fall within the scope of Appellant’s claimed invention, which requires a “concentration range of 0.001 – 5%” (Ans. 14; *see also* Meyer Decl. 6–9 (Tables 1–4)). In addition, Examiner finds that Appellant failed to establish an evidentiary basis on this record to support a finding that the results obtained from the combination of specific concentrations of sclareolide with either phenylethyl resorcinol, butyl resorcinol, or kojic acid demonstrates synergism for all skin lightening agents and combinations of skin lightening agents encompassed by Appellant’s claimed invention (*see* Ans. 14; *cf.* Br. 20 (Appellant recognized, in its discussion of Baldo, that there are “thousands of possible permutations of depigmenting agents” known to those of ordinary skill in

⁸ Declaration of Ms. Imke Meyer (Meyer Decl.), signed November 22, 2017. Examiner and Appellant refer to this document as submitted with Appellant’s December 20, 2017 response (*see* Ans. 14; *see also* Br. 21).

this art)). Thus, we agree with Examiner’s finding that Appellant’s evidence of synergism is not commensurate with the scope of its claims.

For the foregoing reasons, we are not persuaded by Appellant’s contention that Examiner failed to adequately explain why Appellant’s evidence of synergism is not commensurate in scope with Appellant’s claimed invention (*see* Br. 21–22). For the same reasons we are not persuaded by Appellant’s reliance on the non-precedential Opinion in *Ex parte Treacy*, Appeal 2011-00852, 2012 WL 2573060 (BPAI June 29, 2012) to support a contention that, on this record, “Examiner has not provided any rational explanation as to why the untested embodiments . . . would **not be expected** to show synergism given the scope of the data provided in the Specification and declarations” (Br. 21–22 (alteration original)).

Claim 2:

Having found no deficiency in the combination of Michio, Gerke, and Baldo, as it relates to Appellant’s claim 1, we are not persuaded by Appellant’s contention that its “[c]laim 2 is even further patentable over the disclosures of [Michio, Gerke, and Baldo] . . . for the same reasons noted above for [c]laim 1” (Br. 22).

For the reasons discussed above, with regard to Appellant’s secondary considerations, we are not persuaded by Appellant’s contention that “the species of skin lighteners recited in claim 2 are even closer to the showing of unexpected synergism in the [Meyer] Declaration, and as such, claim 2 is even further patentable over the cited references” (*id.* at 23).

Claim 10:

Having found no deficiency in the combination of Michio, Gerke, and Baldo, as it relates to Appellant's claim 1, we are not persuaded by Appellant's contention that its "[c]laim 10 is even further patentable over the disclosures of [Michio, Gerke, and Baldo] . . . for the same reasons noted above for [c]laim 1" (Br. 23).

Claim 11:

Having found no deficiency in the combination of Michio, Gerke, and Baldo, as it relates to Appellant's claim 1, we are not persuaded by Appellant's contention that its "[c]laim 11 is even further patentable over the disclosures of [Michio, Gerke, and Baldo] . . . for the same reasons noted above for [c]laim 1" (Br. 24).

Further, for the reasons discussed above, the combination of Michio, Gerke, and Baldo make obvious a composition, i.e., medicament, comprising the composition of Appellant's claim 1, "wherein sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition" (*see* Br. 37; *cf.* FF 1–9). *See Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002) ("[T]he patentability of . . . composition claims depends on the claimed structure, not on the use or purpose of that structure."). Therefore, we are not persuaded by Appellant's contention that "[a] person of ordinary skill in the art would not assume that a whitening cosmetic would necessarily work for fighting diseases requiring an inhibition of melanin formation in melanocytes," i.e., the stated use of the composition set forth in Appellant's claim 11 (*see* Br. 24).

Claim 12:

Having found no deficiency in the combination of Michio, Gerke, and Baldo, as it relates to Appellant's claim 1, we are not persuaded by Appellant's contention that its "[c]laim 12 is even further patentable over the disclosures of [Michio, Gerke, and Baldo] . . . for the same reasons noted above for [c]laim 1" (Br. 25).

Further, for the reasons discussed above, the combination of Michio, Gerke, and Baldo make obvious a composition, i.e., medicament, comprising the composition of Appellant's claim 1, "wherein sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition" (see Br. 37; cf. FF 1–9). See *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d at 809 ("[T]he patentability of . . . composition claims depends on the claimed structure, not on the use or purpose of that structure."). Therefore, we are not persuaded by Appellant's contention that "[a] person of ordinary skill in the art would not assume that a whitening cosmetic would necessarily work" "for fighting diseases requiring an inhibition of interleukin-(IL-)1a biosynthesis", i.e., the stated use of the composition set forth in Appellant's claim 12 (see Br. 25).

Claim 14:

Having found no deficiency in the combination of Michio, Gerke, and Baldo, as it relates to Appellant's claim 1, we are not persuaded by Appellant's contention that its "[c]laim 14 is even further patentable over the disclosures of [Michio, Gerke, and Baldo] . . . for the same reasons noted above for [c]laim 1" (Br. 26).

Further, for the reasons discussed above, the combination of Michio, Gerke, and Baldo make obvious a composition, i.e., medicament, comprising the composition of Appellant's claim 1, "wherein sclareolide is present in an amount of from 0.001 to 5% by weight based on the total weight of the composition" (see Br. 37; cf. FF 1–9). See *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d at 809 ("[T]he patentability of . . . composition claims depends on the claimed structure, not on the use or purpose of that structure."). Therefore, we are not persuaded by Appellant's contention that "[a] person of ordinary skill in the art would not assume that a whitening cosmetic would necessarily work for [lightening] both skin and hair," i.e., the stated use of the composition set forth in Appellant's claim 14 (see Br. 26).

Claim 15:

Having found no deficiency in the combination of Michio, Gerke, and Baldo, as it relates to Appellant's claim 1, we are not persuaded by Appellant's contention that its "[c]laim 15 is even further patentable over the disclosures of [Michio, Gerke, and Baldo] . . . for the same reasons noted above for [c]laim 1" (Br. 27).

Appellant contends that because claim 15 limits the skin lightening agent to phenylethyl resorcinol, claim 15 "is believed to be *even more* commensurate in scope with the showing of synergism provided in the [Meyer] Declaration" because the Meyer "Declaration contains a specific example combining sclareolide and the herein-claimed compound of phenylethyl resorcinol" (Br. 27). We are not persuaded.

Although Appellant's claim 15 does not recite the amount of sclareolide or phenylethyl resorcinol in wt.%, claim 15 does require that "sclareolide and phenylethyl resorcinol are present in a ratio of about 20:80 to about 80:20 by weight" (*see* Br. 38). As Examiner explains, however, the sclareolide and phenylethyl resorcinol concentrations encompassed by the ratios set forth in Appellant's claim 15 are unbounded and encompass concentrations of 0.001 to 5% by weight based on the total weight of the composition for either of sclareolide or phenylethyl resorcinol (*see* Ans. 14–15 (citing Appellant's claims 20 and 21)). Thus, for the reasons set forth above, we find that Appellant's evidence of synergism is not commensurate with the scope of Appellant's claim 15.

CONCLUSION

The preponderance of evidence relied upon by Examiner support a conclusion of obviousness.

The rejection of claims 1, 2, 10–12, 14, and 15 under 35 U.S.C. § 103(a) as unpatentable over the combination of Michio, Gerke, and Baldo is affirmed. Claims 3–7, and 16 are not separately argued and fall with claim 1. Claims 20 and 21 are not separately argued and fall with claim 15.

Obviousness-type Double Patenting:

ISSUE

Does the preponderance of evidence relied upon by Examiner support a conclusion of obviousness-type double patenting?

FACTUAL FINDINGS (FF)

FF 10. Allowed claim 12 of Krutmann '783 is reproduced below:

12. A method for curing and/or treating human skin and/or hair suffering from disorders and/or dysfunctions from air pollution induced damage comprising:

applying an effective amount of a medicament comprising a binary mixture of

(i) E/Z-2-benzylindene-5,6-dimethoxy-3,3-dimethylindan-1-one and ginger root CO₂ extract, or

(ii) E/Z-2-benzylindene-5,6-dimethoxy-3,3-dimethylindan-1-one and sclareolide, or

(iii) E/Z-2-benzylindene-5,6-dimethoxy-3,3-dimethylindan-1-one and purple coneflower pressed juice,

to the skin and/or hair of a person suffering from disorders and/or dysfunctions of the skin and/or hair from air pollution induced damage.

FF 11. Allowed claim 16 of Krutmann '783 is reproduced below:

The method of Claim 12, wherein the disorders and/or dysfunctions of the skin from air pollution induced damage is skin cancer, skin inflammation or hyperpigmentation.

FF 12. Krutmann '783 discloses compositions, i.e., medicaments, comprising, *inter alia*, "skin lightening actives," such as vitamin C, arbutin, resorcinol, and phenylethyl resorcinol (*see* Krutmann '783 ¶¶ 56–59).

FF 13. Allowed claim 12 of Krutmann '135 is reproduced below:

12. A method for curing and/or treating human skin and/or hair suffering from disorders and/or dysfunctions from air pollution induced damage comprising:

applying an effective amount of a medicament comprising a binary mixture of

(i) ginger root CO₂ extract and sclareolide, or

(ii) ginger root CO₂ extract and E/Z-2-benzylindene-5,6-dimethoxy-3,3-dimethylindan-1-one, or

(iii) ginger root CO₂ extract and purple coneflower pressed juice to the skin and/or hair of a person suffering from disorders and/or dysfunctions of the skin and/or hair from air pollution induced damage.

FF 14. Allowed claim 16 of Krutmann '135 is reproduced below:

The method of Claim 12, wherein the disorders and/or dysfunctions of the skin from air pollution induced damage is skin cancer, skin inflammation or hyperpigmentation.

FF 15. Krutmann '135 discloses compositions, i.e., medicaments, comprising, *inter alia*, “skin-lightening agents,” such as vitamin C, arbutin, resorcinol, and phenylethyl resorcinol (*see* Krutmann '135 ¶¶ 66–69 and 218–220).

FF 16. Examiner relies on Baldo as discussed above (Ans. 6 and 8; *see also* FF 6–9).

ANALYSIS

Based on the claims of Krutmann '783 or Krutmann '135 in view of Baldo, Examiner concludes that, at the time Appellant's invention was made, it would have been *prima facie* obvious

to add an ingredient such as phenylethyl resorcinol to compositions of [Krutmann '783 or Krutmann '135]. The person of ordinary skill in the art would have been motivated to make those modifications and reasonably would have expected success because the anti-pollution cosmetics of [Krutmann '783 or Krutmann '135] can have additional activities by the addition of an ingredient such as phenylethyl resorcinol that is known in the art as a depigmenting agent to control the browning of skin while also providing anti-pollution effects to the skin. It would have been customary for an artisan of ordinary skill to determine the optimal amount of each ingredient to add in order to best achieve the desired results based on the desired results, dosing amount and/or frequency and the presence of additional ingredients that may have similar effects within the ranges

disclosed by the prior art that overlap with the presently claimed ranges.

(Ans. 6–8; *see also* FF 10, 11, 13, and 14.)

Appellant’s contentions are the same for both provisional nonstatutory double patenting rejections (*see* Br. 29–33). Therefore, we address Appellant’s contentions relating to both provisions nonstatutory double patenting rejections together.

Because the provisional nonstatutory double patenting rejections are *not* the only rejection remaining in this Application, we are not persuaded by Appellant’s contentions regarding MPEP § 804(I)(B)(1)(b) (*see* Br. 29 and 31–32).

Appellant contends that because Krutmann ’783 and Krutmann ’135 both have

voluminous disclosure[s] which include[] a virtual dictionary of cosmetic ingredients, . . . [absent hindsight,] a person of ordinary skill in the art would have no specific motivation to select skin lighteners, such as phenylethyl resorcinol, out of the thousands of other potential choices of additional ingredients and classes of ingredients.

(Br. 29–31 and 32–33.) We are not persuaded.

The claims of Krutmann ’783 and Krutmann ’135 are drawn to methods of treating, *inter alia*, hyperpigmentation by applying a composition, i.e., medicament, comprising sclareolide (*see* FF 10–15). A patent disclosure may be used as a dictionary to learn the meaning of a term in the patent claim. *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299 (Fed. Cir. 1999); *see In re Basell Poliolefine Italia S.P.A.*, 547 F.3d 1371, 1375 (Fed. Cir. 2008) (In the context of an obviousness-type double-patenting rejection, a patent’s disclosure may be used to determine whether a

claim “merely define[s] an obvious variation of what is earlier disclosed and claimed,” “to learn the meaning of [claim] terms,” and to “interpret [] the coverage of [a] claim.”). As Appellant recognizes, using the disclosures of Krutmann ’783 and Krutmann ’135 as a dictionary, a person of ordinary skill in this art would have understood that a composition, i.e., medicament, within the scope of the claims of Krutmann ’783 and Krutmann ’135 may include, *inter alia*, a skin-lightening agent, such as vitamin C, arbutin, resorcinol, and phenylethyl resorcinol (*see* Br. 29–31 and 32–33; *see also* FF 12 and 15).

In addition, Baldo discloses compositions comprising depigmenting agents including vitamin C, arbutin, resorcinol and esters thereof, and hydroxylated diphenylmethane derivatives, such as phenylethyl resorcinol (FF 7; *see also* FF 16). Thus, at the time of Appellant’s claimed invention, the selection of an appropriate depigmenting agent, such as phenylethyl resorcinol, would have been *prima facie* obvious to a person of ordinary skill in this art. *See Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 335 (1945) (“Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put into the last opening in a jig-saw puzzle. It is not invention.”).

For the foregoing reasons, we are not persuaded by Appellant’s contention that the provisional nonstatutory double patenting rejections are based on improper hindsight (*see* Br. 29–31 and 32–33).

CONCLUSION

The provisional rejection of claims 1–7, 10–12, 14–16, 20, and 21 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of Krutmann ’783 in view of Baldo is

affirmed. Claims 2–7, 10–12, 14–16, 20, and 21 are not separately argued and fall with claim 1.

The provisional rejection of claims 1–7, 10–12, 14–16, 20, and 21 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of Krutmann ’135 in view of Baldo is affirmed. Claims 2–7, 10–12, 14–16, 20, and 21 are not separately argued and fall with claim 1.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–7, 10–12, 14–16, 20, 21	103	Michio, Gerke, Baldo	1–7, 10–12, 14–16, 20, 21	
1–7, 10–12, 14–16, 20, 21		Provisional Nonstatutory Double Patenting, the claims of Krutmann ’783, Baldo	1–7, 10–12, 14–16, 20, 21	
1–7, 10–12, 14–16, 20, 21		Provisional Nonstatutory Double Patenting, the claims of Krutmann ’135, Baldo	1–7, 10–12, 14–16, 20, 21	
Overall Outcome			1–7, 10–12, 14–16, 20, 21	

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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