



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.
14/293,312	06/02/2014	Rainer KROPKE	3321-P50130	3927
13897	7590	01/29/2020	EXAMINER	
Abel Schillinger, LLP 8911 N. Capital of Texas Hwy Bldg 4, Suite 4200 Austin, TX 78759			PIHONAK, SARAH	
			ART UNIT	PAPER NUMBER
			1627	
			NOTIFICATION DATE	DELIVERY MODE
			01/29/2020	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):

hmuensterer@abel-ip.com
mail@Abel-IP.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAINER KRÖPKE, JENS NIELSEN, and KATHRIN WOLTER

Appeal 2018-004457
Application 14/293,312
Technology Center 1600

BEFORE JOHN G. NEW, ELIZABETH A. LAVIER, and
TAWEN CHANG, *Administrative Patent Judges*.

LAVIER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–12, 14–16, and 21–25. 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(a). Appellant identifies the real party in interest as Beiersdorf AG. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claims are directed to cosmetic or dermatological formulations.

Claim 1, reproduced below, is illustrative:

1. A cosmetic or dermatological formulation, wherein the formulation comprises

(a) one or more of glycerol, propylene glycol, and butylene glycol in a total concentration of from 0.1 % to 20 % by weight, based on a total weight of the formulation,

(b) 2-methyl-1,3-propanediol and, optionally, one or both of pentanediol and hexanediol in a total concentration of from 1 % to 25 % by weight, based on the total weight of the formulation, 2-methyl-1,3-propanediol being present in a concentration of from 1 % to 15 % by weight, and

(c) at least one substance selected from antioxidants, alpha-lipoic acid, phytoene, D-biotin, coenzyme Q10, α -glucosylrutin, carnitine, camosine, isoflavonoids, creatine, taurine, and β -alanine,

and wherein a ratio of (a) to (b) is from 5:1 to 1:1.

REFERENCES

The Examiner relies on the following references:

Name	Reference	Date
Kanga et al.	US 5,798,111	Aug. 25, 1998
Siddiqui et al.	US 6,015,548	Jan. 18, 2000
Stroud et al.	US 6,231,837 B1	May 15, 2001
Kaddurah-Daouk	US 6,242,491 B1	June 5, 2001
Castro et al.	US 6,113,888	Sept. 5, 2000
Kröpke et al. '007	US 8,779,007 B2	July 15, 2014

REJECTIONS

1. Claims 1–4, 8–12, 14–16, and 21–25 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kanga and Siddiqui. Final Action 11.
2. Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kanga and Stroud. Final Action 13.
3. Claim 7 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Kanga, Siddiqui, and Kaddurah-Daouk. Final Action 15.
4. Claims 1–5, 8–12, 14–16, and 21–25 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Castro. Final Action 16.
5. Claims 1–12, 14–16, and 21–25 stand rejected for nonstatutory double patenting as unpatentable over claims 1–25 of Kröpke '007. Final Action 9.

OPINION

Obviousness

The § 103 rejections fall into two groups: those with Kanga as the primary reference (Rejections 1, 2, and 3), and the rejection based on Castro (Rejection 4).

Rejection 1 (Kanga & Siddiqui)

Kanga describes clear emulsion cosmetic compositions in which the aqueous phase includes 2-methyl-1,3-propanediol. Kanga Abstract. More specifically:

An essential element of the aqueous phase will be the presence of 2-methyl-1,3-propanediol, commercially available under the trademark MP Diol glycol from the Arco Chemical Company. Amounts of this diol will range from 1 to 70%, preferably from 10 to 50%, optimally from 20 to 40% by weight of the cosmetic

composition. Other than water, this diol preferably is the component of highest concentration in the aqueous phase, and even in the total cosmetic composition.

Other polyhydric alcohols may be employed as adjunct in the aqueous phase. These polyhydric alcohols may contain from 2 to 6 hydroxyl groups, preferably from 2 to 3 hydroxyl groups. They may also contain from 2 to 6 carbon atoms, preferably from 2 to 3 carbon atoms. Suitable polyhydric alcohols include ethylene glycol, propylene glycol, trimethylene glycol, glycerin and sorbitol. Most preferred is glycerin. Amounts of the polyhydric alcohol may range from 1 to 30%, preferably from 2 to 25%, optimally from 5 to 12% by weight of the cosmetic composition.

Kanga 2:43–60. This passage from Kanga thus describes compositions falling within the concentration ranges and ratios for parts (a) and (b) of claim 1, “[f]or example, a compositions comprising 5% of polyols²] and 5% of 2-methyl-1,3-propanediol provides a 1:1 ratio and allows for the presence of other components as instantly claimed.” Final Action 2. Indeed, Appellant acknowledges that Kanga “does not expressly exclude a ratio (a):(b) as recited in the instant claims (and also does not expressly exclude the presence of 2-methyl-1,3-propanediol in a concentration of 15 % by weight or less).” Appeal Br. 8.

² Appellant notes that claim 1 “do[es] not merely recite ‘polyols’ as component (a) . . . but recite[s] specific polyols,” whereas Kanga recites a wider variety. Appeal Br. 9. To the extent Appellant suggests that this is an additional aspect of the comparative breadth of Kanga relative to the claims, this argument is not persuasive for the reasons described *infra*. In any event, glycerin (i.e., glycerol (*see, e.g.*, Final Action 11)) is “[m]ost preferred” by Kanga (Kanga 2:57–58). Thus, even if Appellant’s emphasis on the preferred or exemplary embodiments (over the totality of the disclosure) were persuasive as a general matter on the present facts, it would not apply to this particular point.

Appellant describes the concentration ranges provided in Kanga as “extremely broad” (*id.* at 7 (emphasis omitted)) and argues that achieving a ratio of component (a) to component (b) within the claimed range requires deviating from Kanga’s preferred and/or exemplary ranges (*see id.* at 7–9, 12–14; Reply Br. 3). According to Appellant, Kanga’s disclosure “as a whole makes it apparent to one of ordinary skill in the art that (i) the ratio (a) : (b) should be significantly lower than 1:1 and (ii) the concentration of 2-methyl-1,3-propanediol should preferably be not lower than 20 % by weight.” Appeal Br. 8.

Appellant’s arguments are not persuasive. Kanga is prior art for all that it teaches, not merely its preferred embodiments. *See In re Mills*, 470 F.2d 649, 651 (CCPA 1972) (“All the disclosures in a reference must be evaluated, including nonpreferred embodiments.” (citations omitted)); *see also In re Lemelson*, 397 F.2d 1006, 1009 (CCPA 1968) (“The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.”). Because Kanga teaches concentration ranges of components (a) and (b) that fall within the concentration and ratio ranges of claim 1, these aspects of claim 1 are obvious over Kanga unless Appellant shows otherwise. *See In re Peterson*, 315 F.3d 1325, 1329 (Fed. Cir. 2003) (“A *prima facie* case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art.” (citations omitted)). We agree with the Examiner that Appellant “has supplied no evidence of unexpected benefit(s) to particularly selecting [the] claimed ratio” (Ans. 15), for example. Nor has Appellant offered any factual support for the assertions that an ordinarily-

skilled artisan would have been required “to resort to the exemplified embodiments” (Appeal Br. 13) in Kanga to develop other emulsions that satisfy the allegedly “demanding requirements” (*id.*) necessary to achieve properties such as clarity, high phase stability, and insensitivity to shear decomposition. “[A]rguments of counsel cannot take the place of evidence lacking in the record.” *Knorr v. Pearson*, 671 F.2d 1368, 1373 (CCPA 1982). Accordingly, we find that this is not an instance of impermissible picking and choosing (*contra* Appeal Br. 10) so much as one of modest, obvious modification of the prior art, specifically through “optimization of the components within the clearly disclosed ranges taught by Kanga” (Ans. 18). *Cf. KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 420 (2007) (“[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”).

In addition to Kanga, the Examiner cites Siddiqui as teaching panthenol as an antioxidant within the scope of part (c) of claim 1. *See* Final Action 12. The Examiner finds that it would have been obvious for the ordinarily skilled artisan to have combined the references as claimed through routine experimentation “to obtain the desired clear composition with the desired make-up removing/cleansing abilities.” Final Action 13. Appellant presents no arguments specific to Siddiqui or to the combination of Siddiqui with Kanga.

Having fully considered Appellant’s arguments regarding claim 1, we are not persuaded of any reversible error by the Examiner in rejecting claim 1 under § 103 based on Kanga and Siddiqui. Accordingly, we affirm the rejection of claim 1, for the reasons described herein and those already of record.

The only claims argued separately from claim 1 by Appellant with respect to this rejection are claims 8, 10, and 24, which Appellant addresses as a group. *See* Appeal Br. 14–15. These claims recite narrower ranges (*see id.* at 26–27 (Claims Appendix)), and Appellant emphasizes this further distinction from the examples in Kanga (*see id.* at 14). This argument is different only in degree, not kind, than that presented with respect to claim 1, and is no more persuasive. Without evidence such as an unexpected result to select these narrower ranges from the broader prior art ranges, Appellant has not established a patentable distinction. Accordingly, we affirm the rejection of claims 8, 10, and 24. Claims 2–4, 9, 11, 12, 14–16, 21–23, and 25 are not argued separately, and fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Rejection 2 (Kanga & Stroud) and Rejection 3 (Kanga & Kaddurah-Daouk)

Except to assert that Stroud and Kaddurah-Daouk fail to cure the alleged deficiencies of Kanga addressed with respect to claim 1, Appellant makes no additional arguments with respect to either of these rejections. *See* Appeal Br. 15 (Rejection 2); *id.* at 16 (Rejection 3). As we are not persuaded by Appellant’s arguments regarding claim 1, Appellant has not shown any reversible error by the Examiner in rejecting claims 5 or 6 (Rejection 2) or claim 7 (Rejection 3). Accordingly, we affirm the rejections of claims 5–7.

Rejection 4 (Castro)

Appellant’s arguments with respect to the rejection over Castro partially recapitulate those made with respect to Kanga, insofar as Appellant argues that the ordinarily skilled artisan would not have been motivated to

optimize to the claimed ranges. *See* Appeal Br. 17, 19. And, similarly, these arguments are not persuasive. Castro teaches compositions comprising glycerin and 2-methyl-1,3-propanediol, with weight percentages falling within the ranges recited in claim 1. *See* Final Action 16 (citing Castro 2:46–53). The Examiner finds that the concentration ranges disclosed in Castro, “and thus ratios based on those concentration ranges, . . . overlap or encompass the ranges/ratios as claimed.” Ans. 25. Again Appellant fails to provide any evidence, of unexpected results or otherwise, to support the patentability of the claimed narrower ranges over the broader prior art ranges. Appellant argues that Castro’s *examples* teach amounts and ratios outside those of claim 1, and further that the rejection relies on the use of components characterized by Castro as optional. *See* Appeal Br. 16, 18. But Castro is prior art for all that it discloses, including the teaching that:

[i]n a further embodiment, the mousse comprises *about 0.001% to about 20% of glycerin; about 0.001% to about 20% of 1,2,-pentandiol; about 0.001% to about 20% of 2-methyl-1,3,-propanediol; about 0.001% to about 5% of a paraben (e.g., methylparaben, ethylparaben, propylparaben, or butylparaben); about 0.001 % to about 5% of fragrance; and about 0.001 % to about 5% of PPG-5 Ceteth-20.*

Castro 2:46–53 (emphasis added). We agree with the Examiner that this embodiment of Castro “significantly overlaps with the claimed ranges for (a) and (b)” (Ans. 24).³

³ As to part (c) of claim 1, the Examiner finds that Castro teaches the inclusion of tocopherols (Vitamin E) as antioxidants and as dermatologically active agents. Final Action 16–17 (citing Castro 4:22–34, 5:10–14). Appellant does not appear to dispute this point, and we discern no reversible error in regard thereto.

Appellant also argues that Castro is directed to self-tanning mousses, which Appellant asserts are “compositions whose moisturizing effects apparently are of only marginal, if any, importance.” Appeal Br. 19. Thus, according to Appellant, the Examiner’s rationale for optimizing toward the claimed ratios and ranges, i.e., improved moisture retention, does not follow from Castro. As to the moisture issue in particular, this is not persuasive given the aforementioned embodiment described in the quotation *supra* from column 2 of Castro. As the Examiner points out, this passage “is indicative that combinations of specific humectants and their amounts were contemplated by Castro.” Ans. 25. Additionally, we cannot agree with Appellant’s characterization of moisturizing as only of “marginal” importance to Castro (Appeal Br. 19), insofar as Castro includes a paragraph discussing humectants as “agents which promote the retention of moisture, e.g., moisturizers” (Castro 5:48–49), and listing examples including some of the compounds recited in claim 1 (*see id.* at 5:49–55). Appellant’s emphasis on Castro’s teaching of a mousse is further unpersuasive as to claim 1, which is not so limited.

For these reasons and those already of record, the Examiner’s rejection of claim 1 is not premised on impermissible hindsight as Appellant alleges (Appeal Br. 20), but rather of routine optimization to achieve the desired moisturizing properties (Final Action 18). Accordingly, we affirm the rejection of claim 1. Claims 3–10 and 21–25 are not argued separately, and fall with claim 1.

As to claim 2, Appellant maintains that this claim is limited to non-foaming formulations, whereas Castro’s disclosed ranges apply to a foaming formulation, i.e., a mousse. Appeal Br. 21. This argument is not persuasive.

First, claim 2 does not recite “non-foaming” formulations, but rather states that the formulation of claim 1 “is present as an ointment, a cream, a milk, a lotion or a spray.” (Appeal Br. 24 (Claims Appendix)). The Examiner finds (Ans. 31) the aerosol compositions contemplated by Castro (*see* Castro 2:10–13⁴) to be “spray” formulations within the scope of claim 2, “since the composition is applied by spraying the aerosol.” Ans. 31. Second, the Examiner finds that it would have been “within the purview of the ordinary artisan” (Ans. 30) to reformulate the composition. In the absence of some evidence to the contrary from Appellant, we discern no error in the Examiner’s finding. We affirm the rejection of claim 2.

As to claims 12, 14–16, and 24, Appellant again attempts to distinguish Castro from the formulations of these claims insofar as Castro describes mousses. *See* Appeal Br. 21. For the same reasons discussed above with respect to claim 2, this argument is not persuasive with respect to these claims. In addition to the mousse argument, Appellant makes a distinct assertion with respect to these claims, which turns on the requirement in independent claim 12 that the formulation comprises “one or both of propylene glycol and butylene glycol” (Appeal Br. 26 (Claims Appendix)). For claim 12 (unlike claim 1), glycerol is not one of the options encompassed by the compulsory⁵ part (a) of the claim.

Appellant argues that “C[astro] does not even mention butylene glycol and mentions propylene glycol only in passing, without providing any

⁴ The Examiner cites “claim 2, lines 10–13” rather than column 2 of Castro on page 31 of the Answer. This appears to be a typographical error.

⁵ Glycerol is, however, recited as an optional additional component of part (a) of claim 12. Appeal Br. 26 (Claims Appendix).

suggested concentration or concentration range therefor.” *Id.* at 22. While we agree with Appellant that Castro does not provide a concentration range specifically for propylene glycol, this is not fatal to the rejection. As the Examiner points out, propylene glycol is disclosed as a humectant by Castro, and a range of acceptable humectant concentrations is claimed in Castro, one which overlaps the claimed range. *See* Ans. 31–32 (citing Castro 5:53, claim 18). Achieving the formulation of claim 12 and/or its dependents based on Castro admittedly requires an additional step of picking and choosing than with respect to the claims encompassing glycerol (e.g., claim 1), for which Castro provides express concentration ranges. Nonetheless, and especially in light of the absence of evidence from Appellant regarding any unexpected advantages of their selections from the broader prior art disclosures, we are not convinced that this distinction is sufficient to confer patentability over Castro on claim 12 and its dependents, as we continue to agree with the Examiner that the optimization would have been a matter of ordinary skill, not innovation. *See In re Aller*, 220 F.2d 454, 456–58 (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”).

Nonstatutory Double Patenting

Appellant does not argue the nonstatutory double patenting rejection. Appeal Br. 22. Accordingly, we summarily affirm this rejection. *See* 37 C.F.R. § 41.37(c)(1)(iv); *Hyatt v. Dudas*, 551 F.3d 1307, 1314 (Fed. Cir. 2008); MPEP § 1205.02 (“If a ground of rejection stated by the examiner is not addressed in the appellant’s brief, appellant has waived any challenge to that ground of rejection and the Board may summarily sustain it.”).

CONCLUSION

The Examiner's rejections are affirmed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-4, 8-12, 14-16, 21-25	103	Kanga, Siddiqui	1-4, 8-12, 14-16, 21-25	
5, 6	103	Kanga, Stroud	5,6	
7	103	Kanga, Siddiqui, Kaddurah-Daouk	7	
1-5, 8-12, 14-16, 21-25	103	Castro	1-5, 8-12, 14-16, 21-25	
1-12, 14-16, 21-25		Nonstatutory Double Patenting	1-12, 14-16, 21-25	
Overall Outcome			1-12, 14-16, 21-25	

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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED