



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.
14/137,591	12/20/2013	Jesus Ruben ABRIL	ES-4662-2767	1005
23117	7590	11/14/2018	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			MOORE, WALTER A	
			ART UNIT	PAPER NUMBER
			1793	
			NOTIFICATION DATE	DELIVERY MODE
			11/14/2018	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):

PTOMAIL@nixonvan.com  
pair\_nixon@firsttofile.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* JESUS RUBEN ABRIL and THAYNE FORT

---

Appeal 2018-000113  
Application 14/137,591  
Technology Center 1700

---

Before LINDA M. GAUDETTE, BRIAN D. RANGE, and  
MERRELL C. CASHION, JR., *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

---

<sup>1</sup> This Decision includes citations to the following documents: Specification filed Dec. 20, 2013 (“Spec.”); Final Office Action dated Sept. 1, 2016 (“Final”); Appeal Brief filed Mar. 1, 2017 (“Appeal Br.”); Examiner’s Answer dated Aug. 7, 2017 (“Ans.”); and Reply Brief filed Oct. 4, 2017 (“Reply Br.”).

Appellant<sup>2</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 93–110, 113, and 114. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

93. A liquid composition comprising:

a) an oil from a microbial source comprising between about 50 mg per serving and about 150 mg per serving of a combination of long chain polyunsaturated fatty acids (LC PUFA) selected from the group consisting of comprising omega-3 LC PUFA, and omega-6 LC PUFA and a combination thereof;

b) an emulsifier which stabilizes the composition consisting of pectin in an amount of about 0.1% to 0.5% by weight of the composition; and

c) a beverage component;

and the composition is an oil in water emulsion, and the composition is free of alginate and of calcium gluconate.

The claims stand finally rejected under 35 U.S.C. § 103(a) as follows:

1. claims 93–96, 99, 103, 104, 106–110, 113, and 114 over Horrobin (EP 0713653 A1, pub. May 29, 1996), Myhre (US 2003/0082275 A1, pub. May 1, 2003), and Chilton (US 2002/0188024 A1, pub. Dec. 12, 2002);
2. claims 94–98, 100, 101, and 103–105 over Horrobin, Myhre, Chilton, and Barclay (US 5,340,594, iss. Aug. 23, 1994); and
3. claim 102 over Horrobin, Myhre, Chilton, and Maeda (US 5,700,397, iss. Dec. 23, 1997).

Horrobin discloses a fruit juice emulsion comprising gamma linolenic acid (GLA) and/or dihomogammalinolenic acid (DGLA) in amounts ranging from

---

<sup>2</sup> Appellant is the applicant and the real party in interest: DSM IP Assets B.V. *See* Appeal Br. 3.

1mg–30g/100 ml, eicosapentaenoic acid (EPA) or docosahexaenoic acid (DHA) in amounts ranging from 1 mg to 30g/100 ml, and 0.1–5.0% of an emulsifier such as a phospholipid derived from eggs or plants. Horrobin 2:47–50, 3:7–9, 3:48–49.

Myhre discloses an orange juice beverage comprising omega-3 fatty acids in the form of an oil-in-water emulsion. Myhre ¶¶ 21, 25. Myhre uses an emulsifying agent such as an egg yolk. *Id.* ¶ 25.

Chilton discloses a fruit-based drink comprising GLA and EPA, formulated as an oil-in-water emulsion. Chilton Abstract, ¶¶ 27, 66. Chilton discloses that suitable emulsifying agents or emulsion stabilizers include phospholipids, egg yolk, and pectin. *Id.* ¶ 66.

The Examiner finds Horrobin discloses a liquid composition as recited in claim 93, with the exceptions that Horrobin does not explicitly describe the composition as an oil-in-water emulsion, and does not disclose the use of pectin as the emulsifier. Final 3–4. The Examiner finds one of ordinary skill in the art would have modified Horrobin to use an oil-in-water emulsion based on Myhre’s teaching that an oil-in-water emulsion prevents oxidation of fatty acids. *Id.* at 4 (citing Myhre ¶ 26). The Examiner finds the ordinary artisan would have used pectin as the emulsifying agent based on Chilton’s disclosure that pectin is a known alternative to phospholipid emulsifiers. *Id.* (citing Chilton ¶ 66).

Appellant argues Horrobin does not disclose an oil-in-water emulsion and, therefore, the ordinary artisan would not have looked to the teachings of Myhre and Chilton which relate to compositions comprising oil-in-water emulsions. *See* Appeal Br. 10–11. Appellant argues the ordinary artisan would not have looked to Chilton because Chilton teaches that it is undesirable to formulate a liquid composition containing the lower doses of long chain polyunsaturated fatty acids recited in claim 93. *Id.* at 11–12 (citing Chilton ¶¶ 26, 98). Appellant also argues

Chilton provides no direction to select pectin from the list of suitable emulsifying agents or emulsion stabilizers. *Id.* at 12–13.

In general, Appellant’s arguments are not persuasive because they are directed to the individual teachings of the references and fail to take into account the understanding of the ordinary artisan upon considering the teachings of the prior art as a whole. *See, e.g.*, Ans. 11.

As found by the Examiner, oxidation of fatty acids was a known problem at the time of the invention, and one with which the inventors were concerned. *See* Ans. 10, 13; Myhre ¶ 26; Spec. 7:1–3. Appellant has not explained persuasively why the Examiner erred in finding that the ordinary artisan would have addressed this problem in Horrobin’s composition by employing Myhre’s technique of forming an oil-in-water emulsion. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.”). Moreover, Appellant has not identified error in the Examiner’s alternative finding that Horrobin’s composition is an oil-in-water emulsion, though not described expressly as such. *See* Ans. 13 (“[O]ne would have a reasonable expectation that Horrobin’s fruit beverage emulsion is actually a discontinuous phase of oil in a continuous phase of water (otherwise known as an oil-in-water emulsion).”); *see generally* Reply Br. 2–5.

We are not persuaded by Appellant’s argument that one of ordinary skill in the art would not have looked to Chilton because Chilton teaches that using doses

of long chain polyunsaturated fatty acids in the amounts recited in claim 93 does not achieve the desired effects. *See* Appeal Br. 11–12. The problems addressed by the inventors and Chilton are related, though not identical. *Compare* Spec. 1–4 (discussing the goal of providing a composition to provide a dietary supplement that is high in omega-3 and other long chain polyunsaturated fatty acids), *with* Chilton ¶ 15 (“The present invention is directed to dietary strategies that treat, or reduce the side effects of lipid-mediated disorders, conditions or syndromes having an arachidonic acid metabolite component.”). As such, Chilton expresses a preference for slightly higher amounts of long chain polyunsaturated fatty acids, than the amounts used in the present invention. *Compare* Chilton ¶ 26 (“When operating below the ranges specified[, i.e., 1–15 g GLA and 0.1–10 g EPA,] the desired effects on eicosanoid synthesis and prevention of arachidonate accumulation will not be obtained.”), *with* Spec. 5:10–14 (“[The composition] preferably can include between about 5 mg and about 1000 mg . . . [m]ore preferably . . . between about 50 mg and about 150 mg of omega-3 LC PUFA or omega-6 LC PUFA.”). Appellant has not argued persuasively that the ordinary artisan would have considered Chilton’s teaching as to suitable emulsifiers inapplicable to the present invention merely because of this difference in preferred amounts of long chain polyunsaturated fatty acids. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007) (explaining that a reference’s teachings and its obvious variants are relevant prior art, even if the reference addresses a problem which differs from that addressed by a patent applicant).

Appellant also has not explained persuasively why the Examiner erred in finding Chilton teaches that pectin is a suitable alternative to phospholipids and egg yolk for use as an emulsifier in a beverage containing fruit juice and long chain polyunsaturated fatty acids. Although Chilton indicates there are numerous suitable

emulsifying agents or emulsion stabilizers, phospholipids and pectin are among the relatively short list of emulsifiers that are expressly identified. Chilton ¶ 66; *see PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1364 (Fed. Cir. 2007) (explaining that an obviousness rejection predicated on selection of one or more components from numerous possible choices may be appropriate if the prior art provides direction as to which of many possible choices is likely to be successful).

All remaining arguments made by Appellant in the Appeal Brief, including the arguments made in support of patentability of claim 102 (*see* Appeal Br. 15–16), have been fully addressed by the Examiner and are unpersuasive for the reasons stated in the Answer. *See* Ans. 9–14. We decline to consider the newly-advanced arguments made in the Reply Brief as Appellant has not explained why these arguments could not have been made in the Appeal Brief. *See Ex parte Borden*, 93 USPQ2d 1473, 1474 (BPAI 2010) (informative) (“The reply brief is not an opportunity to make arguments that could have been made during prosecution, but were not. Nor is the reply brief an opportunity to make arguments that could have been made in the principal brief on appeal to rebut the Examiner’s rejections, but were not.”). Although we do not address the merits of the arguments in the Reply Brief, we note that the arguments lack persuasive evidentiary support and that the alleged unexpected results do not appear to be based on a comparison with the closest prior art.

In sum, for the reasons stated in the Final Office Action, the Answer, and above, Appellant has not identified reversible error in the Examiner’s conclusion of obviousness as to claims 93–110, 113, and 114.

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)(iv).

Appeal 2018-000113  
Application 14/137,591

AFFIRMED