

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

EUNSUNG GLOBAL CORP.,
Petitioner,

v.

HYDRAFACIAL LLC,
Patent Owner.

Case IPR2024-01491
Patent 11,865,287

PETITIONER'S REPLY TO
PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBITS

- EUNSUNG-1001 U.S. Pat. No. 11,865,287 to Ignon (“the ’287 patent”)
- EUNSUNG-1002 Excerpts from the Prosecution History of the ’287 patent (“the Prosecution History”)
- EUNSUNG-1003 Declaration of Mr. Eric Simon
- EUNSUNG-1004 U.S. Patent Publication No. 2003/0212415 (“Karasiuk”)
- EUNSUNG-1005 U.S. Patent No. 5,199,604 (“Palmer”)
- EUNSUNG-1006 U.S. Patent Publication No. 2003/0093089 (“Greenberg”)
- EUNSUNG-1007 U.S. Patent No. 6,390,815 (“Pond”)
- EUNSUNG-1008 U.S. Patent No. 6,684,880 (“Trueba”)
- EUNSUNG-1009 U.S. Patent No. 4,512,764 (“Wunsch 1982”)
- EUNSUNG-1010 U.S. Patent Publication No. 2003/0018252 (“Duchon”)
- EUNSUNG-1011 U.S. Patent No. 4,215,476 (“Armstrong”)
- EUNSUNG-1012 Friedman, et al., Chemical peels, dermabrasion, and laser therapy, *Disease-a-Month* 55.4 (2009): 223-235 (“Friedman”)
- EUNSUNG-1013 Burgess, Cheryl M., *Cosmetic dermatology*, Heidelberg, Germany: Springer, 2005 (“Burgess”)
- EUNSUNG-1014 Pickering, J. A., Touch-sensitive screens: the technologies and their application, *International Journal of Man-Machine Studies* 25.3 (1986): 249-269 (“Pickering”)
- EUNSUNG-1015 Friedman, Mark J. et al., The AMSA injection: A new concept for local anesthesia of maxillary teeth using a computer-controlled injection system. *Quintessence Int* 29 (1998): 297-3

(“Friedman 1998”)

- EUNSUNG-1016 Lee, Woan-Ruoh, et al., Lasers and microdermabrasion enhance and control topical delivery of vitamin C, Journal of investigative dermatology 121.5 (2003): 1118-1125 (“Lee”)
- EUNSUNG-1017 U.S. Patent No. 9,550,052 (“the ’052 patent”)
- EUNSUNG-1018 U.S. Patent No. 11,446,477 (“the ’477 patent”)
- EUNSUNG-1019 U.S. Patent No. 6,428,518 (“Brengele”)
- EUNSUNG-1020 U.S. Patent No. 4,559,036 (“Wunsch”)
- EUNSUNG-1021 U.S. Patent No. 6,099,511 (“Devos”)
- EUNSUNG-1022 U.S. Patent No. 5,163,902 (“Lynn”)
- EUNSUNG-1023 U.S. Patent No. 5,190,525 (“Oswald”)
- EUNSUNG-1024 U.S. Patent No. 6,673,082 (“Mallett”)
- EUNSUNG-1025 Rajan, Poonam, et al., Skin barrier changes induced by aluminum oxide and sodium chloride microdermabrasion, Dermatologic surgery 28.5 (2002): 390-393 (“Rajan”)
- EUNSUNG-1026 Karimipour, Darius J., et al., Molecular analysis of aggressive microdermabrasion in photoaged skin, Archives of dermatology 145.10 (2009): 1114-1122 (“Karimipour”)
- EUNSUNG-1027 U.S. Patent No. 6,241,739 (“Waldron”)
- EUNSUNG-1028-1099 [RESERVED]
- EUNSUNG-1100 Email from the Board dated February 7, 2025, authorizing Petitioner to file a response to Patent Owner’s Preliminary Response

Petitioner submits this reply to Patent Owner's ("PO") Preliminary Response ("POPR"), as authorized by email on February 7, 2025. EUNSUNG-1100.

I. THE PRIOR ART AND ARGUMENTS IN THE FILE HISTORY AND PETITION DIFFER SUBSTANTIALLY

The POPR argues discretionary denial is warranted because Karasiuk and Palmer were considered during prosecution and, although Palmer and Trueba are new, they are allegedly cumulative to other prior art considered. POPR, 61-70. PO is wrong. Karasiuk and Greenberg were submitted in an IDS containing *1120* references and never discussed in any Office Actions. EUNSUNG-1002, 214-253. With this treatment, Karasiuk and Greenberg were not materially considered. *See, e.g.*, IPR2022-00353, Paper 8 at 10; IPR2019-01204, Paper 14 at 16.

Because Palmer was not of record, PO points to Greenberg, alleging Palmer "is not materially different." POPR, 63-64. PO's argument, however, cannot be reconciled with PO's position that Greenberg does not disclose "treatment fluid," POPR, 43-48, because Palmer explicitly discloses "liquid solutions." EUNSUNG-1005, Title, Abstract. This difference alone makes Palmer different than Greenberg and more compatible with Karasiuk. Further, Palmer offers unique motivations for using its liquid delivery technology, including "easy selection" and minimizing refilling downtime. Pet., 10-11; EUNSUNG-1005, 1:30-53, 6:46-51.

Like Palmer, Trueba was not considered and is not cumulative. Different from Shaddock/Duchon, Trueba discloses "**sequential**" delivery of multiple fluids,

the limitation the Examiner found to be missing in the prior art. EUNSUNG-1008, 3:4-8, 5:18-6:9, 6:6-16, 11:4-34, 12:2-9; EUNSUNG-1002, 201-204. PO is, thus, incorrect that “Eunsung does not rely on Trueba” for “anything the Examiner had not already found to be taught by the prior art.” *See* Pet., 53-54, 92-93.

Further, the Petition arguments are materially different from the arguments in prosecution. The Petition argued it was obvious to use multiple containers to improve Karasiuk because Karasiuk recognizes desirability of using multiple types of skin treatment solutions during microdermabrasion. Pet., 9-10, 27. Nothing in prosecution indicates the Examiner considered this argument, much less Karasiuk in combination with a reference like Palmer. PO argues the Examiner “implicitly” considered Karasiuk with Greenberg’s multiple containers. POPR, 66-67. But, as discussed above, Karasiuk and Greenberg were buried in a lengthy IDS—it would have been impossible for the Examiner to consider all *1120* references in all possible combinations and nothing indicates consideration of Karasiuk in view of Greenberg, much less its multiple container disclosure.

The Petition also explained how Greenberg’s particles fall within the ’287 patent’s broad definition of “fluid.” Pet., 69. PO equates this with reviewing Coleman’s “benign abrasive.” But Greenberg has particles (“Purely organic materials,” “abrasive particles ... mixed with organic materials,” and “Abrasive particles ... coated with organic materials”) different from Coleman’s “dry”

abrasive. EUNSUNG-1006, [0073]-[0076]. The Examiner did not consider these particles or the '287 patent's broad definition of "fluid."

II. THE EXAMINER ERRED

In the reasons for allowance, the Examiner noted "Coleman fails to disclose or suggest" delivering "a first treatment fluid contained in the first container and an additional treatment fluid contained in the at least one additional container to the handpiece **sequentially**," and "[t]his limitation ... is not disclosed or suggested in the prior art." EUNSUNG-1002, 201-204. The Examiner also concluded that "[i]t would not be obvious to modify Coleman to function as claimed because Coleman discloses that the treatment materials are **delivered together/mixed**." *Id.* These findings were clear error because the Examiner clearly overlooked teachings of Palmer, Greenberg, and Trueba, regarding **sequentially** delivering multiple, pre-mixed treatment fluids. EUNSUNG-1005, 6:46-51, 11:9-12; EUNSUNG-1006, [0084] ("subsequently"); EUNSUNG-1008, 11:4-34 ("sequentially").

The Examiner also noted "Coleman fails to disclose ... **all three containers contain fluid**." EUNSUNG-1002, 202-203. With this finding, the Examiner erred by clearly overlooking the '287 patent's broad definition of "fluid" and "treatment material" to include "a plurality of fine solids." Pet., 69 (citing EUNSUNG-1001, 5:47-52 ("[t]he general term 'fluid' is used throughout synonymously with the term 'treatment material' and is to be given the same broad definition")).

III. PATENT OWNER'S SECONDARY CONSIDERATIONS DO NOT OVERCOME THE COMPELLING CASE OF OBVIOUSNESS

Objective indicia is highly fact-specific, and the Board routinely assesses objective indicia after institution on a full evidentiary record. IPR2015-01124, Paper 8 at 22; IPR2019-00577, Paper 25 at 20 (“[a]t this stage of the proceeding, Patent Owner’s evidence has not been sufficiently developed, and Petitioners have not yet had an opportunity to adequately test such evidence.”). Nonetheless, PO’s arguments fail to overcome the Petition’s compelling case of obviousness. *Western Union Co. v. MoneyGram Payment Sys., Inc.*, 626 F.3d 1361, 1373 (Fed.Cir.2010).

For nexus, PO relies on presumption, alleging “(1) HydroFacial Systems are embodiments of, and coextensive with, the claimed inventions;” and “(2) the objective indicia result directly from the HydraFacial Systems’ unique and claimed ability to selectively apply multiple treatment fluids drawn from separate containers.” POPR, 50-52. PO is wrong on both counts.

First, PO’s argument that HydroFacial Systems practice the claims of the ’287 patent cannot be reconciled with PO’s argument that the combination of Karasiuk and Palmer does not render obvious a handpiece “connected to the console.” POPR, 24-31. Similar to the proposed combination and the ’287 patent, the handpiece of the HydroFacial Systems connects to components located at the console, not the console itself. *See, e.g.*, EX2033, 7-8, 10 (handpiece supply line connects to manifold attached to console; handpiece waste line connects to waste

container sitting on console). If PO is correct that Karasiuk/Palmer's handpiece is not "connected to the console" (PO is not), then the HydroFacial Systems do not practice the claims of the '287 patent. PO cannot have it both ways.

Further, the HydroFacial Systems are not coextensive with the '287 patent because the HydroFacial Systems include key or driving features that are not claimed by the '287 patent. *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1375-78 (Fed. Cir. 2019). Indeed, PO only addresses the red and blue light therapy handpieces as features unrelated to the '287 patent in its minimal coextensiveness analysis. POPR, 52; EX2022, 1; EX2001, 175-179. But PO offers nothing more than declarant testimony to establish these features as insignificant. *Id.* And PO ignores many other features that are alleged to be important to the HydroFacial Systems, but not claimed in the '287 patent.

In marketing materials, several features were listed as why HydroFacial Systems are "unique & effective," including "patented disposable HydroPeel™ tip," "*simultaneous* exfoliation, extraction, cleaning and hydration," "active serums," "intuitive touchscreen with built-in treatment protocols," "patented diamond abrasion tip," "vacuum therapy," "Blue & Red / Infrared LED light," "patented Vortex-Fusion® serum delivery system," and "unique spiral design." EX2038, 1; EX2039, 1; EX2040, 2; EX2041, 4; EX2042, 1; EX2025, 3, 6. Other marketed features include "small footprint," "easy to use," and "profitable."

EX2047, 1. By comparison, the alleged invention of the '287 patent (e.g., selecting treatment fluids from multiple containers) is found nowhere in PO's marketing materials. *Tokai Corp. v. Easton Enterprises, Inc.*, 2011 WL 308370, *8–*9 (Fed. Cir. 2011). Thus, PO failed to show that the HydroFacial Systems are coextensive.

Further, during prosecution, PO identified **71** related patents that cover various allegedly inventive features of the HydroFacial Systems. EUNSUNG-1002, 254-257. For example, multiple patents in the '287 family include claims directed to a spiral shaped tip design not claimed in the '287 patent, including US11547840, US11612726, US10357642, US10357641, US9814868, US9662482, US9474886, and US8048089. Further, as evidence for “copying by others,” PO asserted, in a previous litigation, various patents that allegedly cover a copy of the HydroFacial Systems, including US6299620, US6641591, US7678120, US7789886, US8066716, and US8337513. POPR, 56-58 (citing EX2005, 3-4). These asserted patents cover various HydroFacial features not claimed in the '287 patent, including skin interface with inflow and outflow apertures (US6299620), skin interface with abrading structure (US6641591), skin interface with a plurality of ridge elements (US8066716), and an outer periphery configured to contact a skin surface (US8337513). The existence of other patents covering features of the HydroFacial Systems confirms that such systems are not coextensive with the '287 patent. *Fox Factory, Inc.*, 944 F.3d at 1375 (“the fact that SRAM obtained the '250

patent covering the combination of wide and narrow teeth and >80% gap filling leads us to conclude that this combination of features amounts to more than an insignificant feature not claimed by the '027 patent”).

PO alleges the claimed feature of “selecting treatment fluids from multiple containers” drove sales of the HydroFacial Systems because HydraFacial’s Nectre product, which does not have this feature, had worse sales. POPR, 52-55. Nectre, however, lacked many features of the other products, including the red and blue light therapy handpieces and the “intuitive touchscreen with built-in treatment protocols.” POPR, 52; EX2022, 1; EX2039, 1; EX2035, 11-21; EX2036, 12-20, EX2037, 3-12. Further, the sales numbers can be explained by different marketing efforts, different price points, and other business reasons that should be explored in a full trial. *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). As to copying, if anything, the Aguila litigation confirms the lack of nexus because the Aguila litigation involved different patents with different claims and, at best, shows copying of features of different patents. Neither the alleged copying nor industry praise is directed to the alleged novelty—multiple containers—of the '287 patent.

For these reasons, PO’s objective indicia does not outweigh the strong case of obviousness set forth in the petition and, at a minimum, should be tested during a full trial in which Petitioner has the opportunity to depose PO’s declarants and offer competing evidence.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that on February 14, 2025, a complete and entire copy of this Petitioner's Reply to Patent Owner's Preliminary Response and Exhibit 1100 were provided by email, to the Patent Owner, by serving the correspondence addresses of record as follows:

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