

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VANTAGE SPECIALTY CHEMICALS, INC.

Petitioner,

v.

CARGILL, INCORPORATED,

Patent Owner

Case IPR2023-00589
U.S. Patent 11,248,245

REVISED SUBMISSION OF PROPOSED PROTECTIVE ORDER

LIST OF EXHIBITS

Exhibit	Description
2001	Declaration of Dr. Tom Schultz, Ph.D. In Support of Patent Owner's Preliminary Response
2002	G. Knothe, <i>Structure indices in FA chemistry. How relevant is the iodine value?</i> JAOCS, 79 (9) 847-854 (2002).
2003	Claim Construction Memorandum Opinion (Dkt No. 63) filed in <i>Cargill, Incorporated v. Vantage Specialty Chemicals, Inc.</i> , No. 1:22-cv-00979-RGA-SRF (D. Del. June 5, 2023)
2004	Excerpt of United States District Courts, Federal Court Management Statistics Report for the 12-month period ending March 31, 2023, <i>available at</i> https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile0331.2023.pdf
2005	Initial Invalidity Contentions (Dkt No. 27) filed in <i>Cargill, Incorporated v. Vantage Specialty Chemicals, Inc.</i> , No. 1:22-cv-00979-RGA-SRF (D. Del. Jan. 19, 2023)
2006	Markman Claim Construction Order (Dkt No. 67) filed in <i>Cargill, Incorporated v. Vantage Specialty Chemicals, Inc.</i> , No. 1:22-cv-00979-RGA-SRF (D. Del. June 15, 2023)
2007	Declaration of Ahmed Davis
2008	Declaration of Casey Kraning
2009	Declaration of Dr. Tom Schultz, Ph.D. In Support of Patent Owner's Response
2010	Sharma et al., "Textbook of Cosmetic Formulations", https://www.researchgate.net/publication/325023106 , May, 2018
2011	Castillo, et al. "Medium-engineering: a useful tool for modulating lipase activity and selectivity", <i>Biocatalysis</i> 2015, Vol. 1 pp. 178-188
2012	Cargill Certificate of Analysis for Floraesters® 15, February 26, 2004

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2013	Cargill Certificate of Analysis for Floraesters® 20, September 1, 2004
2014	CONFIDENTIAL [REDACTED]
2015	Grand View Research, Inc. “Personal Care Specialty Ingredients Market Size, Share, & Trends Analysis Report By Product (Active, Inactive), By Application (Skin Care, Hair Care, Oral Care, Color Cosmetics, Others), By Region, And Segment Forecasts, 2023 – 2030”, https://www.grandviewresearch.com/industry-analysis/personal-care-specialty-ingredients-market , 2023
2016	National Academy of Sciences, “Biobased Industrial Products: Priorities for Research and Commercialization”, Committee on Biobased Industrial Products, National Research Council, ISBN: 0-309-52185-8, 2000
2017	Covestro, “End-of-Life Myths and Facts about Cosmetic Ingredients” https://solutions.covestro.com/en/highlights/articles/stories/2019/biodegradability-and-cosmetics#:~:text=Only%20natural%20products%20can%20biodegrade,nature%20and%20are%20easily%20biodegradable. 2023
2018	Wilford, “Oil From a Shrub Found in Desert May Save the Sperm Whale”, The New York Times, https://www.nytimes.com/1975/05/15/archives/oil-from-a-shrub-found-in-desert-may-save-the-sperm-whale.html May 15, 1975
2019	LibreTexts, “4.3: Mechanisms of Catalysis”, https://batch.libretexts.org/print/Letter/url=https://bio.libretexts.org/Bookshelves/Biochemistry/Book%3A_Biochemistry_Free_For_All_(Ahern_Rajagopal_and_Tan)/04%3A_Catalysis/4.03%3A_Mechanisms_of_Catalysis.pdf
2020	Saldana, et al. “Oxidative Stability of Fats and Oils Measured by Differential Scanning Calorimetry for Food and Industrial Applications”, Applications of Calorimetry in a Wide Context, Chapter 19; pp 445-474, 2013
2021	Gomna , “Review of vegetable oils behaviour at high temperature for solar plants: Stability, properties and current applications,”

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	https://www.sciencedirect.com/science/article/pii/S0927024819302855 , 2019
2022	RESERVED
2023	Wen, “Plant protein-derived antioxidant peptides: Isolation, identification, mechanism of action and application in food systems: A review” Trends in Food Science & Technology 105 (2020) pp. 308–322
2024	Excerpts, Smith, et al. “March’s Advanced Organic Chemistry” Sixth Edition, Wiley-Interscience, 2007
2025	Gad, et al. “Jojoba Oil: An Updated Comprehensive Review on Chemistry, Pharmaceutical Uses, and Toxicity”, Polymers (Basel) 2021 Jun; 13(11): 1711
2026	Faller, “UCD Biophysics 241: Membrane Biology“ LibreTexts, https://phys.libretexts.org/Courses/University_of_California_Davis/UCD%3A_Biophysics_241_-_Membrane_Biology October 11, 2023
2027	Jadhav, et al. “Triglycerides of medium-chain fatty acids: a concise review,” J Food Sci Technol (August 2023) 60(8):2143–2152
2028	Casas-Godoy, et al. “Lipases: An Overview”, Chapter 1, p 3-38; from; Lipases and Phospholipases. Methods in Molecular Biology, vol 861. Humana Press., (2018)
2029	Sharma, et al. “A Review on Applications of Microbial Lipases” International Journal of Biotech Trends and Technology (IJBTT) - Volume 6 Issue 4– October to December 2016
2030	Rozenaal, “Interesterification of oils and fats”, INFORM, Vol. 3, no. 11, November 1992
2031	Schuchardt, et al. “Transesterification of Vegetable Oils: a Review”, J. Braz. Chem. Soc., Vol. 9, No. 1, 199-210, 1998
2032	Arumugam, et al. “Production of biodiesel by enzymatic transesterification of waste sardine oil and evaluation of its engine performance”, Heliyon 3 (2017) e00486, 2017

2033	Dias Ribeiro, et al. “Production and Use of Lipases in Bioenergy: A Review from the Feedstocks to Biodiesel Production”, SAGE-Hindawi Access to Research, Enzyme Research, Volume 2011, Article ID 615803, 16 pages
2034	RESERVED
2035	Rauwerdink, et al. “How the Same Core Catalytic Machinery Catalyzes 17 Different Reactions: the Serine-Histidine-Aspartate Catalytic Triad of α/β -Hydrolase Fold Enzymes”, ACS Catal. 2015, 5, 6153–6176
2036	Utama, et al. “Lipase-Catalyzed Interesterification for the Synthesis of Medium-Long-Medium (MLM) Structured Lipids - A Review”, Food Technology and Biotechnology, July-September 2019 Vol. 57 No. 3 pp. 305-318
2037	Lewis, et al. “Biochemistry, Proteins Enzymes”, https://www.ncbi.nlm.nih.gov/books/NBK554481/?report=printable April 24, 2023, 4 pages
2038	Stergiou, et al. “Advances in lipase-catalyzed esterification reactions”, Biotechnology Advances 31 (2013) 1846–1859
2039	Houde, et al. “Lipases and Their Industrial Applications”, Applied Biochemistry and Biotechnology, Vol. 118, 2004 pp. 155-170
2040	Berglund, “Controlling lipase enantioselectivity for organic synthesis”, Biomolecular Engineering, Vol.18 (2001) 13–22
2041	Bornscheuer, “Methods to increase enantioselectivity of lipases and esterases”, Chemical biotechnology 2002 pp. 543-547
2042	Tabee, et al. “Effects of α -Tocopherol on Oxidative Stability and Phytosterol Oxidation During Heating in Some Regular and High-Oleic Vegetable Oils”, J Am Oil Chem Soc (2008) 85:857–867
2043	Khan, et al. “Current developments in esterification reaction: A review on process and Parameters” Journal of Industrial and Engineering Chemistry 103 (2021) 80–101

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2044	Steinke, et al. “Lipase-Catalyzed Alcoholysis of Crambe Oil and Camelina Oil for the Preparation of Long-Chain Esters”, JAOCS 77, 361–366 (April 2000)
2045	Gunawan, et al. “Lipase-Catalyzed Synthesis of Palm-Based Wax Esters”, J. Oleo Sci., Vol. 53, No. 10, 471-477 (2004)
2046	Deposition Transcript of David Rockstraw, <i>Vantage Special Chemicals, Inc. v. Cargill, Inc.</i> PTAB Proceeding No. IPR2023-00589, November 17, 2023
2047	Errata sheets, Deposition Transcript of David Rockstraw, <i>Vantage Special Chemicals, Inc. v. Cargill, Inc.</i> PTAB Proceeding No. IPR2023-00589, November 17, 2023
2048	Arquette, “Effects of Additives on the Oxidative Stability of Botanical Emollients”, International Flora Technologies, Ltd., SCC Ontario Chapter – Education Day September 10, 1998
2049	Declaration of Delrika Curry
2050	CONFIDENTIAL [REDACTED]
2051	CONFIDENTIAL [REDACTED]
2052	CONFIDENTIAL [REDACTED]
2053	CONFIDENTIAL [REDACTED]
2054	CONFIDENTIAL [REDACTED]
2055	CONFIDENTIAL [REDACTED]
2056	U.S. Patent App. Pub. 2016/0177350A1 to Addy, et al.

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2057	CONFIDENTIAL [REDACTED] [REDACTED]
2058	LibreTexts, “26.8: Triglycerides”, https://chem.libretexts.org/Bookshelves/Introductory_Chemistry/Introductory_Chemistry_(CK-12)/26%3A_Biochemistry/26.08%3A_Triglycerides (last accessed Dec. 5, 2023)
2059	Biochemistry Free For All, Version 1.3, Oregon State University, Section 4.3: Mechanisms of Catalysis
2060	FDA, “Are All ‘Personal Care Products’ Regulated as Cosmetics?” https://www.fda.gov/industry/fda-basics-industry/are-all-personal-care-products-regulated-cosmetics June 16, 2022
2061	Carli, “Cosmetic Formulations: A Beginners Guide”, Institute Of Personal Care Science; 2020
2062	Karupaiah, et al. “Effects of stereospecific positioning of fatty acids in triacylglycerol structures in native and randomized fats: a review of their nutritional implications”, Nutrition & Metabolism 2007, 4:16
2063	Pleiss, et al. “Anatomy of lipase binding sites: the scissile fatty acid binding site”, Chemistry and Physics of Lipids, 93 (1998) 67–80
2064	Salvi, “Chapter 4, Transesterification methods”, Production of Biodiesel from Non-Edible Sources, 2022, p. 117-151
2065	Redline of Protective Order
2066	Transcript of Telephone Conference on January 16, 2024
2067	Revised Redline of Protective Order

Patent Owner, Cargill, Incorporated (“Cargill”) and Petitioner, Vantage Specialty Chemicals, Inc. (“Vantage”), collectively, the “Parties,” hereby submit the proposed protective order appended below as Appendix A, and Exhibit 2065, Redline of the Proposed Protective Order.

Good cause exists to deviate from the Default Protective Order. The Parties are involved in a parallel district court case which resulted in production of each side’s confidential information under the protective order entered by the district court. As part of this proceeding, the Parties believed that some of that confidential information bore on the issues in this IPR and that the Board would benefit from seeing that information. As a result, the Parties agreed to use of that information in this proceeding subject to appropriate confidentiality protections. The Parties’ proposed modifications to the Default Protective Order aim to account for providing a protective order that is commensurate in scope to the protective order entered during the parallel district court litigation, which (i) permits a limited number of in-house counsel to review Confidential materials and (ii) includes a time-limited prosecution bar prohibiting individuals who are involved in related patent prosecution from viewing Confidential materials.

Patent Owner and Petitioner compete, along with other companies, in various areas, including in the production and sale of jojoba wax esters. Therefore,

public disclosure of the Parties' confidential information could cause competitive and financial harm to the Parties.

The Parties acknowledge that the Board does not ordinarily allow prosecution bars in protective orders, (Consolidated Trial Practice Guide at 116); however, here the proposed Protective Order agreed to by the Parties aligns with the carefully negotiated protective order filed and entered by the court in the district court litigation. In the present proceeding, the information disclosed in the confidential exhibits includes specific descriptions of proprietary manufacturing processes, as well as research and development (*e.g.*, propriety sourcing and processing of jojoba oil, and disclosure of experimental data) that would unfairly enable parties to draft and pursue claims based on the knowledge of these documents. *See e.g.*, Ex. 2050, 2-7; 2052, 2; 2055, 2; 2057, 10-11, 18. Moreover, Patent Owner is not seeking to amend or reissue its claims in this proceeding.

Furthermore, both Patent Owner and Petitioner have jointly agreed to the inclusion of the prosecution bar. Thus, "the disadvantage caused by a prosecution bar to patent owners," as contemplated by the Consolidated Trial Practice Guide, does not "outweigh[] the risk that confidential technical information about existing or future commercial products will be revealed during a proceeding." Consolidated Trial Practice Guide at 116. Indeed, Courts recognize that a party's most rigorous efforts in preserving confidentiality of information received in an

ongoing litigation may not be enough to prevent inadvertent disclosure, and a patent prosecution bar is necessary to avoid having to compartmentalize and suppress information inadvertently learned. *In re Deutsche Bank Trust Co.*, 605 F.3d 1373, 1378 (Fed. Cir. 2010) (“[E]ven the most rigorous efforts of the recipient of such information to preserve confidentiality in compliance with the provisions of such a protective order may not prevent inadvertent compromise.”); *id.* (“[I]t is very difficult for the human mind to compartmentalize and selectively suppress information once learned, no matter how well-intentioned the effort may be to do so.”) (quoting *Fed. Trade Comm’n v. Exxon Corp.*, 636 F.2d 1336, 1350 (D.C. Cir. 1980)). Should the Protective Order in this proceeding not include such a prosecution bar, this could permit a party to use the other party’s Confidential materials in a manner that could cause competitive harm. To prevent any potential misuse of the Parties’ Confidential materials, the Parties respectfully request entry of the proposed Protective Order, attached hereto as Appendix A (which is a clean version of Exhibit 2065). The Board has granted a party’s request to modify the default protective order to include a time-limited prosecution bar. *See, e.g., TC Heartland LLC v. Kraft Foods Group Brands LLC*, IPR2015-01129, Pap. 63, 5-6; *see also* IPR2015-01131, IPR2015-01128.

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For the foregoing reasons, good cause exists for entering the proposed
Protective Order in this proceeding.

Dated: February 2, 2024

Respectfully Submitted,

/Grace J. Kim/
Grace J. Kim (Reg. No. 71,977)
Counsel for Patent Owner

/Eric S. Lucas/
Eric S. Lucas (Reg. No. 76,434)
Counsel for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4)(i) *et seq.*, the undersigned certifies that on February 2, 2024, a complete and entire copy of this Revised Submission of Proposed Protective Order and Exhibit 2065 were provided via email to the Petitioner as follows:

Eric S. Lucas (Reg. No. 76,434), eric.lucas@shearman.com
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Appendix A

[PROPOSED] PROTECTIVE ORDER

This protective order governs the treatment and filing of confidential information, which includes documents and testimony from the parallel district court case that have been marked confidential and are protected by the protective order in that litigation matter.

1. Confidential information shall be clearly marked “CONFIDENTIAL.”
2. Access to confidential information is limited to the following individuals who have executed the acknowledgment appended to this order:

(A) Party Representatives. Outside Counsel of record for a party in the proceeding.

(B) Experts. Retained experts of a party in the proceeding who further certify in the Acknowledgement that they are not a competitor to any party, or a consultant for, or employed by, such a competitor with respect to the subject matter of the proceeding.

(C) In-house counsel. Those in-house counsel of each party previously designated under the protective order in the related district court case, *Cargill, Incorporated, et al. v. Vantage Specialty Chemicals, Inc.*, No. 1:22-cv-00979-RGA-SRF, pending in the U.S. District Court for the District of Delaware (“the Delaware Matter”). For the avoidance of doubt, access extends to the in-house counsel’s

data entry, information processing, computer support, clerical, paralegal employees, or agents whose duties and responsibilities require access to materials designated “CONFIDENTIAL.”

(D) Support Personnel. Administrative assistants, clerical staff, court reporters and other support personnel of the foregoing persons who are reasonably necessary to assist those persons in the proceeding shall not be required to sign an Acknowledgement, but shall be informed of the terms and requirements of the Protective Order by the person they are supporting who receives confidential information.

(E) The Office. Employees and representatives of the United States Patent and Trademark Office who have a need for access to the confidential information shall have such access without the requirement to sign an Acknowledgement. Such employees and representatives shall include the Director, members of the Board and their clerical staff, other support personnel, court reporters, and other persons acting on behalf of the Office.

3. Employees (*e.g.*, corporate officers), consultants, or other persons performing work for a party, other than those persons identified above in (2)(A)–(E), shall be extended access to confidential information only upon agreement of the parties or by order of the Board upon a motion brought by the party seeking to

disclose confidential information to that person and after signing the Acknowledgment. The party opposing disclosure to that person shall have the burden of proving that such person should be restricted from access to confidential information.

4. Prosecution Bar. Absent written consent from the Producing Party, any individual who receives access to CONFIDENTIAL information of a technical nature shall not be involved in the prosecution of patents or patent applications relating to the subject matter of the challenged patent in this case and/or the accused products in the Delaware Matter, including without limitation the patent challenged in this action and any patent or application claiming priority to or otherwise related to the patent challenged in this action, before any foreign or domestic agency, including the United States Patent and Trademark Office. For purposes of this paragraph, “prosecution” includes directly or indirectly drafting, amending, advising, or otherwise affecting the scope of patent claims. To avoid any doubt, “prosecution” as used in this paragraph does not include representing a party challenging a patent before a domestic or foreign agency (including, but not limited to, reexamination or *inter partes* review). This Prosecution Bar shall begin when access to Designated Material of a technical nature is first received by the affected individual and shall end two (2) years after final termination of this action.

5. Persons receiving confidential information shall use reasonable efforts to maintain the confidentiality of the information, including:

- (A) Maintaining such information in a secure location to which persons not authorized to receive the information shall not have access;
- (B) Otherwise using reasonable efforts to maintain the confidentiality of the information, which efforts shall be no less rigorous than those the recipient uses to maintain the confidentiality of information not received from the disclosing party;
- (C) Ensuring that support personnel of the recipient who have access to the confidential information understand and abide by the obligation to maintain the confidentiality of information received that is designated as confidential; and
- (D) Limiting the copying of confidential information to a reasonable number of copies needed for conduct of the proceeding and maintaining a record of the locations of such copies.

6. Persons receiving confidential information shall use the following procedures to maintain the confidentiality of the information:

- (A) Documents and Information Filed with the Board.

- i. A party may file documents or information with the Board along with a Motion to Seal. The Motion to Seal should provide a non-confidential description of the nature of the confidential information that is under seal, and set forth the reasons why the information is confidential and should not be made available to the public. A party may challenge the confidentiality of the information by opposing the Motion to Seal. The documents or information shall remain under seal unless the Board determines that some or all of it does not qualify for confidential treatment.
- ii. Where confidentiality is alleged as to some but not all of the information submitted to the Board, the submitting party shall file confidential and non-confidential versions of its submission, together with a Motion to Seal the confidential version setting forth the reasons why the information redacted from the non-confidential version is confidential and should not be made available to the public. A party may challenge the confidentiality of the information by opposing the Motion to Seal. The non-confidential version of the submission shall clearly indicate the locations of information that has been redacted. The confidential version of the submission shall be filed under seal. The redacted information shall remain under seal

unless the Board determines that some or all of the redacted information does not qualify for confidential treatment.

(B) Documents and Information Exchanged Among the Parties.

Documents (including deposition transcripts) and other information designated as confidential that are disclosed to another party during discovery or other proceedings before the Board shall be clearly marked as “CONFIDENTIAL” and shall be produced in a manner that maintains its confidentiality.

7. Within 60 days after the final disposition of this action, including the of all appeals and motions, each party receiving confidential information must return, or certify the destruction of, all copies of the confidential information to the producing party.

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Standard Acknowledgment for Access to Confidential Material

I _____, affirm that I have read the Protective Order in Case No. IPR2023-00589; that I will abide by its terms; that I will use the CONFIDENTIAL information only in connection with this proceeding and for no other purpose; that I will only allow access to support staff who are reasonably necessary to assist me in this proceeding; that prior to any disclosure to such support staff I informed or will inform them of the requirements of the Protective Order; that I am personally responsible for the requirements of the terms of the Protective Order and I agree to submit to the jurisdiction of the Office and the United States District Court for the Eastern District of Virginia for purposes of enforcing the terms of the Protective Order and providing remedies for its breach.

Dated: _____

[Signature]