In the

Supreme Court of the United States

HIP, INC.,

Petitioner,

v.

HORMEL FOODS CORPORATION,

Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR A WRIT OF CERTIORARI

Jerry R. Selinger

Counsel of Record

Patterson + Sheridan, LLP
1700 Pacific Avenue, Suite 2650

Dallas, Texas 75201
(214) 720-2200
jselinger@pattersonsheridan.com

B. Todd Patterson Kyrie Cameron Patterson + Sheridan, LLP 24 Greenway Plaza, Suite 1600 Houston, Texas 77046 (713) 623-4844

Counsel for Petitioner

322782



QUESTIONS PRESENTED

This case presents an intractable conflict between the plain language of 35 U.S.C. § 116(a) ("joint inventions") and requirements for joint inventorship added by the Federal Circuit since Congress amended Section 116(a) in 1984.

Section 116(a) does not impose any express lower limit on the quantity or quality of inventive contribution to be a co-inventor. The Federal Circuit initially construed amended Section 116(a) to require only identifying who conceived subject matter and whether that subject matter is recited in a claim. Subsequently, the appellate court added the requirement that a joint inventor's contribution be not insignificant in quality when measured against the dimension of the full invention.

The district court found that Petitioner's president was a joint inventor of Respondent's patent, because his contribution met the "not-insignificant-in-quality" requirement. Respondent included his contribution in its patent specification and used it to expand the scope of its broadest claim. The Federal Circuit reversed, based on the quantity of disclosure included in the patent specification. The questions presented are:

- 1. Whether joint inventorship requires anything more than a contribution to conception that is stated in a patent claim.
- 2. Whether, under Section 116(a), a claimed and enabled contribution to conception can be deemed insignificant in quality based on the quantity of disclosure in the specification.

PARTIES TO THE PROCEEDING

Petitioner is HIP, Inc.

Respondent is Hormel Foods Corporation.

CORPORATE DISCLOSURE STATEMENT

Petitioner HIP, Inc. has no parent corporation and no publicly held corporation owns 10% or more of HIP, Inc.'s stock.

RELATED PROCEEDINGS

United States District Court (D. Del.):

HIP, Inc. v. Hormel Foods Corporation, No. 21-546-CFC (April 4, 2022) (judgment)

United States Court of Appeals (Fed. Cir.):

HIP, Inc. v. Hormel Foods Corporation, No. 2022-1696 (May 2, 2023) (judgment)

HIP, Inc. v. Hormel Foods Corporation, No. 2022-1696 (June 27, 2023) (order denying petition for panel rehearing and rehearing en banc)

TABLE OF CONTENTS

Page
QUESTIONS PRESENTED i
PARTIES TO THE PROCEEDING ii
CORPORATE DISCLOSURE STATEMENTiii
RELATED PROCEEDINGS iv
TABLE OF CONTENTSv
TABLE OF APPENDICES vii
TABLE OF AUTHORITIESviii
OPINIONS BELOW1
JURISDICTION1
STATUTORY PROVISIONS INVOLVED1
INTRODUCTION
STATEMENT OF THE CASE4
I. Legal Background4
II. Factual Background
III. The District Court's Findings of Mr. Howard's Inventive Contribution Based on Clear and Convincing Evidence

$Table\ of\ Contents$

		Page
IV.	The Panel Engrafted a New Requirement onto the Statute to Reject the District	11
	Court's Findings	11
REAS	SONS FOR GRANTING THE WRIT	13
I.	The Appellate Court Improperly Read Requirements into 35 U.S.C. § 116(a)	
	That Congress Has Not Expressed	13
II.	The Panel's Quantitative Analysis is	
	Improper in a Joint Invention Inquiry	16
III.	The Questions Presented are Exceptionally Important and Warrant Review in this	
	Case.	17
CONC	LUSION	20

TABLE OF APPENDICES

	Page
APPENDIX A — OPINION OF THE UNITED	
STATES COURT OF APPEALS FOR THE	_
FEDERAL CIRCUIT, FILED MAY 2, 2023	la
APPENDIX B — TRANSCRIPT EXCERPT	
FROM THE UNITED STATES DISTRICT	
COURTFOR THE DISTRICT OF DELAWARE,	
FILED MARCH 15, 2022	15a
APPENDIX C — DENIAL OF REHEARING	
OF THE UNITED STATES COURT OF	
APPEALS FOR THE FEDERAL CIRCUIT,	
FILED JUNE 27, 2023	40a

viii

TABLE OF CITED AUTHORITIES

Page
Cases
Amgen Inc. v. Sanofi, 143 S.Ct. 1243 (May 18, 2023)16
Bilski v. Kappos, 561 U.S. 593 (2010)
Board of Trustees of the Leland Stanford Junior University v. Roche Molecular Systems, Inc., 583 F.3d 832 (Fed. Cir. 2009)
Diamond v. Diehr, 450 U.S. 175 (1981)
Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352 (Fed. Cir. 2004)
Ethicon, Inc. v. United States Surgical Corp., 135 F.3d 1456 (Fed. Cir. 1998)
Fina Oil & Chemical Co. v. Ewen, 123 F.3d 1466 (Fed. Cir. 1997) 6, 7, 13, 15, 17
KSR International Co. v. Teleflex Inc., 550 U.S. 398 (2007)
Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996)

$Cited\ Authorities$

Page
Ex parte Markush, 1925 Dec. Comm'r Pat. 126 (1924) 10, 11, 12
McClain v. Ortmayer, 141 U.S. 419 (1891)
Monsanto v. Kamp, 269 F. Supp. 818 (D.D.C. 1967)
Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898 (2014)
Pannu v. Iolab Corp., 155 F.3d 1344 (Fed. Cir. 1998) 7, 9, 10, 11, 14, 15, 18
Pfaff v. Wells Electronics, Inc. 525 U.S. 55 (1998)
Pointer v. Six Wheel Corp., 177 F.2d 153 (9th Cir. 1949)
Sewall v. Walters, 21 F.3d 411 (Fed. Cir. 1994) 6, 7, 13-15, 17
Southwest Software, Inc. v. Harlequin Inc., 226 F.3d 1280 (Fed. Cir. 2000)
Unitherm Food Systems, Inc. v. Swift-Eckrich Inc., 546 U.S. 394 (2006)

$Cited\ Authorities$

Page
Statutes
37 CFR 1.75 (c)
28 U.S.C. § 1254(1)
35 U.S.C. § 102(f)
35 U.S.C. § 112
35 U.S.C. § 116(a)
35 U.S.C. § 256(b)
35 U.S.C. § 261
35 U.S.C. § 2625
Other
9 Chisum on Patents
Donald A. Degnan & Libby A. Huskey, <i>Inventorship:</i> What Happens When You Don't Get It Right?, (Am. Intellectual Prop. Law Ass'n. 2006)5, 17, 18
Leahy-Smith America Invents Act (2011) 5

$Cited\ Authorities$

	Page
P.J. Federico, Commentary on the New Patent Act, Title 35 U.S.C.A. (1954 edition), reprinted 75 J.P.T.O.S. Special Issue (1993) (commentary on Section 116)	4
Manual of Patent Examining Procedure, § 2111.03	10
Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792, §§ 116, 256 (1952)	4
Patent Law Amendments Act of 1984, Pub. L. No. 98-622, 98 Stat. 3383 (1984)	4, 16
1 Robinson on Patents (1890)	4

OPINIONS BELOW

The Federal Circuit's decision is reported at 66 F.4th 1346 and reproduced at App. 1a-14a. The district court stated the findings and conclusions on the record after the close of evidence, and they are reproduced at App. 15a-39a.

JURISDICTION

The Federal Circuit entered judgment on May 2, 2023. Petitioner's timely petition for panel rehearing and rehearing en banc was denied on June 27, 2023. The order denying rehearing and rehearing en banc is unreported and reproduced at App. 40a-41a. This Court has jurisdiction under 28 U.S.C. §1254(1).

STATUTORY PROVISIONS INVOLVED

Section 116(a) of the Patent Act, 35 U.S.C. § 116(a), states:

JOINT INVENTIONS.—When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.

INTRODUCTION

This case presents an indisputable conflict between the express language of Section 116(a) of Title 35, informed by the legislative history of its 1984 amendments, and requirements the Federal Circuit has imposed on the joint inventions statute since the 1984 amendments.

The district court (Connolly, C.J.) found that Petitioner HIP, Inc.'s president, David Howard, made an inventive contribution to Hormel's U.S. Patent No. 9,980,498 (the "498 Patent") that was "not insignificant in quality when measured against the dimension of the full invention." App. 29a-31a. In reversing, the appellate court improperly encumbered unambiguous statutory language and ignored instructive legislative history. The appellate court based its reversal on a new quantitative requirement unsupported by the statutory language, inconsistent with prior precedential panel decisions and legislative history, and inconsistent with the tenet that claims define the invention. Respondent Hormel had shoehorned Mr. Howard's inventive contribution into a single sentence in

^{1.} The appellate court's prior history of doing so is evidenced by *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 60 (1998) (stating certiorari had been granted because "the text of § 102(b) makes no reference to 'substantial completion' of an invention," but the appellate court invalidated the claims based on the invention being "substantially complete at the time of sale"); *KSR International Co. v. Teleftex Inc.*, 550 U.S. 398, 401 (2007) ("We begin by rejecting the rigid approach of the Court of Appeals."); *Bilski v. Kappos*, 561 U.S. 593, 602 (2010) ("This Court has 'more than once cautioned that courts "should not read into the patent laws limitations and conditions which the legislature has not expressed."" (quoting *Diamond v. Diehr*, 450 U.S. 175, 182 (1981))).

the specification of Hormel's '498 Patent, but then used that single sentence to create independent claim 5, the broadest of the three independent claims in the patent.

This case also is of enormous practical importance. Every day, patent practitioners decide whom to include as inventor(s) on patent applications. Until now, however, they had no reason to exclude a potential inventor based on the number of words (or drawings) used to describe the inventor's contribution in the application's written description of the invention. *See* 35 U.S.C. § 112 ("The specification shall contain a written description of the invention"). Indeed, the Court, relying on Section 112, has long instructed that the claims define the invention.

Thus, the decision impacts the validity of alreadyissued patents and raises questions about patent ownership, particularly in the context of patents resulting from joint development activities. Business decisions based on patent assignments may now be called into question based on the allegation that the quantity of a joint inventor's contribution was too small. Further, while errors in inventorship can be corrected, 35 U.S.C. § 256, that right comes at a cost. Damages for infringement may not be recoverable before the USPTO Director has corrected inventorship of a patent having too few or too many named inventors. And, the decision adds uncertainty to future patent applications, with its incorrect focus on quantitative contribution and "centrality" of a disclosed embodiment - concepts that conflict with Section 116(a)'s statutory language, prior appellate statutory constructions, and the critical role of patent claims.

STATEMENT OF THE CASE

I. Legal Background

"The Patent Act requires that a patent specification 'conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as [the] invention." Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 901 (2014) (emphasis in original) (citing 35 U.S.C. § 112 ¶ 2 (2006 ed.). The Court has long instructed that "the claim 'define[s] the scope of a patent grant." See, e.g., Markman v. Westview Instruments, Inc., 517 U.S. 370, 373 (1996) (citation omitted); accord McClain v. Ortmayer, 141 U.S. 419, 424 (1891) ("The claim is the measure of [the patentee's] right to relief....").

Prior to the Patent Act of 1952, there was no statutory authority for correcting errors in inventorship. Senate Report No. 82-1979, June 27, 1952. Congress codified pre-1952 joint inventorship case law in Section 116 and added Section 256 in the Patent Act of 1952.² In 1984, Congress amended Section 116, expanding joint invention to "recognize[] the realities of modern team research." The

^{2.} Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792, §§ 116, 256 (1952); P.J. Federico, Commentary on the New Patent Act, Title 35 U.S.C.A. (1954 edition), reprinted 75 J.P.T.O.S. Special Issue (1993) (commentary on Section 116); see, e.g., Pointer v. Six Wheel Corp., 177 F.2d 153, 157 (9th Cir. 1949); 1 Robinson on Patents, § 398, at 567-569(1890).

^{3.} Patent Law Amendments Act of 1984, Pub. L. No. 98-622, 98 Stat. 3383 (1984); Legislative History of the Patent Law Amendments Act of 1984, at page 6/12, cited in 9 Chisum on Patents SECTION-BY-SECTION ANALYSIS OF H.R. 6286, PATENT LAW AMENDMENTS ACT OF 1984 (2023).

amended provision for joint inventions included negative guidance that joint inventors need not (1) work in physical proximity or at the same time, (2) make the same type or amount of contribution, or (3) make a contribution to the subject matter of every claim of the patent. 35 U.S.C. 116(a). The legislative history states: "Items (i) and (ii) adopt the rationale of decisions such as Monsanto v. Kamp, 269 F. Supp. 818 (D.D.C. 1967)." Monsanto explained that "[t]he fact that each of the inventors plays a different role and that the contribution of one may not be as great as that of another, does not detract from the fact that the invention is joint, if each makes some original contribution, though partial, to the final solution of the problem." 269 F. Supp. at 824 (emphasis added). In enacting the Leahy-Smith America Invents Act in 2011, Congress labelled the first paragraph of Section 116 as Section 116(a).

Congress determined that joint inventors have full undivided rights to the entire patent, even though an individual inventor's inventive contribution does not extend to every claim. 35 U.S.C. §§ 116 (a), 261 ("patents shall have the attributes of personal property"), 262 ("joint owners of a patent"). This means that each coinventor, or the co-inventor's assignee, "may make, use, offer to sell, or sell the patented invention within the United States, or import the patented invention into the United States, without the consent of and without accounting to the other" inventors. 35 U.S.C. § 262; Donald A. Degnan & Libby A. Huskey, Inventorship: What Happens When You Don't Get It Right?, 1, 3 (Am. Intellectual Property Ass'n. 2006) (available to members at https://www.aipla.org/docs/default-source/meetingmaterials/2006/2006-1018-degnan-aipla-inventorship-

^{4.} *Id*.

<u>article3.pdf?sfvrsn=85f17d01_1</u>) (also available at https://www.hollandhart.com/files/InventorshipWhatHappens.pdf) ("Degnan & Libby").

In Sewall v. Walters, 21 F.3d 411, 415 (Fed. Cir. 1994), the appellate court instructed that "[d]etermining 'inventorship' [under § 116] is nothing more than determining who conceived the subject matter at issue [and] whether that subject matter is recited in a claim" Id. Three years later, the appellate court observed that § 116 does not set any explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor. Fina Oil & Chemical Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997) (Section 116 "sets no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor.").

In 1998, in Ethicon, Inc. v. United States Surgical Corp., 135 F.3d 1456, 1461 (Fed. Cir. 1998), the appellate court applied the construction of Section 116 set forth in Sewall. The Ethicon panel explained its task as "determin[ing] what [the putative inventor's] contribution was and then whether that contribution's role appears in the claimed invention." Id. The district court had found the putative co-inventor contributed to aspects of claims 33 and 47. The appellate panel acknowledged the limited nature of its inquiry thusly: "If [the putative inventor] in fact contributed to the invention defined by claim 33, he is a joint inventor of that claim." Id at 1461. The panel affirmed the district court, holding that substantial evidence supported the district court's finding that the putative inventor had contributed a feature of the structure recited in claim 33. Thus, he had "conceived part of the invention

recited in claim 33." *Id.* at 1462. That ended the appellate court's inquiry because, "[a] contribution to one claim is enough." *Id.* at 1460. The added co-inventor had rights to the entire patent. *Id.* at 1466.

Soon after *Ethicon*, another appellate decision synthesized a three-part inquiry based on *Fina* and *Ethicon* (but not *Sewall*). *See Pannu v. Iolab Corp.*, 155 F.3d 1344 (Fed. Cir. 1998). "All that is required of a joint inventor is that he or she (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art." *Id.* at 1351.

In this case, the district court made its findings with reference to the claims and following the three-condition framework for Section 116 set forth in *Pannu*. The appellate court based its reversal solely on *Pannu* condition 2, but without acknowledging that it is the claims that define what the applicant regards as the invention. *Markman*, 517 U.S. at 373; 35 U.S.C. § 112.

II. Factual Background

The following provides context for how inventorship disputes arise in a joint project. In 2006, Mr. Howard, a prolific inventor, developed a novel continuous process for cooking meat products, including sliced bacon. Mr. Howard previously had installed a unique cooking process at a

Hormel subsidiary.⁵ Mr. Howard asked Hormel whether it would be interested in a new cooking process. Hormel had secretly been trying to improve its microwave-based "tough and chewy" precooked bacon products, so Mr. Howard's inquiry piqued its interest. (CA JA 239, 673, 755, 1484, 1491, 1648, 1650, 1953).

Beginning in July, 2007, Mr. Howard confidentially disclosed the details of his process to Hormel employees, including the four named as inventors on the '498 Patent. Mr. Howard initially did so during a July 20, 2007 meeting at Hormel, after which Hormel made a "scoping" visit to HIP's predecessor, Unitherm, to watch Mr. Howard's process in operation and taste its results. That led to a Joint Development Agreement and a series of collaborative visits by Hormel personnel to Unitherm. During Hormel's December 5, 2007 visit, Mr. Howard disclosed and demonstrated his inventive contribution of a preheating method of an infrared oven. App. 34a. In June 2008, an internal Hormel funding request to upper management explained that Hormel wanted to lease and move a Unitherm spiral oven to Hormel to transition from development to commercialization and doing so would prevent Unitherm from working with any Hormel competitor. In July 2009, Hormel accepted Mr. Howard's offer to loan Hormel an infrared oven for preheating. After the oven was moved, however, Hormel ceased sharing information, and Mr. Howard had no input into the 2010 application that led to the '498 Patent. (CA JA 292, 318-319, 348-350, 452, 1661-1663, 1680, 1690-1692, 1758).

^{5.} Mr. Howard's prior invention of a turkey-smoking process played a core role in litigation culminating in *Unitherm Food Systems*, *Inc. v. Swift-Eckrich Inc.*, 546 U.S. 394, 398 (2006).

III. The District Court's Findings of Mr. Howard's Inventive Contribution Based on Clear and Convincing Evidence

On the day the '498 Patent issued in 2018, HIP sued Hormel in Delaware under 35 U.S.C. § 256 to correct inventorship on the '498 Patent. By agreement, HIP refiled the lawsuit in 2021. Chief Judge Connolly held a bench trial in March 2022. The district court granted a directed verdict in Hormel's favor, rejecting HIP's claim that Mr. Howard is the sole inventor of the '498 Patent, and HIP did not appeal that decision.

By contrast, applying *Pannu*'s three-part inquiry to determine joint invention, the district court found by clear and convincing, corroborated evidence that, during a meeting at Hormel on July 20, 2007 attended by four Hormel employees, Mr. Howard disclosed the inventive concept of preheating using an infrared oven. One Hormel attendee, Richard Herreid, led the R&D team and was named a co-inventor of the '498 Patent. App. 33a-34a. The district court also found by clear and convincing, corroborated evidence that during Hormel's December 5, 2007 visit to Unitherm, Mr. Howard successfully disclosed and demonstrated the preheating method of an infrared oven to preheat pork loin before cooking the meat pieces in Unitherm's spiral oven. App. 34a. Mr. Herreid recorded data Mr. Howard generated and sent Mr. Howard spreadsheets of the data. The Hormel inventors testified that none of them contributed the claimed concept of a preheating method consisting of an infrared oven. *Id*.

The '498 Patent's specification discloses that "[p]reheating the sliced bacon with a microwave oven, or

other suitable heating methods such as infrared or hot air, prior to fully cooking the sliced bacon in a superheated steam oven minimizes condensation on the sliced bacon surfaces." App. 11a-12a. While that is the one disclosure Hormel included in the specification of preheating methods other than a microwave oven, Hormel used that disclosure to expand the scope of its exclusive rights from one preheating method to multiple preheating methods.

Independent claim 1 is limited to "preheating bacon pieces with a **microwave oven**, to create preheated bacon pieces, the preheating forming a barrier ..." while independent claim 5, the broadest claim of the '498 Patent, more broadly claims "using a **preheating method selected from the group consisting of** a microwave oven, an **infrared oven** and hot air ... to create **preheated meat pieces**" App. 2a-4a (emphasis added). Claim 5 and six of its seven dependent claims encompass all three preheating methods, while the other nine claims recite only the microwave-based preheating method. (CA JA 62-63).

Under *Pannu* condition 2, the district court found the difference between the scope of independent claims 1 and 5 made Mr. Howard's contribution "not insignificant in quality when measured against the dimension of the full invention." App. 29a-30a. Independent claim 5 extended beyond the single preheating method recited in independent claim 1 and expressly included Mr. Howard's

^{6.} This form of claim is a *Markush* claim, named after *Ex parte Markush*, 1925 Dec. Comm'r Pat. 126, 127 (1924), and requires selection from the closed group "consisting of" the alternative members. See Manual of Patent Examining Procedure, § 2111.03. The parties agreed claim construction was unnecessary. (CA JA 1274).

preheating method. Pointedly, the district court answered a question from Hormel's counsel thusly: "[I]f you want [to] claim an invention like you did in claim 5, you've got to pay the consequences," *i.e.*, the consequence being that Mr. Howard is a joint inventor. App. 38a.

IV. The Panel Engrafted a New Requirement onto the Statute to Reject the District Court's Findings

The panel's background discussion incorrectly relies on Hormel's brief rather than district court findings and documentary evidence to the contrary. Compare App. 5a-6a, 10a with App. 33a-35a, (CA JA 62-63, 1758). With that said, the appellate court fairly characterized the district court as having held that the infrared preheating method in claim 5 was significant based on the differences between independent claim 1 and independent claim 5. It acknowledged that the district court found Mr. Howard's testimony about his contribution of infrared preheating was corroborated by testimony from a former Unitherm employee, by test data, and by testimony that none of the Hormel inventors had conceived of a preheating method of an infrared oven. App. 7a. The appellate court did not question the district court's findings that Mr. Howard had collaborated with Hormel, had conceived of and communicated his contribution of infrared preheating to Hormel, or that Hormel expressly claimed Mr. Howard's contribution.

Nevertheless, the panel held in favor of Hormel, reversing the district court's finding in favor of HIP. It based its reversal on *Pannu* condition 2, after conducting a **quantitative** review of the '498 Patent. First noting that the specification mentioned Mr. Howard's contribution

"only once," the panel then catalogued the quantity of disclosure of preheating with only a microwave oven. App. 11a-13a. The panel stated, incorrectly, that Mr. Howard's contribution was recited only in "a single claim," when his contribution actually appears in the broadest independent claim and six dependent claims. (CA JA 62). The panel confusingly responded to the district court's finding that Mr. Howard's contribution was not insignificant in quality based on the difference in claim scope between the two broadest independent claims by agreeing the two other independent claims (nos. 1 and 13) were narrower in scope than claim 5. App. 11a-12a. The panel did not disagree that the *Markush* form of the preheating step of claim 5 rendered it the broadest claim in the patent, but instead refocused attention on what it phrased "the centrality of the microwave oven." App. 13a. In all events, based on its quantitative dissection of the patent and its improper quantitative measure of Mr. Howard's inventive contribution, the panel concluded that the district court had erred and that Mr. Howard's contribution was "insignificant in quality" when measured against the dimension of the full invention. Id. at 13a.

^{7.} Only the broadest of the three independent claims uses Mr. Howard's contribution, and that alone should be sufficient. But dependent claims 6-8, and 10-12 also take on Mr. Howard's infrared-oven preheating contribution. (CA JA 62). A dependent claim includes all the limitations of the claim incorporated by reference into the dependent claim. 37 CFR 1.75 (c).

REASONS FOR GRANTING THE WRIT

I. The Appellate Court Improperly Read Requirements into 35 U.S.C. § 116(a) That Congress Has Not Expressed

The express language of Section 116(a), as amended in 1984, does not set any explicit lower limit on either the amount or quality of inventive contribution required for a person to qualify as a joint inventor. Precedential decisions of the appellate court confirmed that is the case. Fina, 123 F.3d at 1473 (Section 116 "sets no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor."); accord Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1358 (Fed. Cir. 2004). Consistent with the absence of any such minimum requirement, the Federal Circuit previously identified the joint inventorship inquiry as "nothing more than determining who conceived the subject matter at issue [and] whether that subject matter is recited in a claim" Sewall, 21 F.3d at 415 (emphasis added).

Applying *Sewall*, there is no dispute that the "who" is Mr. Howard. The Hormel inventors denied they "played a role in inventing infrared preheating," and the district court found by clear and convincing, corroborated evidence that Mr. Howard contributed in a significant manner by conceiving of using an infrared oven as the preheating method. App. 29a-30a, 33a-34a. Nor can there be any dispute that Hormel used Mr. Howard's contribution in independent claim 5 (and dependent claims 6-8 and 10-12.). *Id.*, App. 7a, 29a-30a, 33a-34a; (CA JA 62).

The Federal Circuit's analysis in *Ethicon*, 135 F.3d at 1461, confirms that Section 116(a) has no minimum requirement beyond Sewall. The appellate inquiry in Ethicon ended once the reviewing court found substantial evidence supported the trial court's finding that the putative inventor (Mr. Choi) had "conceived of part of the invention recited in claim 33," id. at 1462, and by virtue of that contribution alone, Mr. Choi was a joint inventor of that claim, and of the patent, because a contribution to one claim was enough. Id. at 1460, 1462. In the case at hand, the appellate court should have affirmed the district court's holding that Mr. Howard was a joint inventor based on the statutory construction set out in Sewall and Ethicon. None of those cases support counting words or identifying the purported "centrality" of an embodiment to determine the quality of a co-inventor's contribution to claimed subject matter.

After *Ethicon*, the *Pannu* panel synthesized a three-condition joint inventorship inquiry. *See Pannu*, 155 F.3d at 1351. To reiterate, *Pannu* requires a joint inventor to "(1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art." *Id*.

Since then, the appellate court has used the somewhat loose language of the *Pannu* conditions to justify reaching outcomes not consistent with the statutory language or supported by legislative intent. However, the Federal Circuit's decision in this case lacks any support in the

language of the statute and intractably conflicts with the qualitative requirement of *Pannu* condition 2. Nor can the opinion's effort to dismiss Mr. Howard's inventive contribution as insignificant be reconciled with Hormel's election to claim that contribution, which Section 112 defines as subject matter Hormel regarded as the invention. *Nautilus*, *supra*.

The district court found the difference between the scope of independent claims 1 and 5, in the form of multiple preheating methods rather than only one, made Mr. Howard's contribution "not insignificant in quality when measured against the dimension of the full invention." App. 29a-31a. The district court also found that Hormel used Mr. Howard's contribution to conception of infrared preheating in independent claim 5 to broaden the scope of its exclusive rights beyond a microwave-based preheating method. *Id*.

After separating the portion of the specification in which Hormel incorporated Mr. Howard's inventive contribution from the other portions of the specification, the panel relabeled its work as a qualitative analysis. App. 11a-15a. Re-labelling something unmistakably quantitative as "qualitative" does not make it so. Nor does that linguistic sleight-of-hand change the fact that the panel improperly focused on the quantity of language while glossing over Hormel's use of Mr. Howard's contribution to create the patent's broadest independent claim. The panel's analysis is not supported by the language of Section 116(a), and conflicts with the appellate court's prior precedential statutory constructions, Sewall, supra; Fina, supra; Ethicon, supra; Pannu, supra, and with this Court's repeated admonition that claims define invention,

Nautilus, supra; Markman, supra; McClain, supra. Further, the panel's quantity requirement conflicts with the legislative history of the Patent Law Amendments Act of 1984. Congressional intent was to expand joint invention to reflect the realities of modern team research. See note 3, supra, and accompanying text. The Monsanto case, expressly cited in the legislative history, stated that an invention is joint "if each [co-inventor] makes some original contribution, though partial" 269 F. Supp. at 824. The appellate court's introduction of a quantity limitation also conflicts with the 1984 legislative history.

II. The Panel's Quantitative Analysis is Improper in a Joint Invention Inquiry

Neither Petitioner nor Respondent asserted independent claim 5 (or any other claim) was invalid because the specification failed to contain sufficient quantity to "enable" the full scope of the broadest claims. Amgen Inc. v. Sanofi, No. 21-757, 143 S.Ct. 1243, at 1251-1255 (May 18, 2023) (analyzing enablement under 35 U.S.C. § 112(a)). As Amgen instructed, "the specification must enable the full scope of the invention as defined by its claims. The more one claims, the more one must enable." Id. at 1254. At the same time, Amgen cautioned that a specification does not need to "describe with particularity how to make and use every single embodiment within a claimed class." Id. "Nor is a specification necessarily inadequate just because it leaves the skilled artist to engage in some measure of adaptation or testing." Id. at 1246. Accordingly, because this case is only about joint invention, quantity was not an appropriate appellate inquiry.

Further, there is a clear conflict between Hormel's reliance on that single sentence to enable its broadest claim (independent claim 5) and the panel's use of quantitative dissection to conclude the district court committed reversible error because Hormel had included Mr. Howard's contribution in only a single sentence in the specification. The panel's quantitative joint invention analysis is unsupported by Section 116(a), conflicts with Section 112 in two respects (claims define what the applicant regards as the invention and enablement), and conflicts with this Court's repeated admonition that the claim defines the patentable invention.

III. The Questions Presented are Exceptionally Important and Warrant Review in this Case

Certiorari should be granted because the questions presented are exceptionally important to inventors and patent owners, as well as patent practitioners. This case presents an ideal vehicle to answer whether Section 116(a) includes a requirement that a contribution can be insignificant in quality - thus not qualifying as a conception to a joint invention - based on the relative quantity of disclosure in the patent specification, even if the contribution is used to expand claim scope. This case also allows the Court to instruct practitioners, and the USPTO, whether Section 116(a) requires anything more than an inventive contribution that the applicant includes in a claim.

Patent practitioners decide whom to name as inventor(s) on every patent application. Degnan & Huskey, at 3-4. The construction of Section 116 in *Sewall*, *Ethicon* and *Fina* does not counsel a practitioner to count the

number of words and/or drawings in the specification used to describe a person's contribution in determining who conceived claimed subject matter. Confirmation that this was not the practice comes from the present case, where one named Hormel co-inventor could not point to anything specific in the specification or claims that he had contributed. (CA JA 595-596).

"Errors in patent inventorship typically arise in one of two ways." Degnan & Libby, at 4. One way arises in the context of "collaborative research and development. [I]nventorship disputes frequently arise from collaborative research." *Id.* "[T]rue inventors are sometimes inadvertently excluded because their contributions occurred early on in a long and complicated development process or because they were overlooked among the many contributors. Worse, true inventors are sometimes deceptively excluded for monetary, business, political, or even personal reasons." *Id.* Contrary to the goal of the 1984 Patent Amendment to Section 116(a), the panel's new quantity condition increases the chances of inventorship errors and disputes in applications generated during collaborative research.

This is not a hypothetical concern, because a patent that fails to list all of the actual inventors is invalid. *Pannu*, 155 F.3d at 1348-1350; 35 U.S.C. § 102(f) ("A person shall be entitled to a patent unless ... he did not himself invent the subject matter sought to be patented."); *see also* Degnan & Libby, at 1, 7. Thus, the appellate panel's newly fashioned precedential quantity requirement calls into question the validity of an unknown, but potentially large, number of issued patents.

Section 256(b) allows the USPTO Director to issue a certificate of correction of inventorship of an already-issued patent in response to an order from the district court to that effect, thus saving prospective patent validity. However, Section 256 cannot cure business decisions made by a third party who obtains an assignment from someone wrongly listed as a joint inventor. A finding that an individual was named incorrectly as a joint inventor will break the chain of title arising from an assignment by that person. Board of Trustees of the Leland Stanford Junior University v. Roche Molecular Systems, Inc., 583 F.3d 832, 843 (Fed. Cir. 2009).

Also, Section 256's cure comes at a significant cost regarding past damages for patent infringement. A certificate of correction is only effective for causes of action arising after the certificate issues. Southwest Software, Inc. v. Harlequin Inc., 226 F.3d 1280, 1295 (Fed. Cir. 2000). Thus, a cause of action arising before the certificate of correction issues does not get the benefit of the correction. Without the certificate of correction in Southwest Software, the asserted patent could be invalid for failure to comply with 35 U.S.C. § 112 prior to the date the certificate issued. Id., 226 F.3d at 1297 ("Put another way, if claim 1 is found to be invalid without [the material added with the certificate of correction, the invalidity ceased ... when the PTO issued the certificate of correction."). In like fashion, a patent owner could not recover pre-correction patent damages when a certificate of correction was required to correct inventorship.

The issue of whether a contribution to joint invention can be ignored because of the quantity of disclosure of the contribution, when the disclosure is used to support a claim, or used to substantially expand claim scope, is ripe, real, and ready for a definitive resolution from this Court.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

Jerry R. Selinger

Counsel of Record

Patterson + Sheridan, LLP
1700 Pacific Avenue, Suite 2650

Dallas, Texas 75201
(214) 720-2200

jselinger@pattersonsheridan.com

B. Todd Patterson Kyrie Cameron Patterson + Sheridan, LLP 24 Greenway Plaza, Suite 1600 Houston, Texas 77046 (713) 623-4844

Counsel for Petitioner

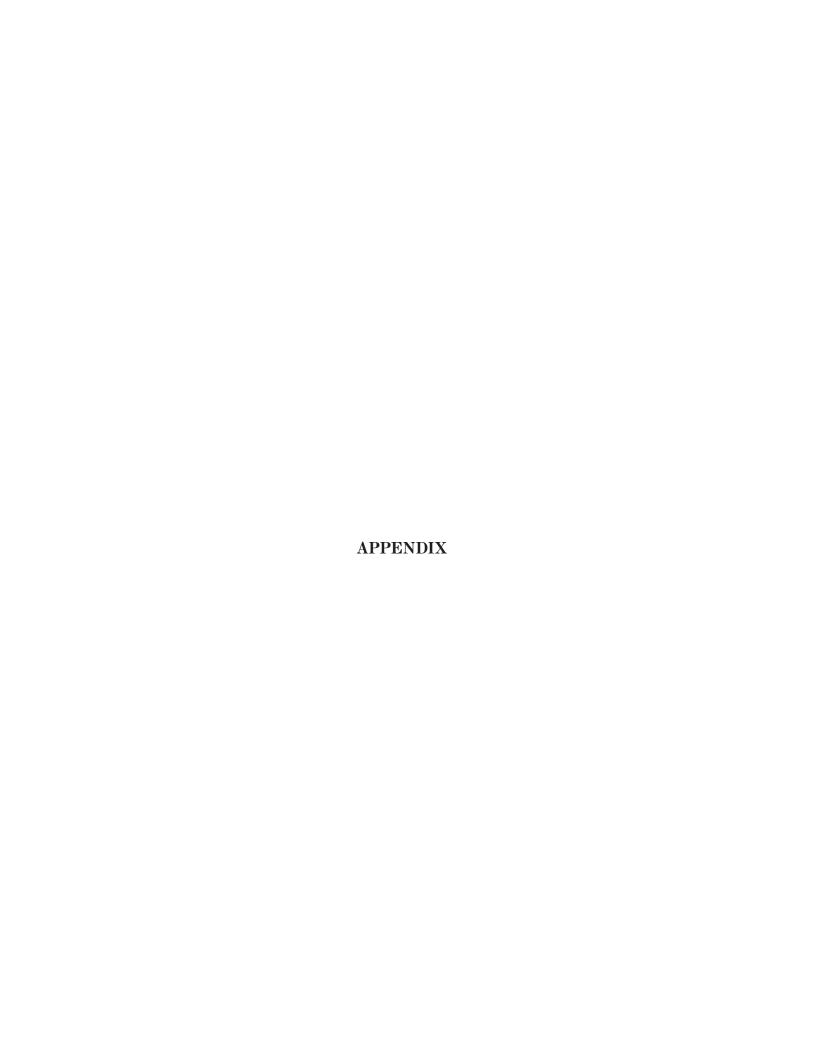


TABLE OF APPENDICES

	Page
APPENDIX A — OPINION OF THE UNITED	
STATES COURT OF APPEALS FOR THE	
FEDERAL CIRCUIT, FILED MAY 2, 2023	1a
APPENDIX B — TRANSCRIPT EXCERPT	
FROM THE UNITED STATES DISTRICT	
COURTFORTHE DISTRICT OF DELAWARE,	
•	150
FILED MARCH 15, 2022	19a
APPENDIX C — DENIAL OF REHEARING	
OF THE UNITED STATES COURT OF	
APPEALS FOR THE FEDERAL CIRCUIT,	
FILED JUNE 27, 2023	40a

APPENDIX A — OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, FILED MAY 2, 2023

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2022-1696

HIP, INC.,

Plaintiff-Appellee,

v.

HORMEL FOODS CORPORATION,

Defendant-Appellant.

Appeal from the United States District Court for the District of Delaware in No. 1:21-cv-00546-CFC, Chief Judge Colm F. Connolly.

Decided: May 2, 2023

,

Before Lourie, Clevenger, and Taranto, Circuit Judges.

Lourie, Circuit Judge.

Hormel Foods Corporation ("Hormel") appeals from a decision of the United States District Court for the District of Delaware holding that David Howard should be added as a joint inventor on its U.S. Patent 9,980,498 (the "'498 patent") pursuant to 35 U.S.C. § 256. See HIP,

Appendix A

Inc. v. Hormel Foods Corp., No. 21-cv-546, 2022 U.S. App. LEXIS 18248, Dkt. 53 ("Final Judgment") at J.A. 1-2, Dkt. 61 ("Trial Tr. III") at J.A. 3-13, 831-1045, Dkt. 63 ("Trial Tr. V") at J.A. 14-42, 1188-1294. For the reasons provided below, we reverse.

BACKGROUND

Hormel owns the '498 patent, which is directed to methods of precooking bacon and meat pieces. Specifically, the '498 patent claims a two-step method that involves a first preheating step using a microwave oven, infrared oven, or hot air, and a second, higher-temperature cooking step. The first step creates a layer of melted fat around the meat pieces, which protects the meat from condensation that may wash away salt and flavor during cooking. The second step prevents the charred, off flavor associated with cooking the meat pieces at higher temperatures. See '498 patent, col. 3 ll. 52-61.

The '498 patent has three independent claims, claims 1, 5, and 13. Claims 1 and 5 are relevant on appeal.

Claim 1 reads as follows:

1. A method of making precooked bacon pieces using a hybrid cooking system, comprising:

preheating bacon pieces with a *microwave* oven to a temperature of 140° F. to 210° F. to create preheated bacon pieces, the preheating forming a barrier with melted fat around the preheated bacon pieces and reducing an amount

of condensation that forms on the preheated bacon pieces when transferred to a cooking compartment of an oven, the barrier preventing any condensation that forms from contacting the preheated bacon pieces under the melted fat and diluting flavor in the preheated bacon pieces;

transferring the preheated bacon pieces to the cooking compartment of the oven, the cooking compartment heated with steam from an external steam generator, the external steam generator being external to the cooking compartment, the steam being injected into the cooking compartment and being approximately 400° F. to 1000° F. when the steam leaves the external steam generator, the cooking compartment including internal surfaces, the steam assisting in keeping the internal surfaces at a temperature below 375° F. thereby reducing off flavors during cooking in the cooking compartment; and

cooking the preheated bacon pieces in the cooking compartment to a water activity level of 0.92 or less to create precooked bacon pieces.

Id. col. 9 ll. 23-48 (emphasis added).

Claim 5 reads as follows:

5. A method of making precooked meat pieces using a hybrid cooking system, comprising:

preheating meat pieces in a first cooking compartment using a preheating method selected from the group consisting of a microwave oven, an infrared oven, and hot air to a temperature of at least 140° F. to create preheated meat pieces, the preheating forming a barrier with melted fat around the preheated meat pieces and reducing an amount of condensation that forms on the preheated meat pieces when transferred to a second cooking compartment, the barrier preventing any condensation that forms from contacting the preheated meat pieces under the melted fat and diluting flavor in the preheated meat pieces;

transferring the preheated meat pieces to the second cooking compartment, the second cooking compartment heated with an external heating source, the external heating source being external to the second cooking compartment, the second cooking compartment including internal surfaces, the external heating source assisting in keeping the internal surfaces at a temperature below a smoke point of fat from the meat pieces thereby reducing off flavors during cooking in the second compartment; and

cooking the preheated meat pieces in the second cooking compartment to a water activity level of 0.92 or less to create precooked meat pieces.

Id. col. 9 l. 57-col. 10 l. 17 (emphasis added).

In early 2005, Hormel embarked on a project to improve on its microwave cooking process for precooked bacon. Appellant's Br. 7. Then, in July 2007, Hormel planned to meet with David Howard of Unitherm Food Systems, Inc. ("Unitherm") to discuss the products and processes that Hormel was developing, as well as to discuss Unitherm's cooking equipment. Appellant's Br. 8 (citing J.A. 1651). Unitherm, now HIP, was a company that produced food safety and thermal processing equipment. J.A. 1515.

Accordingly, Howard and Tom Van Doorn, both of Unitherm, met with Hormel representatives in July 2007 and during the subsequent months. Appellant's Br. 9 (citing J.A. 1510-1547). The parties eventually entered into a joint agreement to develop an oven to be used in a two-step cooking process. J.A. 1682, 1692. In December 2007, Hormel conducted pork loin testing relating to color development. Appellant's Br. 15 (citing J.A. 771), Appellees' Br. 12. During this testing, Hormel used both an infrared oven and a more conventional spiral oven. J.A. 1719-20. Howard later alleged that it was during these meetings and testing process that he disclosed the infrared preheating concept at issue on appeal. See Trial Tr. V 1151:3-7, J.A. 35.

In January 2008, Hormel conducted additional bacon testing using Unitherm's mini spiral test oven. Appellant's Br. 16 (citing J.A. 775, 1723). After experiencing problems with the spiral oven and testing at Unitherm's facility, Hormel leased the oven and moved it to its own research and development facility to continue testing. Appellant's Br. 17 (citing J.A. 777). Subsequent testing revealed

that turning off internal electrical heating elements in the oven solved the charred, off flavor of the bacon, Appellant's Br. 19 (citing J.A. 684, 792), and preheating the bacon with a microwave oven prevented condensation from washing away the salt and flavor, Appellant's Br. 20 (citing J.A. 807). That testing resulted in a two-step cooking process, the first step involving preheating the bacon and the second step involving cooking the meat in a superheated steam oven. Appellant's Br. 20. Hormel filed a non-provisional patent application for the two-step cooking process in August 2011, listing Brian J. Srsen, Richard M. Herreid, James E. Mino, and Brian E. Hendrickson as joint inventors. J.A. 52. The application issued in May 2018 as the '498 patent. The '498 patent names the four inventors, all of whom assigned their interests in the patent to Hormel.

In April 2021, HIP sued Hormel in the United States District Court for the District of Delaware, alleging that Howard was either the sole inventor or a joint inventor of the '498 patent. HIP argued that Howard contributed to at least one of the following: (1) using superheated steam at a level of 90% or more in claims 3 and 12; (2) heating the internal surfaces of the oven to a temperature less than 375° F. in claim 1; (3) preheating by hot air in claim 5; and/or (4) preheating with an infrared oven in claim 5.

After a bench trial, the district court determined that Howard was not the sole inventor of the '498 patent, Trial Tr. III 896:9-13, J.A. 11, but that he was a joint inventor, based solely on his alleged contribution of the infrared preheating in claim 5, Trial Tr. V 1153:3-5, J.A. 37. The court held that the infrared preheating concept in

claim 5 was significant based on the differences between independent claim 1 and independent claim 5 and that HIP established that Howard's testimony was corroborated by Van Doorn's testimony, by the pork loin testing data, and by testimony from three Hormel inventors stating that they had not conceived of the preheating with an infrared oven limitation. Trial Tr. V 1150-53, J.A. 34-37.

In summary, the district court concluded that Howard, although not the sole inventor of the '498 patent, was a joint inventor, having contributed the preheating with an infrared oven concept in independent claim 5. The court ordered the United States Patent and Trademark Office to add David Howard as a joint inventor on the '498 patent and to issue a Certificate of Correction accordingly. Final Judgment at 1-2, J.A. 1-2. Hormel appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

Hormel raises two issues on appeal. First, Hormel contends that the district court erred in holding that David Howard is a joint inventor of the '498 patent because the alleged contribution of preheating with an infrared oven was well known and part of the state of the art and because it was not significant when measured against the scope of the full invention. Second, Hormel contends that the court erred in holding that HIP met its burden of establishing by clear and convincing evidence that David Howard is a joint inventor of the '498 patent because Howard's testimony was insufficiently corroborated. We address each argument in turn.

"Inventorship is a question of law" that we review "without deference" to the district court. Gen. Elec. Co. v. Wilkins, 750 F.3d 1324, 1329 (Fed. Cir. 2014). We review facts underlying the inventorship question for "clear error." Id. The burden of proving that an individual should have been added as an inventor to an issued patent is a "heavy one," Pannu v. Iolab Corp., 155 F.3d 1344, 1349 (Fed. Cir. 1998) (quoting Garrett Corp. v. United States, 422 F.2d 874, 880, 190 Ct. Cl. 858 (Ct. Cl. 1970)), and "the issuance of a patent creates a presumption that the named inventors are the true and only inventors," Gen. Elec. Co., 750 F.3d at 1329. Thus, an alleged joint inventor must prove a claim of joint inventorship by "clear and convincing evidence." Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997).

To qualify as joint inventor, a person must make a significant contribution to the invention as claimed. *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473 (Fed. Cir. 1997). The parties here frame their arguments using the three-part test articulated in *Pannu*, 155 F.3d at 1351. HIP argues that David Howard was a joint inventor because he (1) contributed in some significant manner to the conception of the invention; (2) made a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention; and (3) did more than merely explain to the real inventors well-known concepts and/or the current state of the art. *Id.*

Hormel contends that the district court erred in holding, under the third *Pannu* factor, that David Howard

is a joint inventor of the '498 patent because the alleged contribution of preheating with an infrared oven was well known and part of the state of the art. Hormel contends that Howard's alleged contribution to claim 5, preheating meat pieces with an infrared oven, was disclosed in a prior printed publication, U.S. Patent App. Pub. 2004/0131738 ("Holm"), which, Hormel argues, the court erred in failing to consider. Hormel contends that Holm is directed to a method and apparatus for browning and cooking food products with steam, expressly providing that one of the cooking sources can be an infrared oven. Hormel also argues that its expert testimony established that Holm's browning is preheating, and thus Holm taught using an infrared oven to preheat meat pieces three years before Howard's and Hormel's 2007 discussions. Hormel asserts that the court erred in failing to consider Holm and its disclosure, and instead only looked to the claim language in determining whether preheating with an infrared oven reflected the state of the art. Hormel further asserts that HIP's suggestion that Hormel had an obligation to prove that Holm's disclosure was commercialized, described in a marketing or sales brochure, or described in a textbook is not required in order to show that infrared preheating was well known.

Hormel further argues that the district court failed to analyze the significance of the alleged contribution in light of the full invention (the second *Pannu* factor) and also erred in its conclusion that the infrared preheating language in claim 5 was significant (the first *Pannu* factor). Hormel asserts that the court's findings that Howard was not the sole inventor make it clear that

he did not contribute to the overall conception of the claimed method, but at most suggested the use of a piece of equipment. Hormel concludes that that was not a significant contribution, and further that there is no indication that infrared preheating solved any specific problem in the field of the '498 patent. Hormel notes that the specification of the '498 patent mentions infrared ovens only once, in contrast to microwave ovens, which are mentioned throughout the specification, including in the figures. Hormel also argues that HIP did not put forward any evidence of the significance of Howard's contributions. Hormel finally asserts that the court erred in its claim differentiation analysis between claim 1, which does not include the infrared preheating limitation, and claim 5, which does, because infrared preheating is not what made claim 5 patentable. Hormel concludes that the mere inclusion of the infrared oven language in a claim is not sufficient to label that contribution significant.

HIP responds that the district court did not err in determining that Howard's infrared preheating contribution provided more than a well-known concept in the current state of the art. HIP asserts that Hormel attempts to improperly equate information that is well known in the art with anything in the prior art, however obscure. HIP contends that Holm is an obscure publication that was never commercialized and had never been described in a marketing or sales brochure or in a textbook. The infrared preheating claim limitation, HIP argues, does not become current state of the art merely because it is mentioned in a single patent publication. HIP also argues that its inventor testimony established that infrared preheating was not the state of the art.

HIP further responds that the district court did not err in determining that Howard's infrared preheating contribution was not insignificant in view of the whole invention (the second *Pannu* factor). HIP also argues that the court did not err in determining that Howard contributed in some significant way to the invention (the first *Pannu* factor), further noting that Hormel did not address that finding in its briefing. HIP argues that Hormel improperly attempts to frame the inquiry under the third *Pannu* factor as one of nonobviousness. HIP also contends that the district court did not err in comparing the claim language in claims 1 and 5 and determining that the added infrared preheating in claim 5 was significant.

We agree with Hormel that Howard was not a joint inventor of the invention claimed in the '498 patent. Under the second *Pannu* factor, the inventor must "make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention." Pannu, 155 F.3d at 1351. Here, we find that Howard's alleged contribution of preheating meat pieces using an infrared oven is "insignificant in quality," id., to the claimed invention. Howard's alleged contribution, preheating with an infrared oven, is mentioned only once in the '498 patent specification as an alternative heating method to a microwave oven. 498 patent, col. 5 ll. 40-42 ("Preheating the sliced bacon with a microwave oven, or other suitable heating methods such as infrared or hot air, prior to fully cooking the sliced bacon . . . "). Further, the alleged contribution is recited only once in a single claim of the '498 patent, in a Markush group reciting a microwave oven, an infrared oven, and hot air. Id. col. 9 ll. 57-62. In

fact, independent claims 1 and 13 only recite a method of making precooked bacon pieces (claim 1) or meat pieces (claim 13) using a hybrid cooking system comprising preheating meat pieces with a microwave oven and do not recite preheating with an infrared oven. *Id.* col. 9 ll. 23-25; *id.* col. 10 ll. 38-40.

In contrast to the insignificant disclosure of preheating with an infrared oven, preheating with microwave ovens, and microwave ovens themselves, feature prominently throughout the specification, claims, and figures. The brief summary of the invention mentions preheating with a microwave oven, but never mentions infrared preheating. '498 patent, col. 2 l. 28. As discussed above, independent claims 1, 5, and 13 recite preheating bacon pieces (claim 1) or meat pieces (claims 5 and 13) with a microwave oven. *Id.* col. 9 ll. 25, 61; *id.* col. 10 l. 40. The specification also repeatedly refers to preheating with a microwave oven, including in the background of the invention ("One typical way of making precooked bacon is to use microwave heating," id. col. 1 ll. 19-22) and in the detailed description of the invention ("To address the dilution of the cure flavor, the inventors of the present invention determined that by including a preheating step using a microwave oven, the cold slices of bacon were heated enough to reduce the amount of condensation that formed on the slices of bacon ...," id. col. 3 ll. 52-56).

Furthermore, the examples and corresponding figures employ procedures using preheating with a microwave oven, but not preheating with an infrared oven. In fact, not one example describes preheating with an infrared oven. Example 1 discloses preheating using

a microwave oven. *Id.* col. 5 l. 63. Example 2 uses three methods to preheat the bacon slices: a microwave oven, a superheated steam oven, and a hybrid system using both a microwave oven and a steam oven, consistent with the claimed invention. *Id.* col. 6 ll. 4-21. Strikingly, not a single method of preheating used in Example 2 is an infrared oven. Example 3 uses four preheating methods, including a microwave/superheated steam system, which, the specification discloses, "is the system in accordance with the present invention." *Id.* col. 6 ll. 23-40. Examples 4 and 5 also use microwave ovens and do not use infrared ovens. *Id.* col. 6 ll. 47-49 (using a hybrid system with a microwave oven); *id.* col. 7 ll. 4-6, 16-18 (same).

The figures further emphasize the centrality of the microwave oven, and the corresponding insignificance of the infrared oven, to the current invention. Figures 2-5 present the results of the microwave-oven-based examples, with none indicating the use of an infrared preheating step. Finally, Figure 1, a schematic diagram of a hybrid bacon cooking system according to the principles of the claimed invention, explicitly discloses a "microwave oven 40" as the instrument used in the precooking step.

In summary, the specification, claims, and figures all illustrate that Howard's alleged contribution of preheating the bacon or meat pieces with an infrared oven is "insignificant in quality" when "measured against the dimension of the full invention," *Pannu*, 155 F.3d at 1351, which squarely focuses on a preheating step using a microwave oven. Thus, we conclude that Howard is not a joint inventor of the '498 patent.

We need not comment on the other *Pannu* factors, as the failure to meet any one factor is dispositive on the question of inventorship. Pannu, 155 F.3d at 1351 (stating that a joint inventor must contribute in a significant manner to the conception or reduction to practice of the invention, make a contribution to the invention that is not insignificant, and do more than explain well-known concepts or the current state of the art). We therefore need not address Hormel's arguments that the alleged disclosure of infrared preheating in Holm constitutes a well-known concept and/or the state of the art. We also need not address Hormel's arguments on whether the district court erred in its conclusion that the infrared preheating language in claim 5 was a significant contribution to the conception or reduction to practice of the invention (i.e., the first Pannu factor).

Finally, we need not reach the question of corroboration. Howard's alleged contribution of infrared preheating was insignificant under *Pannu*, so the question of corroboration of evidence regarding Howard's alleged contribution is rendered moot.

CONCLUSION

We have considered the parties' remaining arguments, but we find them unpersuasive. For the foregoing reasons, the decision of the district court is reversed.

REVERSED

APPENDIX B — TRANSCRIPT EXCERPT FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE, FILED MARCH 15, 2022

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

C.A. No. 21-546-CFC

HIP, INC.,

Plaintiff,

v.

HORMEL FOODS CORPORATION,

Defendant.

Tuesday, March 15, 2022 10:00 a.m Bench Trial

Volume 5

844 King Street Wilmington, Delaware

BEFORE: THE HONORABLE COLM F. CONNOLLY United States District Court Judge

[1132] and of the '610 patent.

So -- and I'll just end with, Hormel did challenge ownership inventorship of the '610 application in the Minnesota litigation that was rejected.

THE COURT: Wait. He challenged inventorship?

MS. JACOBS: Well, because ownership -- you've heard about this, Your Honor.

THE COURT: Yeah. And I think you've lost that part of the battle. I mean, you know, it was ownership under the JOA, the technology.

MS. JACOBS: Yes. So I will leave it that --

THE COURT: Let me just ask you this.

MS. JACOBS: Yes.

THE COURT: In any of the claims in this application PTX-4, is there at least 90 percent limitation?

MS. JACOBS: Not in the claims. It's in the disclosure.

THE COURT: It's in the written description?

MS. JACOBS: Yes.

THE COURT: And it's only in Paragraph 21.

MS. JACOBS: I believe that is correct, Your Honor, yes.

Thank you, Your Honor.

THE COURT: All right. I'm going to start with [1133] that claim.

So basically all that's left for me to decide is the issue of joint inventorship. And as we discussed earlier, HIP has narrowed its joint inventorship claims to really four. I'll call them claims, or arguments.

So first let me just discuss the legal standard. A joint invention is the product of collaboration between two or more persons working together to solve the problem addressed. That's from the Federal Circuit decision in *Fina Oil* at 123 F.3d 1466, Page 1473.

The Federal Circuit held in the *Dana Farber* case, at 964 F.3d 1365, Page 1371, that to be considered a joint inventor, the alleged joint inventor must one, contribute in some significant manner to the conception or reduction to practice of the invention;

Two, make a contribution to the claimed invention that is not insignificant in quality when the contribution is measured against the dimension of the full invention; and

Three, do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

As with sole inventorship, any alleged joint inventor must provide corroborating evidence of any asserted contribution to the conception of the invention [1134] because, and I quote from *Fina Oil:* A contribution to conception is a mental act which cannot be accurately verified without corroboration, unquote.

So taken together, the alleged coinventor's testimony and corroborating evidence, must show inventorship by clear and convincing evidence. And the Federal Circuit has instructed, and that must "Consider corroborating evidence in context, make necessary credibility determinations, and assign appropriate probative weight to the evidence to determine whether clear and convincing evidence supports a claim of coinventorship."

Again, that is from -- or other rather that quote is from *Ethicon Inc.* 135 F.3d 1456 at Page 1464.

And I should note that the Federal Circuit cautioned in that decision that clear and convincing evidence -- the requirement for clear and convincing evidence, quote: Is not to be taken lightly, unquote.

As I mentioned, the theories of Mr. Howard's contribution or alleged contribution to the '498 patent have been narrowed. He argues that he contributed at least one of the following ideas to the claimed invention:

One, preheating with an infrared oven;

Two, preheating by hot air;

Three, using superheated steam at a level of [1135]90 percent or more; and

Four, heating the internal surfaces to a temperature less than 375 degrees Fahrenheit.

I'm going to begin where counsel left off which is the fourth argument.

So the limitation that's at issue here can be found in Claim 3 and Claim 12. And it's: Wherein a steam level in the second cooking compartment is at least greater that 90 percent, unquote.

Mr. Howard says that he came up with this idea. I don't think he's established by clear and convincing evidence that he contributed to this idea. I think it's -- if it's not undisputed, it is very, very clear that the notion of superheated steam cooking for the second compartment came from Hormel.

Really all Mr. Herreid can point to -- sorry, Mr. Howard can point to in terms of corroboration is the '610 patent and specifically Paragraph 21.

And stated in that application is the following: The amount of steam injected into the spiral oven in the inventive bacon cooking process will preferably be an amount sufficient to reduce the partial pressure of air which would otherwise be present in the natural cooking environment by at least 10 percent. The amount of steam injected into the spiral oven will more [1136]preferably

be an amount sufficient to reduce the partial pressure of air which would otherwise be present by.

And this is the real key point for me. Here's what follows:

At least 15 percent, at least 20 percent, at least 30 percent, at least 40 percent, at least 50 percent, at least 60 percent, at least 70 percent, at least 80 percent, or at least 90 percent.

That's just not very discerning. It's not very limiting. It provides for virtually every universe.

And then the application continues.

The amount of steam injected into the spiral oven will most preferably be an amount sufficient to replace substantially all of the air which would otherwise be present in the natural cooking environment, unquote.

And that's precisely what Hormel came up with, and it communicated that to Mr. Howard. And that's set forth by many witnesses at trial as far as I'm concerned.

And so this document by itself is not sufficient to establish corroboration such that I'm persuaded that the evidence shows in its totality clearly and convincingly that Mr. Howard contributed to this.

I also find that DTX-48 is better read to support that Mr. Herreid came up with this idea. And that, frankly, at best, Mr. Howard -- well, I will leave [1137]it at that here.

Here's what Mr. Herreid wrote. Now, this is written, mind you, after he has seen the application for the '610 patent, and he's trying to contribute to it. His deposition testimony, which I found very credible, was that he was disappointed that he did not get credit for sharing in the inventorship of the '610 patent.

And in an e-mail he wrote on January 10, 2008, quote:

I agree with submitting the patent quickly. The main added material that I would really like to have part of the application is adding the range from 85 percent to 100 percent moisture volume with a preferable version of 95 to 100 percent. This gets us into the range of less than 3 percent oxygen in the oven or preferably less than 1 percent oxygen. Basically we should be adding claims to cover the area of a completely superheated steam atmosphere. We know it works to cook bacon and have been doing it since 2005, unquote.

That's consistent with testimony from numerous Hormel witnesses. It's consistent with documentary evidence. I'm not going to cite the specific exhibits that show that Hormel was doing this well before 2008, the superheated steam, that it understood the principle of trying to cover completely the area of the superheated [1138]steam atmosphere in the cooking chamber.

And this was written after a draft of the patent application was provided to Mr. Herreid. And we don't know for sure whether or not or I should say, we don't know for sure what iteration of the draft was provided to Mr. Herreid.

There is testimony from Mr. Howard that he did not make any changes in response to this e-mail, but it's not corroborated. And I just think that the scope of what is supposed to be disclosed in Paragraph 21, the number of ranges that are disclosed, and the fact that the principle behind the limitation, as expressed in the January 10th, 2008 e-mail from Mr. Herreid, are consistent with Hormel's position that Hormel came up with this concept.

I found Mr. Herreid to be one of the more credible witnesses in the case. Really, he and Mr. Srsen were the two most credible witnesses, as far as I'm concerned.

And I think in light of his e-mail and the history that Hormel had in developing the superheated steam atmosphere, the fact that they brought it to the table, when viewed in the totality leads me to the conclusion Mr. Howard has not, through his uncorroborated testimony, established clearly and convincingly that he is responsible for, in any significant way, the 90 percent or [1139]greater limitation.

So I'm going to reject that joint inventorship argument.

All right. Let's go to the -- let's go to the heating internal surfaces to less than 375-degree Fahrenheit limitation.

Now, that limitation reads as follows. First of all, it's found in Claim 1 of the patent, and the limitation that we've been discussing is, quote: The steam assisting in keeping the internal surfaces at a temperature below 375 Fahrenheit, unquote.

Now, Mr. Howard's testimony at trial didn't refer to, quote, internal surfaces, and nor did his testimony make any reference to 375 degrees Fahrenheit. What he testified to that has relevance to this limitation is as follows. First of all, he testified at Page 192 of the rough transcript, when asked:

What does that tell about how hot the heating elements would be for a temperature set point of 350 degrees?

Quote: Under that condition, the element itself should be no hotter than 360 degrees.

Then when asked on Page 191, being referred to Paragraph 32 of the patent application, and asked:

What is disclosed there?

[1140]He said, quote: It is explaining that the electrical element itself, the temperature of it should be controlled very tightly to the set point of the oven that there should not be a large variance in these two temperatures to be called tightly controlled, unquote.

And then the next question is:

What use is described in Paragraph 32 of those heating elements?

And he says: They are used to preheat the oven. Not the bacon, preheat the oven itself.

Now, when I look to Paragraph 31 and 32 of the patent application, which are submitted by the plaintiff as being corroborative evidence, I find there, first of all, Paragraph 31, a disclosure of a, quote, low temperature embodiment that eliminates smoke and provides a product with little or no pit flavor notes.

And according to the application in this embodiment, the average cooking median temperature will be preferably in the range of from about 325 degrees Fahrenheit to about 385 degrees Fahrenheit, most preferably about 350 degrees Fahrenheit.

Now, plaintiff also points me to Paragraph 32, and in particular, the sentence which reads, in part, that, quote: Those in the art will understand that the electrical heating elements used in the spiral oven will [1141] preferably be tightly controlled at the desired set point using a thyristor or similar device, unquote.

So the idea here is that the element's temperature can be tightly controlled, quote, at the desired set point, end quote.

Mr. Howard's testimony is effectively that he gave Hormel the idea to cook bacon with the oven set to 350 degrees because he knew that cooking bacon at higher temperatures created a grilled flavor.

But the testimony is effectively a red herring because the '498 patent does not teach cooking bacon with an oven set to the temperature 350 degrees Fahrenheit. As

disclosed in the written description of the patent, Column 1, Lines 31 through 40: Another way of making precooked bacon is to use a continuous spiral oven with a heated gas, such as hot air or steam, which is circulated in the oven to heat and cook the bacon slices. Such ovens commonly use electrical heating elements or thermal oil heat exchangers to heat the circulating gas.

These heating surfaces are typically much hotter than the target temperature for the circulating gas to increase the efficiency of heat transfer. For example, an oven with an air temperature setting of 350 degrees Fahrenheit would have the heating surface temperature of at least 450 degrees Fahrenheit.

[1142] That sentence is, notably, in conflict with the paragraphs that I read from the patent application which plaintiff cites as corroborating evidence.

The written description explained that bacon can take on an off flavor when it is cooked in, quote, electrically heated spiral ovens with steam, unquote.

That's found at Column 3, Lines 31 through 32 of the patent.

The written description goes onto explain that, quote:

The inventors of the present invention found that using an external heat source of superheated steam rather than internal electrical heating elements in steam eliminated the off flavor. The external heat source of superheated

steam kept the surfaces within the oven below the 375 degrees Fahrenheit smoke point bacon fat, unquote.

And that's from Lines 44 through 49 at Column 3 of the patent.

Consistent with these teachings, Mr. Srsen testified that when Hormel cooked bacon in an oven with the electric heating elements as the source of heat, the fat from the bacon would atomize and come into contact with the hot heating surfaces to create a grill flavor.

And this can be found 238, rough trial transcript of -- this is March 2nd.

[1143]Mr. Srsen, whom I found to be very credible, also explained how he found that even when the temperature of the oven was set below the smoke point of bacon fat at 375-degree Fahrenheit, the electrical heating elements were still above 375 degrees, leading him to conclude that the hot heating elements created the grill flavor.

He confirmed this theory when he tried cooking bacon with the electric heating elements turned off and the external steam as the only source of heat and found that this cooking method eliminated the grill flavor.

This is found at Page 284 of the rough transcript and DTX-81.

As I mentioned, Mr. Howard stated the set temperature of the oven is effectively the same as the temperature of

the elements. And he testified that the patent application, '610 application, teaches, citing the passages I read at the beginning of this analysis, that the heating elements should be no hotter than 360-degree Fahrenheit for a temperature set point at 350 degrees Fahrenheit.

He thus argues that his suggestion to cook bacon in an oven set to a temperature of 350 degrees Fahrenheit was a meaningful contribution to the ultimate claim that required the internal surfaces be kept below 375 degrees Fahrenheit.

[1144]But the '610 patent application does not actually state that the set temperature is equivalent to the heating element temperature. It says, that, quote: Heating elements used in the spiral oven will preferably be tightly controlled at the desired set point using a thyristor or similar device, unquote.

And I read this paragraph to mean that the elements are controlled so that the actual temperature of the oven does not deviate from the set temperature.

My reading is consistent with Mr. Srsen's testimony; that the heating elements in the oven must be hotter than the oven set point, and it's also consistent with the written description that I've already read stating that the heating elements would be 450 degrees if the set point were 350-degree Fahrenheit.

Mr. Howard offered no evidence in support of his reading of the '610 patent application and, as I've already indicated, I found Mr. Srsen to be credible -- the

most credible witness indeed, and thus faced with that contradictory element over whether the set temperature is essentially the same as the heat elements' temperature, I will credit Mr. Srsen's testimony over Mr. Howard's, and I find the two temperatures to be distinct.

Against this background, even if I were fully to accept Mr. Howard's testimony that he suggested cooking [1145]bacon in an oven set to 350 degrees Fahrenheit to Hormel, this suggestion would not make him a joint inventor. As the Federal Circuit has explained, a joint inventor must contribute in some significant manner to the conception of the invention. And there is nothing in the record establishing that a suggestion to set an oven to 350-degrees Fahrenheit would have been a significant contribution to the invention.

Instead, the written description of the patent criticizes cooking bacon in an electrically heated spiral oven with the -- with steam when the air temperature is set to 350-degree Fahrenheit because that method for cooking bacon creates an off flavor.

In short, the cooking method that Mr. Howard characterizes as a significant contribution to the invention is identified by the patent as a problem that the invention seeks to solve. In light of the written description, and Mr. Srsen's testimony that he found bacon had a grill flavor even when the oven temperature was set below the smoke point of bacon fat for 375 degrees, I find that the idea to cook bacon in an oven with a temperature set to 350 degrees Fahrenheit would not have been a not insignificant contribution to the invention.

Thus, even if I were to find Mr. Howard did make the suggestion, the suggestion would be insufficient [1146]to make him a joint inventor.

The patent's issuance creates a presumption that the named inventors are the true and only inventors. Because Mr. Howard has not shown by clear and convincing evidence that he made a not insignificant contribution to this particular invention and to overcome the presumption, correction of inventorship is not warranted for this limitation.

All right. Let's turn, then, to the infrared oven limitation.

And let me just take a seven-minute break, give you a break, but we will be back in about seven or eight minutes. All right.

(Whereupon, a recess was taken.)

THE COURT: Okay. The remaining two claim limitations are related, and they're found in Claim 5.

Are they cited anywhere else?

MR. O'SHEA: No, Your Honor.

THE COURT: Right? I just want to make sure.

And it's very important that they are in Claim 5. Obviously there are other claims that depend from Claim 5, but the reason why it's important is because

for there to be joint inventorship, the joint inventor, or at least the person making a claim of joint inventorship, has to establish, among other things, that their [1147] contribution is not insignificant in quality when measured against the dimension of full invention.

And because of the way Claim 5 differs from Claim 1, I find that the limitations with regard to an infrared oven and hot air are not insignificant. And I say this because when I look at the difference between Claim 1 and Claim 5, there's only two substantive differences.

The first difference is that, unlike Claim 1 which addresses bacon pieces, Claim 5 addresses meat pieces. And then there are at least, at least five instances in Claim 5, or at least in the first clause of Claim 5, which is what we're looking at, where meat is substituted for bacon.

The other substantive change is that whereas Claim 1 recites, with a microwave oven to a temperature of 140 degrees Fahrenheit to 210 degrees Fahrenheit, Claim 5 substitutes, quote: In a first cooking compartment using a preheating method selected from the group consisting of a microwave oven and infrared oven and hot air to a temperature of at least 140 degrees Fahrenheit.

So there's -- and I say there's -- you could argue that that's two substantive changes because it's substituting the means for cooking and it's getting rid of the range, 140 to 210, and just having it be at least 140. [1148]So it's getting rid of the cap.

Now because, though, Hormel has a patent on Claim 5 -- and Claim 5 under Federal Circuit law is an invention

just like Claim 1 is an invention, I don't see how Hormel can say that having the preheating method be selected from a group consisting of a microwave oven, an infrared oven, and hot air, is not significant. It has to be significant.

And by the way, I don't think that HIP has put on any testimony or record evidence that would establish that these three things are significant. So you have an appeal issue in the sense that I'm basing this solely on what's in the patent. Essentially, I'm doing claim differentiation.

So I think, then, infrared and hot air have significance to the claimed invention that's recited in Claim 5.

Now, that doesn't end the inquiry.

Let's start with the hot air.

So Mr. Howard says he came up with the idea of using hot air to preheat. Now he cites first Mr. Gunawardena's testimony that -- and this is at Page 156 to 157 of the rough trial transcript, that you've got air leaking out of the inlet and outlet and, and he's asked, well, when that condenses, it becomes a mix of hot [1149]air and water, correct? And he says, correct.

I do not find that probative on behalf of HIP. Because Mr. Srsen, whom I find credible, says, hot air is not the same thing as a mix of hot air and water.

Next, HIP points to the video, which I've already made a finding of fact. I don't think the video is clear and convincing evidence of anything. I think it's ambiguous.

Next, HIP cites the testimony of Mr. Srsen at -- and, again, this is the rough transcript, but Page 231, Lines 5 through 9. And it's true -- this is what the question was: Now, going back to your first visit on September 25, 2007, you personally observed that hot air escaping from the inlet of the Unitherm spiral oven served to preheat bacon slices, correct?

The answer was yes.

I actually remember that question vividly, Mr. Selinger. And I don't think Mr. Srsen was -- I think it was at the end of his testimony, I don't think he was fully listening when he answered "Yes."

What I notice is that on Page 217 of the transcript when asked, Was preheating with hot air your idea, Mr. Srsen said, I never saw any preheating with hot air.

I think that's when he was being credible.

[1150]Next -- so I don't find Mr. Srsen provides corroborating evidence of a claim to inventorship of the hot air limitation.

Then I've got, according to HIP, to look at Paragraph 36 of the patent application, the '610 application, and I'm pointed specifically to language, quote, pretreated prior to entering the spiral oven cooking chamber by contacting the raw slices with dry, (i.e., superheated) steam, unquote.

Here, again, turning to Mr. Srsen, I rely on his testimony. Stearn and hot air are two different things.

So I don't believe that HIP has presented corroborating evidence. I don't they -- of Mr. Howard's claim of inventorship to the concept of using hot air for preheating, and I don't think that they've established by clear and convincing evidence, therefore, that he is a joint inventor with respect to the hot air limitation.

I do think, however, that they have established, by clear and convincing evidence, that Mr. Howard is a joint inventor with respect to the infrared limitation.

Let me walk through that.

Now, first of all, we have Mr. Howard's testimony. It's corroborated by Mr. Van Doorn's [1151]testimony. And this is found at Page 104, Page 120, and Page 109 of the trial transcript. It's also found JTX-12.

And he testified, Mr. Van Doorn, that during the July 20, 2007 meeting between Mr. Howard and folks from Hormel, Mr. Howard had disclosed the concept of using a microwave, IR, and RapidFlow air for preheating bacon slices prior to cooking them in the spiral oven.

That testimony was uncontradicted, as far as I'm concerned. There was suggestion, certainly in opening argument, and it was just argument, I'm not at all criticizing Hormel, but certainly after opening argument, I expected to hear people say, "I was there the entire time. I never heard him, "him" being Mr. Howard, make that disclosure."

Again, you know, Mr. Srsen was candid, and he said he wasn't there the entire time. When he was there he didn't

hear such a disclosure, and he certainly allowed for the possibility such a disclosure was made out of his presence.

So Mr. Van Doorn provides testimony.

But the most compelling, corroborating evidence comes from PTX-79. And in that document, we have test results for the Unitherm pork loin test. And we have an infrared oven being documented as being used to preheat meat pieces. And when you combine that with the fact that [1152]the inventors who testified said they did not invent the infrared limitation.

That is what gives you, in my opinion, clear and convincing evidence. You have the testimony of a person, corroborated by test results, and you have unequivocal statements from the three from the inventors that neither they nor Herreid, I always get the name -- neither they nor Mr. Herreid played a role in inventing infrared preheating. And that's clear and convincing evidence in my mind.

I think it's very unusual circumstances, and it'd be interesting to see what the Federal Circuit thinks of it, because really what is so important in driving my decision is the difference between Claim 5 and Claim 1, and the fact that the inventors testified that they did not contribute to or invent the infrared preheating.

And given that, and you couple it with PTX-79, I think you have clear and convincingly demonstrated a joint inventorship.

I don't find the other documents to be really probative. And why I say that is the flame griller documents that followed or the e-mails that came in 2009, at that point you could argue it's self-serving. I think more importantly, it's clear, what's very, very clear is as of December 5, 2007, an infrared preheating was used. [1153] And both parties participated in its use, and one party says, We didn't invent that, the other party says, We did.

And so I'm going to rule, then, in favor of joint inventorship solely with respect to the infrared limitation in Claim 5.

All right. I'm ruling against the plaintiff in all other respects.

So where does that leave us?

So, first of all, does anyone think, and now is the time to speak, that I need to say anything more on the record?

MR. SELINGER: Not on the part of the plaintiff, Your Honor.

MR. NIEDERLUECKE: Nothing further, Your Honor with regard -- hold on. Can I --

THE COURT: Yes, please go ahead and confer. I want you to make sure.

MR. O'SHEA: Your Honor, for the record, Slide 48 in Hormel's demonstrative, DDX-5, Slide 48, which

references the December 5th, 2007 pork loins test, which is PTX-79 at Page 4, if you reference Mr. Srsen's testimony from trial, and we just want to make sure that's part of the record.

And then the last thing would be if is Your Honor wants to make any statements regarding the prior art [1154]piece with respect to the infrared oven.

THE COURT: All right. Well, with respect to the Srsen testimony cited at Page 5 through 48, I would say this. I don't doubt that that was -- that Mr. Srsen is truthfully testifying to his recollection as to the purpose of the pork loins test. But I also don't think he was fully apprised of everything going on in the meeting.

And secondly, I thought it was very important -- and I mentioned -- I did mention at trial, but since you've now brought this up, I'll add it to my one of my findings of fact, which is that when I asked Mr. Srsen at trial, What does preheating mean? And I didn't ask him with any further limitations. I asked him literally, quote: What does preheating mean, unquote.

And his response -- actually, hold on. Hold on a second.

I wanted to make sure I've got the right page.

So I asked Mr. Srsen, quote: What does preheating mean?

And he responded: In our application, it would be elevating the temperature prior to a cooking step.

And then I said: An artisan of ordinary skill in the industry would know that's what preheating means?

And he said: Yes.

And so I don't think that his testimony that he [1155] thought the purpose of the pork loins test on December 5 of 2007 was to look at comparing color development at all contradicts Mr. Howard's assertion that he came up with the idea of using infrared for preheating.

And I actually think his testimony about what preheating means supports my findings and supports Mr. Howard's testimony and supports that Mr. Howard believed, and it isn't contradicted at all, that the infrared oven that was being used on December 5th was for preheating, even if it also -- even if it also browned and if it also did other things, that's not inconsistent with preheating. In fact, it is consistent with Mr. Srsen's definition of preheating.

Any other findings you want to -- or anything else you think I need to address?

MR. NIEDERLUECKE: Your Honor, the only, I think, other point that Mr. O'Shea made was whether you wanted to address anything about the question of the IRB in the prior art for the record.

THE COURT: I don't, you know. I mean, I really view this, as I said, as being driven by the language of Claim 5 and the language of Claim 1. Now, obviously, I think that goes to the significance or the non-insignificant issue, so ...

And precisely because it's different, it's so [1156] different than Claim 1, I think it also goes to the current state of the art because you've got a patent and you've got an invention, it's got to be novel, and it's got to be different than Claim 1. And the only things that we've talked about that are different are the limitation that's at issue, and so it seems to me that that takes care of the current state of the art question.

I kind of think, you know, if you want a claim an invention like you did in Claim 5, you've got to pay the consequences. All right?

So those are my findings of fact and conclusions of law under Rule 52. And I don't think anybody, especially since nobody's asked for any further statements on the record and nobody has objected, I don't think this resolution and adjudication on my part calls for an opinion or a memorandum decision. It's not required by Rule 52(a) (1). And I don't think further articulation on some of the nuances of the case law would add anything of benefit, and so that will be my decision.

I would ask the parties to confer and present me a judgment that I can sign.

And is there anything else?

39a

$Appendix\,B$

MR. SELINGER: Not from the plaintiff, Your Honor.

MR. O'SHEA: Nothing from Hormel.

 $[1157]\mbox{THE COURT:}$ All right. Thank you very much.

(The proceedings concluded at 4:15 p.rn.)

APPENDIX C — DENIAL OF REHEARING OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, FILED JUNE 27, 2023

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2022-1696

HIP, INC.,

Plaintiff-Appellee,

v.

HORMEL FOODS CORPORATION,

Defendant-Appellant.

Appeal from the United States District Court for the District of Delaware in No. 1:21-cv-00546-CFC, Chief Judge Colm F. Connolly.

ON PETITION FOR PANEL REHEARING AND REHEARING EN BANC

Before Moore, *Chief Judge*, Newman, Lourie, Clevenger¹, Dyk, Prost, Reyna, Taranto, Chen, Hughes, and Stoll, *Circuit Judges*.²

^{1.} Circuit Judge Clevenger participated only in the decision on the petition for panel rehearing.

 $^{2. \ \ \, {\}rm Circuit\,Judge\,Cunningham\,and\,Circuit\,Judge\,Stark\,did\,not}$ participate.

41a

Appendix C

PER CURIAM.

ORDER

HIP, Inc. filed a combined petition for panel rehearing and rehearing en banc. The petition was referred to the panel that heard the appeal, and thereafter the petition was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue July 5, 2023.

June 27, 2023 Date

FOR THE COURT

/s/ Jarrett B. Perlow Jarrett B. Perlow Acting Clerk of Court