

UNITED STATES DISTRICT COURT
DISTRICT OF NEW HAMPSHIRE

National Pasteurized
Eggs, LLC

v.

Civil No. 07-103-JL
Opinion No. 2011 DNH 208

L. John Davidson

FINDINGS OF FACT, RULINGS OF LAW, AND ORDER FOR JUDGMENT

This is a dispute over the ownership of a patent, which the parties refer to as "the Jumbo," on a process for pasteurizing chicken eggs in their shells. See U.S. Patent No. 6,692,784 (issued Feb. 17, 2004). The plaintiff, National Pasteurized Eggs, LLC ("NPE"), traces its claimed ownership to a 2001 agreement between the defendant, L. John Davidson, and, among others, the now-defunct company he founded, Pasteurized Eggs Corporation ("PEC"). NPE says that agreement, known as the "Global Settlement Memorandum" or "GSM," assigned Davidson's rights in the Jumbo to PEC. It is undisputed that, after PEC declared bankruptcy in 2002, NPE succeeded to PEC's rights under the GSM when NPE purchased PEC's assets in a sale approved by the Bankruptcy Court. In re Pasteurized Eggs Corp., No. 02-13086 (Bankr. D.N.H. July 25, 2003).

NPE now seeks a declaratory judgment that it is "the rightful owner of the Patent Rights conveyed by the Bankruptcy

Court Order," including the Jumbo. But Davidson argues that the scope of the assignment in the GSM did not include the Jumbo. He further argues that NPE cannot enforce the GSM against him, both because it was merely an "agreement to agree" and because, in any event, PEC breached it before it declared bankruptcy by failing to make certain payments to him.

This court has diversity jurisdiction over this action between NPE, a limited liability company with no New Hampshire members, and Davidson, a New Hampshire citizen, in which the amount in controversy exceeds \$75,000.¹ See 28 U.S.C. § 1332(a)(1). The court conducted a five-day bench trial on NPE's claim between July 18 and July 22, 2011. Before trial, the parties each submitted a trial memorandum and a set of proposed findings and rulings, see L.R. 16.2(b)(2), and jointly filed a statement of agreed-upon facts as directed by the court, see Order of Apr. 12, 2011. Following trial, each party filed a supplemental memorandum addressing particular issues, also at the

¹Davidson moved to dismiss this action for lack of subject-matter jurisdiction, arguing, among other things, that the amount in controversy did not exceed \$75,000. Judge Barbadoro, to whom this case was previously assigned, denied this motion "for the reasons stated in [NPE's] objection," which included an argument and a supporting affidavit that the value of the patent rights at issue exceeded \$75,000. Order of July 14, 2008. While Davidson suggested otherwise at the final pretrial conference, he did not pursue that argument at trial, and none of the evidence cast doubt on this jurisdictional conclusion.

court's direction. With the assistance of these materials, the court makes the following findings of fact and rulings of law, see Fed. R. Civ. P. 52(a), which result in the entry of judgment for NPE on its claim to ownership of the Jumbo.

Findings of Fact

1. In 1993, Davidson and others formed Pasteurized Eggs, L.P., and its general partner, Davidson Group Shell Egg Corporation.² Davidson served as the chief executive officer and chairman of the board of directors of Davidson Group, which had its office in Laconia, New Hampshire.

2. Through Davidson's efforts, the Group entered into an agreement with James P. and R.W. "Duffy" Cox, a father-and-son team of inventors from Washington state, to license certain technology they had developed for the pasteurization of chicken eggs in their shells. In relevant part, this technology involved heating the eggs for a particular length of time in a bath set to a particular temperature in order to reduce their bacterial content while retaining their "raw" character, i.e., without partially cooking them.

²For simplicity's sake, this order will use "PELP" to refer to either Pasteurized Eggs, L.P., Davidson Group Shell Egg Corporation, or both.

3. In 2000, PELP commissioned the construction of two pasteurization machines by an equipment manufacturer, Heat and Control, located in Concord, New Hampshire, and installed them in a facility in Newberry, South Carolina. This work was overseen by Myron "Mike" Wagner, a PELP employee who was in frequent contact with Davidson during this time. Another PELP employee, Mike Myshrall, also worked with the equipment in the South Carolina facility.

4. By early in the summer of 2000, PELP had started using the machines to pasteurize eggs on a commercial scale. The eggs, placed in containers called "flats," were moved by conveyor belt into a pasteurization tank, filled with water at a temperature of approximately 138° F. This temperature was maintained through the use of heat exchangers positioned underneath the tank, and kept consistent throughout the tank through the use of air bubbles in a technique known as "perturbation." The conveyor belt then moved the eggs into a "chiller tank," filled with cool water. After cooling, the eggs were moved to a piece of equipment known as "the Diamond," which packaged them for sale.

5. Within a few weeks, PELP started receiving complaints from its customers that the eggs pasteurized through this process were prematurely rotting, forcing a product recall. Wagner and

Myshrall, in frequent consultation with Davidson, began working to try to identify the source of the problem.

5. As part of these efforts, the men made a number of changes to the pasteurization process at the South Carolina facility during the summer and fall of 2000. Significantly, they eliminated the chilling bath, instead allowing the eggs to cool in ambient air after the pasteurization bath. They also began removing the eggs from the pasteurization bath before they reached the desired reduction in bacteria concentration, allowing them to reach that point as they cooled in the air afterwards. They began spraying the eggs with quaternary ammonia, a disinfectant, after they left the pasteurization bath. Eventually, they began contacting the shells with a mixture of wax and disinfectant after the eggs left the pasteurization bath.

6. Within a few weeks of these measures' implementation, the eggs stopped showing signs of rot. In fact, in a November 8, 2000, communication to PELP's limited partners (i.e., its investors), Davidson wrote:

As expected, our initial installation required significant adjustment and fine tuning along with training and adaptation to new challenges particularly in the area of recontamination after pasteurization. I am pleased to report that the pasteurizing machine has been functioning superbly for the past six weeks as a result of the knowledge gained and implemented The recontamination issues have been addressed and are

now fully under control through further inventiveness which is qualified for patent protection.³

9. Also in the fall of 2000, around the same time he was trying to solve the rot problem, Wagner realized that the heat exchangers on the pasteurization tank could maintain "zones" of different temperatures. Wagner discovered this accidentally; he was interrupted by a telephone call amidst the process of turning on the heat exchangers in the pasteurization tank and had to leave the area. When he returned, he noticed that while the water had become heated to the desired temperature in the area of tank where the exchangers had been activated, the water in the rest of the tank--where the exchangers had not yet been activated--maintained its original temperature.

10. Realizing that this would allow eggs to be heated to different temperatures in a single tank, Wagner immediately telephoned Davidson in New Hampshire to inform him of this discovery. Davidson flew to South Carolina the very next day to visit the PELP facility, where he and Wagner began efforts to use the separate zones in the tank to pasteurize quantities of eggs at different temperatures.

³Similarly, in a September 20, 2000, letter to PELP's patent attorney, Davidson wrote, "We have determined that deep chilling in lieu of natural cooling is not necessary and, if used, is risky."

11. Before the end of 2000, PELP had started pasteurizing eggs for market at the South Carolina facility, using a process that passed them through two zones of different temperatures in the same tank. While Wagner tried to create zones of three different pasteurizing temperatures in the same tank, the heat exchangers at the South Carolina facility were not powerful enough to accomplish that.

12. Also in late 2000, Wagner began assisting PELP in building a pasteurization machine to be installed at its new facility in Lansing, Michigan. This work took place at the Heat and Control facility in New Hampshire. Wagner directed that the new machine have the capacity to create zones of three different pasteurizing temperatures in the same tank and, at some point, successfully tested the machine for that capacity.

13. Further testing of the new pasteurization machine at the Heat and Control facility revealed that the three different temperature zones could be used to pasteurize eggs effectively. Wagner recalled that, as a result of this testing, "we developed at that time a three temperature test that worked very well and probably was the best pasteurized egg I'd ever seen," i.e., it looked like a "farm fresh egg," without the cloudiness in the white often present in pasteurized eggs.

14. The evidence is in dispute as to when this breakthrough occurred. Wagner recalled that it was in 2001, "within a couple weeks" of when the new pasteurization machine was shipped to the Lansing facility, which was not operational until summer 2001 at the earliest.⁴ But Davidson described successful tests of a three-temperature process in a November 14, 2000 letter to PELP's patent counsel, Fred Whisenhunt:

A differential in temperature setting currently employed occurs in the first of the 3 zones at 2° F higher than the preferred setting of 133° F in the second and third zones

In addition, further testing has been performed successfully that allows for the same settings described above with the exception that the third zone employs a 2° F higher setting (135° F) than the preferred temperature When the third zone is increased to 135° F together with a 133° F setting for zone #2 and a setting for zone #1 in a range between 136° F and 139° F the processing time is reduced.

15. Whether the successful testing of the three-temperature pasteurization process occurred in 2001, as Wagner recalled, or 2000, as Davidson stated in this contemporaneous writing, is potentially a significant factual issue in this case because of agreements struck between Davidson and PELP's successor entity, PEC, in 2001. See infra ¶¶ 17, 26. At trial, Davidson testified

⁴Wagner also recalled that the breakthrough occurred after Davidson had been terminated as a PEC employee and re-hired as a consultant, which did not occur until September 2001. See infra ¶¶ 23, 25.

that the memorandum reflected results that he had simply "anticipated," and not that had actually occurred. The court does not credit Davidson's newfound modesty as to the status of his inventions. Instead, as to the date when the successful testing of the three-temperature process occurred, this court relies on Davidson's contemporaneous memorandum over any conflicting testimony by Wagner--who came across as an entirely forthcoming witness at trial, but was attempting to remember events that happened 10 years or so ago.

16. In 2000, as a means of attracting greater investment, PELP's investors decided to convert it from a limited partnership a corporation, PEC, which was organized under Delaware law. In December 2000, Davidson described the conversion to PELP's investors by sending them a memorandum prepared by the company's law firm. The memorandum stated, in relevant part, that Davidson would assign to PEC "without consideration any invention or improvement which, during the term of his employment, is tested or used by [PEC] at a [PEC] facility or has been the subject of a patent application" (parenthetical omitted). In December 2000, Davidson executed an "Assignment of U.S. Patents" assigning to PEC "all right, title and interest" in specified patents, not including the Jumbo (as to which, as discussed infra, no application had yet been filed).

17. As part of the PELP-PEC conversion, which took effect on January 1, 2001, Davidson signed an employment agreement. The agreement, which took effect on January 21, 2001, provided in relevant part that:

Inventions conceived, developed or reduced to practice (or tested or used by [PEC] at a [PEC] facility . . . or which has been the subject of a patent application) prior to January 1, 2001 shall be [PEC's] exclusive property as against [Davidson]. [Davidson] will, at [PEC's] request and at its expense, execute all documents reasonably necessary to assign your right, title and interest in any such Invention. Inventions conceived, developed or reduced to practice on or after January 1, 2001, will be owned by [Davidson] and [his] successors for the life of the Invention, however [Davidson] will offer to license to [PEC], on an exclusive basis within the field of the business of [PEC], such Inventions useful in the business of [PEC].

(parentheticals omitted).

18. The next month, Whisenhunt's firm filed two provisional patent applications naming Davidson as the inventor. See U.S. Patent Application Nos. 60/271,726 (filed Feb. 28, 2001) and 60/271,746 (filed Feb. 28, 2001). The '726 application consisted entirely of verbatim excerpts from the memorandum Davidson had written to Whisenhunt in November 2000. See ¶ 14, supra.

19. The '746 provisional application described a method of "overpasteurization," i.e., reducing the bacterial content of the eggs by more than 5 logs but also causing some coagulation, on the theory that this would not only "provide even greater safety" but also reduce the preparation time for the eggs, making them

useful to fast food restaurants. The '746 provisional application consisted entirely of verbatim excerpts from a memorandum Davidson had written to Whisenhunt, bearing a date of January 31, 2001, and stating, "My experiments indicate that we can achieve up to a one minute saving by providing an advanced log reduction and a more coagulated product."

20. In relevant part, the '726 provisional application (and the November 2000 memorandum) described "our current learnings as applied to our pasteurization technology and processing." These "learnings" included, in relevant part:

- "the eggs exit the water bath at 4.80 logs [bacteria concentration] and achieve a minimum of 5.0 logs [bacteria concentration] during the first 4 minutes after exit and while naturally cooling down";
- "it was impossible in a commercial environment to maintain the water quality of the cold water bath to a standard that eliminated forms of bacteria that may reduce shelf life through the introduction of organisms which accelerated rot";
- "treatment of the eggs upon exit [from the bath] with an anti-bacterial agent must be prompt and precede all further processing"; and
- "following the anti-bacterial application, a protective sealant at a higher temperature than the internal temperature of the eggs is to be applied. The preferred sealant is a paraffin based wax containing an anti-bacterial agent."

21. The '726 provisional application and the November 2000 memorandum also described a pasteurization process using three

zones of different temperatures in a single tank, as already discussed. See ¶ 14, supra.

22. In March 2001, Davidson wrote to PEC's board of directors, claiming to own certain inventions in the egg pasteurization field by virtue of the employment agreement because they were "new inventiveness," i.e., created on or after January 1, 2001. See ¶ 17, supra. These inventions included treating the eggs with disinfectant after they exited the pasteurization bath.

23. At least one of PEC's board members, however, believed he had seen that process in use at PELP's South Carolina facility during 2000. So, as a result of Davidson's contrary claim, among other reasons, the PEC board of directors terminated his employment with the company, effective May 30, 2001. To accomplish this, certain directors obtained the written consent of a majority of PEC's shareholders to remove Davidson (and one other director, Arthur Blasberg, Jr.) from the board.

24. Davidson and Blasberg responded by filing suit against PEC and certain of its directors in the Delaware Chancery Court, alleging that those directors had wrongfully procured the consent of the corporation's shareholders to his termination.⁵ See

⁵Section 225 of the Delaware General Corporation Law authorizes the Chancery Court to "hear and determine the validity of any election, appointment, removal or resignation of any

Davidson v. Gorman, No. 18972-NC (Del. Ch. June 22, 2001). The court later issued a "status quo order" that, among other things, restricted the PEC board in its ability to take certain actions, including entering into contracts for more than \$250,000. This order interfered with PEC's efforts to raise additional capital.

25. To settle the Delaware litigation, Davidson, Blasberg, PEC, and its remaining board members entered into the GSM, effective September 20, 2001. The GSM was drafted by James Rand, a PEC board member whose company, Atlantic Capital Partners, L.L.C., had invested in PEC, and who negotiated the terms of the agreement with Davidson. The GSM provided for Davidson to dismiss the Delaware action challenging his termination, but that his employment agreement would "be cancelled by mutual consent." Sections 1(a)(ii), 1(a)(iii), and 1(a)(v) of the GSM stated that the employment contract would be replaced by an agreement under which Davidson would "be engaged as a consultant to PEC" through the end of the following year in exchange for a monthly fee of \$17,500 (the same as his salary as PEC's chairman under the employment agreement) and other benefits. The GSM further provided, in section 1(a)(iv), that "[a]ny remuneration due

director or officer of any corporation." [Del. Code Ann. tit. 8, § 225](#). So Davidson and PEC's directors have referred to the Chancery Court action, both around the time it was filed and since, as the "225 litigation" or the "225 action."

[Davidson] with respect to calendar year 2001 not paid up to the date of settlement shall be paid, in cash, upon settlement."

26. The GSM also contained a number of sections dealing with the ownership of intellectual property, numbered 1(b)-1(d):

- b. Patents and all other intellectual property applied for prior to January 1, 2001, shall be owned by PEC
- c. New patents or intellectual property ("Inventiveness") developed prior to January 1, 2001 ("Old Inventiveness"), including a method for extending the shelf life of pasteurized eggs by treatment with antibacterial agents, shall be the property of PEC and [Davidson] shall take such actions as may reasonably be required to assist PEC to complete the development, improvement, documentation, protection and patenting of such Old Inventiveness.
- d. Inventiveness developed by [Davidson], whether in combination with Old Inventiveness or prior inventiveness, which results in protection from new patents or patent applications providing broader or improved protection, on or subsequent to January 1, 2001 ("New Inventiveness") shall be considered the property of [Davidson]

Section 1(d) further required Davidson "to offer PEC the New Inventiveness for exclusive license," the terms of which would require "a royalty of \$0.0025 per dozen pasteurized eggs sold on" the new inventiveness, provided Davidson was no longer working for PEC as a consultant or otherwise.

27. While negotiating the GSM, Davidson had asked Rand to add the phrase "whether in combination with Old Inventiveness or prior inventiveness, which results in protection from new patents

or patent applications providing broader or improved protection" to the definition of "New Inventiveness" set forth in section 1(d). In a memorandum circulating the final version of the GSM to the other PEC board members, Rand explained that he had incorporated this change because "1) we have already agreed on licensing at a minimum the multi-temperature process and 2) the financial liability under the royalty provisions is capped and 3) [Davidson] is precluded from unilaterally utilizing 'Old' or prior inventiveness I don't think that the requested revision materially changes PEC's rights."

28. Rand testified at trial that this statement did not reflect his understanding that "the multi-temperature process" was "New Inventiveness" and therefore subject to the GSM's licensing provision, but rather, his understanding that, if that process was in fact "New Inventiveness," then PEC would have the right to license it from Davidson if it so chose.

29. The GSM also entitled Davidson to receive a promissory note in the principal sum of more than \$530,000, plus interest, known as the "Settlement Note." The note was payable on June 30, 2002, unless PEC completed a planned stock offering before then, in which case the company would have the right to repay the note in the monthly installments or convert the obligation into stock. The GSM also stated, in section 3(d), that Davidson and Blasberg

"will be reimbursed their reasonable fees and expenses, subject to the review of PEC prior to the completion of the closing of the agreement contemplated hereby, by a payment to [them] of \$100,000 in cash at closing and an amendment to the [note] for the balance."

30. Section 4 of the GSM stated, as one of several "Conditions Precedent," that Atlantic Capital (together with another entity, Antaeus Enterprises, Inc.) "will lend to PEC, on or immediately following the settlement date" the sum of \$600,000. The proceeds were to be directed, first, to discharging "minimum royalty obligations" under PEC's licenses for the Cox family technology and, "subject to there remaining a balance," to paying "the sums payable by PEC under [sections] 1(a)(iv) and 3(d)" of the GSM (which, as just discussed, provided for "remuneration" to Davidson "with respect to calendar year 2001" and reimbursement of the expenses of the 225 litigation, respectively).⁶

31. The final paragraph of the GSM stated:

This agreement shall be given effect as of September 20, 2001. Appropriate documents (the "Settlement Documents") to effectuate the foregoing will be

⁶The other "Conditions Precedent" involved another \$600,000 loan to PEC, from the directors named as defendants in the 225 litigation, as well as the settlement of that lawsuit, releases of the claims brought therein, and changes to the composition of PEC's board.

prepared and signed as soon as practicable by all Parties. The Parties agree that this "Heads of Agreement" memorandum summarizes the provisions to be included in such documents. The Parties further agree that this memorandum will be binding until such time as the Settlement Documents are prepared and accepted and that where this memorandum lacks specificity as to any matter, the Settlement Documents will contain provisions that are usual and customary, modified to reflect the intent of the Parties as embodied in the memorandum, where necessary.

32. After signing the GSM, Davidson attempted to renegotiate its terms, including those dealing with the ownership of intellectual property, but those renegotiations never ripened into a different agreement. Davidson admitted at trial, and affirmatively alleged in his counterclaim in this action, that the GSM was an enforceable agreement. Indeed, Davidson's counterclaim states that the GSM "contained all the essential terms of the parties' agreements and was effective and enforceable as the agreement by its express terms."⁷

33. Following the execution of the GSM, Davidson began negotiating with PEC over the terms of a consulting agreement which would govern the new relationship between Davidson and PEC contemplated by the GSM. See ¶ 25, supra. During those negotiations, a law firm representing PEC's investors circulated

⁷Davidson made the same statement in a writ he filed against a number of PEC's former directors and others in Rockingham County Superior Court. See Davidson v. Rand, No. 04-C-805 (N.H. Super. Ct. Sept. 17, 2004).

a draft consulting agreement. The draft stated, inter alia, that "all Old Inventiveness is owned by the Company" and that "'Old Inventiveness' shall mean processes or intellectual property developed prior to January 1, 2001 and shall include, upon payment in full of the LJD Settlement Note or the conversion of the LJD Settlement note into securities of the Company . . . , methods for extending the shelf life of pasteurized eggs by incorporating antibacterial agents into the wax coating" (underlining and parenthetical omitted). Davidson and PEC never reached accord on the terms of the consulting agreement, however.

34. Davidson recalled that, after the execution of the GSM, he was paid the equivalent of three months' wages. There is evidence that the "Settlement Note" envisioned by the GSM was prepared and executed, but there is no evidence that it was ever delivered to Davidson. Nor was Davidson otherwise reimbursed for the fees and expenses he incurred in the 225 litigation.

35. In the meantime, the application for the patent that ultimately became the Jumbo was filed with the United States Patent and Trademark Office. U.S. Patent Application No. 10/084,444 (filed Feb. 28, 2002). The application, prepared by Whisenhunt's law firm,

both listed Davidson as an inventor, and claimed priority through the provisional patent applications filed by the firm in February 2001. See ¶ 18, supra.

36. The '444 application contained, so far as is relevant here, three independent claims, numbered as claims 1, 30, and 55.⁸ Claim 1 of the '444 application described:

A method of pasteurizing in-shell chicken eggs, comprising: (1) placing the eggs in a heated fluid having a temperature of between about 128 degree. F. and 146 degree. F.; (2) allowing the eggs to dwell in the heated fluid until there is a log reduction of at least 4.6 of any Salmonella bacteria within the eggs; (3) removing the eggs from the heated fluid into a gaseous atmosphere; and (4) contacting the eggs with an antibacterial fluid containing an antibacterial agent.

Claim 4, a dependent claim, described "[t]he method of claim 1, wherein the heated fluid is at different temperatures."

37. Claim 30 of the '444 application described:

A method of pasteurizing in-shell chicken eggs, comprising: (1) placing the eggs in a heated fluid having temperatures between about 128 degree. F. and 146 degree. F. so as to heat the eggs, said heated fluid having a first temperature of about 139 degree F. to 146 degree F., a second temperature from about 130 degree. F. to less than 135 degree F. and a third temperature from about 135 degree. F. to 138 degree. F., and wherein the first, second, and third temperatures of the heated fluid are maintained in separate zones of the heated fluid; (2) allowing the eggs to pass through the first, second, and third temperatures in a time period which causes at least a

⁸The application contained additional independent claims numbered 82 and 84-86, but those claims were ultimately withdrawn when the application was amended. See infra ¶ 38.

log reduction of at least 4.6 of any Salmonella bacteria within the eggs; and (3) removing the eggs from the heated fluid to a gaseous atmosphere and allowing the eggs to cool.

38. Claim 55 of the '444 application described:

The method of pasteurizing in-shell chicken eggs, comprising: (1) passing the eggs through a tank containing a heated fluid at different temperatures in separate zones of the heated fluid, said different temperatures being about 139 degree F. to 146 degree F. in a first zone, from about 130 degree. F. to less than 135 degree F. in a second zone and from about 135 degree. F. to 138 degree. F. in a third zone; and (2) removing the eggs from the heated fluid when the eggs have reached at least about a 4.6 log reduction of any Salmonella within the eggs.

39. In response to the '444 application, the USPTO issued an "office action," dated December 20, 2002. This office action rejected (among other claims) claim 1, explaining that it had been anticipated by a patent issued to Cox and his parents in 1995. The office action stated that this patent "discloses pasteurizing in-shell eggs comprising heating same at a temperature of, for example, at least 139 [degrees Fahrenheit] for at least 20 minutes," as in claim 1 of the '444 application, "followed by placing said eggs in a gaseous environment, wherein said gaseous environment includes an antibacterial agent" (parentheticals omitted). According to the office action, "it is considered inherent that such heat treatment would provide the particular log reduction called for in" claim 1. The office action noted that the Cox patent "further discloses treating aid

[sic] shell eggs with a pore sealant wax." Finally, the office action stated that claim 4 (among other dependent claims) was "objected to as dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

40. Whisenhunt, acting on Davidson's behalf, responded by filing an amendment to the '444 application. The amendment, in relevant part, changed claim 1 to state:

A method of pasteurizing in-shell chicken eggs, comprising: (1) placing the eggs in a heated fluid having different temperatures of between about 128 degree. F. and 146 degree. F.; (2) allowing the eggs to dwell in the heated fluid until there is a log reduction of at least 4.6 of any Salmonella bacteria within the eggs; (3) removing the eggs from the heated fluid into a gaseous atmosphere where the eggs are allowed to cool; and (4) contacting the eggs with an antibacterial fluid containing an antibacterial agent.

(emphasis supplied to show additions from '444 application). The amendment explained that "the subject matter of claim 4, an allowed claim, has been incorporated into claim 1 An additional clarifying amendment to claim 1 has also been made in step (3) in connection with the eggs being cooled in the lower temperature gaseous atmosphere. Thus, it is believed that claim 1 is now clearly allowable."

41. The USPTO ultimately granted the '444 application, as amended, when it issued the '784--or "Jumbo"--patent on February 17, 2004. The Jumbo contains three independent claims, numbered

1, 27, and 48. The language of claim 1 is the same as that set forth in the amendment to the '444 application. See ¶ 40, supra. The language of claim 27 of the Jumbo is the same as that set forth as claim 30 of the '444 application. See ¶ 37, supra. And the language of claim 48 is the same as that set forth in claim 55 of the '444 application. See ¶ 38, supra.

42. In the meantime, PEC filed for bankruptcy protection in the Bankruptcy Court for the District of New Hampshire. In re Pasteurized Eggs Corp., No. 02-13086 (Bankr. D.N.H. Oct. 5, 2002). Davidson filed a claim against PEC for more than \$903,000, including \$100,000 in legal fees he incurred in prosecuting the 225 litigation and for which, under the GSM, PEC had agreed to reimburse him.

43. PEC filed a disclosure statement with the Bankruptcy Court in support of a proposed reorganization plan, acknowledging "a prepetition breach by [PEC] of the Global Settlement Agreement" that had jeopardized its "ability to continue using certain intellectual property," including the Jumbo. The statement explained that PEC and Davidson had "agreed to settle and resolve" that dispute, among others, through a "mutually acceptable written settlement agreement." The agreement was to make Davidson the owner of the Jumbo "and any improvements and new inventions conceived of at any time relating to pasteurized

eggs," but would provide PEC an "exclusive worldwide license" in that technology, with specified royalties due to Davidson.

44. Notwithstanding these statements, no such agreement was ever reached. Davidson said as much in an adversary complaint he filed against PEC in the Bankruptcy Court, in July 2003, seeking a declaratory judgment that he was the "sole and exclusive owner" of the disputed intellectual property, including the Jumbo patent application. Davidson's complaint alleged that the settlement referred to in PEC's disclosure statement "was at no point in time consummated" and that "PEC's multiple breaches of the [Global Settlement Memorandum] relieved him of . . . any obligation to assign further intellectual property interests to PEC." The complaint did not assert, however, that the Jumbo or any of the other disputed intellectual property amounted to "New Inventiveness" belonging to Davidson under the GSM.

45. PEC subsequently entered into an asset purchase agreement with NPE providing for the conveyance of "all of [PEC's] right, title and interest in all of [its] real and personal property," including "Intellectual Property" set forth in an attached schedule. The schedule listed the then-pending application for the Jumbo, among other patents, applications, and trademark registrations. NPE moved the Bankruptcy Court for approval of the sale, but Davidson objected on the grounds that

he--not PEC--was "the owner of and has exclusive rights to a substantial portion of the patents and patent applications" listed on the schedule, including the Jumbo. Davidson argued, among other things, that PEC had "no rights under the [GSM] and the Employment Agreement by virtue of its failure to perform." But he did not argue that, irrespective of any breach, the Jumbo or any of the other intellectual property on the schedule was "New Inventiveness" belonging to him under the GSM.

46. The Bankruptcy Court later approved the sale of PEC's assets to NPE over Davidson's objection. In re Pasteurized Eggs Corp., No. 02-13086 (Bankr. D.N.H. July 23, 2003). But the court noted that, as to the Jumbo and other intellectual property listed on a schedule to the asset purchase agreement:

title in said assets is disputed and subject to the competing claims of [PEC] and Davidson. Accordingly, [PEC] is authorized to convey to NPE all legal and equitable rights [PEC] has to claim ownership in the assets listed on [the schedule], subject only to the competing ownership claims of Davidson.

Id. at 3. The closing on the asset purchase agreement took place in late July or early August 2003.

47. Davidson then filed a complaint against NPE in this court, seeking a declaratory judgment that he owned, inter alia, the Jumbo application. Davidson v. Nat'l Pasteurized Eggs, LLC, No. 03-377 (D.N.H. Aug. 27, 2003). Davidson claimed that PEC, and hence NPE, had no rights to the application under either the

employment agreement or the GSM because of PEC's breach of those agreements. Again, though, Davidson did not claim that the Jumbo was "New Inventiveness" under the GSM. Just before the issuance of the Jumbo patent, Davidson filed a stipulation dismissing that action without prejudice.

48. Nearly three years later, NPE commenced this action against Davidson. NPE alleged that, in the weeks prior to that filing, Davidson "asserted that he owns and controls" the rights to certain patents, including the Jumbo, "in contravention of his obligations" under the employment agreement and GSM, thus jeopardizing several of NPE's pending international patent applications "derived from" those patents. NPE seeks a declaratory judgment that it owns "all right, title and interest" in a number of patents and patent applications, including the Jumbo and related foreign patent applications.

49. Davidson answered, raising several affirmative defenses, including failure of consideration. He also counterclaimed for a declaratory judgment that "the claim set forth in the 'Jumbo' patent describing the process of extending the shelf life of eggs be declared an independent claim that is

not within the public domain.”⁹ Davidson did not, however, seek rescission of the GSM.

50. This court finds that the GSM represents a meeting of the minds on all the essential terms of an agreement between Davidson and PEC and, therefore, that it is a valid contract.

51. This court finds that the Jumbo was “developed prior to January 1, 2001” as that phrase is used in the GSM.

Rulings of Law

A. As noted at the outset, it is undisputed that NPE succeeded to PEC’s rights in the Jumbo when NPE purchased PEC’s assets out of its bankruptcy. NPE claims that those assets include the Jumbo because it was among the intellectual property which, under the GSM, “shall be owned” by PEC. As fully explained below, NPE has proven this claim by a preponderance of the evidence, and Davidson has failed to prove any defense to it.

B. As an initial matter, the GSM is an enforceable agreement. “A valid, enforceable contract requires offer, acceptance, and a meeting of the minds on all essential terms

⁹The court eventually granted NPE’s motion to dismiss this counterclaim because it failed to present a justiciable case or controversy. Nat’l Pasteurized Eggs, LLC v. Davidson, 2011 DNH 009, 36-37 (document no. 118).

. . . . A meeting of the minds occurs when the evidence, viewed objectively, indicates that the parties have assented to the same terms.” [Glick v. Chocorua Forestlands Ltd. P’ship](#), 157 N.H. 240, 252 (2008). Whether a meeting of the minds has occurred, and a valid contract has been created, are questions of fact. [Id.](#) As already noted, [see](#) ¶ 50, [supra](#), this court finds that the GSM represents a meeting of the minds on all the essential terms of an agreement between Davidson and PEC and, therefore, that it is a valid contract.

C. The principal purpose of the GSM was to settle the 225 litigation between Davidson and PEC, which had itself arisen out of their dispute over the ownership of intellectual property between and, in turn, Davidson’s continued role in the management of the company. The GSM sets forth the essential terms for the resolution of that controversy: it provides for dismissal of the 225 litigation, cancellation of Davidson’s employment contract, his continued work for (and remuneration by) PEC as a consultant, settlement of his monetary claims against PEC, and--most importantly for present purposes--division of the ownership of intellectual property between Davidson and PEC. As to that final subject, the GSM assigns ownership depending on whether patents were issued or applied for, or “Inventiveness” was “developed,” prior to January 1, 2001, and sets forth detailed provisions for

PEC to license any intellectual property assigned to Davidson. Davidson does not identify any "essential terms" of his agreement with PEC that these provisions fail to address.

D. Instead, Davidson argues that the GSM was merely "an agreement to prepare a far more detailed documentation of the complex interrelationship between [him], PEC, and the other parties," emphasizing its statements that "[a]ppropriate documents (the 'Settlement Documents') to effectuate the foregoing will be prepared and signed as soon as practicable" and that "[a] new agreement will be substituted" for Davidson's employment agreement. But "[a] written memorandum is sufficient to establish a contract if it demonstrates that the parties have manifested their intent to be bound to the essential terms of a more detailed forthcoming agreement." [Lower Vill. Hydroelec. Assocs., L.P. v. City of Claremont](#), 147 N.H. 73, 75 (2001). The GSM readily satisfies this standard. Indeed, in its last paragraph, the GSM specifically provides that

this memorandum will be binding until such time as further Settlement Documents are prepared and accepted and that where this memorandum lacks specificity as to any matter, the Settlement Documents will contain provisions that are usual and customary, modified to reflect the intent of the Parties as embodied in the memorandum, where necessary.

It is difficult to imagine a clearer manifestation of intent to be bound by the essential terms of an agreement even though details remain to be worked out.

E. There is no merit to Davidson's argument, then, that the GSM is merely an agreement for the parties' "good faith preparation and execution of the Settlement Documents" which would themselves resolve the division of intellectual property. See, e.g., [Hogan Family Enters., Ltd. v. Town of Rye](#), 157 N.H. 453, 457-58 (2008) (enforcing agreement for the settlement of a nuisance action, which included the grant of an easement, even though the agreement provided that the language of the easement remained to be negotiated by counsel); [Lower Vill. Hydroelec.](#), 147 N.H. at 75-76 (enforcing agreement evinced by letter accepting offer, even though it "explicitly stated that an agreement would be drawn up"); [Guy v. Starwood Hotels & Resorts Worldwide, Inc.](#), 2005 DNH 126, 7 ("An enforceable agreement results under New Hampshire law when the parties manifest their intent to be bound to the essential terms of a more detailed forthcoming agreement even if the more detailed agreement never materializes.") (quotation marks and bracketing omitted). This is to say nothing of the fact that Davidson himself has repeatedly stated that the GSM "contained all the essential terms of the parties' agreements and was effective and enforceable as

the agreement by its express terms," including in his counterclaim in this action. See ¶ 32, supra.

F. Davidson also argues that, even if the GSM is enforceable, it never operated to assign any of his intellectual property to PEC because PEC failed to make the payments to him due under the GSM--in particular, the monthly "consulting fee" under section 1(a)(iii) and the reimbursement of his legal fees and expenses of the 225 action under section 3(b). See ¶ 25, supra. As a result, Davidson argues, he "was under no obligation to transfer intellectual property" to PEC. Davidson has repeatedly advanced this argument unlike his other claims to his continued ownership of the Jumbo) since he made his adversary complaint against PEC in the bankruptcy proceedings. It is without merit.

G. First, Davidson suggests that the parties' agreement itself contemplated that Davidson's duty to assign did not arise until PEC honored its duty to pay. This seems to be an argument that the parties' agreement made Davidson's performance of the assignment conditional on PEC's performance of the payments. "Conditions precedent are those facts and events, occurring subsequently to the making of a valid contract, that must occur before there is a right to performance." In re Est. of Kelly, 130 N.H. 773, 781 (1988) (quotation marks and ellipses omitted).

H. Davidson points out that section 4 of the GSM states, among a list of events expressly entitled "Conditions Precedent," that Atlantic and Antaeus would lend \$600,000 to PEC, the proceeds of which would be used to discharge PEC's "minimum royalty obligations" under its licenses for the Cox patents and, "subject to there remaining a balance," to making certain payments to Davidson due under sections 1(a)(iv) and 3(d) of the GSM.¹⁰ See ¶ 30, supra. These payments were, respectively, "remuneration due [Davidson] with respect to calendar year 2001" and reimbursement of the "reasonable legal fees and expenses" he incurred in the 225 litigation. But Davidson does not argue that PEC failed to pay him any of the "remuneration" called for by section 1(a)(iv). He acknowledged in his trial testimony, in fact, that he received the equivalent of three months' wages after signing the GSM (which would have covered the three months left in 2001 at that point).

I. It is undisputed that Davidson did not receive reimbursement of his expenses and legal fees in the 225 litigation. But, under section 3(d), that payment was "subject

¹⁰The record is unclear as to how much of the proceeds of the Atlantic/Antaeus loan remained after PEC settled its obligations under the Cox family licenses. For purposes of this discussion, however, the court will assume that a balance remained which would have enabled PEC to meet its obligations to Davidson under sections 1(a)(iv) and 3(b) of the GSM.

to a review of PEC prior to a completion of the closing of the agreement contemplated hereby” and was to take the form of “\$100,000 in cash at closing and an amendment to the . . . Settlement Note for the balance” (emphasis added). The “closing of the agreement”--which, as section 6 of the GSM contemplates, is the signing of “[a]ppropriate documents to effectuate” its provisions--never occurred. So, by the express terms of the GSM, the reimbursement for Davidson’s legal fees and costs in the 225 litigation never came due. Davidson does not argue to the contrary and acknowledged at trial that his position that the reimbursement was due before the documents envisioned by the GSM were signed “may have been overreaching.”¹¹ Because the conditions precedent imposed by section 4 were either satisfied (in the case of the remuneration called for by section 1(a)(iv)) or not triggered (in the case of the reimbursement called for by section 3(b)), those conditions had no effect on Davidson’s assignment of intellectual property rights under section 1(c).

J. Davidson also argues that PEC’s failure, beginning in January 2002, to pay the monthly “consulting fee” called for by

¹¹Indeed, although the GSM, by its terms, took effect on September 20, 2001, there is no evidence that Davidson demanded reimbursement of his legal fees and expenses until after PEC filed for bankruptcy protection more than one year later. That inaction is plainly inconsistent with any understanding that the reimbursement was due upon the signing of the GSM, as opposed to the more formal documents it contemplated.

section 1(a)(iii) of the GSM relieved him of its assignment provision. But he does not identify any section of the GSM that conditions the assignment upon PEC's making those monthly payments to him, and the court cannot locate any. As the New Hampshire Supreme Court has held, a contract will not be read to impose conditions precedent "unless required by the plain language of the agreement." [Holden Eng'g & Surveying, Inc. v. Pembroke Rd. Realty Trust](#), 137 N.H. 393, 396 (1993) (quotation marks omitted). Generally, this "plain language" embodies "words such as 'if,' 'on condition that,' 'subject to,' and 'provided.'" [Id.](#) (further internal quotation marks omitted).

K. Here, the provision of the GSM on which NPE relies for its ownership of the Jumbo, section 1(c), states simply that "Old Inventiveness" (as therein defined) "shall be the property of PEC."¹² It does not say, as Davidson seems to imagine, that Old

¹²Relying on Federal Circuit caselaw, NPE argues at length that this provision operated as an "automatic assignment" of the rights in the Jumbo to PEC. But the federal-law doctrine of "automatic assignment" serves to determine whether a plaintiff has standing, by virtue of its contract with the inventor of the patented matter, to bring a patent infringement claim against a third party and therefore plays little, if any, role in resolving a dispute (like this one) between two parties both claiming to own an invention under the contract between them. [Cf. DBB Techs., L.L.C. v. MLB Advanced Media, L.P.](#), 517 F.3d 1284, 1289-90 (Fed. Cir. 2008) (explaining that "whether a patent assignment clause creates an automatic assignment or merely an obligation to assign is intimately bound up with the question of standing in patent cases" and is therefore "a matter of federal law"). As this court has previously observed, such ownership disputes are

Inventiveness shall be the property of PEC "if," "on condition that," or "provided that" PEC make the monthly payments. Nor does section 1(a)(iii) of the GSM, which imposes the payment obligation, contain any language indicating that it serves as a condition of the assignment. Finally, section 4 of the GSM (which, as just discussed, does serve to impose conditions precedent) does not list payment of the monthly consulting fee among them. The "plain language" of the GSM, then, does not condition Davidson's assignment of intellectual property upon PEC's remission of the monthly payments to him.

L. Second, Davidson argues that PEC's failure, beginning in January 2002, to pay the monthly consulting fee under section 1(a)(iii) of the GSM amounted to a "material breach" so that his "obligation to assign the intellectual property that comprised the Jumbo Patent was discharged." Davidson is correct that "a breach that is sufficiently material and important to justify ending the whole transaction is a total breach that discharges the injured party's duties." [Fitz v. Coutinho](#), 136 N.H. 721, 725 (1993). But, as Davidson recognizes, the duties that are discharged by a total breach are "the injured party's remaining

resolved under state law. See [Nat'l Pasteurized Eggs](#), 2011 DNH 009, 33 n.13; Order of May 7, 2008 (Barbadoro, J.) (document no. 29). So this court applies New Hampshire principles of contract interpretation, rather than the federal doctrine of "automatic assignment," in deciding the effect of section 1(c) of the GSM.

duties.” Id. (emphasis added); see also Restatement (Second) of Contracts § 237 (1981) (“it is a condition of each party’s remaining duties to render performances . . . that there be no uncured material failure by the other party to render any such performance due at an earlier time”).

M. As just discussed, Davidson’s duty to assign intellectual property under section 1(c) of the GSM was not “remaining” at the time that PEC stopped making the monthly payments to him under section 1(a)(iii), because the GSM did not condition the assignment upon the payments. Again, section 1(c) provides simply that the specified intellectual property “shall be owned by PEC” (emphasis added), and does not say that this is to occur only after PEC makes all (or even any) of the monthly payments.¹³ So the GSM does not allow Davidson to wait to assign the intellectual property in question until he has received his consulting fee--which, of course, was not due up front, but on a

¹³Section 1(c) applies only to intellectual property “developed prior to January 1, 2001,” so the subject of the assignment would necessarily have already come into existence at the time the GSM was signed. Cf. Arachnid, Inc. v. Merit Indus., Inc., 939 F.2d 1574, 1580 (Fed. Cir. 1991) (ruling that a “provision that all rights to inventions developed during [a specified] period ‘will be assigned’ . . . does not rise to the level of a present assignment of an existing invention”). It is also worth noting that even the draft consulting agreement, circulated after the execution of the GSM, did not condition Davidson’s assignment of “Old Inventiveness” upon PEC’s payment of the consulting fee, but only upon its payment of the “Settlement Note.” See ¶ 32, supra.

monthly basis. See Restatement (Second) of Contracts § 237 cmt. b (directing that "the terms of the agreement should be considered" in "determining the relative times when performance is due"). It follows that the assignment was not one of Davidson's "remaining duties" under the GSM at the time PEC breached the agreement by discontinuing the monthly payments in January 2002. Indeed, by that point, Davidson had already rendered that performance by signing off on the GSM's unconditional provision that the specified intellectual property "shall be owned by PEC."

N. At least one court has rejected the argument that one party's material breach of contract allows the other "to cancel his previous performance," reasoning that, once tendered, it is "not a remaining duty of performance which the material breach would excuse" under § 237 of the Restatement. Waste Mgmt., Inc. v. Danis Indus. Corp., No. 00-256, 2004 WL 5345389, at *9 (S.D. Ohio Feb. 24, 2008) (ruling that defendant's failure to continue indemnifying plaintiffs, in breach of the parties' settlement agreement, did not cancel plaintiffs' release of claims against the defendant, which became effective upon execution of the agreement). Moreover, the Federal Circuit has rejected the view that "following a breach of the assignment[], the [assignor] could unilaterally declare the assignment null and void and

thereby reobtain ownership of the patents that are covered." [Jim Arnold Corp. v. Hydrotech Sys., Inc.](#), 109 F.3d 1567, 1578 (Fed. Cir. 1997) (applying Texas law).¹⁴ Davidson has provided no authority to the contrary. PEC's failure to make the monthly payments from January 2002 onward, then, had no effect on Davidson's assignment of intellectual property under section 1(c) of the GSM, because Davidson had already made that assignment when he executed the GSM--which states that such intellectual property "shall be owned by PEC."

O. Davidson complains that this is "an absurd result" which "unjustly deprives him of the benefit of the bargain intended by the monetary and non-monetary consideration he was to receive in return for the division of intellectual property rights summarized in the GSM." But Davidson--who, by all accounts, is an experienced businessman and an effective negotiator--exposed himself to this risk by signing the GSM. Once again, that agreement assigns the specified intellectual

¹⁴As [Jim Arnold](#) explains, "a party must seek the aid of a court in order to obtain cancellation or rescission of any assignment, thus obtaining reassignment of title." 109 F.3d at 1578. Like the plaintiff there, however, Davidson has never secured that relief from any court, and he did not seek it in his counterclaim in this action. In any event, "[r]escission as a remedy for breach of contract is not available against a defendant whose defaulted obligation is exclusively an obligation to pay money," [Restatement \(Third\) of Restitution and Unjust Enrichment](#) § 37(2) (2011), so Davidson would not have been able to obtain rescission of the GSM even had he sought that relief.

property to PEC without conditioning the assignment on the company's continued payments to Davidson or, for that matter, its compliance with any of its obligations to him (save for those expressly made conditions precedent by section 4, as already discussed). Where, as is the case here with PEC's monthly payments to Davidson, "the performance of one party requires a period of time and the performance of the other party does not, their performance cannot be simultaneous. Since one of the parties must perform first, he must forego the security that a requirement of simultaneous performance affords against disappointment of his expectation of an exchange." Restatement (Second) of Contracts § 234 cmt. e. While "parties can by express provision mitigate the harshness of [this] rule," id., they did not do so here.

P. Davidson, then, put himself in the same position as anyone who agrees to give something of value immediately in exchange for a promise of payment over time: assuming the risk that the promisor will not deliver, leaving the promisee with less than he bargained for. There is nothing "absurd" about this scenario and, in fact, many of those who had loaned money to or bestowed other benefits on PEC found themselves in the same predicament when PEC declared bankruptcy (as creditors of a bankrupt debtor often do). In any event, whatever the "fairness"

of this result from a cosmic perspective, it is the result dictated by the GSM, and "courts cannot make better agreements than the parties themselves entered into or rewrite contracts merely because they might operate harshly or inequitably."

Livingston v. 18 Mile Point Drive, Ltd., 158 N.H. 619, 623-24 (2009). PEC's discontinuance of the monthly consulting fee payments to Davidson under section 1(a)(iii) had no effect on the assignment under section 1(c).

Q. Finally, Davidson argues that, even if the assignment provision of section 1(c) was not voided by PEC's breaches, that clause does not cover the Jumbo anyway. To recapitulate, section 1(c) states that:

New patents or intellectual property ("Inventiveness") developed prior to January 1, 2001 ("Old Inventiveness"), including a method for extending the shelf life of pasteurized eggs by treatment with antibacterial agents, shall be the property of PEC and [Davidson] shall take such actions as may reasonably be required to assist PEC to complete the development, improvement, documentation, protection and patenting of such Old Inventiveness.

Davidson argues that the inventiveness in the Jumbo was not "developed"--as he says the parties understood that term--prior to January 1, 2001, so that the Jumbo does not amount to "Old Inventiveness" under section 1(c). Instead, Davidson argues, the Jumbo is "New Inventiveness" covered by section 1(d) of the GSM. Under his interpretation, that section repositis ownership of the

Jumbo in him, subject only to PEC's right to license it for specified royalties (a right he says was never exercised).¹⁵

R. Davidson's argument turns on the proper construction of the language of sections 1(c) and 1(d), particularly the term "developed." New Hampshire principles of contract interpretation "give the language used by the parties its reasonable meaning, considering the circumstances and the context in which the agreement was negotiated, and reading the document as a whole." [Birch Broad., Inc. v. Capitol Broad. Corp.](#), 161 N.H. 192, 196 (2010). While this exercise serves to "give an agreement the meaning intended by the parties when they wrote it[,] [a]bsent ambiguity . . . , the parties' intent will be determined from the plain meaning of the language used in the contract." [Id.](#) (quotation marks and citation omitted).

S. The parties here have essentially agreed that sections 1(c) and 1(d) are ambiguous, i.e., that they "could reasonably

¹⁵Davidson also argues, by way of a pretrial motion in limine, that NPE cannot sustain its burden of proof on its claim for ownership of the Jumbo without expert testimony as to the "inventiveness" it describes. As the ensuing discussion makes clear, however, the question here is not whether the Jumbo contains "inventiveness" in the patent law sense of novelty, usefulness, and non-obviousness, but when the inventiveness described in the Jumbo was "developed" (there is also no question here that it was developed by Davidson). Cf. [Lucent Techs., Inc. v. Gateway, Inc.](#), 543 F.3d 710, 718 (Fed. Cir. 2008). Davidson does not explain why this court needs expert testimony to decide the factual question of when certain technology was developed. His motion in limine (document no. 138) is denied.

disagree as to the meaning of that language.”¹⁶ Id. (quotation marks omitted). So “it must be determined, under an objective standard, what the parties, as reasonable people, mutually understood the ambiguous language to mean.” Id. To apply this test, “a court should examine the contract as a whole, the circumstances surrounding execution and the object intended by the agreement, while keeping in mind the goal of giving effect to the intentions of the parties.” Id. at 197-98. Based on these considerations, the court concludes that the inventiveness set forth in the Jumbo falls within section 1(c), rather than section 1(d), and therefore became the property of PEC under the GSM.

T. As discussed in detail supra, see ¶¶ 35-40, the Jumbo contains three independent claims, numbered 1, 27, and 48, all describing methods of pasteurizing chicken eggs in their shells by placing them in a heated fluid of different temperatures, then removing them when they have reached at least a 4.6 log reduction in any Salmonella bacteria within. This was, in essence, the

¹⁶In his post-trial memorandum, Davidson argues that these provisions are in fact “clear and unambiguous” in giving him ownership of the Jumbo, as “New Inventiveness.” But Davidson spent much of the trial introducing extrinsic evidence as to the meaning of the GSM (particularly sections 1(c) and 1(d)). As just noted, that evidence would be irrelevant if the agreement was in fact unambiguous as Davidson now argues. In any event, whether a contract is ambiguous is a question of law for the court to decide, see Birch Broad., 161 N.H. at 196, and, in this court’s view, sections 1(c) and 1(d) are ambiguous.

process described in Davidson's November 2000 memorandum to Whisenhunt, the patent attorney--who used verbatim excerpts from that memorandum as the '726 provisional patent application. See ¶¶ 18-21, supra. The Jumbo patent application, in turn, claimed priority through that provisional application. See ¶ 35, supra. Because, in November 2000, Davidson described the methods later patented in the Jumbo--and, moreover, described them as "our current learnings"--it follows that they were "developed" prior to January 1, 2001 and therefore constitute "Old Inventiveness" that is the property of PEC under section 1(c) of the GSM.

U. Davidson argues that the Jumbo embodies several "claims of inventiveness" that were not "developed" until after January 1, 2001, amounting to "New Inventiveness" that is the property of Davidson under section 1(d) of the GSM. In his view, these "claims of inventiveness" comprise (i) applying an antibacterial agent to the shells of the eggs, and cooling them in ambient air, following the pasteurization bath, (ii) employing a "three-temperature process" for pasteurization, (iii) a "food service process" through which the eggs are not only pasteurized, but partially cooked, (iv) "perturbation" of the fluid in the bath using fluid, rather than air, and (v) using "jet fluid walls" to separate the different temperature zones in the bath. In the

court's view, however, none of these meets the definition of "New Inventiveness" under section 1(c) of the GSM.

V. First, the method of applying an antibacterial agent to the shells of the eggs and allowing them to cool in ambient air after the pasteurization bath was in use in PEC's South Carolina facility in the summer and fall of 2000. See ¶ 5, supra.

Davidson nevertheless argues that, because he, Wagner, and Myshrall conducted "ongoing testing and experimentation" as to the solution to the rot problem beyond the end of 2000, these steps were not "developed prior to January 1, 2001." But, as evinced by the November 2000 memorandum to Whisenhunt, see ¶ 20, supra, and Davidson's contemporaneous memorandum to PELP's investors, see ¶ 8, supra, Davidson claimed that he had solved the rot problem before the end of 2000, through "inventiveness" that included applying the antibacterial agent and cooling the eggs in air (rather than water) following the pasteurization bath. By the end of 2000, then, that "inventiveness" had been "developed" within any reasonable understanding of that term.

W. Indeed, while "[c]ourts that have interpreted assignment agreements requiring the employee to assign inventions to an employer disagree over what is required before such an invention exists," that disagreement is over whether "the invention dates from the written expression of the idea" or "the

completion of a specimen or prototype.” [Target Tech. Co. v. Williams Advanced Materials, Inc.](#), No. 04-1083, 2007 WL 6201689, at *10 (C.D. Cal. Feb. 6, 2007) (citing cases). The successful implementation of an invention plainly meets even the more demanding of these standards. Moreover, section 1(c) specifically lists “a method for extending the shelf life of pasteurized eggs by treatment with antibacterial agents” as “Old Inventiveness.”

X. Davidson posits that his employment agreement, executed prior to (and superseded by) the GSM, supports a more circumscribed reading of “developed.” While “[a]greements and negotiations prior to or contemporaneous with the adoption of a writing are admissible in evidence to establish . . . the meaning of the writing,” [Gintzler v. Melnick](#), 116 N.H. 566, 568 (1974) (quotation marks omitted; ellipse in original), the employment contract does not support Davidson’s view.¹⁷ It is true that its

¹⁷Davidson also relies on the draft consulting agreement, which states that “‘Old Inventiveness’ . . . shall include methods for extending the shelf life of pasteurized eggs by incorporating antibacterial agents into the wax coating,” suggesting that the scope of that phrase in the GSM should be limited accordingly. See ¶ 33, *supra*. But the parties never reached accord on the consulting agreement, so terms that were proposed as part of it shed little, if any, light on the meaning of the GSM. In any event, because “the term ‘includ[e]’ is not one of all-embracing definition, but connotes simply an illustrative application of the general principle,” [Fed. Land Bank of St. Paul v. Bismarck Lumber Co.](#), 314 U.S. 95, 100 (1941), the language of the draft consulting agreement does not suggest

assignment provision extends to “[i]nventions conceived, developed or reduced to practice (or tested or used by [PEC] at a [PEC] facility . . .) prior to January 1, 2001,” while section 1(c) of the GSM encompasses only inventiveness “developed” before then. But Davidson has not pointed to anything suggesting that this linguistic change reflected a conscious effort by the parties to narrow the scope of the assignment; they may well have thought that “developed,” on its own, did the job of all the different verbs listed in the prior contract’s assignment clause.

Y. In any event, “conceived” seems to be the only verb in the employment contract’s assignment provision with a broader scope than “developed.” Cf. Jamesbury Corp. v. Worcester Valve Co., 443 F.2d 205, 210-11 (1st Cir. 1971) (reading an assignment agreement covering “inventions which are made or worked out” during a specified period to require that the invention was “put in tangible form,” not just “conceived,” during that time) (applying Massachusetts law). As just discussed, applying antibacterial agents to the eggs and allowing them to cool in ambient air had not just been “conceived,” but had been put into practice, before the end of 2000. So, even if section 1(c) of the GSM should be read to exclude inventiveness merely

that “Old Inventiveness” is limited to the placement of antibacterial agents in the wax coating.

"conceived" before January 1, 2001, that reading would not render the process "New Inventiveness."

Z. Second, for largely the same reasons, the three-temperature pasteurization process embodied in the Jumbo was also "developed" prior to January 1, 2001. Claims 27 and 48 of the Jumbo describe a method of pasteurizing eggs by placing them in a heated fluid comprised of three "separate zones" of different temperatures of, respectively, 139° to 146°, 130° to less than 135°, and 135° to 138°. See ¶¶ 37-38, supra. As NPE points out, these are essentially the same three temperature zones that Davidson described as having produced "[s]uccessful test results," shortening pasteurization times, in his November 2000 memorandum to Whisenhunt. See ¶ 14, supra. Largely as a result of that writing, this court has found that the three-temperature process was successfully tested before the end of 2000. See ¶ 15, supra. Again, any reasonable understanding of the GSM's requirement that inventiveness have been "developed" by that point would have to include its "successful" testing by then.

AA. In arguing to the contrary, Davidson relies on Rand's comment in his memorandum circulating a draft of the GSM (which he authored) that "we have already agreed on licensing at a minimum the multi-temperature process." See ¶ 27, supra. Davidson takes this to reflect Rand's understanding that the

process was "New Inventiveness," since that is what the GSM gave PEC the right to license. What the memorandum says, though, is that PEC will have that right "at a minimum" as to the multi-temperature process--suggesting Rand's understanding that PEC's rights may in fact be broader, i.e., an assignment of the process as "Old Inventiveness" under section 1(c). In fact, that was precisely the understanding to which Rand testified at trial. See ¶ 28, supra. The comment in Rand's memorandum, then, does not support reading the GSM to treat the multi-temperature process as "New Inventiveness."¹⁸

BB. Third, Davidson's contemporaneous writings to Whisenhunt also indicate that what Davidson identifies as "the food service process" of the Jumbo was developed prior to the end of 2000. While that process was not mentioned in Davidson's November 2000 memorandum, it was discussed at length in his memorandum of January 31, 2001, including the results of "experiments" demonstrating that the process could "achieve up to

¹⁸Davidson testified that he recalled conversations, prior to or at the time the GSM was executed, that "the multi-temperature process clearly was part of the new inventiveness" set forth in the agreement, but he did not describe those conversations any more specifically, nor do any of the contemporaneous documents between the parties corroborate that account. Rand, for his part, did not recall any such discussions. So, while not necessarily questioning Davidson's subjective belief in the veracity of his self-serving and vague recollections, the court does not rely on his testimony as to those conversations in construing the GSM.

a one minute saving" in cooking time. See ¶ 19, supra. The memorandum also relates that the fast-food behemoth McDonald's "has done extensive testing of our eggs over a period of at least three months before making the decision to go forward last December," apparently with a plan to test-market "a new breakfast menu consisting of our eggs." The most reasonable inference to draw is that the food service application of the Jumbo had been tested successfully (at least successfully enough to draw the interest of one the largest restaurant chains in the world) before the end of 2000 and that, as a result, the "food service process" was also "developed" before the end of 2000.

CC. There is no evidence that the other area of "New Inventiveness" that Davidson has identified in the Jumbo--the use of "jet fluid" perturbation or "walls" in the pasteurization tank--was put in place, successfully tested, or otherwise "developed" before 2001. Indeed, there is no evidence as to when the claimed "jet fluid" innovations were even conceived: the concept was not mentioned in either of the February 2001 provisional patent applications, see ¶ 19, supra, appearing for the first time in the application for the Jumbo, filed in July 2002. It follows, Davidson argues, that these innovations are "New Inventiveness" belonging to him under section 1(d).

DD. Davidson's argument, however, ignores the other limitation that the GSM places on "New Inventiveness": not only must it be "developed . . . on or subsequent to January 1, 2001," it must also "result[] in protection from new patents or patent applications providing broader or improved protection." The alleged "jet fluid" innovations do not meet this standard.

EE. As Davidson acknowledges, these "innovations" are not described in any of the Jumbo's independent claims, but only in its dependent claims. It is, of course, "a fundamental principle of patent law that 'dependent claims cannot be found infringed unless the claims on which they depend have been found to have been infringed.'" [Jeneric/Pentron, Inc. v. Dillon Co.](#), 205 F.3d 1377, 1383 (Fed. Cir. 2000) (quoting [Wahpeton Canvas Co. v. Frontier, Inc.](#), 870 F.2d 1546, 1553 (Fed. Cir. 1989)). As a result, NPE argues, any inventiveness not described in the Jumbo's independent claims, but only in its dependent claims, does not "result[] in protection from new patents or patent applications providing broader or improved protection" and therefore falls outside the scope of "New Inventiveness" under section 1(d). The court agrees.

FF. Under the fundamental principle of patent law just set forth, the holder of the Jumbo could not prevent a third party from using the "jet fluid" processes described in certain of the

dependent claims, unless that third party was also using one of the processes described in one of the independent claims. It follows that the "jet fluid" inventiveness, whenever it was developed, did not "provid[e] broader or improved protection" beyond the inventiveness embodied in the Jumbo's independent claims (which, as just discussed at length, is "Old Inventiveness," having been "developed" prior to the end of 2000). Instead, the "protection" provided by the Jumbo's dependent claims is narrower than that provided by its independent claims, because, each "dependent claim, by definition, incorporates all of the limitations of the [independent] claim to which it refers" in addition to its own limitations. Jeneric/Pentron, 205 F.3d at 1383. So the "jet fluid" innovations, described only in the Jumbo's dependent claims, are not "New Inventiveness" belonging to Davidson under section 1(d) of the GSM.¹⁹

GG. Accordingly, because all of the inventiveness described in the Jumbo was either developed prior to January 1, 2001, or did not result in broader or improved protection, sections 1(c) and 1(d) of the GSM gave ownership of the Jumbo to PEC. It

¹⁹The same is true of the Jumbo's food service application, which is also not described in any of its independent claims. Thus, even if that application was not "developed" until January 1, 2001 or later, but see ¶ BB, supra, it would still not constitute "New Inventiveness" under the GSM.

follows that NPE, who purchased PEC's rights under the GSM through the asset purchase agreement approved as part of PEC's bankruptcy, owns the Jumbo.

Order for Judgment

Based on the findings and rulings set out above, the clerk shall enter judgment for NPE on its claim that it owns all right, title, and interest in the Jumbo, U.S. Patent No. 6,692,784. Davidson's motion in limine²⁰ is DENIED.

SO ORDERED.



Joseph N. Laplante
United States District Judge

Dated: December 15, 2011

cc: Peter G. Callaghan, Esq.
Adam Taylor Rick, Esq.
Paul C. Bordeau, Esq.
David H. Bownes, Esq.

²⁰Document no. 138.