

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AGROFRESH INC.,)	
)	
Plaintiff,)	
)	
v.)	Civ. No. 16-662-SLR
)	
MIRTECH, INC., NAZIR MIR,)	
ESSENTIV LLC, DECCO U.S.)	
POSTHARVEST, INC. and)	
CEREXAGRI d/b/a DECCO)	
POST-HARVEST,)	
)	
Defendants.)	

Chad S.C. Stover, Esquire and Regina S.E. Murphy, Esquire of Barnes & Thornburg LLP, Wilmington, Delaware. Counsel for Plaintiff. Of Counsel: Robert D. MacGill, Esquire, Joseph T. Wendt, Esquire, Deborah Pollack-Milgate, Esquire, and Jessica M. Lindemann, Esquire of Barnes & Thornburg LLP.

Arthur G. Connolly, III, Esquire and Ryan P. Newell, Esquire of Connolly Gallagher LLP, Wilmington, Delaware. Counsel for Defendants Nazir Mir and Mirtech, Inc. Of Counsel: Eric Dorkin, Esquire, Giel Stein, Esquire, and Mason Floyd, Esquire of Clark Hill PLC.

Frederick L. Cottrell, III, Esquire of Richards, Layton & Finger, P.A., Wilmington, Delaware. Counsel for Defendants Decco U.S. Post-Harvest, Inc., Cerexagri, Inc. and Essentiv, LLC. Of Counsel: John M. Williamson, Esquire, Parmanand K. Sharma, and Rajeev Gupta, Esquire of Finnegan, Henderson, Farabow, Garrett & Dunner, LLP.

OPINION

Dated: June 30, 2017
Wilmington, Delaware


ROBINSON, Senior District Judge

I. INTRODUCTION

On August 3, 2016, plaintiff AgroFresh Inc. (“AgroFresh” or “plaintiff”) filed a complaint against multiple defendants, including Dr. Nazir Mir (“Dr. Mir”), MirTech, Inc. (“MirTech”), Decco U.S. Post-Harvest, Inc. (“Decco”), Essentiv LLC, and Cerexagri, Inc., d/b/a Decco Post-Harvest (collectively, “defendants”). The complaint arises out of a failed business relationship between AgroFresh and MirTech, and includes claims of ownership of certain intellectual property, breach of contract, tortious conduct, and patent infringement. More specifically, count I of the complaint revolves around the agreements between AgroFresh and MirTech, and whether MirTech was obligated to disclose and automatically assign to AgroFresh the rights to U.S. Patent No. 9,394,216 (“the ‘216 patent”), which patent was developed and filed by MirTech. Count IV of the complaint includes allegations that Dr. Mir and MirTech fraudulently induced AgroFresh to sign an extension to the parties’ agreements in October 2015.

In October 2016, the parties filed a joint motion to bifurcate counts I and IV of the complaint on the grounds that prioritizing the claim of ownership of the ‘216 patent and the fraudulent inducement claim (two of the nineteen counts included in the complaint) would simplify and clarify the disputed issues in the case, likely facilitate resolution, and result in economies for the court and the parties. (D.I. 18) The court granted the motion, and held a bench trial on counts I and IV from March 20 to March 22, 2017. The court has jurisdiction over the matters tried pursuant to 28 U.S.C. §§ 1331, 1337, and 1338(a). Having considered the documentary evidence and testimony, the court makes the following findings of fact and conclusions of law pursuant to Federal Rule of

Civil Procedure 52(a).

II. FINDINGS OF FACT

A. The Parties

Plaintiff AgroFresh is a corporation organized under the laws of the State of Illinois having a principal place of business in Philadelphia, Pennsylvania. AgroFresh is a research-based industry leader in research, development, and sales of technology for pre- and post-harvest freshness preservation of fruits, vegetables, and other produce.

Defendant MirTech is a corporation organized under the laws of the State of New Jersey, with its principal place of business in Somerset, New Jersey. Dr. Mir is the sole owner of MirTech, signed the contracts at issue on MirTech's behalf, and performed the work contemplated by the contracts at issue.

Defendant Decco is a Delaware corporation with a principal place of business in Monrovia, California. Defendant Cerexagri d/b/a Decco Post-Harvest is a Pennsylvania corporation with a principal place of business in King of Prussia, Pennsylvania. Essentive LLC is a Delaware limited liability company constituting a joint venture of defendants MirTech and Decco.

Prior to their business relationship, both AgroFresh and Dr. Mir worked on 1-MCP¹ applications for various crops. (D.I. 94 at 61-64, D.I. 96 at 610) 1-MCP is a synthetic, volatile gas that slows the ripening process in fruits and vegetables. Due to its volatility, commercialization of 1-MCP requires an effective delivery system, which consists of 1-MCP-stabilizing technology and formulations for commercial delivery of 1-

¹1-methylcyclopropene.

MCP to crops. AgroFresh primarily uses an α -cyclodextrin complex to stabilize 1-MCP. 1-MCP is the “foundational molecule for the AgroFresh business,” and AgroFresh’s patents and know-how on stabilization technology are a key part of its competitive advantage. (D.I. 94 at 61-68, 71, 178-180)

Dr. Mir is widely recognized as an inventor and expert in the field of post-harvest technology. (D.I. 96 at 606) In addition to his work on 1-MCP applications for crops, Dr. Mir has developed “1-MCP related technologies” (D.I. 92 at 2), including an invention that combines 1-MCP with an engineered film called a Modified Atmospheric Package (“MAP”). (D.I. 96 at 611)

B. The Negotiations

In late 2009, AgroFresh² and Dr. Mir (on behalf of MirTech) began negotiations to develop technology combining AgroFresh’s 1-MCP expertise³ and Mir’s MAP technology. (See PTX 134; PTX 135; PTX 136) As the parties worked toward a commercial agreement, Dr. Mir indicated that he was willing “to leave everything (namely PerfTech, FreshTech, etc.) behind and dedicate all of my efforts to make our partnership a great success.” (PTX 136)

The parties entered an interim Consulting Services Agreement (“CSA”) with an effective date of January 1, 2010. The CSA described the services and the field at

²AgroFresh was a subsidiary of Rohm and Haas Company until 2009, when Dow Chemical Company bought Rohm and Haas. (See PTX 438 and Wikipedia) The initial negotiations, therefore, were conducted by Dow employees and the initial collaboration was contemplated to be one between Dow and Dr. Mir. (PTX 134)

³See, e.g., AgroFresh’s SmartFresh™, “a powder that, when mixed with water in a proprietary generating system, releases the volatile active ingredient 1-methylcyclopropene (1-MCP).” (PTX 438, dated March 20, 2009)

issue as follows:

Research and development of current and new combination technology, including the development of new intellectual property, comprised of modified atmospheric packaging (“MAP”) including microperforated flexible film bags, pouches, rollstock and lidstock, perforation design, etc. and ethylene **inhibitors including, but not limited to, 1-methylcyclopropene** and its analogs and homologs (“1-MCP”) for use on bananas and other produce. New products developed using these combined technologies are “Product” or “Products.”

(DTX 22) (emphasis added) Rather than standard Dow language regarding ownership of intellectual property,⁴ Dr. Mir insisted that the CSA allow each party to own “any and all inventions conceived or reduced to practice in the course of Services made solely by that Party. The Parties shall jointly own, as of the date of their conception, any and all inventions conceived or reduced to practice jointly by the Parties in the course of Services. [Nevertheless,] Consultant **must disclose those inventions promptly** to [Dow’s] Representative in writing.” (*Id.*) (emphasis added) During the course of the negotiations, Dow/AgroFresh shared with Dr. Mir the prospect of using different 1-MCP delivery systems in the combination product. (PTX 230, “MAP + Chemistry (1 MCP, etc.)”)

C. The Agreements

The parties signed the formal agreements – a Commercial Agreement and a

⁴Which would have given Dow ownership of “all inventions (a) conceived or reduced to practice in the course of the Services, or (b) otherwise invented by [Dr. Mir] (solely or jointly with others) based upon Information or Samples.” (DTX 17) According to the testimony of Dow’s representatives in the negotiation, a broad assignment of intellectual property rights was a condition to allowing access by Dr. Mir to all of AgroFresh’s 1-MCP-related research and information. (D.I. 94 at 158-159, 164-167)

Consulting Agreement (collectively, the “Agreements”)⁵ – at issue in this litigation in May 2011, with a retroactive effective date of January 1, 2011. (PTX 82; PTX 83) The following sections are the most relevant to the dispute at bar:

2.2 **Services** shall include, but **not be limited to**, research, development, marketing and sales services **related to technology combining** (i) modified atmosphere packaging comprising one or more microperforated film(s) (“**MAP**”) and (ii) **compounds** which inhibit the ethylene response in plants **including, but not limited to**, 1-methylcyclopropene and its analogs and homologs (collectively, “**1-MCP**”). At all times during the Term, . . . Dr. Mir shall be actively engaged in providing the Services; be readily available by telephone or in person; be responsive to requests from AF and its Affiliates; and provide the Services to AF and its Affiliates.

3.2 In further consideration of the compensation paid to MirTech by AF under this Agreement, MirTech agrees to **assign**, and hereby assigns, to AF, at no additional cost to AF, any and all proprietary interests and rights, for all countries, that MirTech may have under U.S. Patent Application No. 61/284899, and its foreign equivalents, or any other patent application or associated issued patent **related to the Products** of which Dr. Mir is listed as a co-inventor (the “Patent”). . . .

8.1 Unless otherwise agreed to in a writing signed by the authorized representatives of both parties and attached to this Agreement as an amendment, during the Term of this Agreement and for a period of two (2) years following termination for cause or expiration of this Agreement: (1) MirTech agrees, and MirTech agrees to commit its employees in writing, to not work in any capacity that AF or its Affiliates deem detrimental to the development of the Product and (2) MirTech agrees, and MirTech agrees to commit its employees in writing, to not enter into any future relationship which may adversely impact the development or sale of the Product, or conflict with the Services.

12.1 During the Term of this Agreement, MirTech shall **promptly inform** AF of **any and all** inventions, discoveries, improvements or other modifications which are **related to the Products** (“Improvements”), whether patentable or not. In further consideration of the compensation paid to MirTech by AF under this Agreement, MirTech hereby assigns automatically all rights, and all future rights, to AF, at no additional cost to AF, any and all proprietary interests and

⁵Unless otherwise noted, the citations will be to the Commercial Agreement. (PTX 82)

rights, for all countries, in the Improvements, including, without limitation, any patent rights, know-how, copyrights, or other intellectual property. MirTech shall execute any documents necessary to accomplish such assignment.

(PTX 82) (emphasis added) Attached to the Agreements was a “Description of Services,” which provides in relevant part as follows:

During the Term, MirTech shall appoint Dr. Nazir Mir to act as a consultant to AF and its Affiliates and Dr. Mir, together with such assistants as MirTech shall require, and whom MirTech shall employ at its own expense, shall provide the following services, and other services as identified by AF or its Affiliates:

1. Ongoing research and development of current and new **combination technology**, including development of new intellectual property, **combining** (i) modified atmosphere packaging comprising one or more microperforated film(s) (“**MAP**”) and (ii) **compounds** which inhibit the ethylene response in plants **including, but not limited to**, 1-methylcyclopropene and its analogs and homologs (collectively, “**1-MCP**”), for use on bananas and other produce. Products developed using these combined technologies are “Product” or “Products” under this Agreement. Other plants and/or plant parts may be added to the Services by written agreement of the Parties. The Parties agree that the definition of Products can and may be expanded to include additional product or products.

(PTX 82, Attachment A) (emphasis added)

AgroFresh provided Dr. Mir a \$300,000 annual salary while the parties worked toward commercializing the combination technology. (PTX 83 § 3.1) AgroFresh provided Dr. Mir this salary to ensure that he need not look for other sources of income. (D.I. 94 at 140-141, 159-160; see also D.I. 96 at 634-635) As the Products achieved commercial success, Dr. Mir would receive the greater of the \$300,000 salary or a royalty stream based on a percentage of sales. (PTX 82 §§ 3.1 & 3.3; PTX-83 § 3.1) The Agreements tied Dr. Mir’s royalty stream to the definition of “Product.” (PTX 82, § 3.1) Prior to the 2015 extension of the Agreements, discussed *infra*, Dr. Mir never

received any royalty on MAP alone or 1-MCP alone. (D.I. 95 at 324-325)

D. Course of Conduct - January 2011 through December 2013

The original term of the Consulting Agreement ran from January 1, 2011 through December 31, 2013. (PTX 83 § 1)⁶ During this time frame, Dr. Mir and AgroFresh worked on extending the application of AgroFresh's core competency, 1-MCP stabilization and delivery, to additional crops. (D.I. 94 at 80-81) The focus was on commercializing the RipeLock™⁷ combination technology by 2014. (PTX 405) In the course of this work, Dr. Mir had frequent interaction with AgroFresh employees, and access to AgroFresh's facilities and commercial and technical information. (D.I. 94 at 80-82) For example, AgroFresh's analytical chemists provided Dr. Mir support in setting up his lab to measure 1-MCP accurately. (PTX-416; PTX 392) Dr. Mir gained an understanding of the efficacy of the SmartFresh™⁸ delivery system. (PTX 315; PTX 96; PTX 408; PTX 338; and PTX 159) The research and development related to combining "the benefits of MAP and SmartFresh™ through custom made package design, tailored for the produce based on market needs," included countless trials on bananas and other crops. (PTX 392; PTX 15; PTX 339; PTX 406; PTX 432; PTX 405) Although these trials generally involved the SmartFresh 1-MCP delivery system, the "developmental prioritization" described the combination technology simply as "MAP +

⁶The term of the Commercial Agreement was substantially longer, extending until certain patents expired or December 31, 2020. (PTX 82 § 1)

⁷Hereinafter, "RipeLock."

⁸Hereinafter, "SmartFresh."

1MCP combo,” not limited to SmartFresh. (PTX 405) In July 2013, the parties executed the First Extension to the Consulting Agreement, which extended the term until December 31, 2014. (DTX 2)

By the fall of 2013, Dr. Mir and colleagues at Rutgers University were working on encapsulating 1-MCP in β -cyclodextrin, a project not involving the RipeLock combination technology. (PTX 89) Dr. Mir requested a separate confidential disclosure agreement with AgroFresh before sharing these “new ideas.” (DTX 68) In the “Agreement for Information and Samples,” the “field of discussions” included 1-MCP as an “active ingredient for produce treatment; formulations incorporating 1-MCP; method of applying 1-MCP and formulations thereof to produce; encapsulants for 1-MCP and formulations thereof, especially encapsulants comprising cyclodextrin and derivatives or isomers thereof.” (DTX 69) In December 2013, Dr. Mir presented to AgroFresh his “first patent application along with figures which [was] due to publish on January 9, 2014.” (DTX 73) As explained by Dr. Mir, the application examined “hydrocolloid systems for controlling gas release from alpha cyclodextrin,” as well as “[l]ow water solubility and potential high inclusion in modified beta-cyclodextrin . . . to develop a non-phytotoxic water based sprayable 1-MCP formulation.” (*Id.*)

MirTech suggests that Dr. Mir introduced the following invention at the December 12, 2013 meeting: “a polymerized beta-cyclodextrin, where the 1-MCP molecule is stabilized by adsorbing it to the outside of the polymer, rather than being encapsulated inside it.” (D.I. 89 at ¶ 25) The only contemporary evidence MirTech points to is a single molecular diagram captioned “Modifying encapsulant: polymerization.” (DTX 73 at AF2814) Indeed, Dr. Mir’s notes from the meeting do not mention “adsorption,” only

encapsulation. (DTX 185) At trial, Dr. Mir admitted that at the time of the December 2013 presentation, he did not know whether, in his “modified beta-cyclodextrin polymer,” the 1-MCP was encapsulated or adsorbed.⁹ (D.I. 96 at 655-656) The court finds, therefore, that Dr. Mir did **not** present his invention as described by MirTech at the December 12, 2013 meeting with AgroFresh.¹⁰

Nevertheless, there is no dispute that the presentation covered 1-MCP information “outside of RipeLock” (DTX 185); while AgroFresh thought the presentation could have taken place within the scope of the Agreements, Dr. Mir did not. (DTX 68) The record reflects that AgroFresh did not inform Dr. Mir that he had breached the Agreements by filing the patent application in his own name, or that the Agreements covered the technology presented. Dr. Mir did not disclose that he intended to use his 1-MCP technology to compete with AgroFresh.

E. Course of Conduct January 2013 through December 2014.

AgroFresh was not interested in commercializing the β -cyclodextrin and 1-MCP analog concepts Dr Mir presented in December 2013, because the technologies did not solve a commercial need or augment AgroFresh’s existing product line. (D.I. 94 at 182-185) The parties continued their work on the RipeLock trials and commercialization

⁹The record reflects that Dr. Mir had not yet discovered the use of a metal-organic framework (“MOF”) to stabilize 1-MCP (the “216 patent technology” or “MOF technology”), which work occurred from May 2014 to May 2015. (D.I. 95 at 540-542)

¹⁰Dr. Mir’s patent filings bear out the distinction. Dr. Mir filed a separate provisional application of the MOF technology in November 2014 (well after the December 2013 presentation). His MOF patent application did not claim priority to the earlier patent application for the β -cyclodextrin ideas he presented in December 2013. (PTX 449)

efforts. (PTX 448; PTX 348) The record contains one patent that issued to AgroFresh (with Dr. Mir listed as one of the inventors) in August 2014 that covers the combination technology. (DTX 309)

In contrast to the one AgroFresh patent in evidence, the record is replete with work Dr. Mir was pursuing on his own, including the filing of various patent applications and the issuance of two patents in August and September 2014, respectively, which were variants on the hydrocolloid systems presented to AgroFresh in December 2013. (PTX 451; PTX 452; *see also* PTX 434) Dr. Mir kept AgroFresh apprised of this work concurrently with the filings. (DTX 85; DTX 87; DTX 89) AgroFresh neither expressed an interest in, nor claimed ownership of, this work under the Agreements.

In July 2014, the parties executed a Second Extension of the Consulting Agreement to December 31, 2015. (PTX 85) By email dated October 29, 2014, Dr. Mir inquired as to whether AgroFresh still had interest in his “IP. Some parties have recently approached for acquiring my patents but I told them my preference is to work with AF and I am committed to my contract at AF until the end of this year unless they communicate otherwise.”¹¹ (DTX 95) The only “patents” Dr. Mir had disclosed to AgroFresh by this time involved the hydrocolloid systems presented at the December 2013 meeting.

¹¹Mark Zettler (“Zettler”) of AgroFresh initially responded that “[r]egarding the patents, the status is the same in that we intend to take them on, although I have not yet had the discussion around compensation. Sorry for that, but at least you know our intentions.” (DTX 95, an email also dated October 29, 2014) Zettler testified at trial that, in late 2014 or early 2015, he told Dr. Mir that he was free to shop the December 2013 technology, with the understanding that Dr. Mir would have to return to AgroFresh if he found a potential commercial partner because he could not commercialize the technology without AgroFresh’s involvement. (D.I. 94 at 186-187)

Of course, by October 20, 2014, Dr. Mir had received a confidential disclosure agreement from Decco for his review. Dr. Mir represented to Decco that because “MirTech’s 3 employees” had been working “non-stop” for “3 years to develop lot of IP in 1-MCP area,” Dr. Mir had broadened the scope of the agreement “to cover all information so that you and Decco can made a good assessment on the contribution value of MirTech.” (PTX 16) By November 2014, Dr. Mir had executed a letter of intent to form a “strategic alliance” with Decco for the “commercialization of MirTech technologies as embodied by . . . US Provisional Patent Application 62077867,” related to the ‘216 patent. (PTX 60) The letter of intent required both parties to keep confidential the MOF provisional application and associated technology. (*Id.* § 5) Decco agreed to pay Dr. Mir a \$250,000 advance on future royalties from sale of products using the MOF technology, while Dr. Mir agreed to provide NewCo (the company to be established by the joint venture) the “exclusive rights to practice” both the ‘216 patent technology and the technology Dr. Mir shared with AgroFresh in December 2013. (*Id.* § 7; D.I. 95 at 451)

F. Course of Conduct January 2015 through December 2015.

As noted above, Dr. Mir discovered that MOF could be used as a carrier for 1-MCP in May 2014 and, by April 2015, was “fully engaged” with Decco to finalize the MOF technology that ultimately became the ‘216 patent,¹² and to develop the product Decco registered as TruPick™¹³. (PTX 64; PTX 23; PTX 141; PTX 142) On June 1,

¹²“MOF technology” and “the ‘216 patent technology” may be used interchangeably.

¹³Hereinafter, “TruPick.”

2015, Dr. Mir and Decco memorialized the completion of the Phase I activities contemplated by the 2014 letter of intent. (PTX 63) In connection with this milestone, Decco paid Dr. Mir \$250,000, described as an advance on future royalties. (PTX 63 at 1; D.I. 95 at 436-437) During the spring and summer of 2015, while Dr. Mir remained under contract with AgroFresh, he and Decco worked “non-stop” to conduct studies and prepare materials to register TruPick. (PTX 141) Mir helped Decco “prepare the protocols, train/conduct the applications, evaluations, trouble-shooting, etc.” (PTX 23)¹⁴

During 2015, Dr. Mir did not disclose to AgroFresh either the MOF technology or his business relationship with Decco. (D.I. 95 at 549-550; D.I. 96 at 658) Indeed, Dr. Mir and Decco took pains to keep both the MOF technology and their relationship a secret from AgroFresh. (D.I. 95 at 431, 443) As early as January 2015, the Decco representative was telling Dr. Mir that Decco “would rather let the market believe you are focused on the patents for modified beta-cyclodextrin and only learn about MOFs at the latest possible moment.” (PTX 104) Decco understood that Dr. Mir had “a lot at stake if AF cut[] him off,” and that he was “very nervous about his exposure.” (PTX 24; PTX 26) As a consequence, Decco’s representatives and Dr. Mir scheduled meetings at remote locations to avoid being seen together (PTX 25; D.I. 95 at 446), and Dr. Mir referred to MOFs in only the final version of his USDA grant proposal seeking federal

¹⁴See also PTX 180, an email acknowledgment by Decco that Dr. Mir had gained “an understanding of the air sampling procedure used by AF using GC,” a gas chromatograph, the same instrument AgroFresh analytical chemists helped set up for Dr. Mir to measure 1-MCP.

funding associated with the MOF technology.¹⁵ (PTX 90) While Dr. Mir testified at trial that he had “never, ever” had a concern about his “RipeLock-type relationships” with AgroFresh (D.I. 96 at 696-697), this assertion is undermined by the contemporaneous evidence described above.

In July 2015, a second AgroFresh patent (with Dr. Mir listed as an inventor) issued that disclosed “an unexpected synergistic effect of a cyclopropene compound and a modified atmosphere package to extend shelf life and/or storage for avocados.” (DTX 310) About this same time, Dr. Mir requested an extension to the Consulting Agreement with AgroFresh. (DTX 118) This extension would ensure that he continued to receive a guaranteed salary from AgroFresh, as opposed to simply a royalty stream based on sales of Products. (D.I. 94 at 212-213) During the months that followed, Dr. Mir was characterized by Decco as “transitioning” from AgroFresh to Decco (PTX 25, dated August 9, 2015), and as having “no interest at all in working with AgroFresh.” (PTX 307) At the same time, Dr. Mir represented to AgroFresh that he had “tremendous respect for . . . AgroFresh in general and so have always gone out of way to support RipeLock Technology.” (PTX 113)

In October 2015, Dr. Mir and Decco finalized their Term Sheet for Decco’s exploitation of the ‘216 patent technology. (PTX 65) Among other things, Decco

¹⁵Significantly, Dr. Mir’s collaboration with AgroFresh on the RipeLock combination technology is included as “**related** research or research and development” in the MOF grant proposal. (PTX 90 at MIR48522-23) (emphasis added) More specifically, the proposal describes MOF technology as an improvement to AgroFresh’s “1-MCP encapsulation in α -cyclodextrin.” (*Id.* at MIR48522) The instructions for that section of the grant proposal require the researcher to describe research that is “**directly related to the proposed effort.**” (PTX-342) (emphasis added)

committed to “an exclusive worldwide sourcing agreement for all 1-MCP and 1-MCP related technologies from NewCo.” (*Id.*) The Term Sheet carried forward the 2014 letter of intent’s confidentiality and exclusivity provisions. (*Id.* ¶ 10) On October 7, 2015, Dr. Mir and Decco submitted a completed registration packet to the EPA for TruPick. (PTX 5); D.I. 95 at 456-457)

Also in October 2015, Dr. Mir was actively negotiating the Third Extension of the Consulting Agreement (the “Third Extension”) with AgroFresh. On October 9, 2015, Zettler, on behalf of AgroFresh, sent a modified Consulting Agreement to Dr. Mir, which included a revised definition of “Product” in Attachment A, to wit: “Products developed using either MAP or MAP + 1-MCP technologies are considered ‘Product’ or ‘Products’ under this Agreement.” (PTX 381) On October 28, 2015, Dr. Mir added a sentence to Attachment A which he described as “primarily for the benefit of AgroFresh:” “For avoidance of any doubt, the sales and marketing of 1-MCP alone are not part of this or original agreement.” (PTX 115) Later that same day, Dr. Mir sent along yet another revision to Attachment A, this time adding proposed language that would “completely keep both parties free from any claim on 1-MCP alone applications from each other:” “For avoidance of any doubt, the development, patenting, sales and marketing by one or both of MirTech and Dr. Mir, alone or in collaboration with others of 1-MCP alone and 1-MCP-related products, for any and every application and use, are not part of and will not violate this or original agreement, including, without limitation, Section 8.1 of the Agreement.”¹⁶ (PTX 114) In response, in the early morning hours of October 29,

¹⁶Not surprisingly, such language perfectly described Dr. Mir’s undisclosed activities with Decco.

2015, Zettler sent back to Dr. Mir the language which was ultimately agreed to by the parties in this regard: "For avoidance of any doubt, the development, patenting, sales and marketing by one or both of MirTech and Dr. Mir, alone or in collaboration with others of 1-MCP alone are not part of and will not violate this or original agreement, including without limitation, Section 8.1 of the Agreement." (PTX 113)

Dr. Mir negotiated the Third Extension even while conducting business with Decco. (PTX 148; D.I. 94 at 218-219; D.I. 95 at 458, 574-575; D.I. 96 at 723) He did not disclose to AgroFresh any of his work with Decco or the development of TruPick prior to the time he and AgroFresh signed the Third Extension. (D.I. 95 at 574-576) Zettler testified that he would not have executed the Third Extension on behalf of AgroFresh had he known that Dr. Mir was working with Decco to develop and register a competitive product. (D.I. 94 at 229-231) AgroFresh paid Dr. Mir his salary and a royalty under the Third Extension before his activities with Decco came to light in July 2016.¹⁷ (*Id.* at 231)

G. Course of Conduct January 2016 Through July 2016.

As a consequence of Dr. Mir's travel to India in November 2015 (PTX 364) and the public disclosure of his 1-MCP work in India (DTX 194), AgroFresh representatives met with Dr. Mir in January 2016 to discuss a potential business distributorship in India. AgroFresh recognized Dr. Mir as a "dangerous competitor if he were not associated with AgroFresh." (DTX 198) Dr. Mir did not disclose the '216 technology at this

¹⁷Ultimately, AgroFresh paid Dr. Mir over \$1.8 million in salary. (D.I. 96 at 720-722) The combination RipeLock product was not commercially successful as of 2016. (*Id.* at 722)

meeting. (D.I. 96 at 658) Although he mentioned that he had been contacted by several producers, including Decco, he informed AgroFresh that “at this point [he] has not made any commitments to anyone.” (DTX 198) AgroFresh had access only to Dr. Mir’s non-MOF technology. (See, e.g., DTX 202; DTX 316; DTX 205)

In April 2016, Decco was pushing forward with its “New Partnership Platform around 1-MCP & New Technologies.” (PTX 163) In May 2016, the application that became the ‘216 patent published. (PTX 449) In June 2016, AgroFresh still contemplated that the only competing patent activity involving Dr. Mir was that presented in December 2013, that is, “hydrocolloid liquid systems using encapsulated 1-MCP.” (DTX 219; DTX 221) When asked by Zettler whether he was working with Decco, Dr. Mir denied any relationship. (PTX 435; D.I. 94 at 204)

On June 27, 2016, Dr. Mir and Decco received a letter from the EPA formally advising of the approval of TruPick’s registration, i.e., “the approval of Mg-formate MOF for use as an inert for non-food crops.” (PTX 324) According to Decco, “AgroFresh will be totally surprised by the news of TruPick. . . . This is a milestone that rarely happens and validates all that we have worked to accomplish over the last 1.5 years.” (*Id.*)

On June 28, 2016, Dr. Mir met with Zettler and, for the first time, disclosed the ‘216 patent technology. (D.I. 94 at 196, 198; D.I. 96 at 658)¹⁸ Zettler was shocked at this revelation. (D.I. 94 at 197-198; see also DTX 234 in terms of what AgroFresh was

¹⁸However, Dr. Mir did not disclose at this time his preexisting relationship with Decco, the fact that he and Decco had just obtained an EPA registration for TruPick, the fact that he had received \$250,000 from Decco and anticipated earning a \$300,000 consulting fee from Decco that year, or any of his associated activities with Decco. Indeed, Dr. Mir did not inform Zettler that he had formally signed with Decco until July 10 or 11, 2016. (D.I. 94 at 203; PTX 430)

expecting to hear at the June 28, 2016 meeting) Dr. Mir asked whether AgroFresh had any interest in the MOF technology, and told Zettler that he needed a response within a week. (D.I. 94 at 202) Although Dr. Mir testified at trial that he intended to explore a potential AgroFresh/Decco/MirTech collaboration (D.I. 96 at 699-702), there are no contemporary documents reflecting that intent. To the contrary, the Mir/Decco term sheet in effect gave Decco exclusive rights to the MOF technology; Decco, not Dr. Mir or MirTech, held the product registration for TruPick. (PTX 65)

Effective June 30, 2016, Dr. Mir and MirTech entered into a consulting agreement with defendant Essentiv LLC, a joint venture entity formed by MirTech and Decco to conduct activities related to 1-MCP products. (PTX 71) AgroFresh was still evaluating Dr. Mir's proposal on July 5, 2016. (DTX 277) On July 11, 2016, "Decco/Essentiv™ announce[d] US EPA registration of TruPick™ for postharvest freshness management" using the MOF technology developed by Dr. Mir. (PTX 73; PTX 430)

H. Summary

In relevant part, then, the court finds that the MOF technology is distinct from the β -cyclodextrin technology Dr. Mir disclosed to AgroFresh in December 2013. (See *e.g.*, D.I. 96 at 658-659) The court further finds that Dr. Mir disclosed to AgroFresh neither the MOF technology¹⁹ nor his relationship with Decco until June and July (respectively) of 2016. The court finds that the MOF technology is an alternative 1-MCP stabilization

¹⁹The evidence that Dr. Mir cites to in support of his position is inapposite, as it consistently refers to the technology shared in December 2013 which the court has found to be distinct from the '216 technology. (See, *e.g.*, DTX 180; DTX 198; DTX 205; DTX 234)

technology using an organometallic framework, instead of an α -cyclodextrin (sugar). (D.I. 94 at 200, 202; D.I. 95 at 347-348) When formulated into a commercial product, the MOF technology could be used as a substitute for SmartFresh, in combination with a MAP bag. (D.I. 94 at 203; D.I. 95 at 347-348; PTX 89; PTX 324)

II. CONCLUSIONS OF LAW

A. The Agreements are Clear and Unambiguous

When a “contract is clear and unambiguous,” the court should interpret it to “give effect to the plain-meaning of the contract’s terms and provisions.” *Osborn ex rel. Osborn v. Kemp*, 991 A.2d 1153, 1159-60 (Del. 2010). See also *Alta Berkeley VI C.V. v. Omneon, Inc.*, 41 A.3d 381, 385 (Del. 2012) (requiring the court to give words in a contract their ordinary meaning); *Clouding IP, LLC v. Google Inc.*, 61 F. Supp. 3d 421, 431 (D. Del. 2014) (“[W]here no ambiguity exists, the contract will be interpreted according to the ordinary and usual meaning of its terms[.]”) (citation omitted).

Only when the court “may reasonably ascribe multiple and different interpretations to a contract” should it “find that the contract is ambiguous.” *Id.* An interpretation is unreasonable if it “produces an absurd result or one that no reasonable person would have accepted when entering the contract.” *Id.*

The relevant provisions of the Agreements in this case are unambiguous. Section 12.1 of the Agreements contains a broad automatic assignment provision, in that it required MirTech to “promptly inform [AgroFresh] of any and all inventions, discoveries, improvements, or other modifications which are **related to** the Products (‘Improvements’).” (PTX 82 § 12.1) (emphasis added) Under Delaware law, courts give

the phrase “related to” its ordinary meaning, that is, “connected in some way.” Black’s Law Dictionary (10th ed. 2014); *see also Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 385 (1992) (adopting Black’s definition of “related to” in construing a statute). *See also Tyco Healthcare Grp., L.P. v. Ethicon Endo-Surgery, Inc.*, 587 F.3d 1375, 1378-79 (Fed. Cir. 2009) (“In general, ‘related to’ means one thing has some relationship or connection to another thing.”); *United States v. Morehouse*, 318 F. App’x 87, 90 (3d Cir. 2009) (noting that both the U.S. Supreme Court and the Third Circuit have “given a broad interpretation to the term ‘relating to’”); *Denis v. Attorney Gen. of U.S.*, 633 F.3d 201, 209 (3d Cir. 2011) (the term “relating to” in a statute is “to be read expansively and ‘must not be strictly confined to its narrowest meaning’”).

The Product at bar, marketed commercially as RipeLock, is a combination of two parts: 1-MCP and MAP. The use of 1-MCP in this combination requires a delivery system incorporating effective stabilization technology. AgroFresh and Dr. Mir used the SmartFresh product line, which traps and stabilizes 1-MCP through the use of α -cyclodextrin (a sugar molecule). The TruPick product uses a different stabilizing technology (MOF versus α -cyclodextrin). The MOF technology was disclosed in the ‘216 patent, and is described in the record as a new method to stabilize 1-MCP that improved on α -cyclodextrin. (D.I. 95 at 549-550; D.I. 96 at 658; *see also* PTX 90 at MIR_0048540 (representing that MOF was an improvement over α -cyclodextrin due to its potential load capacity); PTX 90 at MIR_0048526 (referring to a “cheaper and better, alternative for α -cyclodextrin”).

Section 12.1 of the Agreements does not limit the assignment provision to the

“Product” or even “improvements to the Product” or “modifications to the Product.” Rather, § 12.1 extends beyond the “Product” to reach “any and all inventions, discoveries, improvements or other modifications which are **related to** the Products.” The words “related to” would have no meaning if they did not apply to technology (like the ‘216 patent technology) that improved upon and, therefore, was related directly to the Product but is not itself the Product. See, e.g., *In re Peierls Family Inter Vivos Trusts*, 77 A.3d 249, 265 (Del. 2013) (“[W]e prefer an interpretation that attaches meaning to every word used by the drafter and that avoids rendering language superfluous.”); *iBIO, Inc. v. Fraunhofer USA, Inc.*, 2016 WL 4059257 at *13-14 (Del. Ch. July 29, 2016); *Douzinis v. Am. Bureau of Shipping, Inc.*, 888 A.2d 1146, 1150 (Del. Ch. 2006); *Morales*, 504 U.S. at 385 (rejecting argument that would “simply read[] the words ‘relating to’ out of the statute”).

The Agreements’ other provisions likewise support a broad application of § 12.1. For example, the Services Dr. Mir agreed to provide included work on each component of the combination technology. (D.I. 94 at 157-158) Dr. Mir agreed to work exclusively for AgroFresh. (PTX 82 § 2) Dr. Mir’s substantial compensation and the broad non-compete provision demonstrate that the parties intended to prevent Dr. Mir from operating in this area of post-harvest technology. (D.I. 94 at 140-141, 159-160; D.I. 96 at 634-635; PTX 82 § 8.1) The Agreements even required Dr. Mir to affirm he had no relationship with a third party that would create a conflict. (PTX 82 § 8.2) Taken together, the context and terms of the Agreements support giving the phrase “related to” its ordinary breadth.

The court declines to accept an interpretation that would produce an absurd result. *Osborn*, 991 A.2d at 1160. Dr. Mir argues that if one of the components is not sold in combination with the other, it is not “related to” the combination. This would allow Dr. Mir to independently develop and sell either component of the combination technology by itself (at least pre-Third Extension) as long as he did not offer them as a combination. The relationship of the technology (and the meaning of § 12.1) does not vary depending on how Dr. Mir markets a product. The technology is critical to the combination of 1-MCP and MAP and, therefore, relates to the combination.

B. The Extrinsic Evidence Is Consistent With An Assignment

Given the court’s conclusion that the Agreements are not ambiguous, it need not resort to extrinsic evidence. *See, e.g., O’Brien v. Progressive N. Ins. Co.*, 785 A.2d 281, 289 (Del. 2001) (noting that court would not consider extrinsic evidence where the clear language did “not support an ambiguous reading”). Even if the court were to consider such evidence, however, it too demonstrates that the ‘216 patent technology “relates to” the Product and, therefore, was assigned to AgroFresh under § 12.1.

As noted above, Dr. Mir’s own sworn representations to the United States government establish that the ‘216 patent technology relates to the Product. The government instructed Dr. Mir to identify research “directly related” to the ‘216 patent technology in connection with a grant proposal seeking government funding. (PTX 342) Dr. Mir identified the RipeLock technology (the combination of 1-MCP and MAP) as “directly related” research. (PTX 90) Thus, pre-litigation – when Dr. Mir was directed to accurately describe the relationship between the ‘216 patent technology and the Product – Dr. Mir admitted the two were related.

Dr. Mir's December 2013 presentation to AgroFresh also supports AgroFresh's interpretation of § 12.1. That presentation included a new 1-MCP-stabilizing concept and, despite Dr. Mir's trial testimony to the contrary, the record as a whole leads the court to conclude that Dr. Mir brought those 1-MCP-stabilizing inventions/discoveries to AgroFresh's attention in December 2013 because they "related to" the Product and therefore, § 12.1 obligated Dr. Mir to inform AgroFresh of their existence.²⁰ (See, e.g., DTX 95, linking patents to Dr. Mir's commitment to his contract with AgroFresh)

Both Dr. Mir and AgroFresh recognized that 1-MCP delivery systems (i.e., stabilization technology) were critical (and competitive) to the RipeLock combination system. (See PTX 86; PTX 230; PTX 338; PTX 408; D.I. 94 at 158-159, 161-167, 171-174) Indeed, if AgroFresh had sold 1-MCP in a different delivery system combined with MAP, Dr. Mir would have received a royalty on such a combination product.

Finally, Dr. Mir's testimony that he proposed the "related to" language in § 12.1 supports the court's interpretation of the Agreements. Specifically, Dr. Mir's testimony relies on DTX 31, which shows § 12.1 as originally proposed:

During the Term of this Agreement, MirTech shall promptly inform AF of any and all inventions, discoveries, improvements or other modifications which are (a) related to the Products or (b) otherwise conceived of, reduced to

²⁰Dr. Mir's request for a separate confidentiality agreement for the December 2013 meeting does not alter the plain language of the Agreements or suggest any course of dealing that would undermine that plain language. Parties frequently execute confidentiality agreements, even when they believe that existing agreements likely cover the topics to be discussed. (D.I. 95 at 588-589; D.I. 94 at 116-117) Importantly, Dr. Mir did not disclose to AgroFresh the nature or subject matter of his presentation prior to requesting a separate confidentiality agreement or explain why he wanted such an agreement, so the fact that AgroFresh executed such an agreement cannot be considered evidence of any mutual understanding.

practice, or acquired, during the performance of the Services (collectively, “Improvements”), whether patentable or not.

(DTX 31) Dr. Mir testified that AgroFresh’s acceptance of the “related to” language in clause (a), together with the deletion of clause (b), shows that § 12.1 is limited to assignment of the Product. The court disagrees. Deletion of clause (b) does not inform the meaning of “related to.” Clause (b) would have assigned to AgroFresh any of Dr. Mir’s inventions, regardless of subject matter. AgroFresh’s agreement to the first paragraph appropriately limited § 12.1 to the subject matter of the parties’ relationship – the Product and inventions related to the Product.²¹

C. Waiver

Section 12.1 of the Agreements provides that “MirTech hereby assigns **automatically** all rights, and all future rights, to such Improvements to [AgroFresh], at no additional cost to [AgroFresh][.]” (PTX 82 § 12.1) (emphasis added). Such language has been interpreted to mean that the assignment is effected at the moment the “inventions, discoveries, improvements or other modifications” are made. *See, e.g., DDB Techs., LLC v. MLB Advanced Media, L.P.*, 517 F.3d 1284, 1290 (Fed. Cir. 2008) (holding that contractual language where employee “agrees to and does hereby grant and assign” was “not merely an agreement to assign, but an express assignment of rights in future inventions”); *Speedplay, Inc. v. Bebop, Inc.*, 211 F.3d 1245, 1252-53 (Fed. Cir. 2000) (holding that contract language “hereby conveys, transfers and

²¹Dr. Mir testified at trial that § 12.1 needed to be restricted to the Product. (D.I. 96 at 639) The court has concluded that striking clause (b) in fact limited the scope of the provision to inventions related to the Product. Dr. Mir cannot change the meaning of or read “related to” out of the Agreements after the fact through his testimony.

assigns” constituted present assignment); *Filmtec Corp. v. Allied–Signal Inc.*, 939 F.2d 1568, 1570 (Fed. Cir. 1991) (agreement “to grant and does hereby grant” constituted assignment when invention came into being by operation of law).

Defendants raised an affirmative defense of waiver. The standard for proving waiver under Delaware law are “quite exacting.” *AeroGlobal Capital Mgmt., LLC v. Cirrus Indus., Inc.*, 871 A.2d 428, 444–45 (Del. 2005). “Waiver ... implies knowledge of all material facts and an intent to waive, together with a willingness to refrain from enforcing those contractual rights.” *Id.* at 444 (internal quotation marks omitted). “Intention forms the foundation of the doctrine of waiver, and an intention to waive must appear clear from the record evidence[.]” *Id.* at 445.

Even if AgroFresh’s actions at the December 2013 meeting had operated as a waiver as to the ideas presented in that meeting²² – notwithstanding the non-waiver provision found in § 27 of the Agreements – AgroFresh never waived its rights to the MOF technology, which Dr. Mir had not discovered at the time of the December 2013 meeting. As noted above, Dr. Mir admitted he did not disclose the MOF technology to AgroFresh until June 28, 2016. (D.I. 96 at 658) AgroFresh could not have intentionally waived its right to technology that did not yet exist and, certainly, had not yet been disclosed to AgroFresh.

The fact that Dr. Mir may have presented one idea, which AgroFresh declined to commercialize, did not give him free reign with respect to ideas like the MOF technology that he did not disclose. The Agreements did not require AgroFresh to take affirmative

²²The ideas from the December 2013 meeting are not at issue in this phase of the case, and the court does not address them here.

steps or make demands when presented with the technology in December 2013 to preserve its rights. *See, e.g., Goldwasser v. Smith Corona Corp.*, 817 F. Supp. 263 (D. Conn. 1993). Moreover, the fact that Dr. Mir did inform AgroFresh of his ideas in December 2013 could reasonably have led AgroFresh to expect that Dr. Mir would continue to comply with his obligations to keep AgroFresh informed if he developed other technology or found a commercial partner interested in the December 2013 technology.

The court also concludes that defendants' waiver defense fails due to the non-waiver provision in the parties' Agreements. (PTX 82 § 27) Delaware courts have consistently held that the existence of an express non-waiver provision precludes a contracting party from arguing that the other party's conduct waived a contractual right. *See, e.g., Cent. Mortgage Co. v. Morgan Stanley Mortgage Cap. Holdings LLC*, 2012 WL 3201139, at *7, *26 (Del. Ch. Aug. 7, 2012) (holding that a party's subsequent conduct did not act as a waiver in the face of an express non-waiver provision). Such provisions "give a contracting party some assurance that its failure to require the other party's strict adherence to a contract term ... will not result in a complete and unintended loss of its contract rights if it later decides that strict performance is desirable." *Rehoboth Mall Ltd. P'ship v. NPC Int'l, Inc.*, 953 A.2d 702, 704 (Del. 2008) (internal quotation marks omitted).

In the "hectic course of day-to-day business," non-waiver provisions serve an important function, protecting a company against the loss of rights where business people may not have full knowledge of the contract's terms. *Viking Pump, Inc. v. Liberty Mut. Ins. Co.*, 2007 WL 1207107, at *27 (Del. Ch. Apr. 13, 2007). The record

demonstrates that none of the AgroFresh representatives at the December 2013 presentation were involved in crafting the Agreements, nor were they designated to receive notices under the Agreements. (D.I. 94 at 181; D.I. 95 at 587, 589; PTX 82 § 33)

D. Amendment Through Course of Conduct

The parties did not modify the Agreements through their course of conduct. Delaware courts are reluctant to hold that parties have modified their agreements verbally or through a course of conduct where there is an express contract clause requiring amendments to be in writing. (PTX 82 § 23) While parties can waive the “no oral amendment” clause itself through their course of conduct, courts have rejected arguments that the parties waived such a clause where they have executed written amendments. *See, e.g., Cont’l Ins. Co. v. Rutledge & Co.*, 750 A.2d 1219, 1228–30 (Del. Ch. 2000) (rejecting argument that parties amended clause through course of dealing where they had amended agreement in writing in the past).

The parties’ course of dealing reflects no intention to modify the “no oral amendment” clause. They executed three written extensions of the Consulting Agreement and one written amendment to the Commercial Agreement. They knew how to execute written amendments when they desired to do so. Accordingly, there is no basis to find waiver of the “no oral amendment” clause (PTX 82 § 23), and no basis to find the parties amended their Agreements through their course of conduct.

E. Estoppel

Dr. Mir has also asserted an affirmative defense of estoppel. To prove estoppel,

Dr. Mir has to prove that AgroFresh by its conduct “intentionally or unintentionally [led Dr. Mir], in reliance upon that conduct, to change position to his detriment.” *Benitec Australia Ltd. v. Promega Corp.*, 2005 WL 549552, at *5 (D. Del. Mar. 8, 2005). Dr. Mir further had to prove, by clear and convincing evidence, that “(1) he lacked the knowledge of the true facts or he lacked the means to obtain the truth; (2) he relied on the conduct of the party against whom the estoppel is claimed; and (3) he suffered a prejudicial change of position as a result of his reliance.” *Id.* at *6.

Delaware law “generally reject[s] attempts to invoke equitable estoppel” based on oral statements. *Id.* (holding that a party could not claim detrimental reliance when it had knowledge of the terms of the agreement from the contract itself) (citing *Keene Corp. v. Hoofe*, 267 A.2d 618 (Del. Ch. 1970)). In addition, courts often find that a party could not reasonably rely on oral promises where a prior agreement requires a writing to amend. *See, e.g., MDNet, Inc. v. Pharmacia Corp.*, 147 F. App’x 239, 244 (3d Cir. 2005).²³

Based on these principles, Dr. Mir failed to prove estoppel by clear and convincing evidence. At best, the record indicates that AgroFresh did not immediately assert its ownership rights over the December 2013 technology. Dr. Mir admits that he was aware of and agreed to the various provisions of the Agreements. (D.I. 95 at 517) Nothing in the Agreements required AgroFresh to assert ownership rights over the technology, which had already been automatically assigned to AgroFresh. Finally, Dr.

²³This assumes an estoppel defense exists at all where the agreement at issue contains an automatic assignment provision – at least one court has rejected that idea. *See DDB Techs., L.L.C. v. MLB Advanced Media, L.P.*, 517 F.3d at 1289-90.

Mir could not have relied on AgroFresh's conduct in connection with the MOF technology, because he did not inform AgroFresh of its existence until June 2016. Nor could Dr. Mir reasonably have relied on any oral statements by AgroFresh given the Agreements' requirement of a writing to amend their terms.

F. The Third Extension

1. The Third Extension Is not retroactive

Generally speaking, courts will honor the effective date of an agreement in determining whether to apply it retroactively. *See, e.g., Sweetman v. Strescon Indus., Inc.*, 389 A.2d 1319, 1322 (Del. Super. 1978); *see also, Grubb & Ellis Co. v. Bradley Real Estate Trust*, 909 F.2d 1050, 1054 (7th Cir. 1990) (recognizing that "contractual terms may be effective for a period before the contract is executed, so long as such coverage is clear from the fact of the contract"). Where there is not an earlier effective date and the intent to make an agreement retroactive is not clear on the face of the contract, courts decline to hold modifications retroactive. *See, e.g., Sec. Watch, Inc. v. Sentinel Sys., Inc.*, 176 F.3d 369, 373 (6th Cir. 1999) (declining to give a merger clause retroactive effect "as no other provision of the later agreement even 'remotely intimate[d] that the parties ever contemplated so radical a retroactive renegotiation of their earlier agreements'" (citation omitted).

The Third Extension does not include an earlier effective date. The parties knew how to make agreements retroactive: (1) the CSA was executed in October 2010 with a retroactive effective date of January 1, 2010 (DTX 22); (2) the original Agreements were executed in May 2011 with a retroactive effective date of January 1, 2011 (PTX

82); and (3) the Second Extension to the Consulting Agreement explicitly states that it “shall be retroactive.” (PTX 85) The Third Extension has no such language and is effective, if at all, only from October 28, 2015 going forward. (PTX 433)

Nor did the parties express a “clear intention” to apply the Third Extension retroactively. As noted, the parties knew how to include such language when they wanted to do so - the language of the Third Extension expresses no such intention. To the contrary, the provisions of the Third Extension contemplate future activity, not going back to amend past conduct. For example, the language Dr. Mir proposed provided that certain “1-MCP alone” activities “**are** not part of and **will** not violate this or original agreement.” (PTX 82, Attach. A) (emphasis added) It uses the future tense “will” – meaning that going forward, such activities are not part of and will not violate the specific terms of the Third Extension or the terms of the original Agreements more broadly. See, e.g., Merriam-Webster’s Dictionary (defining “will” as “used to express futurity”). Similarly, the “Background” section of the Third Extension states that the parties “desire to extend the Original Agreement upon the terms and conditions contained herein.” (PTX 433) The language does not reach backward to insulate conduct that already occurred, and says nothing about preexisting inventions and discoveries. (D.I. 94 at 214, explaining that the parties did not discuss the intellectual property provisions in connection with the Third Extension).

2. The Third Extension applies to “1-MCP alone”

The Third Extension is unambiguous and does not allow Dr. Mir to compete except with respect to “1-MCP alone.” The Agreements define “1-MCP” as “compounds

which inhibit the ethylene response in plants including, but not limited to, 1-methylcyclopropene and its analogues and homologs.” (PTX 82 § 2.2) That definition refers to the ethylene-inhibiting compound itself (i.e. the gas), not formulated products to deliver the gas.²⁴ (See PTX 69) Indeed, products to deliver 1-MCP, like TruPick and SmartFresh, contain only a small percentage of the ethylene-inhibiting compound 1-MCP. (See, e.g., PTX 438, which shows that SmartFresh contains only 3.3% 1-MCP; D.I. 96 at 714) Moreover, during the negotiation process, Zettler struck the phrase “1-MCP-related products,” making it clear that the Third Extension does not apply to any such products (e.g., a delivery system for 1-MCP, like TruPick). (PTX 115)

G. Fraudulent Inducement

In order to prove fraudulent inducement, a party must establish the existence of (1) a false representation, (2) knowledge of falsity, (3) intentional inducement, (4) reasonable reliance, and (5) damages. See *E.I. DuPont de Nemours & Co. v. Florida Evergreen Foliage*, 744 A.2d 457, 461-62 (Del. 1999). A party has an obligation to disclose “information that if undisclosed will cause its partial statements of facts to be misleading.” *In re Student Fin. Corp.*, 2004 WL 609329, at *5 (D. Del. Mar. 23, 2004); *Stephenson v. Capano Dev., Inc.*, 462 A.2d 1069, 1074 (Del. 1983) (“[O]ne is equally culpable of fraud who by omission fails to reveal that which it is his duty to disclose in order to prevent statements actually made from being misleading.”).

The record at bar demonstrates that, at the time Dr. Mir was negotiating the

²⁴While the Agreements define 1-MCP as the gas, a delivery system for 1-MCP is related to this technology as explained above and, therefore, falls within the broader terms of § 12.1.

Third Extension, he had already been working with Decco for a year on the TruPick product. He and Decco had submitted a completed registration packet and conducted the associated trials. (PTX 5; D.I. 95 at 456-457) They had completed Phase I of their 2014 letter of intent, and Decco had paid Dr. Mir \$250,000. (D.I. 95 at 436-437; PTX 63)

Nevertheless, prior to the negotiation and execution of the Third Extension, Dr. Mir told Zettler that he had not found a party to pursue commercialization of the technology he disclosed in December 2013, and further suggested he had disclosed all relevant patents to AgroFresh. (PTX 114) Moreover, by choosing to disclose ideas in December 2013 and follow up on those ideas over time, AgroFresh had a reasonable expectation that Dr. Mir would (and Dr. Mir had an obligation to) fully disclose all relevant technology. Dr. Mir disclosed only the patents that had little commercial value, hiding the MOF technology to which he attributed \$100 million in EBITDA value. (PTX 143)

Dr. Mir also misrepresented his existing intentions. He told AgroFresh in October 2015 that he was “committed to the success of RipeLock and will do everything in my power to support its success.” (PTX 113) However, just a month earlier, Dr. Mir had discussed with Decco his plan to “give [AgroFresh] notice that he cannot support [AgroFresh] as a consultant and that he will be developing a new 1-MCP business with Decco.” (PTX 76; PTX 77) Dr. Mir thus had the existing intent to terminate his Agreements with AgroFresh prematurely at the same time he was affirming his “commitment” to AgroFresh to procure the Third Extension.

As found above, Dr. Mir failed to disclose material facts, including the '216 patent

itself, the nature of his activities with Decco, and his intention to stop working with AgroFresh when he finalized his joint venture with Decco. These facts were material, as Decco itself recognized that AgroFresh would “certainly” cut Dr. Mir off as a consultant if it learned of his activities. (PTX 24) *See NACCO Indus., Inc. v. Applica Inc.*, 997 A.2d 1, 29 (Del. Ch. 2009) (citing Restatement (Second) of Torts § 538). Zettler testified that he would not have signed the Third Extension had he known these facts. (D.I. 94 at 229-231)

Dr. Mir had a duty to disclose these material facts by virtue of his Agreements with AgroFresh and his special relationship with AgroFresh.²⁵ *In re Student Fin. Corp.*, 2004 WL 609329, at *5 (noting that a duty to speak may arise under these circumstances) (citing Restatement (Second) of Torts § 551). Significantly, the Agreements created a duty to “promptly inform” AgroFresh of any Improvements related to the Products. *Mitsubishi Power Sys. Ams., Inc. v. Babcock & Brown Infrastructure Grp. US, LLC*, 2010 WL 275221, at *16 (Del. Ch. Jan. 22, 2010) (acknowledging parties can contract to impose a duty to disclose).

Restatement (Second) of Torts § 551 (1977) (comment b) provides that a contract can be rescinded for failure to disclose facts basic to the transaction. Dr. Mir

²⁵ The court finds that the parties’ longstanding commercial partnership and close business relationship was the type of special relationship giving rise to a duty to disclose. *See, e.g., Crosse v. BCBSD, Inc.*, 836 A.2d 492, 494-95 (Del. 2003); *Corrado Bros. v. Twin City Fire Ins. Co.*, 562 A.2d 1188, 1192 (Del. 1989); *MetCap Sec. LLC v. Pearl Senior Care, Inc.*, 2007 WL 1498989, at *5 (Del. Ch. May 16, 2007) (recognizing that a duty to disclose may arise based on the custom or course of dealing between the parties). As noted above, Dr. Mir had been under contract with AgroFresh for over five years, and had repeatedly emphasized the need to be forthright with each other.

had a duty to disclose not only the MOF technology and the '216 patent, but the facts surrounding the '216 patent, his activities with Decco, and his intention to stop working with AgroFresh in the near future because they were basic and essential to the transaction, that is, the Third Extension. The court has already found that Dr. Mir took affirmative steps to conceal his work with Decco. *See Nicolet, Inc. v. Nutt*, 525 A.2d 146, 149 (Del. 1987) (fraud may occur “through deliberate concealment of material facts, or by silence in the face of a duty to speak.”); *Duffield Associates, Inc. v. Meridian Architects & Engineers, LLC*, 2010 WL 2802409, at *4-5 (Del. Super. July 12, 2010) (same). In sum, Dr. Mir’s work with a competitor to register a technology competitive with AgroFresh’s core business was basic to the transaction.

Dr. Mir intended to induce reliance on his misrepresentations and omissions, which resulted in damage to AgroFresh. *Davis v. 24 Hour Fitness Worldwide, Inc.*, 75 F. Supp. 3d 635, 640 (D. Del. 2014) (“Questions of reasonable reliance ask what information a reasonable person would consider important in determining his choice of action in the transaction in question.”) (internal quotation marks omitted). Dr. Mir intentionally induced AgroFresh’s reliance by emphasizing the parties’ relationship of trust throughout the negotiation process. AgroFresh entered into and performed under the Third Extension in reliance on Mir’s misstatements and omissions. (D.I. 94 at 229-231)

H. Summary

Section 12.1 of the Agreements is clear and unambiguous. All Improvements related to the Product are automatically assigned to AgroFresh. The '216 patent

technology is an improvement related to the Product. Dr. Mir fraudulently induced AgroFresh into executing the Third Extension to the Agreements by not disclosing either the '216 patent technology or his business relationship with Decco. Therefore, the Third Extension is deemed rescinded.

IV. CONCLUSION

For the reasons stated, the court enters judgment in favor of plaintiff and against defendants on counts I and IV of the complaint. An order shall issue.