IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MARCO DODA, DODA USA, INC., and DODA COSTRUZIONE MACCHINE AGRICOLE, DI DODA ALDO E C. SNC,

Plaintiffs,

Civil Action No. 17-604-CFC

v.

WASTE MANAGEMENT, INC., WM INTELLECTUAL PROPERTY HOLDINGS, LLC, WASTE MANAGEMENT NATIONAL SERVICES, INC., and JAMES L. DENSON, JR.,

Defendants.

David E. Moore and Bindu A. Palapura, POTTER ANDERSON & CORROON LLP, Wilmington, Delaware; Grant D. Fairbairn, Laura L. Myers, Timothy M. O'Shea, and Barbara Marchevsky, FREDRIKSON & BYRON, P.A., Minneapolis, Minnesota; Cara Donels, FREDRIKSON & BYRON, P.A., Des Moines, Iowa

Counsel for Plaintiffs

Karen Jacobs, Megan E. Dellinger, and Sarah E. Simonetti, MORRIS, NICHOLS, ARSHT & TUNNELL LLP, Wilmington, Delaware; David M. Stein and Franklin Krbechek, BROWN RUDNICK LLP, Irvine, California

Counsel for Defendants

OPINION

January 13, 2023 Wilmington, Delaware

Colm Faconnolly COLM Faconnolly CHIEF JUDGE

I held a four-day bench trial on correction of inventorship and breach of contract claims brought by Plaintiffs DODA USA, Inc. (DODA USA), DODA COSTRUZIONE MACCHINE AGRICOLE, di Doda Aldo e C. snc (DODA Italy) (and collectively with DODA USA, DODA), and Marco Doda against Defendants Waste Management, Inc., WM Intellectual Property Holdings, LLC, Waste Management National Services, Inc. (collectively, Waste Management), and James L. Denson, Jr. Plaintiffs alleged at trial that (1) the inventorship of U.S. Patent Nos. 8,926,841 (the #841 patent) and 10,486,995 (the #995 patent) must be corrected to list Marco Doda as a joint inventor; and (2) Defendants breached the parties' 2010 Mutual Nondisclosure Agreement¹ (NDA). D.I. 205 at 3, 26.

¹ Plaintiffs also alleged in the operative Second Amended Complaint breach of the parties' 2012 NDA, but they did not expressly address this claim in their posttrial briefing. D.I. 66 ¶¶ 125−26; D.I. 205. At trial, the parties' attorneys agreed that the 2012 NDA "bring[s] forward the 2010 [NDA]" but is not materially different from it and applies retroactively to breaches that occurred before it was entered, and that I should apply the language of the 2010 NDA in determining if either contract has been breached. Tr. 729:24−730:9, 731:21−22, 732:3−13. Based on these representations at trial and Plaintiffs' failure to expressly address breach of the 2012 NDA in their posttrial briefing, Plaintiffs have forfeited and waived any separate claim with respect to the 2012 NDA.

Plaintiffs have offered numerous and varied theories of liability throughout the course of this litigation. They present in their posttrial briefing, however, only two liability theories. First, they argue that Marco Doda should be added as coinventor on the #841 and #995 patents because he "collaborated with Denson on the design of organic waste processing systems between 2009 and 2016 [by] providing [Denson and Waste Management] disclosures in December 2009 and February 2010 that Denson incorporated into" the claims of the two patents. D.I. 205 at 1. (As discussed, below, Plaintiffs refer to the December 2009 disclosures as the "First Disclosed Combination" and the February 2010 disclosures as the "Second Disclosed Combination.") Second, Plaintiffs argue that Defendants breached the 2010 NDA by using in Figure 6 of Denson's application for the #841 and #995 patents a drawing DODA had provided Waste Management in May 2011. D.I. 205 at 27. The drawing was introduced at trial as part of JTX-14.² To

[Waste Management] breached the 2010 NDA when Denson put DODA's non-public information into his patent application and allowed it to publish. To prevail on a breach of contract claim, the plaintiff "must show the existence of a contract, the breach of a contractual obligation, and damages as a result." Agilent

² Plaintiffs framed their breach of contract argument in their posttrial briefing as follows:

be clear: Plaintiffs have forfeited and waived any and all theories of liability except these two theories set forth in their posttrial briefing.

Techs., Inc. v. Kirkland, C.A. No. 3512-VCS, 2010 WL 610725, at *14 (Del. Ch. Feb. 18, 2010).

DODA established each element. The parties signed the 2010 NDA in December 2010, preventing the unauthorized disclosure of information marked as "'Confidential,' 'Proprietary,' or [with] some similar designation." (¶45.) After signing the NDA, DODA provided WM with a May 2011 drawing that depicted a "NEW BIOSEPARATOR". (¶46.) The cover email contained a confidentiality notice in Italian, and the drawing bore DODA's trademark and a legend containing a warning in Italian against unauthorized distribution or use. (*Id.*)

Denson used DODA's drawing to prepare Figure 6 in his patent application, described how the new secondary separator would work, and obtained claims relating to that system. (¶49.) The disclosed information was not public. (¶46.)

D.I. 205 at 26–27. The "¶" citations in Plaintiffs' brief are to Plaintiffs' Proposed Findings of Fact (D.I. 206). The only drawing identified in paragraph 46 of Plaintiffs' proposed findings is a May 2011 drawing contained in JTX-14. D.I. 206 ¶ 46; see also Tr. 32:24–25 (Plaintiffs' counsel asserting in his opening statement that the May 2011 drawing contained in JTX-14 is "the drawing Mr. Denson lists and puts into Figure 6 in the patent.").

As required by Federal Rule of Civil Procedure 52(a)(1), I have set forth separately below my findings of fact and conclusions of law.

I. FINDINGS OF FACT

A. The Parties

- 1) Plaintiff DODA Italy, an Italian corporation with its principal place of business in Curatone, Italy, is an engineering firm that designs, manufactures, and implements systems for separating organic waste. D.I. 66 ¶¶ 3, 13.
- 2) Plaintiff DODA USA, a Minnesota corporation with its principal place of business in St. James, Minnesota, markets DODA Italy's products and services in the United States and provides its customers with design, operation, and implementation support. D.I. 66 ¶ 14.
- 3) Plaintiff Marco Doda, a citizen and resident of Italy, is a principal of DODA Italy and DODA USA and is the director of DODA's technical department.

 D.I. 66 ¶¶ 1, 15; Tr. 93:9–15 (M. Doda).
- 4) Defendants Waste Management, Inc. (WMI) and Waste Management National Services, Inc. (WMNS) are Delaware corporations and WM Intellectual Property Holdings, LLC (WMIP) is a Delaware limited liability company. D.I. 66
 ¶¶ 4–6. WMI, WMNS, and WMIP each has a principal place of business in

Houston, Texas and collectively operate under the corporate organization known as Waste Management. D.I. 66 ¶¶ 4–6, 16.

5) Defendant James L. Denson, Jr. is an Oregon citizen and was an agent and employee of WMNS at the time relevant to this matter. D.I. 66 ¶ 7.

B. The Parties' Witnesses

1. Plaintiffs' Witnesses

a. Fact Witnesses

- 6) Marco Doda.
- 7) Ada Doda is the CEO of DODA and Marco Doda's sister. Tr. 222:3 (A. Doda). During DODA's engagement with Waste Management, she coordinated activities at DODA Italy and provided information to DODA USA to be used in developing a waste processing system at Waste Management's Orange County transfer station. Tr. 222:6–19 (A. Doda).
- 8) Ron Pope is a former employee at Waste Management. He worked at Waste Management for 11 years, and during the time frame relevant to this case, he served as director of business development and was involved in negotiating an equipment supplier agreement with DODA. Tr. 287:6–288:15.
- 9) Philip Wessels, a DODA employee since January 2011, is currently the general manager and vice president of DODA USA. Tr. 385:25, 386:6–7

(Wessels). Wessels led DODA's negotiations with Waste Management, signed both the 2010 and 2012 NDAs on behalf of DODA, and learned of the existence of the #841 patent in 2016. Tr. 384:25–385:4 (Wessels).

b. Expert Witnesses

- 10) Dr. Fred Smith is an expert in mechanical engineering with experience in waste processing. He is a registered professional engineer and the president of Alpine Engineering and Design, a business that provides engineering consulting services and designs products, including equipment for the waste industry. Tr. 552:17–554:3 (Smith).
- 11) Donald Gorowsky is an expert in the field of economic damages with 40 years of experience in accounting, finance, and consulting and 31 years of experience as a financial expert. Tr. 648:10–12, 649:24–650:11 (Gorowsky). He has a Bachelor of Science in business administration from the University of North Dakota and a law degree from William Mitchell College of Law and is a Certified Public Accountant and Certified Management Accountant. Tr. 648:17–25 (Gorowsky).

2. Defendants' Witnesses

a. Fact Witnesses

- 12) Martin Felker is a national business manager at Waste Management. Tr. 478:1–2 (Felker). He was involved in Waste Management's Orange County project. Tr. 478:17–19 (Felker).
- patents, has worked at Waste Management for 27 years and is currently a manager of engineering and special projects. Tr. 748:11–17, 751:1–2 (Denson). During the time frame at issue in this case, he was an environmental protection manager at Waste Management and became involved with the Orange County project when he was asked to identify a solution for food waste. Tr. 750:18–22, 751:15–752:12 (Denson).

b. Expert Witness

14) Dr. Tej Gidda is an expert in the field of organic waste technology. He is a vice president and global leader for Future Energy at GHD, a company based in Waterloo, Ontario that works on infrastructure. Tr. 841:5–12 (Gidda). Dr. Gidda received his Bachelor of Science in engineering and Master of Science and Ph.D. in environmental engineering from the University of Guelph and currently serves as an adjunct professor at the University of Waterloo in the

department of civil and environmental engineering. Tr. 841:11–842:1 (Gidda). As a consulting engineer, Dr. Gidda specializes in food waste management and converting food waste "into nutrients for energy," a field in which he has 16 years of experience. Tr. 842:15–22 (Gidda). Dr. Gidda has worked on over 20 anaerobic digestion projects, including two large anaerobic digestion facilities in Toronto. Tr. 842:23–844:19 (Gidda).

C. The Inventions at Issue

- 15) The #841 patent issued on January 6, 2015, and the #995 patent issued on November 26, 2019. JTX-1; JTX-3. The patents share a common written description and identify Denson as the sole inventor. JTX-1; JTX-3.
- 16) The #841 and #995 patent claims at issue cover a system for converting organic waste into a slurry that can be used in anaerobic digesters to produce biogas, transportation fuels, and other useful products. #841 patent at 1. The system is designed to create a uniform fuel slurry by using multiple tanks to blend organic waste of various physical and chemical properties, including differing levels of chemical oxygen demand (COD). #841 patent at 6:13–22.
- 17) The invention solves the problem of anaerobic digesters breaking down while producing methane from highly variable waste streams due to variations in the chemical and physical properties of the waste materials. The

invention achieves this goal by mixing and blending various waste streams into a uniform fuel product with consistent levels of solids and COD that does not upset digesters. #841 patent at 6:26–34.

- 18) The #841 patent has 40 claims. The #995 patent has 27 claims.
- 19) Claim 16 of the #841 patent reads:

An organic waste processing system to produce to produce a slurry for the production of bio-gas, transportation fuels or chemical products, and a residual solid, comprising:

- [a] a hopper configured to receive sorted organic waste having contaminants from one or more sources;
- [b] a separator system in communication with the hopper and configured to receive the sorted organic waste from the hopper and to remove at least a portion of the contaminants in the sorted organic waste, wherein the separator system comprises a primary separator;
- [c] a wash water liquid tank in communication with the separator system and containing wash water, wherein at least a portion of the wash water from the wash water tank is periodically injected into the separator system upon request;
- [d] a product tank in communication with the separator system and configured to receive organic waste from the separator system, which has been processed by the separator system; and
- [e] a make-up product tank in communication with the separator system and configured to receive the sorted organic waste from the separator system having low

COD, wherein at least a portion of the organic waste from the make-up product tank is periodically injected into the product tank upon request.

#841 patent at 16:11-37.

- 20) For ease of reference, I will follow the parties' practice at trial and discuss the system covered by these claims as comprising a combination of these five elements: 16(a) a hopper; 16(b) a separator system; 16(c) a wash water tank; 16(d) a product tank; and 16(e) a make-up product tank.
- 21) Claim 26 of the #841 patent depends from claim 21, which in turn depends from claim 16.

22) Claim 21 reads:

The system of claim 16, the separator system further comprising a secondary separator in communication with the primary separator and configured to receive the organic waste from the primary centrifugal separator and to remove at least a portion of the contaminants in the organic waste.

#841 patent at 16:59-63.

³ Claim 16 and the #841 patent's written description use "wash water tank" and "wash water liquid tank" interchangeably. The parties also treated the phrases as synonymous throughout the trial and in their briefing.

23) Claim 26 reads:

The system of claim 21, the secondary separator is configured to remove contaminants greater than 8 millimeters from the organic waste.

#841 patent at 17:13-15 (sic).

24) Plaintiffs contend, and Defendants do not dispute, that claims 16, 21, and 26 of the #841 patent are in all material respects the same respectively as claims 1, 11, and 16 of the #995 patent. *See* Tr. 13:22–14:3 (Plaintiffs' counsel); D.I. 205 at 4. Accordingly, I will follow the parties' lead and substantively discuss and cite only the #841 patent.

D. Timeline of the Parties' Relationship and Communications

25) In January 2009, Martin Felker attended a trade show where he spoke with DODA USA's then-general manager Rich Miller and watched a video about DODA's "wet" system for organic waste processing (also referred to as the "kitchen") that was installed at a biogas facility in Rivalta, Italy. Tr. 520:11–521:14 (Felker). At Felker's request, Miller sent him more information about the "wet" system and Felker circulated that information internally at Waste Management. PTX-5; PTX-6; *see* Tr. 479:1–11 (Felker). Felker provided information about DODA's system to Waste Management employees as part of an update on several equipment vendors that Waste Management was considering

using in connection with its Orange County transfer station project. Tr. 523:7–525:5 (Felker); see DTX-109.

- 26) In May 2009, Felker shared a summary and diagram of DODA's wet system with Jim Denson, who had been researching anaerobic digestion as a solution for diverting food waste. DTX-101; see Tr. 766:15–21 (Denson).
- 27) In November 2009, Felker and Denson traveled to Rivalta, Italy, where they viewed DODA's wet and dry systems and discussed purchasing equipment from DODA that could be customized for Waste Management's needs. Tr. 772:1–773:13 (Denson). The parties agreed during this visit that Marco Doda would prepare designs for DODA equipment to be used for a new organic waste processing system at the Orange County transfer station. Tr. 117:22–118:8 (M. Doda).

1. The So-Called "First Disclosed Combination"

28) On December 4, 2009, in an email with the subject line "DRAWINGS SENDING," Simona Mazzocchi—who worked at DODA Italy as an assistant to Marco and Ada Doda—sent Rich Miller two AutoCAD drawings dated December 4, 2009. PTX-26; *see* Tr. 120:13–121:1 (M. Doda). AutoCAD is a computer-aided design and drafting software application. The mark "DODA" appears in the upper left corner of each drawing. Neither drawing identifies the name of a person

and neither drawing is marked in any way to suggest it was confidential. The first drawing, titled "sktr01," depicts a garbage truck emptying unidentified semi-solid contents into a u-shaped container (i.e., a hopper) that in turn dumps its contents onto the ground. The second drawing, titled "bioseparator," depicts a waste processing system with, among other things, a hopper, separator, dilution line, transfer pump, and a "liquid storage tank." PTX-26 at 4. Simona stated in her email to Miller: "[A]s per your agreement with Marco, here attached we send you the agreements requested." PTX-26 at 2.

- 29) On December 6, 2009, Miller forwarded the email and drawings to Martin Felker. Miller stated in the email that he was "not sure if DODA shared these concept drawings with you or not" and asked Felker to share the drawings with Jim Denson and Tom Koutroulis. PTX-26 at 1.
- 30) Felker in turn forwarded Miller's email and the drawings to Denson and Koutroulis. Felker stated in his email: "Tom/Jim: preliminary concept drawings from Doda attached. Spoke with Rich Miller today, he is expecting some updated drawings and a proposal to us for the system by the end of the week."

 PTX-26 at 1.
- 31) On December 11, 2009, in an email with the subject line "DRAWINGS," Simona Mazzocchi sent Miller two AutoCAD drawings dated

December 4, 2009. PTX-27. The mark "DODA" appears in the upper left corner of each drawing. Neither drawing identifies the name of a person and neither drawing is marked in any way to suggest it was confidential. The first drawing, titled "sktr02," depicts a garbage truck on an unloading ramp emptying unidentified semi-solid contents into a u-shaped container (i.e., a hopper) that in turn dumps its contents onto the ground. The second drawing, titled "sktr01," depicts a waste processing system with, among other things, a hopper, separator, dilution line, transfer pump, and a "liquid storage tank," connected to a tank with a built-in waste compactor. PTX-27 at 4. Simona stated in her email to Miller: "as per your agreements with Marco, here attached w[e] send you 2 file[s] with separation plant diagrams." PTX-27 at 1.

- 32) On December 11, 2009, Miller forwarded the email and drawings to Felker. Miller stated that the drawings reflect "how a transfer station could be set up to process and load out organics to a tanker truck" and that he should be able to provide pricing information by the following week. PTX-27 at 1. He also asked Felker to share the drawings with Denson and Koutroulis. PTX-27 at 1.
- 33) On December 22, 2009, Miller sent Felker an email with the subject line "Organic Processing System." PTX-28. Miller stated in the email that he was attaching "a quotation on the Organics Processing Equipment for Orange County

facility." PTX-28 at 1 (capitalization in the original). The attachment is a threepage letter signed by Miller that provided "a quotation and brief description of each component of the DODA ORGANICS PROCESSING SYSTEM." PTX-28 at 2. The letter describes five components of the system: (1) a hopper with an auger 400 millimeters in diameter and an optional second auger 300 millimeters in diameter; (2) an optional hydraulic controlled top cover; (3) a bio separator; (4) an auxiliary hydraulic package to operate the hydraulic components of the system; and (5) an optional organics transfer manifold equipped to pump and transfer slurry. PTX-28. Neither the letter nor the cover email are marked in any way to suggest they are confidential. Miller stated in his email to Felker: "You would need the system with the Manifold to load out trucks etc. as described. We could be ready in Feb. probably the middle to later part. This would be as modified per pdf's sent earlier." PTX-28 at 1.

- 34) I will follow DODA's lead and refer to the three December 2009 email chains and their attachments collectively as "the First Disclosed Combination." See D.I. 206 ¶ 27.
- 35) The parties dispute whether the "liquid storage tank" depicted in the drawings of the First Disclosed Combination meets the wash water tank element of claim 16 of the #841 patent. The patents do not define "wash water," let alone

"wash water tank," or "wash water liquid tank." The parties never asked me to construe these terms, and the parties' competing experts did not define the terms at trial or explain what an artisan of ordinary skill would understand the terms to mean in general.

- 36) DODA argues that the liquid storage tank meets the claimed wash water tank element because "it contain[s] wash water (which the patents indicate can be organic waste or slurry that has sat for 2-3 days and has become 'liquid enough to be used as wash water again') and provide[s] a dilution line back to the separator system to reinject the wash water." D.I. 211 at 2 (quoting JTX-1 at 3:34–35).
- drawings of the First Disclosed Combination meets the wash water tank element of claim 16 of the #841 patent for four reasons. First, the written description of the patents speaks of "reclaim[ing] wash water" (JTX-1 at fig.1), "[u]sing the organic waste as wash water" (JTX-1 at 3:36–37), and using "wash water to thin the organic waste slurry" (JTX-1 at 5:46–47). Thus, wash water used to dilute the waste being processed can come from the process itself. Second, the drawings show a dilution line that runs from the liquid storage tank back to the separator, where organic waste is "diluted to a pumpable consistency." PTX-28 at 3.

Third, Miller's letter enclosed with the third December 2009 email describes valves that "allow separated organic slurry to be transferred *from a storage tank* to the Organics Hopper *for diluting* difficult organic batches when necessary[.]" PTX-28 at 3 (emphasis added). Fourth, Waste Management's expert, Dr. Gidda, did not dispute the testimony of DODA's expert, Dr. Smith, that the liquid storage tank depicted in the drawings in the First Disclosed Combination constituted a wash water tank.

38) The parties dispute in their briefing who came up with the idea of the dilution line depicted in the First Disclosed Combination. Plaintiffs argue in their reply brief that "Marco Doda testified that the liquid tank dilution line was his idea." D.I. 211 at 3 (citing paragraphs 25 through 33 of Plaintiffs' Proposed Findings of Fact (D.I. 206)). But that is not what Marco Doda testified to in the portions of the trial transcript cited by Plaintiffs. Marco Doda merely testified about the purpose that dilution served (Tr. 135:17–22), that the dilution line was "new" and not part of DODA's Rivalta system (Tr. 136:16–20), and that Marco Doda was not "aware of any other system[] in the world that had a hopper, a separator, and a liquid tank with a dilution line like [the dilution line depicted in

PTX-26]" (Tr. 137:4–7).⁴ By contrast, Felker testified that during the November 2009 visit to Rivalta he and Denson "made the suggestion [to Marco Doda] to provide dilution water into the hopper to make the material more pumpable as it exited the hopper." Tr. 496:20–498:10 (Felker). And Denson similarly testified that during that visit he and Felker "asked [DODA] to install a dilution line into the hopper." Tr. 773:20–21. Felker's and Denson's testimony on this point is also consistent with an email sent by Rich Miller to Felker on November 17, 2009 (just days after the Rivalta trip) confirming that DODA "will also be putting a[n] effluent discharge in the hopper from the Bio Separator to bring some liquid back in the unit as it[']s processed" and that "in this manner we will have the system

⁴ Marco Doda's testimony with respect to the dilution line differed notably from his unambiguous testimony with respect to other waste system elements DODA has claimed that Marco Doda invented. *See*, *e.g.*, Tr. 140:4–14 ("Whose idea was it to place the hopper at the end of the unloading ramp? A. My idea. Q. Whose idea was it to place the separator attached to the hopper next to it in that formation? A. My idea. Q. And whose idea was it to put the liquid storage tank and transfer pump on that side of the ramp? A. My idea. Q. And whose idea was it to put a line running off the transfer from the truck in that location? A. My idea.") (M. Doda); Tr. 162:24–25 ("Q. And who proposed th[e] idea [of a secondary separator with a smaller screen], Mr. Doda? A. Me.") (M. Doda).

plumbed and set with valves so we can transfer to holding tanks or bring the processed liquids back into the hopper." PTX-22 at 1.

39) Accordingly, I find as a matter of fact that DODA did not establish by clear and convincing evidence that Marco Doda conceived of the idea of the dilution line depicted in the First Disclosed Combination. And based on that finding, I find also that DODA did not establish by clear and convincing evidence that Marco Doda conceived of the idea of the wash water tank element in claim 16 of the #841 patent or the combination of the hopper, separator, and wash water tank elements of claim 16 of the #841 patent.

2. Denson's Conception of a Multi-Tank System

- 40) Denson left Rivalta impressed with the quality of DODA's equipment. Based on that assessment and DODA's communications with Waste Management in December 2009, he recommended to his colleagues at Waste Management that it use DODA as an equipment supplier for the Orange County organic waste system project. Tr. 776:17–22 (Denson).
- 41) On January 15, 2010, Denson emailed DODA a layout for the Orange County organic waste processing system. JTX-7. The purpose of the layout was to provide DODA with an understanding of the size of the building at the Orange County site "and the general spatial relationship of the equipment that [Denson]

wanted to be put in the building." Tr. 777:9–12 (Denson). Denson did not intend for the layout to serve as an engineering drawing or a process design, and therefore he did not depict in the layout the flow of materials in the waste processing system. Tr. 777–78 (Denson).

42) On January 28, 2010, Denson sent DODA an email that read in relevant part:

I think we are at the point where we should nail down the relationships for the equipment in the building we have. I have attached a very simple drawing of the plan of the building with the end Elevation. . . . Please have you[r] technical office place the feeder, bio-separator, and tank manifolds in a drawing so we can review the relationships to each other.

DTX-130 at 1. The drawing Denson attached to the email was a three-dimensional depiction of a waste processing system with, among other things, four tanks connected by piping. *See* DTX-130 at 5–6; Tr. 779:19–781:2 (Denson).

43) On February 11, 2010, in reply to Denson's January 28, 2009 email, Ada Doda sent three AutoCAD drawings that are dated February 11, 2010 and depict the layout and configuration of the system to be installed at the Orange County plant. JTX-8 at 5, 7–8. The mark "DODA" appears in the legend located in the bottom right corner of each drawing. The legend identifies "P.L." as the

"disegnatore" (drawer⁵) and "Orange Plant" as the "descrizione" (description) and contains a warning in Italian against unauthorized distribution or use, typewritten in a font so small as to be almost illegible. The drawings and cover email are not otherwise marked in any way to suggest they are confidential.

3. The So-Called "Second Disclosed Combination"

44) On February 25, 2010, in an email with the subject line "UPDATE," Miller informed Denson, Felker, and Koutroulis that a "new finalized quotation" was "pretty much complete," subject to any language Waste Management wished to add, and that DODA wanted to "do pretty much a turnkey deal for WM." PTX-41 at 1. Miller described in the email certain components of the system that DODA had been developing for Waste Management. Miller wrote in relevant part:

We don't obviously want a train wreck here and there would be another easy solution. We use the Bio Separator with the mm screen to remove the plastic etc. The product could go to a storage tank or pumped to another Bio Separator with a screen of 8mm and a higher speed electrical motor. This would produce something like a cream we feel and if there was anything in the way of contaminants that got past the first unit would be captured here. The other option would be to pull the product out of a storage tank when loading a truck, run it through the second Bio Separator and fill the

⁵ I adopt Plaintiffs' undisputed translation of "disegnatore" as "drawer," provided by Mr. Doda during his direct examination. Tr. 164:23, 186:8–17 (M. Doda).

tanker truck that will be hauling to the municipality. We could just try a smaller screen in the first separator but are concerned on the through put and some of the organics coming out with the contaminants.

PTX-41 (emphasis added). Miller's email is not marked in any way to suggest that its contents are confidential.

- 45) On February 26, 2010, Felker emailed Miller back and said that

 Denson would "circle back with [Miller] on the proposal and agreement." PTX
 41.
- COUNTY QUOTATION," Miller sent Denson, Felker, Koutroulis, and Pierce a technical bid and price quotation for supplying and installing a DODA waste processing system at the Orange County plant. PTX-42. The technical bid lists the following items to be supplied by DODA USA: (1) a stainless steel organics hopper; (2) a bio separator to be connected to and fed by the organics hopper, with a perforated screen for organics to pass through before falling into a storage tank; (3) distribution manifolds to be connected to storage tanks, allowing for the contents to be transferred to transport trucks; (4) a hydraulic power unit; (5) a control panel; (6) stainless steel piping, hoses, and related accessories; and (7) a chopper pump for plumbing waste content into waste water storage tanks. The bid stated that "[w]hile [DODA had] confidence that the processed particle sizes of

approximately 15mm" would meet Waste Management's expectations, Doda "ha[s] the ability to add a second Bio Separator to the system to further reduce particle sizes if necessary." PTX-42 at 2. The technical bid and cover email are not marked in any way to suggest they are confidential.

- 47) I will follow DODA's lead and refer to the emails exchanged between the parties on February 25 and 26, 2010 and the February 26, 2010 bid collectively as "the Second Disclosed Combination." *See* D.I. 206 ¶ 37.
- 48) The Second Disclosed Combination discloses a hopper, separator system, and wash water liquid tank covered by elements 16(a), 16(b), and 16(c) of the #841 patent; a secondary separator covered by claim 21; and a secondary separator that is configured to remove contaminants greater than eight millimeters and that is covered by claim 26. PTX-41; PTX-42; Tr. 594:17–598:4 (Smith).
- 49) The parties dispute who first came up with the concept of a secondary separator and the concept of a secondary separator with an eight-millimeter screen.
- 50) Plaintiffs contend that Marco Doda originated both concepts. D.I. 205 at 11–12. Marco Doda testified at trial that he was the originator of the concepts of a secondary separator and of a secondary separator with a screen smaller than 15 millimeters. Tr. 162 (M. Doda). In his words: he "passed [this] information to [his] assistant [and] she translate[d] [the information] and then shared [the

translated information] [with] Rich Miller at [DODA] USA." Tr. 163:7–9 (M. Doda). But Marco Doda did not testify at trial that he conceived of the idea of a secondary separator with an eight-millimeter screen. Rather, Doda testified that he had used an eight-millimeter screen in a primary separator he installed in Canada before December 2009. Tr. 111:15–112:6 (M. Doda). And he testified that he "anticipat[ed]" using an eight-millimeter screen in a secondary separator he drew in May 2011—i.e., more than a year after the materials in the Second Disclosed Combination were provided to Waste Management. Tr. 174:16–175:6 (discussing JTX-14, which was created in May 2011) (M. Doda).

between Doda and his assistant to support his testimony. Nor did Plaintiffs introduce into evidence any written or electronic communications between Marco Doda and Miller (or any other DODA employee) to corroborate Doda's testimony that he "passed on" to Miller the ideas of a secondary separator and a secondary separator with a smaller screen. Plaintiffs did not call Miller to testify at trial; nor did they offer at trial deposition testimony from Miller or counter Defendants' assertion that Plaintiffs could have called Miller as a witness. In short, Plaintiffs failed to introduce at trial anything other than Miller's February 25, 2010 email to

corroborate Plaintiffs' claim that Marco Doda originated the concepts of a secondary separator and a secondary separator with an eight-millimeter screen.

52) There is nothing in the language of Miller's email that supports Marco Doda's claim of inventorship of the secondary separator or the secondary separator with an eight-miller screen. On the contrary, the structure and language of the email suggest that others besides Doda contributed to the ideas of a secondary separator and a secondary separator with an eight-millimeter screen. Miller mentions Doda only in the second paragraph of the email. He states in that paragraph that "Marco would also like to include [in the system] a conveyor to take the trash to a dumpster or whatever, for more versatility." PTX-41 at 2. In the next paragraph, Miller changes subjects and says that "[t]here has also been quite a bit of discussion regarding the digester you plan on taking the organics to." PTX-41 at 2. In the very next sentence, Miller says that he "spoke with numerous bio guys and Dr. Sordelli in Italy in particular," and he then summarizes concerns that those "bio guys" and, in particular, Dr. Sordelli raised with him. It is at this point in the email that Miller says, "We don't obviously want a train wreck here and there would be another easy solution" and then immediately proceeds to propose as the "easy solution" the secondary separator and a secondary separator with an eight-millimeter screen. Thus, if anything, the February 25, 2010 email

supports the finding that Marco Doda did not by himself come up with the concepts of a secondary separator and secondary separator with an eight-millimeter screen.

- 53) Denson testified at trial that he (i.e., Denson) originated the idea of a secondary separator. *See* Tr. 784:1–785:20, 815:16–816:5, 820:4–14 (Denson).
- 54) In light of this conflicting and ambiguous evidence, I find as a factual matter that Plaintiffs did not establish by clear and convincing evidence that Marco Doda originated the idea of a secondary separator or a secondary separator with an eight-millimeter screen. Having heard and considered the testimony and documentary evidence introduced at trial, I am not left with an abiding conviction that it is highly probably that Marco Doda conceived of those ideas or the combination of either of those ideas with a hopper, primary separator, and wash water tank.

4. Completion of the Orange County Transfer Station

55) On April 29, 2010, Denson sent Miller an email in which he attached "some AutoCAD drawings that represent our final engineering placement of the equipment" and asked Miller to pass on several questions about the configuration of the equipment to DODA, noting that Waste Management was "expecting to

submit the engineering drawings for the building permit next week." PTX-46. On April 30, 2010, Miller forwarded the email and drawings to Ada Doda.

- equipment layout," Ada Doda sent Miller and Denson two AutoCAD drawings dated May 13, 2010. PTX-46. The mark "DODA" appears in the legend located in the bottom right corner of each drawing. The legend identifies "P.L." as the "disegnatore" (drawer) and "Orange Plant" as the "descrizione" (description) and contains a warning in Italian against unauthorized distribution or use, typewritten in a font so small as to be almost illegible. The drawings and cover email are not otherwise marked in any way to suggest they are confidential. Ada Doda stated in her email to Miller and Denson: "I had some drawings from my technical office 'boys' that You will find attached in dwg form for Mr. Denson and Pdf for You. I hope these are those Mr. Denson is looking for." PTX-46.
- 57) On May 27, 2010, DODA USA and WMNS signed an Equipment Purchase Agreement pursuant to which DODA agreed to "[p]rovide detailed drawings and specifications for the infrastructure required to install the Equipment at WM's facility" and that "[u]pon Final Payment, all right, title and ownership of the Equipment shall pass to WM." JTX-9 §§ 1, 5.

- 58) The Equipment Purchase Agreement also provided that if the parties considered the trial period for Waste Management's use of DODA equipment at the Orange County plant successful, they could negotiate an agreement for DODA to become Waste Management's exclusive supplier of waste processing equipment. JTX-9 § 15.
- 59) In September 2010, DODA installed the Orange Transfer Doda FoodPower system at Waste Management's Orange County plant. Tr. 170:22–171:6 (M. Doda); see PTX-52.

5. Non-Disclosure Agreements and Patent Applications

- 60) In November 2010, the parties began to negotiate an agreement pursuant to which Waste Management would purchase from DODA a minimum amount of equipment and processes and DODA would agree to supply such equipment exclusively to Waste Management (i.e., and not Waste Management's competitors). Tr. 288:12–291:11, 300 (Pope).
- NDA, pursuant to which the parties agreed not to disclose to third parties information they received from each other that was marked "Confidential," 'Proprietary,' or [with] some similar designation." JTX-11 ¶¶ 2–3. The 2010 NDA further provides that "[a]ll documents and other tangible objects containing

or representing Confidential Information . . . shall be and remain the property of the disclosing Party. . . . " JTX-11 ¶ 7. It also states that publicly available information is not covered by the NDA. JTX-11 ¶ 2.

62) On May 26, 2011, in an email sent to Denson and Wessels, Ada Doda wrote:

Hi, please find attached dwg files required. I also add pdf forms. Any further information You may need please do not hesitate to contact us

Best regards Ada

JTX-14 at 1. The words "confidential" and or "proprietary" do not appear in the email, and there are no other English words in the email that would have put a recipient of the email on notice that the email or its attachments included confidential or proprietary material.

63) Below Ada Doda's email signature line is a paragraph written in Italian. In their posttrial Proposed Findings of Fact, Plaintiffs state that this paragraph constitutes "a confidentiality notice in Italian." D.I. 206 ¶ 46. Plaintiffs cite in support of this assertion *only* JTX-14, which reads in relevant part:

AVVISO: le informazioni contenute o allegate alla presente sono dirette unicamente al destinatario sopra indicato. In caso di ricezione da parte di persona diversa é vietato qualunque tipo di distribuzione o copia.

Chiunque riceva questa comunicazione per errore é tenuto ad informarci immediatamente per telefono ed a restituirci quanto ricevuto, per posta, all'indirizzo di cui sopra. Sebbene sia cura della ditta DODA proteggere il proprio sistema di posta elettronica da virus o altri fatti dannosi, la stessa non garantisce che questo messaggio (inclusi i suoi eventuali allegati) sia indenne da virus e non è responsabile per danni subiti dal destinatario a seguito del ricevimento, apertura o uso di questo messaggio.

JTX-14 at 1. There is no English translation of this paragraph anywhere in JTX-14.

- 64) I do not speak or read Italian.
- 65) When I inputted the language from the paragraph in Google Translate,

I obtained this translation of the text:

NOTICE: The information contained or attached hereto is directed solely to the above recipient indicated. In case of receipt by a different person, any type of distribution or copying is prohibited. Anyone who receives this communication by mistake is required to inform us immediately by telephone and e-mail return to us what you have received, by post, to the above address. Although it is DODA company's concern to protect its electronic paste [sic] system from viruses or other harmful facts, the same does not guarantee that this message (including its possible attachments) is free from viruses and is not responsible for damages suffered by the recipient as a result of receipt, opening or use of this message.

Translate, GOOGLE, https://translate.google.com (select Italian in the "Detect language" dropdown menu and then enter Italian text to be translated).

- 66) Ada Doda testified on direct examination at trial in relevant part as follows:
 - Q. Turning back to your e-mail on the first page of the exhibit, JTX-14, what information are you giving at the bottom of your e-mail, the signature block?
 - A. Please be advised that information and drawings attached are confidential, for the purpose of -- for the --
 - Q. Did anyone at Waste Management ever ask you permission to use this drawing other than for the Orange County plant?

A. No.

Tr. 239:1–9 (A. Doda). Waste Management never challenged or objected to this testimony. Nor did it ever offer a competing translation of the paragraph below Ada Doda's signature block. Plaintiffs did not cite Ada Doda's testimony in their Proposed Findings of Fact (D.I. 206) to support their assertion that the paragraph "contained a confidentiality notice in Italian" and therefore forfeited any right to rely on that testimony as proof of the content of the paragraph. But in any event, I find that Ada Doda's testimony about the content of the paragraph below her signature line is not credible and would not rely on it.

- 67) Ada Doda attached to her May 26, 2011 email two AutoCAD drawings. The drawings are dated May 25, 2011. They depict a proposed organics processing system that included a secondary separator. JTX-14.
- 68) The mark "DODA" appears in the legend located in the bottom right corner of each drawing. The legend identifies "P.L." as the "disegnatore" (drawer) and "Orange Plant" as the "descrizione" (description) and contains a warning in Italian against unauthorized distribution or use, typewritten in a font so small as to be nearly illegible. JTX-14.
- 69) Waste Management filed the application for the #841 patent on June 27, 2011. JTX-1. Denson used the May 25, 2011 drawing (JTX-14) to help prepare Figure 6 in the patent application. Tr. 820:1–3 (Denson); *see also* Tr. 596:18–23 (stating that the May 25, 2011 drawing and Figure 6 of the #841 patent are "essentially the same drawing") (Smith). Denson did not seek DODA's permission to use the May 25, 2011 drawing because he did not think permission was required. Tr. 811:22–812:2 (Denson).
- 70) DODA USA and WMNS entered into a second NDA, dated April 13, 2012, confirming that "[f]or the avoidance of doubt, holding tank mixing sequences and/or customization of DODA equipment" made by Waste

Management or DODA at Waste Management's request "will remain confidential to [Waste Management]." JTX-15 at 4.

71) Waste Management filed the application for the #995 patent on February 16, 2017. JTX-3.

6. State-of-the-Art and Inventive Contribution Findings

- 72) Plaintiffs admit, and I find as a matter of fact, that the hopper, separator system, and waste water tank elements of claim 16 of the #841 patent and a separator with an eight-millimeter screen were known in the art in isolation as of December 2009. See Tr. 946:20–21 ("All of every element of claim 16 alone was in the art.") (Plaintiffs' counsel); Tr. 993:7–13 ("the eight-millimeter screen was in the state of the art in isolation") (Plaintiffs' counsel); Tr. 111:8–112:3, 114:24–115:10 (stating that DODA supplied a separator with an eight-millimeter screen to a Canadian company before December 2009) (M. Doda).
- 73) I also find as a matter of fact, based on Dr. Gidda's testimony and documentary evidence introduced at trial, that the concept of a secondary separator was known in the art before December 2009 and that the combination of a hopper, waste water tank, and separator system with a primary centrifugal separator and a secondary separator with varied screen sizes was also known in the art as of December 2009. *See* Tr. 865:17–885:18 (Gidda); DTX-211 at 224–26 (showing

Torsvik facility with a hopper (reception pit), wash water tank equivalent (mixing and diluting with hot water steam), primary separator (sand trap), and secondary separator (flotation separator)); DTX-211 at 327, 469 (showing Ypres facility with hopper (deep bunker unit), wash water tank equivalent (recirculating processed water), and separator system with primary centrifugal separator (hydro-pulper) and secondary separator (charge tank with hydro-cyclone)); DTX-211 at 327 (showing Västerås facility with hopper equivalent (walking floor and deep bunker), wash water tank, and separator system with primary centrifugal separator and secondary separator (screen rake and sand trap)); DTX-90 at 5 (2008 EPA report showing EBMUD facility with hopper, wash water dilution liquid, primary separator (rock trap) and secondary separator (paddle finisher)); DTX-138 at 1, 10 (showing that EBMUD's secondary separator had multiple screen sizes).

74) Based on Dr. Gidda's credible testimony, I find that the inventive feature of the system covered by claim 16 of the #841 patent was the make-up product tank element (16(e)), which enabled the injection of collected waste into a product tank containing different waste material, and that this feature was not depicted in the December 4, 2009 drawings or in the wet and dry systems that DODA operated in Rivalta, Italy as of 2009, all of which only had a single product tank. See Tr. 853:11–854:1, 854:7–20 (Gidda). I also find that the four-tank

system—in which two tanks filled with make-up water or wash water are connected to a wash water pump and two product tanks—appeared for the first time in the drawings Denson sent to DODA in January 2010 that were later incorporated into the diagrams that Ada Doda sent to Denson on February 11, 2010. Tr. 857:5–19, 860:8–861:14 (Gidda); see JTX-7, JTX-8, DTX-130.

- 75) I also find, based on Dr. Gidda's credible testimony, that DODA's single-tank system could not practice the challenged claims or solve the problem addressed by the patents because it could not blend different materials of varying chemical makeups into a consistent, low-COD bio-slurry. *See* Tr. 854:21–855:4 (Gidda).
- 76) It is possible to practice the claims of the #841 patent with equipment from vendors other than DODA, and as of 2009, several known organic waste processing facilities were practicing elements of the First and Second Disclosed Combinations using hoppers and tanks provided by vendors other than DODA. Tr. 865:6–10, 869:4–17, 879:4–19 (Gidda).
- 77) It would have been obvious to an artisan of ordinary skill as of late 2009 to use a wash water liquid tank to dilute material. Tr. 874:9–875:24, 882:5–17 (Gidda).

- 78) The use of different screen sizes in separators as of December 2009 was common in the waste processing industry and would have been obvious to an artisan of ordinary skill. Tr. 884:7–885:18, 890:12–24 (Gidda).
- I found Dr. Gidda's opinions more credible than those of Dr. Smith 79) because of Dr. Gidda's extensive experience in the waste processing industry and his forthright and cogent answers to questions at trial. Dr. Gidda explained in detail how the multi-tank system is necessary to practice the claims at issue and how known facilities practiced elements of the First and Second Disclosed Combinations as of December 2009. In sum, I credit his testimony and find that even if Marco Doda had originated the ideas of a waste water tank, secondary hopper, and secondary hopper with an eight-millimeter screen, DODA did not show by clear and convincing evidence that Marco Doda made a significant contribution to the conception of the invention covered by claim 16 of the #841 patent (and claim 1 of the #995 patent). (I make no such finding with respect to claims 21 and 26 of the #841 patent, as they are separate inventions from claim 16, see, e.g., Jones v. Hardy, 727 F.2d 1524, 1528 (Fed. Cir. 1984) ("[E]ach claim must be considered as defining a separate invention."), and therefore a secondary separator necessarily is a significant contribution to claim 21 and a secondary

separator with an eight-millimeter screen is necessarily a significant contribution to claim 26.)

II. PLAINTIFFS' JOINT INVENTORSHIP CLAIM

A. Legal Standards

"[A] joint invention is simply the product of a collaboration between two or more persons working together to solve the problem addressed." *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473 (Fed. Cir. 1997). To be considered a joint inventor,

one must: (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

Dana-Farber Cancer Inst. v. Ono Pharm. Co., 964 F.3d 1365, 1371 (Fed. Cir. 2020) (internal citations omitted). Conception is the "formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Stern v. Trs. of Columbia Univ., 434 F.3d 1375, 1378 (Fed. Cir. 2006) (citation omitted). "[A]n inventive act" is required to be named as a joint inventor. Fina Oil, 123 F.3d at 1473. A combination of known elements is inventive only when the combination is both novel and non-obvious. 35 U.S.C. §§ 102–103.

"A party seeking correction of inventorship must provide clear and convincing evidence of inventorship." *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1318–19 (Fed. Cir. 2004). To meet that burden:

alleged co-inventors must prove their contribution to the conception with more than their own testimony concerning the relevant facts. Whether [a] co-inventor's testimony has been sufficiently corroborated is evaluated under a rule of reason analysis, which requires that an evaluation of *all* pertinent evidence must be made so that a sound determination of the credibility of the inventor's story may be reached. Corroborating evidence may take many forms. Reliable evidence of corroboration preferably comes in the form of records made contemporaneously with the inventive process. Circumstantial evidence of an independent nature may also corroborate. Additionally, oral testimony from someone other than the alleged inventor may corroborate.

Id. at 1327 (internal quotation marks and citations omitted).

B. Discussion

Plaintiffs argue that Marco Doda should be added as co-inventor on the #841 and #995 patents because he provided Denson and Waste Management with the First Disclosed Combination and the Second Disclosed Combination. I have already found as a factual matter that Plaintiffs failed to establish by clear and convincing evidence that Marco Doda conceived of these combinations or any of their elements. Accordingly, as a matter of law, Defendants have not established

that Marco Doda is a co-inventor of the claimed inventions of the #841 and #995 patents.

III. PLAINTIFFS' BREACH OF CONTRACT CLAIM

A. Legal Standards

The parties agree that Delaware law governs Plaintiffs' contract claim.

Under Delaware law, the elements of a contract claim are: (1) a contractual obligation; (2) breach of that obligation by the defendant; and (3) resulting damage to the plaintiff. *Kuroda v. SPJS Holdings, LLC*, 971 A.2d 872, 883 (Del. Ch. 2009).

B. Discussion

Plaintiffs contend that Defendants breached the confidentiality provision of the 2010 NDA—under which the parties may not disclose to third parties information marked "Confidential," 'Proprietary,' or [with] some similar designation"—when Denson disclosed the May 25, 2011 drawing in Figure 6 of Denson's June 2011 patent application. See D.I. 205 at 27–28. I have already found as a factual matter, however, that neither the May 2011 drawing nor any other document in JTX-14 is marked "Confidential," "Proprietary," or with a similar designation that would have put Waste Management or Denson on notice that DODA considered the drawing in question to be confidential or proprietary. Because the document that Denson disclosed (the May 25, 2011 drawing) was not

confidential according to the terms of the NDA, Defendants cannot have breached the confidentiality provision in the NDA by disclosing that document.

Accordingly, Plaintiffs' contract claim fails as a matter of law.

IV. CONCLUSION

For the reasons discussed above, I find that Plaintiffs have not met their burdens to establish their inventorship and contract claims. Accordingly, I will enter judgment in favor of Defendants.

The Court will issue an Order directing the parties to submit a proposed order by which the Court may enter final judgment consistent with this Opinion.