

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION
Civil Action No. 5:20-CV-630**

NORDIC WATER PRODUCTS AB, and)
WESTECH ENGINEERING, INC,)
)
Plaintiffs,)
)
v.)
)
VEOLIA WATER SOLUTIONS &)
TECHNOLOGIES SUPPORT,)
)
Defendant.)
)

COMPLAINT FOR DECLARATORY JUDGMENT

Plaintiffs Nordic Water Products AB (“Nordic Water”) and WesTech Engineering, Inc. (“WesTech”), collectively “Plaintiffs,” hereby plead the following claims for Declaratory Judgment against Defendant Veolia Water Solutions & Technologies Support (“Veolia”), and allege as follows:

NATURE OF THE ACTION

1. Plaintiffs seek a declaration under 28 U.S.C. §§ 2201 and 2202 that their products do not infringe United States Patent No. 10,188,971 (“the ’971 Patent”) and that the ’971 Patent is invalid and unenforceable.

PARTIES

2. Plaintiff Nordic Water Products AB is a Swedish corporation with its principal place of business at Alfagatan 5, SE-431 49 Mölndal, Sweden. Nordic Water provides equipment and systems for water purification plants, waste water treatment plants and industries of all sizes.

3. WesTech is an employee-owned California corporation with headquarters located

at 3665 S. West Temple, Salt Lake City, Utah 84115. WesTech provides equipment and processes for water and wastewater treatment, liquids/solids separation, and biological treatment.

4. On information and belief, Defendant Veolia Water Solutions & Technologies Support is a company organized and existing under the laws of France, with its principal place of business at L'Aquarène - 1, Place Montgolfier, 94417 Saint-Maurice, France.

JURISDICTION AND VENUE

5. Upon information and belief, Veolia is the lawful assignee of all right, title, and interest in and to the '971 Patent. *See* Ex. 1.

6. This is a civil action seeking declaration of non-infringement and invalidity of the '971 Patent and, therefore, arises under United States Patent Laws, Title 35, U.S. Code, including but not limited to 35 U.S.C. § 271, and further under the Federal Declaratory Judgments Act, 28 U.S.C. §§ 2201 and 2202. Therefore, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. WesTech sells rotary disc filters manufactured by Nordic Water. WesTech is the exclusive distributor of Nordic Water's SuperDisc™ in the United States.

8. This Court has personal jurisdiction over Veolia because Veolia has continuous and systematic contacts with the State of North Carolina, and regularly conducts business in the State of North Carolina.

9. Upon information and belief, Veolia licensed I. Kruger, Inc. ("Kruger"), a North Carolina corporation that has its principal place of business at 401 Harrison Oaks Blvd # 100, Cary, NC 27513, to be its exclusive licensee to market, sell, and distribute disc filters covered by the '971 Patent to the water, wastewater, and biosolids markets throughout the United States, including in the State of North Carolina.

10. Upon information and belief, Veolia, through Kruger, has gained substantial

revenue from the sale and marketing of its products throughout the United States, including in the State of North Carolina.

11. Veolia has purposefully availed itself of the benefits of North Carolina law when it previously brought suit against WesTech for alleged infringement of the '785 Patent, which is in the family of patents that includes the '971 Patent. *See Veolia Water Solutions & Technologies Support v. WesTech Engineering, Inc.*, Case No. 15-cv-00592 (EDNC) (the "2015 Lawsuit").

12. Veolia's accusations against Nordic Water and WesTech implicate Nordic Water's SuperDisc™ product and a case or controversy exists as to whether Nordic Water and WesTech infringe one or more claims of the '971 Patent and whether the '971 Patent is invalid and/or unenforceable. Accordingly, a substantial controversy exists between the parties which is of sufficient immediacy and reality to warrant declaratory relief.

13. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b). Upon information and belief Veolia regularly engages in business within this district. As stated herein, Veolia has threatened patent infringement against WesTech in this District and the use and sale of Nordic Water SuperDisc™ filters occurred and continues to occur within this District.

BACKGROUND FACTS AND ALLEGATIONS

14. WesTech is in the business of selling rotary disc filters, including the allegedly infringing product at the center of the 2015 Lawsuit: the SuperDisc™. The SuperDisc™ was and is manufactured by Nordic Water. During the pendency of the 2015 Lawsuit, WesTech was the exclusive SuperDisc™ distributor in the United States.

15. Some of the claims of the '785 Patent asserted in the 2015 Lawsuit recite the

phrase “wherein each edge structure of each compartment includes an open area along most of the length of the edge structure such that liquid can move between all the compartments and is not entrained when the disc-shaped filter member rotates during operation of the rotary disk filter.”

16. Veolia also brought suit against Nordic Water in Denmark’s Maritime and Commercial High Court alleging infringement of Veolia’s Danish Patent No. DK/EP 1596958 in case no. T-0011-11. On September 9, 2016, Veolia, Nordic Water, and WesTech entered into a global settlement agreement (“2016 Settlement Agreement”) resulting in the dismissal of both the Danish lawsuit and the 2015 Lawsuit. *See* Ex. 3.

17. Paragraph 8 of the 2016 Settlement Agreement states:

In the event a future patent issues in the United States from the family of patents that includes the ’785 patent and Veolia believes that it is infringed by the redesigned device manufactured, sold or offered for sale by WesTech or Nordic Water, Veolia shall provide notice to WesTech and Nordic Water. The parties shall have ninety (90) days from the date of the notice to negotiate. If the parties fail to reach an agreement, they shall engage in mandatory binding baseball arbitration for determining the sole issue of an appropriate royalty rate, if any. The arbiter may consider issues relating to invalidity and non-infringement when deciding which tendered royalty rate to accept.

18. As part of the 2016 Settlement Agreement, WesTech and Nordic Water agreed to a permanent redesign of the SuperDisc™ disc filters marketed, sold, offered for sale and imported into the United States.

19. The redesign of the SuperDisc™ disc filters required Nordic Water and WesTech to reduce the open area along the edge structure:

“1. Redesign. WesTech and Nordic Water agree to a permanent redesign for the SuperDisc™ disc filters marketed, sold, offered for sale and imported into the United States. In the redesigned SuperDisc™ disc filter, no more than 50% of the filter cassette edges will contain open area. New molds will be used to

produce the redesigned filter cassettes with the reduced open area.”

20. During a so-called “Transition Period”, Nordic Water and WesTech agreed to reduce the open area along the edge structure by taping over the open areas:

“3. Transition Period. Until June 15, 2017, WesTech and Nordic Water may phase out its existing inventory of SuperDisc filter cassettes in the USA, so long as one side of the filter cassette is ‘taped’ such that no more than 50% of the edge of the filter cassette includes open area. WesTech will not increase its inventory of the old design for the USA during the transition period.”

21. In compliance with the 2016 Settlement Agreement, Nordic Water and WesTech redesigned the SuperDisc™ cassette, which is manufactured by Nordic Water and distributed exclusively by WesTech throughout the United States. The redesigned SuperDisc™ cassette is called the “EVO Cassette.”

22. On January 29, 2019, the ’971 Patent issued from the family of patents that includes the ’785 Patent.

23. On January 30, 2019, pursuant to Paragraph 8 of the 2016 Settlement Agreement, Veolia’ counsel sent a letter (the “Veolia Letter”) to WesTech at its principal place of business in Salt Lake City, Utah, alleging that WesTech infringed one or more claims of the ’971 Patent. *See* Ex. 2. On January 30, 2019, pursuant to Paragraph 8, WesTech’s counsel in Washington, D.C. also received the Veolia Letter from Veolia’s counsel.

24. On January 30, 2019, Nordic Water received the Veolia Letter from Veolia’s counsel by electronic mail and addressed, *inter alia*, to the Chief Executive Officer of Nordic Water Products AB at Sisjö Kullegata 6, Askim, Västra Götalands län, 436 32, Sweden.

25. The Veolia Letter alleges that “the disc filters being imported into the United States by Nordic Water Products AB and the disc filters being sold by WesTech infringe the ’971

Patent.” *See* Ex. 2.

26. The Veolia Letter does not specifically identify any accused disc filters or any specific claims of the ’971 Patent or provide any factual basis for Veolia’s allegations of patent infringement.

27. Nordic Water responded on Plaintiffs’ behalf on March 6, 2019, stating that the Veolia Letter was “neither sufficiently specific nor detailed to give Nordic Water or WesTech actual notice of any infringement of the ’971 patent” because it failed to “(1) identify any allegedly infringing Nordic Water product with any meaningful specificity; (2) identify which claim(s) you contend are infringed; and (3) provide any factual basis for or explanation of the alleged infringement.” *See* Ex. 4.

28. Veolia responded on March 12, 2019 and identified the redesigned DynaDisc as the infringing product. Veolia alleged that the DynaDisc infringes claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30 of the ’971 patent, but again failed to provide any factual basis for, or explanation of, the alleged infringement, simply stating “[t]he infringement is obvious.” *See* Ex. 5.

29. Neither Nordic Water nor WesTech market the DynaDisc in the United States.

30. On March 18, 2019, Nordic Water informed Veolia on behalf of the Plaintiffs that Veolia had again failed to identify a “factual basis sufficient to understand your infringement allegation” and again requesting the “factual basis sufficient to understand [Veolia’s] infringement allegation.” *See* Ex. 6.

31. On April 10, 2019, Nordic Water informed Veolia that Nordic Water and WesTech “have serious questions about Veolia’s basis for alleging that Nordic Water’s DynaDisc infringes the ’971 patent. Infringement is far from ‘obvious.’” *See* Ex. 7.

32. Nordic Water also noted that “[d]uring the prosecution of the application that

issued as the '971 patent, Veolia added the phrase 'pass substantially all of the liquid held in one compartment to an adjacent trailing compartment' to claim 1." *See* Ex. 7.

33. Nordic Water also informed Veolia that "'substantially all of the liquid', however, is vague, undefined, does not have a plain and ordinary meaning, and the '971 patent provides neither a definition nor guidance for understanding the scope of this limitation with reasonable certainty. In fact, 'substantially all of the liquid' does not appear in the specification or original claims of the '971 patent. For at least these reasons, Nordic Water and WesTech contend that the claims of the '971 patent are invalid as indefinite." *See* Ex. 7.

34. Also on April 10, 2019, Nordic Water informed Veolia on behalf of Plaintiffs that the "DynaDisc does not operate such that 'all of the liquid passes to an adjacent trailing compartment.'" If 'substantially all of the liquid' were construed to mean 'all of the liquid', the DynaDisc would not infringe the claims of the '971 patent. The phrase 'substantially all of the liquid' is not amenable to any construction, but certainly not a construction sufficiently expansive to ensnare the use of Nordic Water's DynaDisc." *See* Ex. 7.

35. The SuperDisc™ also does not operate such that "all of the liquid passes to an adjacent trailing compartment." If "substantially all of the liquid" were construed to mean "all of the liquid, the SuperDisc™ would not infringe the claims of the '971 Patent. The phrase "substantially all of the liquid" is not amenable to any construction, but certainly not a construction sufficiently expansive to ensnare the use of Nordic Water's SuperDisc™ containing the EVO Cassette.

36. In spite of Nordic Water's communications regarding the '971 patent and Nordic Water's SuperDisc™, on April 30, 2019, precisely 90 days after the Veolia Letter, Veolia provided Nordic Water with a chart ("the Veolia Infringement Chart") that compares the limitations of claim 1 of the '971 Patent to a disc filter allegedly imported by Nordic Water and

allegedly sold by WesTech. *See* Ex. 8.

37. The Veolia Infringement Chart relies upon seven diagrams, one photo, and two clips from a YouTube video. *See* Ex. 8.

38. The diagrams in the Veolia Infringement Chart relied on by Veolia to allege infringement by the DynaDisc are diagrams of a previous model of the SuperDisc™, which does not contain the redesigned cassette--the EVO Cassette.

39. Diagram 1a of the Veolia Infringement Chart shows the principle of operation with inlet/outlet and reject backwash water flow paths, the backwash spray arm and the operational Delta h (operational head variance).

40. Diagram 1b of the Veolia Infringement Chart depicts an older version of the SuperDisc™, the CD2416/14, which does not contain the redesigned cassette, the EVO Cassette.

41. Diagrams 1c and 1d of the Veolia Infringement Chart depict the principles of operation, but are, again, based on an older version of the SuperDisc™, the CD2408/08, which does not contain the redesigned cassette, the EVO Cassette.

42. Diagram 1e of the Veolia Infringement Chart shows an exploded view of the cassettes forming a series of discs mounted on the drum, but again is based on an older version of the SuperDisc™, which does not contain the redesigned cassette, the EVO Cassette.

43. None of diagrams 1a through 1e of the Veolia Infringement Chart depict the redesigned cassette, the EVO Cassette.

44. The photograph shown in 1h of the Veolia Infringement Chart was taken at the WesTech exhibit booth at WEFTEC 2018 in New Orleans, in direct contravention of WEFTEC policy prohibiting “videotaping, filming, or live-streaming of any workshop or technical session presentation, or exhibit booth.”

45. The photograph in 1h shows the EVO Cassette fitted to all SuperDisc™ machines sold in the United States by WesTech and imported into the United States by Nordic Water.

46. The 2016 Settlement Agreement states, “[n]o more than 50% of the filter cassette edge will contain open area.” The EVO cassette complies with the agreement as no more than 50% of the filter cassette edge contains open area.

47. The two clips from the YouTube video relied upon by Veolia to allege infringement are not animations of the current SuperDisc™ EVO Cassette—they are animated depictions of the old cassette prior to the redesign required by the 2016 Settlement Agreement. Moreover, the animation does not show any fluid motion to substantiate the statement “that substantially reduces entrainment of liquid in the compartments.” Instead, the sequence of animations between minutes 1:03–1:20 show, and the audio describes, the backwash feature where the suspended solids are removed from the filter cloth by means of the oscillating spray arm and washed in to the reject trough, which is in no way related to “substantially reduc[ing] entrainment of liquid in the compartments.”

THE PATENT-IN-SUIT

48. The '971 Patent is titled “Rotary disc filter and module for constructing same.”

49. The '971 Patent was issued to named inventors Åke Danielsson, Åke Ralvert, Emil Svensson, and Per Larsson on January 29, 2019.

50. Upon information and belief, the '971 Patent is assigned to Veolia.

51. Upon information and belief, the '971 Patent is exclusively licensed to Kruger.

52. A copy of the '971 Patent is attached as Exhibit 9.

53. Claim 1 of the '971 Patent reads:

1. A rotary disc filter for filtering a liquid comprising:

- a. a rotary drum for receiving the liquid and having a plurality of drum openings for permitting the liquid to flow from the drum;
- b. one or more disc-shaped filter members secured around the drum;
- c. each disc-shaped filter member including a plurality of compartments configured to receive liquid from the drum and to hold the liquid;
- d. the compartments disposed around the drum with each compartment being disposed between and next to two other compartments;
- e. each compartment being bound, at least in part, by opposed edges and on opposite sides by two filters;
- f. wherein liquid held in the compartments is filtered by flowing outwardly through the filters on opposite sides of the compartments;
- g. a drive for rotatively driving the drum and causing the disc-shaped filter members and the compartments thereof to rotate with the drum; and
- h. openings formed in the edges of the compartments and configured to:
 - (i) substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments; and
 - (ii) pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating.

DYNADISC™ TECHNOLOGY

54. The SuperDisc™ is a high-rate “inside-out” rotary disc filter that is typically used to treat municipal waste water. The SuperDisc™ is based on DynaDisc™ technology developed by Nordic Water. In an inside-out rotary disc filter, dirty water goes in and filtered water comes out, with the solids retained on the inside of filter discs or cassettes.

55. A typical SuperDisc™ unit is depicted below. The SuperDisc™ unit includes large round discs, which are attached around a cylindrical drum that rotates during operation. The number of discs can vary from 2 to 35 depending on capacity requirements.



56. Each disc is divided into separate filter cassettes which may also be referred to as compartments. The cassettes are depicted below:



57. Each cassette has openings along its edges to permit some liquid to flow to the adjacent cassette as the disc rotates. Each cassette has an opening at its base where it connects to the drum to allow liquid to pass from the drum into the cassette and to flow in reverse from the cassette into the drum as the disc rotates.

58. During operation, the liquid to be filtered is fed into the center of the drum and then passed through the openings in the bottom of the cassettes. The liquid then passes through the filter cloth and becomes the “filtered effluent,” while the undesired solids are captured on the

filter cloth.

59. The filtered effluent is discharged from the filter for use or further processing. When solids build up and start to impede the flow of liquid through the cassettes, the level of the water waiting to enter the filter starts to rise and generates a signal that automatically starts a backwash cycle.

60. During backwash, a high-pressure spray cleans the filter cloth, and the solids are washed into a reject trough.

COUNT I
(Declaration of Non-infringement of the '971 Patent)

61. Nordic Water and WesTech restate, reallege, and incorporate by reference all forgoing paragraphs of this Complaint as if set forth herein their entirety.

62. Nordic Water and WesTech contend that they have not infringed, whether directly or indirectly, or under the doctrine of equivalents, any valid and enforceable claim of the '971 Patent.

63. A real and justiciable controversy has arisen and presently exists between the parties, and Nordic Water and WesTech seek a judicial determination and declaration of the respective rights and duties of the parties based on Nordic Water's and WesTech's contentions as set forth in in this Complaint. Such a determination and declaration are necessary and appropriate at this time so that the parties may ascertain their respective rights and duties regarding the non-infringement of the claims of the '971 Patent.

64. Veolia has accused Nordic Water and WesTech of infringing the '971 Patent. On April 30, 2019, precisely 90 days after the Veolia Letter, Veolia provided Nordic Water with the Veolia Infringement Chart that compares the limitations of claim 1 of the '971 Patent to a disc filter allegedly imported by Nordic Water and allegedly sold by WesTech.

65. In the April 30, 2019 email from Veolia’s counsel that included the Veolia Infringement Chart, Veolia’s counsel stated: “Regardless, attached you will find an infringement chart demonstrating the obvious and indisputable basis as to how the '971 patent reads on your client's DynaDisc device.”

66. Neither Nordic Water nor WesTech import, manufacture or sell any rotary disc filters in the United States under the trade name DynaDisc.

67. The diagrams in the Veolia Infringement Chart relied on by Veolia to allege infringement of claim 1 of the ‘971 patent by a Nordic Water DynaDisc are diagrams of a previous model of the SuperDisc™, which does not contain the redesigned cassette--the EVO Cassette.

68. Through the 2016 Settlement Agreement, Veolia covenants not to sue Nordic Water or WesTech for the redesigned cassette--the EVO Cassette in the SuperDisc™ rotary disc filters sold in the United States. When a patent holder grants a covenant not to sue in a settlement agreement for certain enumerated patents in exchange for monetary consideration, and in this case redesign of the cassette, the patent holder is legally estopped from enforcing a continuation patent.

69. The ‘971 Patent has four independent claims (claims 1, 15, 19 and 23). Each of the four independent claims include the same claim limitation, requiring “openings formed in the edges of the compartments and configured to (i) substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments; and (ii) pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating.” Ex. 9.

70. The other asserted claims, 2, 3, 4, 5, 6, 7, 8, 9, 13, 16, 17, 18, 20, 21, 22, 24,

25,26, 27, 28, 29 and 30, are dependent claims. The dependent claims are narrower than their independent claims and cannot be infringed if the independent claims are not infringed. Because Nordic Water and WesTech do not infringe any of the independent claims, neither Nordic Water nor WesTech can infringe any of the dependent claims.

71. Infringement is a two-step process. First a court construes the claims to determine the meaning of the claims. Second, the court compares the accused device to the construed claims. To show infringement of one of the independent claims, Veolia must show that Nordic Water's device, or a WesTech device, includes each and every limitation recited in that claim of the '971 Patent.

72. Neither Nordic Water nor WesTech infringe independent claims 1, 15, 19 and 23 of the '971 Patent at least because Nordic Water's device, as sold by WesTech, cannot be found to include every limitation recited in any one of the independent claims under any reasonable construction of the relevant claim terms contained therein, for example, "substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments" and "pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating."

73. Because the term "substantially all of the liquid", which is recited in each independent claim and is necessarily an element of each dependent claim, is vague, undefined, and does not have a plain and ordinary meaning, this term is not amendable to any construction and the claims of the '971 patent are invalid as indefinite.

74. The specification of the '971 patent does not actually use the language "substantially all of the liquid", does not describe this term or provide a method of determining

whether “substantially all of the liquid” passes from one compartment to an adjacent trailing compartment, and a person of ordinary skill in the art would not understand the meaning of this term with reasonable certainty.

75. Because the '971 patent does not reasonably apprise persons of ordinary skill in the art of the meaning of “substantially all of the liquid”, a court would properly find the term indefinite. If a court determined that persons of ordinary skill in the art would understand the word “substantially” to only slightly expand the phrase “all of the liquid”, a court would narrowly construe the term to mean essentially all of the liquid.

76. The SuperDisc™ does not pass more than about 60% of the liquid from one compartment to an adjacent trailing compartment. If properly construed, Nordic Water’s SuperDisc™ device, as sold by WesTech, does not “pass substantially all of the liquid held in one compartment to an adjacent trailing compartment.”

77. Nordic Water and WesTech also do not infringe the '971 Patent because the 2016 Settlement Agreement granted Nordic Water and WesTech an implied license. Veolia made a covenant not to sue Nordic Water and WesTech for the redesigned disc filter in exchange for monetary consideration and the redesign of the cassettes, and is now seeking to detract from that grant. Thus, Veolia is legally estopped from enforcing the '971 patent against Nordic Water and WesTech.

78. Through the 2016 Settlement Agreement, Veolia covenants not to sue Nordic Water and WesTech for the redesigned cassette--the EVO Cassette in SuperDisc™ rotary disc filters--sold in the United States. The 2016 Settlement Agreement grants Nordic Water and WesTech a covenant not to sue specifically for the '785 Patent and also identifies that there are no objections based on any other then existing U.S. patents. When a patent holder grants a

covenant not to sue in a settlement agreement for certain enumerated patents in exchange for monetary consideration, and in this case redesign of its cassettes, the patent holder is legally estopped from enforcing a continuation patent.

79. The 2016 Settlement Agreement grants Nordic Water and WesTech a covenant not to sue regarding a specific patent. However, the 2016 Settlement Agreement does not preclude application of the covenant not to sue to the claims of the '971 patent because the '971 patent merely substitutes the limitation of the '785 Patent claim that was the subject and basis of the redesign of the cassette with a different limitation (“pass substantially all of the liquid held in one compartment to an adjacent trailing compartment”) for which there is absolutely no support in the specification.

80. Veolia has already received compensation for this transaction, and allowing enforcement of the '971 patent against Nordic Water and WesTech would be inequitable.

81. Even if Paragraph 8 of the 2016 Settlement Agreement allows enforcement of later-issued continuation patents, Nordic Water and WesTech certainly did not assent to the present situation which called for a costly redesign of their filter disc cassettes, along with payment of a fee, only to find that they now owe more for newly added limitations in a continuation patent that has no written description support for those limitations. Nordic Water and WesTech would have never assented to redesigning the filter disc cassettes if they knew that, two years later, Veolia would accuse the newly designed product of infringing the same family of patents, thereby depriving Nordic Water and WesTech of the covenant they bargained for in the 2016 Settlement Agreement.

82. Veolia’s “open area” of the '785 Patent claims allows water to flow from one filter compartment to another. During prosecution of the '785 Patent, Veolia argued that sizing

of the open area to avoid entrainment of water within the compartments made the claimed invention of the '785 Patent distinct and unobvious over the prior art.

83. During the prosecution of the '785 Patent, the United States Patent and Trademark Office ("the USPTO") issued a non-final rejection of claims 1–50 on the ground of nonstatutory double patenting as being unpatentable over claims 1–33 of U.S. Patent No. 7,597,805, claims 1–40 of U.S. Patent No. 7,972,508, and claims 1–27 of U.S. Patent No. 8,409,436. *See* Ex. 10. In response to the non-final rejection, Veolia amended claim 1 to include "substantially the entire length of each edge structure." *See* Ex. 11. Subsequently, the Examiner initiated an interview, during which the USPTO required Veolia to "[a]dd the limitation of claim 52 to claim 16 to define over the above Prior art [U.S. Patent No. 3,163,601 to Ericson *et al.*, issued December 29, 1964 ("the Ericson Patent")] and cancel claim 52." *See* Ex. 12. That is, the Examiner required the following amendment to claim 16: "after line 20 add new lines as follows: wherein each edge structure of each compartment includes an open area along most of the length of the edge structure such that liquid can move between all the compartments and is not entrained when the disc-shaped filter member rotates during operation of the rotary disc filter." *See* Ex. 13. This amendment was required because U.S. Patent No. 3,163,601 to Ericson *et al.*, not only taught the use of open areas between filter compartments, but also taught that those open areas should and could be used to prevent the entrainment of water. *See* Ex. 12.

84. After entering into the 2016 Settlement Agreement with Nordic Water and WesTech and requiring Nordic Water and WesTech to redesign the SuperDisc™ rotary filter device to reduce the size of the open area on the edges of the SuperDisc™ cassettes, Veolia pursued new claims in the application that issued as the '971 Patent.

85. Those claims include openings formed in the edges of the compartments that are

configured to: (i) substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc-shaped filter member and the compartments; and pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc- shaped filter member rotating.

86. Veolia obtained the '785 Patent by arguing that sizing of the open area to avoid entrainment of water within the compartments distinguished the claims of the '785 Patent from the prior art and limited the claims to disc filters having compartments in which the length of the open area extended "most of the length of the edge structure." The stated benefit of an open area extending most of the length of the edge structure is the reduction of entrainment of liquids in the compartments of the disc filter.

87. According to Veolia's representations to the USPTO, a greater open area along the length of the edge structure of the devices claimed in the '785 Patent would decrease the entrainment of liquid in the compartment and would increase the amount of liquid that would pass from one compartment to an adjacent trailing compartment in response to the rotation of the filter.

88. Nordic Water and WesTech redesigned the SuperDisc™ rotary filter device to contain the EVO Cassette such that no more than 50% of the EVO Cassette edges contain open area, thereby reducing the open area in the cassette edges compared to the device accused by Veolia as infringing the claims of the '785 Patent in the 2015 lawsuit.

89. During prosecution in the USPTO of the patent application that issued as the '785 Patent, the USPTO required Veolia to amend claim 16 because U.S. Patent No. 3,163,601 to Ericson *et al.*, not only taught the use of open areas between filter compartments, but also taught that those open areas should and could be used to prevent the entrainment of water. *See* Ex. 12.

90. Specifically, the USPTO required Veolia to limit its claims to disc filters having compartments in which the length of the open area extended “most of the length of the edge structure.” *See* Ex. 13. Because the SuperDisc™ rotary filter device containing the EVO Cassette was specifically redesigned such that no more than 50% of the EVO Cassette edges will contain open area, Veolia should be estopped from now alleging that the redesigned SuperDisc™ containing the EVO Cassette infringes the ‘971 patent.

91. Despite requiring Nordic Water and WesTech to redesign the SuperDisc™ rotary filter device cassettes to reduce the size of the open area on the edges of the cassettes, Veolia is now pursuing additional compensation from Nordic Water and WesTech for allegedly infringing claims to devices that (i) substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments; and (ii) pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating.

92. The redesigned rotary filter devices containing the EVO Cassettes now imported into the United States by Nordic Water and sold by WesTech do not “substantially reduce the entrainment of liquid in the compartment” compared to the SuperDisc™ before redesign or compared to the prior art, including U.S. Patent No. 3,163,601 to Ericson *et al.*, because both the redesigned SuperDisc™ and the devices of the prior art, including the devices of U.S. Patent No. 3,163,601 to Ericson *et al.*, have no more than 50% of the edge of a compartment (or cassette) containing open area.

93. Because both the redesigned SuperDisc™ and the devices of the prior art, including the devices of U.S. Patent No. 3,163,601 to Ericson *et al.*, have no more than 50% of the edge of a compartment (or cassette) containing open area, the redesigned rotary filter devices

containing the EVO Cassette now imported into the United States by Nordic Water and sold by WesTech pass less than substantially all the liquid from one compartment to an adjacent trailing compartment, as in the case of the prior art.

94. Nordic Water and WesTech therefore seek a judgment declaring, under the Patent Laws of the United States, that Nordic Water and WesTech are not infringing the claims of the '971 Patent literally, under the doctrine of equivalents, or contributorily, and that they are not inducing such infringement. Nordic Water and WesTech further seek a judgment declaring, under the Patent Laws of the United States, that Nordic Water and WesTech have not previously infringed the '971 Patent literally, under the doctrine of equivalents, or contributorily, and that they have not previously induced such infringement, for at least the reasons alleged above.

95. This is an exceptional case under 35 U.S.C. § 285, entitling Nordic Water and WesTech to an award of their attorneys' fees incurred in connection with this action at least because: 1) Veolia based its assertions of infringement of the '971 Patent on DynaDisc products which are neither imported into or manufactured or sold in the United States; 2) Veolia based its assertions of infringement of the '971 Patent on prior models of the SuperDisc™, which do not contain the EVO Cassette, and have not been imported into or manufactured or sold in the United States following issuance of the '971 Patent; 3) Veolia failed to conduct a reasonable investigation before alleging infringement of the claims of the '971 Patent; and 4) there is no reasonable construction possible for at least the phrases "substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments" and "pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating."

COUNT II
(Declaration of Invalidity of the '971 Patent)

96. Nordic Water and WesTech restate, reallege, and incorporate by reference all foregoing paragraphs of this Complaint as if set forth herein their entirety.

97. Nordic Water and WesTech contend that the '971 Patent is invalid for failing to comply with the conditions and requirements for patentability as set forth in the United States Laws, Title 35 U.S.C. §§ 101, 102, 103 and/or 112, and the rules regulations, and laws pertaining thereto, including the judicial doctrine of obviousness-type double patenting.

98. One or more of the claims of the '971 Patent are anticipated under 35 U.S.C. § 102 over at least the following prior art:

- U.S. Patent No. 3,163,601 to Ericson *et al.*, issued December 29, 1964 (“the Ericson Patent”);
- Hydrotech’s HSF-3100 Disc Filter HSF3100 Manual (“HSF3100 Manual”);
- Hydrotech’s HSF-3100 Disc Filter (“HSF3100 Disc Filter”), which, upon information and belief, was offered for sale, sold, and/or publicly used in the United States by Hydrotech and Kruger, as early as 2001;
- Hydrotech’s HSF 1300 and 1700 Series Disc Filters which, upon information and belief, were offered for sale, sold, and/or publicly used in the United States by Hydrotech and Kruger as early as 2000; and
- Hydrotech’s HSF 2100 Series Disc Filters which, upon information and belief, were offered for sale, sold, and/or publicly used in the United States by Hydrotech and Kruger as early as 1998.

99. To the extent that Veolia argues that the redesigned rotary filter devices

containing the EVO Cassettes now imported into the United States by Nordic Water and sold by WesTech “substantially reduce the entrainment of liquid in the compartment”, the prior art, including U.S. Patent No. 3,163,601 to Ericson *et al.*, also discloses this limitation, because both the redesigned SuperDisc™ and the devices of the prior art have no more than 50% of the edge of a compartment (or cassette) containing open area.

100. During prosecution in the USPTO of the patent application that issued as the '785 Patent, the USPTO required Veolia to amend claim 16 because U.S. Patent No. 3,163,601 to Ericson *et al.*, not only taught the use of open areas between filter compartments, but also taught that those open areas should and could be used to prevent the entrainment of water. *See* Ex. 12.

101. Specifically, the USPTO required Veolia to limit its claims to disc filters having compartments in which the length of the open area extended “most of the length of the edge structure.” *See* Ex. 13.

102. In distinguishing the prior art from the claims of the '785 Patent, Veolia admitted to the USPTO that the prior art devices, including the devices of U.S. Patent No. 3,163,601 to Ericson *et al.*, have no more than 50% of the edge of a compartment (or cassette) containing open area and that the invention claimed in the '785 Patent would not “substantially reduce the entrainment of liquid in the compartment.”

103. The following prior art, alone or in combination, render one or more of the claims of the '971 Patent obvious under 35 U.S.C. § 102 and/or 103:

- U.S. Patent No. 3,163,601 to Ericson *et al.*, issued December 29, 1964 (“the Ericson Patent”), which teaches the use of an opening with a size that allows the rapid drainage of water from one compartment to another;
- Hydrotech’s HSF-3100 Manual;

- Hydrotech's HSF-3100 Disc Filter; and
- Hydrotech's HSF 1300, 1700, and 2100 Series Disc Filters.

104. Further, one or more of the claims of the '971 Patent are invalid under 35 U.S.C. §§ 102 and/or 103 as a result of an offer for sale and sale of two Hydrotech HSF2100 Disc Filters to the City of Alamogordo, New Mexico. Public records show that the offer for sale of the Alamogordo HSF2100 Disc Filters was made on January 23, 2002, *see* Ex. 14, and that the sale agreement was executed by the City of Alamogordo on February 28, 2002, *see* Ex 15. Public records also show that the Alamogordo HSF2100 Disc Filters were delivered on May 13, 2002, *see* Ex. 16, having radial supports with circular bores creating substantial open areas, *see* Ex. 17, similar to those depicted in the HSF3100 Manual printed on February 15, 2002. This evidence shows that, prior to any claimed critical date of the asserted patent, the Alamogordo HSF2100 Disc Filters were offered for sale and sold at a time when an alleged novel feature of the asserted claims was ready for patenting and embodied in the HSF2100 Disc Filters.

105. One or more of the claims of the '971 Patent, including each one of the asserted claims, are invalid under 35 U.S.C. § 112(a) for lack of written description, because the written description upon which priority is claimed does not describe the claimed invention with sufficient detail so that one skilled in the art could reasonably conclude that the inventors had possession of the full scope of the claimed invention, including, but not limited to, what was claimed by the terms: “substantially all of the liquid” and “substantially reduce the entrainment of liquid.”

106. The claims of the '971 patent are directed to subject matter that is indisputably missing from the specification of the '971 patent. The terms “substantially all of the liquid” and “substantially reduce the entrainment of liquid” do not appear in the specification, drawings or

original claims. The terms were added to the application (U.S. Patent Application Ser. No. 14/628,521; “the ’521 application”) that issued as the ’971 patent by amendment on August 13, 2018. *Compare* Ex. 18 *with* Ex. 19.

107. Each of the original claims of the ’521 application were canceled and new claims 32–55 were added by amendment on August 13, 2018. The new claims included claims that issued as independent claims 1, 15, 19 and 23 of the ’971 patent. Each of these independent claims contain the term “substantially all of the liquid” and claim 1 also contains “substantially reduce the entrainment of liquid.”

108. The written description of the ’971 patent, including the specification, original claims, structures, figures, diagrams and formulas does not fully set forth the claimed invention of the ’971 patent. As a consequence, the ’971 patent lacks an adequate written description of the claimed subject matter and the applicant has not shown possession of the claimed invention.

109. One or more of the claims of the ’971 Patent, including each one of the asserted claims, are invalid under 35 U.S.C. § 112(a) for lack of enablement, at least because the ’971 Patent does not allow persons of ordinary skill in the art to make and use the claimed rotary disc filter without undue experimentation. Specifically, to the extent that any claimed “openings formed in the edges of the compartments” are not obvious in view of the prior art, the ’971 Patent fails to teach how to “configure” the “openings formed in the edges of the compartments” to “(i) substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments; and (ii) pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating” without undue experimentation.

110. One or more of the claims of the ’971 Patent, including each one of the asserted

claims, is invalid under 35 U.S.C. § 112(b) because the term “pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating” is indefinite and fails to apprise one of ordinary skill in the art of the scope of the patentee’s claims within a reasonable degree of certainty.

111. The claims of the ’971 patent, when read in light of the specification, do not reasonably apprise persons of ordinary skill in the art of the scope of the term “pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating.” In particular, “substantially all of the liquid” is not precise, does not have an accepted meaning in the art and persons of ordinary skill in the art would not understand, in light of the specification, what is claimed in all of the claims of the ’971 patent.

112. The term “substantially all of the liquid” is a term of degree. The word “substantially” modifies the phrase “all of the liquid” and presumably expands the scope of the phrase to some degree less than “all of the liquid.” Persons of ordinary skill in the art would not reasonably understand, in light of the patent specification, the degree to which the word “substantially” expands the scope of “all of the liquid” and the claims. The specification of the ’971 patent does not provide any standard for measuring the degree by which the word “substantially” expands the claim scope. The term “substantially all of the liquid” does not appear in the specification, drawings or original claims. The term was added to the ’521 application that issued as the ’971 patent by amendment on August 13, 2018. *Compare* Ex. 18 *with* Ex. 19.

113. Each of the original claims of the ’521 application were canceled on August 13, 2018 and new claims 32–55 were added by amendment. The new claims included claims that issued as independent claims 1, 15, 19 and 23 of the ’971 patent. Each of these independent

claims contain the term “substantially all of the liquid.” *Compare* Ex. 18 *with* Ex. 19.

114. The specification provides no description or discussion on the quantum or proportion of liquid that passes from one compartment to an adjacent trailing compartment in response to rotation. The specification of the ’971 patent also does not identify any method for measuring or determining whether “substantially all of the liquid” passes from one compartment to an adjacent trailing compartment. Because the specification of the ’971 patent lacks any standard for measuring the degree intended by “substantially all of the liquid”, each claim of the ’971 patent is indefinite.

115. One or more of the claims of the ’971 Patent, including each one of the asserted claims, is invalid under 35 U.S.C. § 112(b) because the term “substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments” is indefinite and fails to apprise one of ordinary skill in the art of the scope of the patentee’s claims within a reasonable degree of certainty.

116. The claims of the ’971 patent, when read in light of the specification, do not reasonably apprise persons of ordinary skill in the art of the scope of the term “substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments.” In particular, “substantially reduce the entrainment of liquid” is a relative term that is not precise does not have an accepted meaning in the art and persons of ordinary skill in the art would not understand, in light of the specification, what is claimed in all of the claims of the ’971 patent. In particular, the claim term “substantially reduce the entrainment of liquid” relates the characteristics of the claimed device (“entrainment of liquid”) in relation to an unidentified and unspecified device that has a comparably greater degree of “entrainment of liquid.”

117. The term “substantially reduce the entrainment of liquid” is a term of degree, but the specification of the ’971 patent does not provide any standard for measuring that degree. The term “substantially reduce the entrainment of liquid” does not appear in the specification, drawings or original claims. The term was added to the ’521 application that issued as the ’971 patent by amendment on August 13, 2018. *Compare* Ex. 18 *with* Ex. 19.

118. Each of the original claims of the ’521 application were canceled and new claims 32–55 were added by amendment. The new claims included claims that issued as independent claims 1, 15, 19 and 23 of the ’971 patent. Each of these independent claims contain the term “substantially reduce the entrainment of liquid.” *Compare* Ex. 18 *with* Ex. 19.

119. The claim term “substantially reduce the entrainment of liquid” relates the characteristics of the claimed device (“entrainment of liquid”) to an unidentified and unspecified device that has a comparably greater degree of “entrainment of liquid.” The specification of the ’971 patent does not identify to which device or standard the characteristic of the claimed device is compared. The specification also does not identify any method for measuring or making this comparison or determining whether the claimed devices “substantially reduce the entrainment of liquid.” Because the specification of the ’971 patent lacks some standard for measuring the degree intended by “substantially reduce the entrainment of liquid”, each claim of the ’971 patent is indefinite.

120. Nordic Water and WesTech seek a judicial determination and declaration of the respective rights and duties of the parties based on Nordic Water and WesTech’s contentions as set forth in this Complaint. Such a determination and declaration is necessary and appropriate at this time so that the parties may ascertain their respective rights and duties regarding the invalidity of the claims of the ’971 Patent.

121. Nordic Water and WesTech therefore seek a judgment declaring, under the Patent Laws of the United States, that the claims of the '971 Patent are invalid for at least the reasons alleged above.

122. This is an exceptional case under 35 U.S.C. § 285, entitling Nordic Water and WesTech to an award of their attorneys' fees incurred in connection with this action at least because: 1) Veolia knew or should have known that the '971 Patent is invalid over the prior art, based on admissions made to the USPTO during the prosecution of the patent application that issued as the '785 Patent, if Veolia were to allege that the claims of the '971 patent were sufficiently broad to ensnare the redesigned SuperDisc™ containing the EVO Cassette and 2) Veolia knew or should have known that at least the claim language “substantially reduce the entrainment of liquid in the compartments by the rotary motion of the disc shaped filter member and the compartments” and “pass substantially all of the liquid held in one compartment to an adjacent trailing compartment in response to the disc-shaped filter member rotating” renders the claims of the '971 patent invalid as either: 1) lacking written description support; 2) enabling a person of ordinary skill in the art to make and use the claimed devices without undue experimentation; or 3) rendering the claims indefinite.

REQUEST FOR RELIEF

WHEREFORE, Nordic Water and WesTech respectfully request the following relief:

- A. A declaration and judgment that Nordic Water and WesTech have not infringed, and do not infringe, directly or indirectly, literally or by equivalence, any valid claim of the '971 Patent;
- B. A declaration and judgment that each claim of the '971 Patent is invalid;
- C. An award of attorneys' fees and costs under 35 U.S.C. § 285; and

D. Such further and other relief as this Court may deem just and proper.

Dated this 25th day of November, 2020.

/s/ John T. Kivus

J. Christopher Jackson
N.C. State Bar No. 26916
cjackson@morningstarlawgroup.com
John T. Kivus
N.C. State Bar No. 42977
jkivus@morningstarlawgroup.com
MORNINGSTAR LAW GROUP
421 Fayetteville Street, Suite 530
Raleigh, NC 27601
Telephone: (919) 590-0365
Facsimile: (919) 829-7396

*Attorney for Plaintiffs Nordic Water
Products AB and WesTech Engineering, Inc.*

Of Counsel:

Einar Stole
EStole@cov.com
Kristin M. Cobb
KCobb@cov.com
COVINGTON & BURLING LLP
One CityCenter
850 Tenth Street, N.W. Washington, DC 20001

Attorneys for Plaintiff Nordic Water Products AB

Clifton E. McCann
Clifton.McCann@ThompsonHine.com
David A. Wilson
David.Wilson@ThompsonHine.com
THOMPSON HINE LLP
1919 M Street, N.W., Suite 700
Washington, D.C. 20236
Tel: (202) 331-8800

David Jaglowski
David.Jaglowski@ThompsonHine.com
THOMPSON HINE LLP
41 South High Street, Suite 1700
Columbus, OH 43215
Tel: (614) 469-3361
Attorneys for Plaintiff WesTech Engineering, Inc.