

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

<p>AQUATECH INTERNATIONAL CORPORATION, a Pennsylvania corporation, and DEBASISH MUKHOPADHYAY, an individual,</p> <p>Plaintiffs,</p> <p>vs.</p> <p>N.A. WATER SYSTEMS, LLC, a Pennsylvania Limited Liability Company; and VEOLIA WATER SOLUTIONS & TECHNOLOGIES SUPPORT, a French Corporation,</p> <p>Defendants.</p>	<p>Civil Action No.: 2:12-cv-00435</p> <p>Judge Joy Flowers Conti</p>

SECOND AMENDED COMPLAINT

Aquatech International Corporation (hereinafter “Aquatech”) and Debasish Mukhopadhyay (hereinafter collectively “Plaintiffs” or “the Aquatech Plaintiffs”) bring this action for declaratory judgment relating to Defendants’ N.A. Water Systems, LLC and Veolia Water Solutions & Technologies Support (hereinafter collectively “the VWSTS Defendants”) U.S. Patent No. 7,815,804 B2 (hereinafter “the ‘804 OPUS Patent”). (Exhibit “1” hereto.)

PARTIES

1. Aquatech is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, and has its principal place of business in Washington County, Pennsylvania. Aquatech is an exclusive licensee of the HERO Patents.

2. Debasish Mukhopadhyay (hereinafter “Deb”) is an individual residing in the State of California. Deb is the owner, and licensor, of U.S. Patent Nos. 5,925,255 (the “255 patent”) and 6,537,456 (the “456 patent”) (collectively, the “HERO Patents”). (Exhibits “2” and “3” respectively.)

3. Upon information and belief, N.A. Water Systems, LLC (“NAWS”) is a Pennsylvania limited liability company and a direct subsidiary of Veolia Water Solutions & Technologies North America, Inc. and has its principal place of business at Airside Business Park, 250 Airside Drive, Moon Township, PA 15108.

4. Upon information and belief, Veolia Water Solutions & Technologies Support (“VWSTS”) is a privately-held joint-stock company with limited liability (Societe anonyme), organized and existing under the laws of France, having its registered head office at L’Aquarene, 1, place Montgolfier, 94417 Saint-Maurice, France.

5. Upon information and belief the VWSTS Defendants purport to be the assignees of all right, title, and interest in and to the ‘804 Patent.

JURISDICTION AND VENUE

6. This action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*, and the Declaratory Judgment act, 28 U.S.C. §§ 2201 and 2202.

7. This Court has subject matter jurisdiction under the provisions of 28 U.S.C. §§ 1331, 1338(a).

8. Venue is proper in this Judicial District pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b) because the VWSTS Defendants have regularly conducted business in this judicial district and is subject to personal jurisdiction in this judicial district.

9. This Court can enter the declaratory relief sought in this Complaint because this case presents an actual case and continuing controversy, and is within the Court's jurisdiction pursuant to the provisions of the Federal Declaratory Judgment Act, 28 U.S.C. § 2201.

NATURE OF THIS ACTION

10. This is a declaratory judgment action seeking a determination that the claims of U.S. Patent No. 7,815,804 B2 ("the '804 OPUS patent") are invalid under one or more provisions of 35 U.S.C. §§ 101, 102, 103, 112 and/or 116.

11. This is a declaratory judgment action seeking a determination that the '804 OPUS patent is unenforceable due to inequitable conduct.

12. This is a declaratory judgment action seeking a determination that Plaintiffs' licensing and activities, sale, offers for sale, or operation of HERO® water treatment processes and related equipment described herein at paragraphs 23 thru 27 and 42 thru 45 do not infringe any valid, enforceable claims of the '804 OPUS Patent.

13. An actual, and continuing, controversy over the validity and enforceability of the '804 OPUS Patent and its alleged infringement exists between the Aquatech Plaintiffs and the VWSTS Defendants, as evidenced by the fact that the VWSTS Defendants have published

threats of infringement with respect to Defendants' '804 OPUS Patent directed to Plaintiffs and their respective licensees, customers, end-users, and potential customers and end-users of the HERO processes, and Defendants threats of infringement are likely to reoccur in the future. Moreover, Plaintiffs and Defendants, are, and have been, in direct head-to-head competition for sales of water treatment processes and related equipment.

THE AQUATECH PLAINTIFFS' HERO PROCESSES

14. The Aquatech Plaintiffs specialize in industrial water purification technologies for the electricity generation, chemical, petrochemical, pharmaceutical, microelectronics, and other industries. During the past 15 years, Deb as the owner of the inventive HERO patents, has licensed his unique HERO water purification technologies to the most preeminent industry leaders such as General Electric, Intel, and Aquatech, among others. (Exhibit "4" hereto)

15. Deb's HERO® processes use the patented high efficiency reverse osmosis technologies that is currently being employed globally in a multitude of industries including power generation, petrochemical and microelectronics. Plaintiffs' well recognized HERO® water treatment processes have proven effective in treating high silica, fouling, and difficult-to-treat industrial waste streams at least since 1996. Applications include zero liquid discharge, cooling tower blow down treatment, recycle/reuse, and treating water supplies with high organic content (including treated effluents). The HERO® processes are robust and forgiving processes which utilize industry standard and proven components. Water recoveries in excess of 90% result in economical water reuse and environmental benefits. Its advantages, beyond the

simplicity of design and operation, include lower total installed cost, lower operating costs, and lower life cycle costs when compared to prior art reverse osmosis processes.

16. Deb's licensees have designed and built, and are now designing and proposing numerous HERO® water and waste-water treatment projects in the U.S. and throughout the world. Before such projects are implemented, Deb's licensees typically prepare and present to potential buyers (customers and/or end-users) costly and detailed proposals that include specifications regarding proposed equipment and/or sub-systems for treating the specific feed water. These proposals include, and have included a multitude of variations of the processes and related equipment for performing HERO processes. Currently, some of these proposals by Deb's licensees include site specific variations of Reverse Osmosis (RO) processing conditions, using various equipment/sub-system combinations to achieve higher usable water recoveries than can be achieved with HERO processes originally disclosed in the HERO Patents thereby minimizing the resultant waste water stream volume. Typically, the cost of preparing such proposals by Deb's licensees can exceed hundreds of thousands of dollars and may exceed ten percent (10%), or more, of the design and build contract to be awarded in a very competitive third party bidding process.

17. The primary objective of such proposals is to provide treatment at a minimal cost while satisfying specific requirements. In least cost design studies, a total discounted cost is attained at the lowest possible level while satisfying a set of constraints. These constraints include (a) a specified effluent quality, and (b) various physical and biological constraints. Traditional design procedures for wastewater treatment systems attempt to minimize total capital cost by considering steady state concepts for unit processes and design guidelines. Generally,

such proposals will include dynamic models for optimal design that simultaneously considers both fixed and variable costs. This methodology can aid designers by selecting optimal design and operating parameters for the unit processes in order to produce the minimum, total discounted costs, while satisfying all design and operational constraints. The treatment plant model may include a variety of unit processes, including primary clarification, aeration, secondary clarification, gravity thickening multi-media filtration, acidification, degasification, ion-exchange, cartridge filters, and reverse-osmosis. The proposal models and optimization techniques can be used to predict optimal design and operating parameters for wastewater treatment plants being evaluated for bids, as well as for minimizing the operating costs of existing plants.

18. Thus, there is not just one HERO[®] process, but a wide number of HERO[®] treatment process variations which have been used, are using used, have been proposed, and are being proposed currently. Examples of such HERO[®] process variants include: 1) Aquatech's proposal to Bechtel for the Russell City Energy Center, in the fall of 2010 (Exhibit "5" hereto); and 2) Aquatech's proposal to Kiewit Power Constructors for the Pio Pico Energy Project (Exhibit "6" hereto). Moreover, Aquatech is currently drafting similar proposals, and intends to present proposals in the next several months which include HERO process variants which can be considered by Defendants, and likely will be considered by Defendants, to infringe the claims of the '804 OPUS patent. Each of these proposals includes processes as described and claimed in Defendants' '804 OPUS Patent.¹

¹ Process for treating wastewater containing high organics, silica, boron, hardness, and suspended and dissolved solids. The method includes degasifying the wastewater for the removal of dissolved gases and thereafter chemically softening the wastewater. After the chemical softening step, the wastewater is directed through a media

THE VWSTS DEFENDANTS' FALSE INFRINGEMENT THREATS REGARDING THE '804
OPUS PATENT AND THE HERO TREATMENT PROCESSES

A. The Russell City Energy Center (RCEC)

19. Zero liquid discharge (ZLD) wastewater recycling technology will be installed at the Russell City Energy Center (RCEC), a new 600-megawatt (MW) natural gas and steam combined-cycle power plant being built in Alameda County, California.

20. RCEC is the first power plant in the country to be built under a voluntary agreement with the U.S. Environmental Protection Agency to meet stricter limits on greenhouse gases and other emissions. The plant is expected to enter commercial service in 2013 and supply energy to the San Francisco Bay region.

21. As part of the plant's arsenal of technologies to improve energy efficiency and reduce environmental footprint, the ZLD system will be used for onsite wastewater treatment and recycling. Bechtel is the contractor on the project.

22. Power plants are major industrial consumers of water to support their operations – chiefly for power plant cooling, steam production, and other production processes. But with the United States and international communities seeking to preserve the world's dwindling supplies of fresh water, the public and the private sectors have begun collaborating more closely to increase the deployment of industrial water recycling technologies.

filter or membrane which removes additional solids and precipitants. Thereafter the wastewater is directed through a sodium ion exchange that further softens the wastewater. The effluent from the ion exchange is directed through a cartridge filter and the effluent from the cartridge filter is directed through one or more reverse osmosis units. At a selected phase of the process, prior to the wastewater reaching the reverse osmosis unit or units, the pH of the wastewater is raised and maintained such that the pH of the wastewater reaching a reverse osmosis unit is at a pH greater than 10.5. [See Exhibit "1", Abstract of the '804 Patent]

23. On or about August 23, 2010 Aquatech presented a Proposal for Russell City Energy Center Zero Liquid Discharge System to Aquatech's client, Bechtel Power Corporation ("Bechtel") for Bechtel's consideration. Aquatech's proposal included the technical (base) – HERO® crystallizer based system. (Exhibit "5" hereto.)

24. The HERO® processes proposed to Bechtel by the Aquatech Plaintiffs embodied some of the same treatment technologies originally disclosed in Deb's HERO patents (Exhibits "2" and "3").

25. Between September 1, 2010 and October 30, 2010, Aquatech and the potential Aquatech customer, Bechtel, had numerous discussions concerning the Aquatech Plaintiffs' proposed HERO® process, how it worked, and the results that the potential customer could expect if it implemented the HERO® process set forth in Exhibit "5".

26. On or about August 30, 2010, Bechtel requested an update from Aquatech as Veolia was also scheduled to discuss their competing proposal for the Russell City Energy Center on such date.

27. On September 1, 2010, a meeting was held between Aquatech personnel and Bechtel personnel to discuss the details and advantages of Aquatech's HERO® base proposal in meeting Bechtel's needs.

28. It was understood through the meeting with Bechtel that Defendant NAWs was also presenting a competing proposal to Bechtel utilizing NAWs' OPUS process as described in the '804 OPUS patent.

29. At the September 1, 2010 meeting Aquatech had with Bechtel representatives, Aquatech learned that Defendant NAWs' representative Mark Boone, had stated in substance to Bechtel that "Bechtel should be careful if Bechtel planned to seriously consider Aquatech's proposal as the proposed HERO[®] process would infringe on their patents".... (emphasis added).

30. After Defendants' threat of infringement concerning Plaintiffs' proposed HERO[®] process, Bechtel sought assurances from Aquatech that the HERO[®] process did not infringe Defendants' OPUS patents and asked if there was a likelihood that an injunction would issue against Aquatech, if Bechtel selected Aquatech's proposal.

31. Aquatech assured Bechtel that the use of Plaintiffs' HERO[®] process would not infringe the VWSTS Defendants' OPUS patents and further agreed to indemnify Bechtel against patent infringement claims related to the use of the HERO[®] process set forth in Exhibit "5".

32. On information and belief, from November 2010 to the present, the VWSTS Defendants, by and through their respective authorized agents, have continued to issue such threats of patent infringement to Plaintiffs' licensees and Plaintiffs' other potential customers .

33. On information and belief, at the time such threats of patent infringement were made by the VWSTS Defendants' agents including Mark Boone, such agents were authorized by

the VWSTS Defendants, to make such statements to the Plaintiffs' licensees and to Plaintiffs' potential customers.

34. The VWSTS Defendants knew, or reasonably should have known, that their contention that the HERO® processes described in Exhibit "5" infringes the '804 OPUS patent is, and was, false.

35. Defendants made these false statement to harm the Aquatech Plaintiffs' reputation, deter the potential Aquatech customer and other potential customers from working with the Aquatech Plaintiffs, and to prevent legitimate competition between the VWSTS Defendants and the Aquatech Plaintiffs for the licensing, offer for sale, sale, and use of Plaintiffs' HERO technologies.

36. The VWSTS Defendants' actions were not privileged and were not undertaken for any legitimate business purpose, but instead for the purpose of deliberately and maliciously harming the Aquatech Plaintiffs' business interests.

37. The Aquatech Plaintiffs seeks a declaration confirming their continued right to promote, license, market, and sell the HERO processes set forth in Exhibit "5" in the industrial waste water industry, as well as all other markets, and that the processes proposed by Aquatech to Bechtel did not, and do not, infringe the '804 OPUS patent.

B. Plaintiffs' Pio Pico Energy Proposal

38. A proposed 300-megawatt natural gas-fired power plant near the U.S.-Mexico border was unanimously approved on September 12, 2012, by the California Energy Commission (CEC). The \$300 million Pio Pico Energy Center is slated for 10 acres along Alta road, adjacent to the Otay Mesa Generating Project. It's known as a "peaker" plant that will kick into operation during period of high demand on San Diego Gas & Electric's system.

39. On or about October 31, 2012, Aquatech presented a Proposal for Pico Energy Project to Aquatech's client, Kiewit Power Constructors Co. ("Kiewit"), 9407 Renner Boulevard, Lenexa, KS 66219, for Kiewit's consideration. Aquatech's proposal included the technical (base) – HERO[®] crystallizer based system. (Exhibit "6" hereto.)

40. The proposal from Aquatech was to be executed from Aquatech's North American Operations through Cannonsburg, Pennsylvania offices.

41. As shown in Exhibit "6", the Baseline Process Flow Diagram includes:

- A) Clarifier with Lime, Soda Ash & Polymer addition.
- B) Acid-addition & Clearwell/ Crystalization Tank.
- C) Addition of "coagulant and a self cleaning filter".
- D) Ultrafiltration Units and an UF Product Tank.
- E) WAC (Weak Acid Cation) Exchangers; and
- F) Caustic addition for high pH RO operation.

42. Plaintiffs' process or equipment shown in Exhibit "6" can reasonably be asserted by Defendants to meet the Claims of the '804 patent. (See '804 Patent Claims Chart Exhibit "7" hereto.)

43. Similarly, Deb's licensees have presented, and will present similar proposals in the immediate future, to third-party customers and end-users which incorporate process steps and/or related equipment which are likely to be asserted by Defendants to be an infringement of the '804 Patent claims.

44. The VWSTS Defendants contend that their competing OPUSTM processes (Exhibit "8") are protected by the '804 OPUS patent and that the Aquatech Plaintiffs' HERO[®] processes set forth in paragraphs 25, 39, and 43 infringe the '804 OPUS patent. Defendants' contentions of Plaintiffs' alleged infringement of the '804 OPUS patent have been widespread, and made by the VWSTS Defendants repeatedly to coerce and to intimidate customers and potential customers to choose the VWSTS Defendants' OPUS process, under threat of patent litigation.

45. On information and belief, since November, 2010 to the present, Defendants have widely made known to the industry and to potential customers of Aquatech that Defendants' OPUS process is "patented". Additionally, many of Plaintiff's customers, and potential customers, have raised concerns of Defendants' potential enforcement of its OPUS patents since Defendants have accused Aquatech of patent infringement if customers utilized the HERO[®] process. (Appended hereto as Exhibits "9" and "10" are true and correct copies of trade journal articles which have never been retracted, or corrected by Defendants.)

46. The VWSTS Defendants, are direct competitors of Aquatech in providing water treatment processes for industrial applications.

47. In early March 2013, Defendants presented a revised covenant (Exhibit "11"). This limited scope document² is meaningless in effectively resolving present and future '804 Patent infringement disputes between the parties. First, the Defendants' revised covenant requires a Court determination construing the claims of the HERO patents. These hotly contested issues are already the subject of a pending related case (CV 2: 10-484) . Second, Defendants' revised covenant does not resolve Plaintiffs' damages caused by Defendants' threat of infringement made to Bechtel. Third, Defendants' revised covenant will not resolve the likely reoccurrence of Defendants' infringement threats with respect to Exhibit "6" and similar HERO[®] proposals authored by Deb's licensees. These unresolved issues present the same quandary, namely, Plaintiffs' customers and potential customers are adversely affected in their purchasing decisions by Defendants' infringement threats with respect to the '804 OPUS patent.

48. An actual case and controversy exists because the VWSTS Defendants have asserted the '804 OPUS patent to intimidate customers and potential customers not to utilize the Aquatech Plaintiffs' HERO technologies in water treatment projects, and that Defendants' threats are likely to reoccur in the immediate future.

49. Moreover, other projects similar to the above mentioned Aquatech proposals are forthcoming. Unless deterred by the Court, a substantial risk exists that the VWSTS Defendants will again wrongfully assert the '804 OPUS patent against potential customers in an attempt to intimidate prospective customers to reject the Aquatech Plaintiffs' HERO processes in favour of the VWSTS Defendants' OPUS process.

² VWSNA and VWSTS disavow any claim that the processes described in the HERO patents or covered by the claims in the HERO Patents infringe U.S. Patent No. 7,815,804.

50. The VWSTS Defendants have harmed and will continue to harm the Aquatech Plaintiffs' economic interest by impairing their ability to promote, license, market, and sell water treatment systems which practice the patented HERO® processes.

THE '804 PATENT

51. On information and belief, U.S. Patent No. 7,815,804 B2, entitled "Method for Treating Wastewater or Produced Water" was issued October 10, 2010, some ten (10) years after the issuance of the HERO patents. The '804 OPUS patent is assigned to Defendant VWSTS. On information and belief, Defendant NAWs purports to be a co-owner of the '804 OPUS patent.

52. The '804 OPUS patent matured from application Serial No. 11/609,659, filed December 12, 2006, originally naming, as joint inventors, Joseph E. Zuback and LNSP Nagghappan. On April 4, 2007, a petition under 37 CFR 1.47(a) was filed with the US Patent and Trademark Office requesting, in effect, that LNSP Nagghappan be allowed to proceed with the application on behalf of himself and non-signing inventor, Joseph E. Zuback.

53. The '804 Patent is also subject to a number of continuation applications. In this respect, the continuation applications are as follows: PCT/US07/87206 filed on 12/12/2007; US12/904,286 filed on 10/14/2010; and US13/443,971 filed on 4/11/2012.

DEFENDANTS' INEQUITABLE CONDUCT COMMITTED DURING THE PROSECUTION OF THE PATENT APPLICATION THAT MATURED TO THE '804 OPUS PATENT

54. During the VWSTS Defendants' prosecution of the patent application Serial Number 11/609,659, ("the '659 application") that matured to the '804 patent, neither applicant

54. During the VWSTS Defendants' prosecution of the patent application Serial Number 11/609,659, ("the '659 application") that matured to the '804 patent, neither applicant LNSP Nagghappan, nor his prosecuting attorneys, nor any individual subject to the requirements of 37 CFR 1.56 (c) disclosed the strikingly similar prior art HERO patents (Exhibits "2" and "3") to the Examiner. At the time the '659 application was prosecuted, Nagghappan (and individuals subject to such requirements) knew that the HERO patents existed, and that each of the HERO patents were, and are, material to the patentability of the '804 OPUS patent.

55. Specific intent to deceive, in the failure of the VWSTS Defendants to disclose the HERO patents and other material prior art while the '659 application was pending is evidenced at least by the applicant's (and/or his prosecuting attorneys' and/or any other individual subject to the requirements of 37 CFR 1.56(c)) knowledge of the HERO patents, and Defendants knowledge of the high degree of materiality of the HERO patents as prior art under 35 USC 102 and 103, and Defendants' decision to withhold disclosure of the HERO patents as well as other material prior art set forth in paragraphs 54 through 57.

56. During the prosecution of the '659 application, the applicant LNSP Nagghappan, and his prosecuting attorneys each failed to disclose prior art relating to Defendants' San Ardo Pilot System and "on sale" bars relating to Defendants' prior art activities at Chevron's San Ardo facility. Such prior art relates to Defendant NAWS high pH RO process with a water softener in the pre-treatment train to remove hardness, and was uniquely under Defendants' possession, custody and control. At the time the VWSTS Defendants were prosecuting the '659 application, Nagghappan (and individuals subject to such requirements) knew that the San Ardo Pilot System

57. Specific intent to deceive, in the VWSTS Defendants' failure to disclose the San Ardo related prior art while the '659 application was pending is evidenced at least by Nagghappan and/or his prosecuting attorneys' and/or any other individual subject to the requirements of 37 CFR 1.56(c)'s knowledge of the San Ardo prior art, knowledge of the high degree of materiality of the San Ardo Pilot System as prior art under 35 USC 102 and 103, and the VWSTS Defendants' decision to withhold disclosure of the San Ardo prior art.

58. Moreover, on information and belief, Nagghappan and/or his prosecuting attorneys made material misrepresentations, with the intent deceive the US Patent and Trademark Office, as to the true "inventorship" of the claims of the '804 patent.

59. In this respect, during the prosecution of the '659 application, Nagghappan and/or his prosecuting attorneys, filed a Declaration of Larry Coats , averring that subject matter set forth in the claims of the '804 patent was the "invention" of joint inventors, i.e., Joseph E. Zuback and LNSP Nagghappan . (Exhibit "12")

60. The Declaration of Larry L. Coats represented, in pertinent part, as follows:

“2. Upon information and belief, the Assignee in this case, OTV SA S.A. and its affiliate, N.A. Water Systems, LLC (individually and collectively “N.A. Water Systems”), believe that Mr. Joseph E. Zuback may be a co-inventor of one or more of the claims described in the patent application.

3. At the time of the conception of the invention of one or more claims in the present patent application, it is believed that Mr. Zuback and Mr. Nagghappan were employed by the predecessor-in-interest by merger to N.A. Water Systems, which, at the time, was an affiliate of United States Filter Corporation (now WASCO LLC).

present patent application, it is believed that Mr. Zuback and Mr. Nagghappan were employed by the predecessor-in-interest by merger to N.A. Water Systems, which, at the time, was an affiliate of United States Filter Corporation (now WASCO LLC).

Subsequently, certain other affiliates of United States Filter Corporation were sold to Siemens Corporation, and after the sale, Mr. Zubeck left the employment of N.A. Water Systems and became employed with Siemens Corporation.

4. Siemens Corporation, in some respects at least, is considered a competitor of N.A. Water Systems. Hence, N.A. Water Systems has been reluctant to contact Mr. Zuback directly. Rather, N.A. Water Systems decided to attempt to gain Mr. Zuback's cooperation by working through Siemens Corporation, and particularly, Ms. Deborah M. Newell, Senior Counsel of Siemens Corporation.

5. Sometime prior to January 19, 2007, Mr. Ken Kubrick, Legal Counsel to N.A. Water Systems contacted Ms. Newell and explained that N.A. Water Systems was planning to file a patent application in which it believed that a Siemen's employee, Mr. Zuback, may be a co-inventor and obligated to execute the patent application. Ms. Newell indicated to Mr. Kubrick that a conference call, involving Mr. Kubrick, others at N.A. Water Systems, along with Mr. Zuback and Mr. Gary Ganzi (a Siemens' executive having IP responsibility) would be appropriate. That conference was held on January 19, 2007. Participating in that conference were Ms. Newell, Mr. Zuback, Mr. Ganzi, Mr. Kubrick, and Mr. Chuck Blumenschein and Mr. Craig Yendell from N.A. Water Systems. At that time the technology relating to the patent application was discussed. Mr. Zuback and Mr. Ganzi appeared to have reservations about the patentability of the technology.

During the course of the call, Mr. Zuback identified a number of pieces of prior art that he thought impacted the patentability of this technology.

* * *

7. On March 22, 2007, Mr. Kubrick sent a letter to Ms. Newell concerning this patent application, and included a request for Mr. Zuback to execute the Declaration and Power of attorney. See Exhibit 1 attached. A full copy of the application, along with the drawings, a Declaration and Power of Attorney, and an Assignment, was included.

8. The letter, as it states, was directed to Ms. Newell, but with a request to present the patent application and the associated papers to Mr. Zubeck. Again, this was done because Siemens Corporation may be viewed as a competitor, and because Mr. Zuback is employed now by Siemens Corporation.

9. As of April 4, 2007, N.A. Water Systems has not received a reply from Ms. Newell or Mr. Zuback.

10. Upon information and belief, N.A. Water Systems believes that because of the competitive positions that the parties stand in, that Mr. Zuback is reluctant to execute the patent application. N.A. Water Systems has requested that he execute the application, and based on the responses to date from both Siemens Corporation and Mr. Zuback, there appears to be a reluctance to do so.”

61. After Mr. Zuback reaffirmed his belief that the subject matter of the claims of the ‘659 application was not patentable, Nagghappan and/or his prosecuting attorneys , intentionally misrepresented to the U.S. Patent Office that LSNP Nagghappan was the “sole inventor” of such

subject matter. In truth, at the time Defendants' misrepresentations were made, Mr. Zuback was, and is a "joint inventor" of such subject matter.

62. The VWSTS Defendants (including their predecessors in interest) obtained the '804 OPUS Patent through intentional deceptions, submitted under oath or declaration, to the United States Patent and Trademark Office.

63. The VWSTS Defendants' intentional deceptions and inequitable conduct include:

- a) VWSTS Defendants' inequitable conduct arising from Defendants' failure to disclose highly material information, and/or submission of false material information to the United States Patent and Trademark Office (USPTO), with an intent to deceive;
- b) VWSTS Defendants knew of the information and knew, or should have known, of the materiality of the information; and
- c) VWSTS Defendants have not provided a credible explanation for the withholding of such material information from the USPTO during the examination of the '804 OPUS Patent.

COUNT I
DECLARATORY JUDGMENT OF NON-INFRINGEMENT
28 U.S.C. §§ 2201, 2202; 35 U.S.C. § 271

64. The Aquatech Plaintiffs reallege and incorporates by reference the preceding paragraphs 1 through 63 of this Amended Complaint.

65. There is an actual controversy, within the meaning of 28 U.S.C. §§ 2201 and 2202, between the Aquatech Plaintiffs and the VWSTS Defendants concerning the infringement of the '804 OPUS patent.

66. The Aquatech Plaintiffs are entitled to a declaratory judgment that water treatment systems practicing the HERO® processes, do not infringe the '804 OPUS Patent, and the Aquatech Plaintiffs have not contributed to or induced infringement of any valid, enforceable claim of the '804 OPUS patent.

67. The Aquatech Plaintiffs are entitled to a declaratory judgment that water treatment systems practicing its HERO® processes do not infringe any valid claim of the '804 patent, either literally or under the doctrine of equivalents, and that the Aquatech Plaintiffs, by promoting the HERO processes and selling equipment to practice the HERO processes, do not indirectly infringe the '804 OPUS patent.

68. The Aquatech Plaintiffs seek a declaration that they have not directly infringed and do not directly infringe the '804 OPUS Patent either literally or under the doctrine of equivalents. A judicial declaration is necessary and appropriate at this time in order that the Aquatech Plaintiffs may ascertain their rights and duties with respect to the '804 OPUS Patent and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sales of their HERO processes and equipment for practicing the HERO processes.

69. As a result of the Defendants conduct set forth in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issue of a declaratory judgment

70. This is an exceptional case, and the Aquatech Plaintiffs are entitled to an award of attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT II
DECLARATION JUDGMENT OF PATENT INVALIDITY
28 U.S.C. §§ 2201, 2202, 35 USC. §§ 102, 103, and 112

71. The Aquatech Plaintiffs reallege and incorporate by reference the preceding paragraphs 1 thru 65 and 65 thru 70 of this Amended Complaint.

72. There is an actual controversy, within the meaning of 28 U.S.C. §§ 2201 and 2202, between the Aquatech Plaintiffs and NAWS as to whether there exists any valid and enforceable claims of the '804 patent.

73. The Aquatech Plaintiffs are entitled to a declaration that based on the prosecution history of the '804 patent, and the prior art cited during prosecution, as well as other prior art, the patent claims in the '804 patent are invalid.

74. The Aquatech Plaintiffs are entitled to a declaration that the '804 patent and each of the claims therein are invalid for failure to comply with one or more the requirements of 35 U.S.C. §§ 101, 102, 103, 111, 112, 116, 132, 171, 172, and 251.

75. A judicial declaration is necessary and appropriate at this time in order that the Aquatech Parties may ascertain their rights and duties with respect to the '804 Patent and with respect to any past, present, or future manufacture, use, importation, distribution, sale, or offer for sale of their HERO processes and equipment to practice the HERO processes.

76. A person is entitled to a patent unless he himself did not invent the subject matter sought to be patented, 35 U.S.C. § 102(f). The Aquatech Plaintiffs are entitled to a declaration that the '804 patent is invalid for omission of an inventor with deceptive intention.

77. After a reasonable opportunity for further investigation and discovery, the Aquatech Plaintiffs believe that it is likely to have further evidentiary support for the conclusion that the claims of the '804 OPUS Patent are invalid for failure to comply with the requirements of the Patent Laws of the United States as set forth in Title 35 of the United States Code, including without limitation §§ 101, 102, 103, and/or 112.

78. This is an exceptional case, and the Aquatech Plaintiffs are entitled to an award of attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT III
DECLARATION JUDGMENT OF UNENFORCEABILITY
28 U.S.C. §§ 2201, 2202; 35 USC 102, 103

79. The Aquatech Plaintiffs reallege and incorporate by reference the preceding paragraphs 1 thru 63, 65 thru 70, and 72 thru 78 of this Amended Complaint.

80. On information and belief, Mr. Coats failed to cite material information to the USPTO during prosecution of the application that resulted in the '804 Patent. Mr. Coats filed the application that resulted in the unlawful issuance of '804 Patent.

81. Mr. Coats failed to disclose the existence of the HERO patents and San Ardo prior art as required under 37 C.F.R. § 1.56 and MPEP §§ 2001.04, 2001.06(b) during the prosecution of the '804 Patent. This information would have been material to the patent

examiner because it would have alerted the examiner to rejections under 35 U.S.C. § 102 and/or 103. This prior art information would have been material to the patentability of the '804 Patent and should have been disclosed to the USPTO.

82. On information and belief, Mr. Coats intended to mislead the USPTO by intentionally failing to notify the examiner of the material prior art.

83. On information and belief, Mr. Coats failed to notify the examiner of the material prior art with the intent of ensuring the issuance of the '804 Patent without further rejections.

84. Unwilling to delay the issuance of the '804 Patent, Mr. Coats intentionally failed to notify the examiner of material information relating to the correct inventorship of the subject matter of the '804 patent even though his duty of good faith and candor continued until the date of issuance of the patent pursuant to MPEP §§ 2001. 2001.01, 2001.04.

85. On information and belief, Mr. Coats intended to mislead, and materially mislead, the patent examiner by intentionally withholding material information. Mr. Coats had knowledge of the withheld prior art, knew that the withheld prior art was material, and failed to disclose the prior art and information concerning the correct inventorship to the USPTO during prosecution of the application that led to the '804 Patent.

86. On information and belief, as a direct and proximate result of Mr. Coat's inequitable conduct, the USPTO issued the '804 Patent. The VWSTS Defendants received the benefit of improperly obtaining the grant of such patent rights.

87. In view of the inequitable conduct before the USPTO in the prosecution of the '804 Patent, the Aquatech Plaintiffs are entitled to a declaratory judgment that the '804 Patent is unenforceable.

COUNT IV
TORTIOUS INTERFERENCE WITH PROSPECTIVE CONTRACTUAL RELATIONSHIP

88. The Aquatech Plaintiffs reallege and incorporate by reference the preceding paragraphs 1 thru 63, 65 thru 70, 72 thru 78, and 80 thru 87 of this Amended Complaint.

89. The Aquatech Plaintiffs had a prospective contractual relationship with Bechtel for the Russell City Energy Project.

90. But for NAWS' interference, the Aquatech Plaintiffs would have entered into the contract with Bechtel for the Russell City Energy Project.

91. NAWS falsely threatened Bechtel with patent infringement litigation as set forth in paragraphs 37 et seq. herein.

92. On information and belief, NAWS does not enjoy the right to enforce the OPUS '804 patent against any third parties.

93. NAWS had no reasonable basis to believe the claim that the proposed HERO process for the RCEC project infringes the OPUS '804 patent.

94. NAWS acted with intent to harm the Aquatech Plaintiffs by preventing the relationship with Bechtel from forming and preventing legitimate competition.

95. NAWS acted without a privilege or justification.

96. NAWS acted in bad faith.

97. The Aquatech Plaintiffs suffered actual damages as a result of NAWS' conduct. The Aquatech Plaintiff suffered pecuniary loss of the benefit of the contract with Bechtel , as well as consequential damages and losses from harm to the Aquatech Plaintiffs' reputation.

98. The VWSTS Defendants have harmed and will continue to harm the Aquatech Plaintiffs' economic interest by impairing their ability to promote, license, market, and sell water treatment systems which practice the patented HERO® processes.

99. The Aquatech Plaintiff are entitled to punitive damages because the NAWS' conduct was particularly egregious, and demonstrated a reckless indifference to the rights of others.

PRAYER FOR RELIEF

WHEREFORE, the Aquatech Plaintiffs pray for the following relief:

1. A declaration that water treatment processes practicing the HERO® technologies as described above do not infringe the claims of the '804 patent;
2. A declaration that each of the claims of '804 patent is invalid;
3. A declaration that the '804 Patent is unenforceable due to inequitable conduct before the United States Patent and Trademark Office;
4. A declaration that this is an exceptional case, and an award of reasonable attorneys' fees pursuant to 35 U.S.C. § 285;

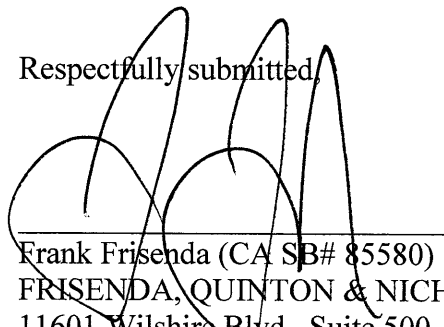
5. Compensatory and consequential damages;
6. Punitive damages; and
7. That the Court award the Aquatech Parties such other and further relief as this Court may deem appropriate, just and proper under the circumstances.

DEMAND FOR JURY TRIAL

The Aquatech Plaintiffs respectfully demand a trial by jury on all claims and issues so triable.

DATE: March 22, 2013

Respectfully submitted,



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ATTORNEYS FOR THE AQUATECH PARTIES

CERTIFICATE OF SERVICE

I hereby certify that on March 22, 2013, the Second Amended Complaint was served via Electronic Mail upon the following:

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/s/ Frank Frisenda
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