

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN**

U.S. WATER SERVICES, INC., and	)	
	)	
ROY JOHNSON,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	Case No.: 13-cv-864-bbc
	)	
	)	Jury Trial Demanded
NOVOZYMES A/S, and	)	
	)	
NOVOZYMES NORTH AMERICA, INC.,	)	
	)	
Defendants.	)	

**FIRST AMENDED COMPLAINT**

Plaintiffs U.S. Water Services, Inc. (“U.S. Water”) and Roy Johnson (referred to collectively herein as “Plaintiffs”), for their Complaint against Defendants, Novozymes A/S and Novozymes North America, Inc. (referred collectively herein as “Novozymes”), state and allege as follows:

**PARTIES**

1. Plaintiff U.S. Water is a Minnesota corporation having its principal place of business at 12270 43rd Street NE, St. Michael, Minnesota. U.S. Water, through its U.S. Water Ethanol Process Technologies division, offers innovative technologies to ethanol manufactures to help improve their efficiency and profitability.
2. Plaintiff Roy Johnson is a Wisconsin resident who resides at 4651 Gifford Road, Oconomowoc, Wisconsin. Roy Johnson is an employee of U.S. Water.
3. Defendant Novozymes A/S is a Danish corporation with its principal place of business at Krogshoejvej 36, DK-2880 Bagsvaerd, Denmark. Novozymes A/S is a global

company that sells products, including industrial enzymes, microorganisms and biopharmaceutical ingredients worldwide.

4. Defendant Novozymes North America, Inc. is a New York corporation with its principal place of business at 77 Perry Chapel Church Road, Franklinton, North Carolina. Upon information and belief, Novozymes North America is a subsidiary of Novozymes A/S.

### **JURISDICTION AND VENUE**

5. This is a civil action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 et seq. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over Novozymes under Wis. Stat. § 801.05(1)(d), among other provisions, because Novozymes is engaged in substantial and not isolated activities within this state such that the exercise of personal jurisdiction over it is consistent with due process. Novozymes has committed acts of infringement in this district. Novozymes North America maintains a regional office at 13100 W. Lisbon Road, Brookfield, Wisconsin. Upon information and belief, Novozymes North America has a sales representative in Black River Falls, Wisconsin.

7. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400(b) because Defendants are subject to personal jurisdiction, Novozymes does substantial business in this district and has committed acts of infringement in this district. Novozymes has previously availed itself of this Court to enforce its patents against infringement (Case No. 3:10-cv-0025).

### **BACKGROUND**

8. Plaintiffs repeat and re-allege each and every allegation of the foregoing paragraphs as though fully set forth herein.

9. U.S. Water is engaged in the business of selling water treatment and purification equipment, materials, and services, including laboratory services, pretreatment design and optimization, well water test kits, and delivery services.

10. A significant portion of U.S. Water's business is the sale and service of ethanol process technologies and equipment and the provision of training and continuing education in that field.

11. A common problem for ethanol producers is the formation of scale deposits on ethanol processing equipment. These deposits impede heat transfer and flow and compromise and render less efficient the operation of mechanical devices used in ethanol processing. Products and methods to reduce scale formation are highly valued in the ethanol industry.

12. Employees of U.S. Water, Roy Johnson and Paul Young, invented novel methods to reduce the formation of insoluble scale deposits during the production of ethanol. Among other things, these novel methods convert phytic acid or phytates to inorganic phosphates to improve metal solubility and reduce such deposits.

13. U.S. Water is an assignee and lawful co-owner of United States Patent No. 8,415,137 (hereinafter "the '137 Patent"), entitled "Preventing Phytate Salt Deposition in Polar Solvent Systems," which duly and lawfully issued from the United States Patent and Trademark Office on April 9, 2013. Roy Johnson, an inventor of the '137 Patent who has not assigned his interest in that patent, is a lawful co-owner of the '137 Patent. A true and correct copy of the '137 Patent is attached as Exhibit A and made a part hereof.

14. On December 17, 2013, the United States Patent and Trademark Office duly and lawfully issued a continuation of the '137 Patent, United States Patent No. 8,609,399 (hereinafter "the '399 Patent"), entitled "Reducing Insoluble Deposit Formation in Ethanol Production."

U.S. Water is an assignee and lawful co-owner of the '399 Patent. Roy Johnson, an inventor of the '399 Patent who has not assigned his interest in that patent, is a lawful co-owner of the '137 patent. A true and correct copy of the '399 Patent is attached as Exhibit B and made a part hereof. By service of the original Complaint in this action on December 19, 2013 Novozymes was placed on notice of the '399 Patent.

15. As the sole co-owners of the '137 Patent and the '399 Patent, Plaintiffs are authorized and have standing to bring legal action to enforce all rights arising under the '137 Patent and the '399 Patent.

16. The '137 Patent and the '399 Patent describe and claim new and useful methods for reducing the formation of insoluble deposits of phytic acid and salts of phytic acid in, e.g., fuel ethanol-processing equipment.

17. U.S. Water adopted and uses the brand pHytOUT® when presenting its patented system to its customers and the trade. U.S. Water has presented and marketed pHytOUT® as its “patented” deposit control technology, and it is well known as such in the industry. As but an example, and in addition to U.S. Water’s own public statements, Ethanol Producers Magazine reported on the issuance of the '137 Patent on July 11, 2013.

18. U.S. Water’s patented deposit control technology has enabled numerous ethanol production plants to control mineral deposit scaling, which reduces backend fouling and sulfuric acid use, and increases plant productivity and efficiency, among other benefits.

19. Novozymes offers for sale and sells a phytase enzyme product under the name Phytaflow®. Novozymes markets Phytaflow® for use in ethanol plants to control mineral deposit scaling and reduce backend fouling and sulfuric acid use.

20. Prior to introducing Phytaflow® to the market, Novozymes sold or offered for sale a phytase product bearing the product number 50161, which it sold or offered for sale for use in ethanol plants to control mineral deposit scaling and reduce backend fouling and sulfuric acid use.

21. Upon information and belief, Phytaflow® and 50161 are each designed for use as a material part of the method(s) patented by U.S. Water's '137 Patent and the '399 Patent and have no substantial, non-infringing use.

22. By letter dated May 30, 2012, U.S. Water informed Novozymes of U.S. Patent No. 8,039,244, a predecessor to the '137 Patent and the '399 Patent. U.S. Water has presented and marketed pHyTOUT® as its "patented" deposit control technology and publicly announced the issuance of the '137 Patent and the '399 Patent to the industry. Upon information and belief, Novozymes has knowledge of the '137 Patent and the '399 Patent and/or has willfully blinded itself as to the infringing nature of its activity.

23. Upon information and belief, in recent months, Novozymes, with knowledge of the '137 Patent and '399 Patent, has approached a number of U.S. Water customers with its Phytaflow® and/or 50161 products with instructions to use Phytaflow® and/or 50161 in the same manner as U.S. Water's patented pHyTOUT® method, i.e., to carry out the methods claimed in the '137 Patent and the '399 Patent. Upon information and belief, Novozymes has offered to sell Phytaflow® to Badger State Ethanol, LLC (BSE), a dry-mill ethanol production facility in Monroe, Wisconsin and a long-time customer of U.S. Water, with instructions to use Phytaflow® in the same manner as U.S. Water's patented pHyTOUT® methods, i.e., to carry out the method(s) claimed in the '137 Patent and/or the '399 Patent.

24. Upon information and belief, and not by way of limitation, Novozymes also has offered to sell and/or sold Phytaflow® and/or 50161 for use in carrying out U.S. Water's patented methods in the following ethanol plants: Glacial Lakes Energy, LLC (Mina, South Dakota and Watertown, South Dakota); LifeLine Foods, LLC (St. Joseph, Missouri); Lincolnway Energy, LLC (Nevada, Iowa); Nesika Energy, LLC (Scandia, Kansas); Hereford Renewable Energy, LLC (Hereford, Texas); Diamond Ethanol, LLC (Levelland, Texas); Green Plains Wood River, LLC (Wood River, Nebraska); Kansas Ethanol, LLC (Lyons, Kansas); and Badger State Ethanol, LLC (Monroe, Wisconsin).

25. Upon information and belief, by using Phytaflow® and/or 50161 in the manner and method prescribed by Novozymes, at least some of the plants referred to in the previous paragraph have directly infringed and/or are directly infringing the method(s) claimed in the '137 Patent and '399 Patent.

26. Neither U.S. Water nor Roy Johnson have licensed or otherwise authorized Novozymes or any of the above-referenced ethanol plants to use the method(s) claimed in the '137 Patent or '399 Patent with Phytaflow® or 50161.

**COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,415,137**

27. Plaintiffs repeat and re-allege each and every allegation of the foregoing paragraphs as though fully set forth herein.

28. Novozymes, by making, selling, and offering to sell phytase enzymes under the brand name Phytaflow® or bearing product number 50161 to various ethanol plants, with the express purpose of encouraging, aiding and/or causing such plants to utilize methods within the scope of the '137 Patent, indirectly infringes through inducement and contributory infringement under 35 U.S.C. § 271 et seq.

29. Upon information and belief, Novozymes has actual knowledge of the '137 Patent and actual knowledge that its activities constitute indirect infringement of the '137 Patent, or has willfully blinded itself to the infringing nature of its activities, and yet continues its infringing activities.

30. Upon information and belief, Novozymes intends for its actions to result in infringement of the '137 Patent by ethanol producers or has disregarded an objectively high likelihood that the induced use of its phytase enzyme would infringe one or more claims of the '137 Patent.

31. Novozymes has and continues to induce infringement of and/or contributorily infringe the '137 Patent actively and intentionally under 35 U.S.C. §§ 271(b) and/or (c).

32. Novozymes engaged in the foregoing conduct with respect to the '137 Patent during the term of the patent and without authority from Plaintiff.

33. Novozymes' infringement of the '137 Patent has been and will continue to be willful, deliberate and intentional.

34. As a direct and proximate result of Novozymes' infringement of the '137 Patent, Plaintiffs have been and will continue to be irreparably damaged and deprived of its rights in the '137 Patent, for which Plaintiffs are entitled to relief.

**COUNT II – INFRINGEMENT OF U.S. PATENT NO. 8,609,399**

35. Plaintiffs repeat and re-allege each and every allegation of the foregoing paragraphs as though fully set forth herein.

36. Novozymes, by making, selling, and offering to sell phytase enzymes under the brand name Phytasflow® or bearing product number 50161 to various ethanol plants, with the express purpose of encouraging, aiding and/or causing such plants to utilize methods within the

scope of the '399 Patent, indirectly infringes through inducement and contributory infringement under 35 U.S.C. § 271 et seq.

37. Upon information and belief, Novozymes has actual knowledge of the '399 Patent and actual knowledge that its activities constitute indirect infringement of the '399 Patent, or has willfully blinded itself to the infringing nature of its activities, and yet continues its infringing activities.

38. Upon information and belief, Novozymes intends for its actions to result in infringement of the '399 Patent by ethanol producers or has disregarded an objectively high likelihood that the induced use of its phytase enzyme would infringe one or more claims of the '399 Patent.

39. Novozymes has and continues to induce infringement of and/or contributorily infringe the '399 Patent actively and intentionally under 35 U.S.C. §§ 271(b) and/or (c).

40. Novozymes engaged in the foregoing conduct with respect to the '399 Patent during the term of the patent and without authority from Plaintiffs.

41. Novozymes' infringement of the '399 Patent has been and will continue to be willful, deliberate and intentional.

42. As a direct and proximate result of Novozymes' infringement of the '399 Patent, Plaintiffs have been and will continue to be irreparably damaged and deprived of its rights in the '399 Patent, for which Plaintiffs are entitled to relief.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs pray for a judgment that:

- A. Defendants have infringed the '137 Patent and the '399 Patent;
- B. Defendants' infringement of the '137 Patent and the '399 Patent is willful;



C. Defendants, their officers, directors, employees, agents, subsidiaries, licensees, servants, successors and assigns, and any and all persons acting in privity or in concert or participation with Defendants, be permanently enjoined from infringement of the '137 Patent and the '399 Patent under 35 U.S.C. § 283;

D. Plaintiffs be awarded all damages adequate to compensate Plaintiffs for Defendants' infringement of the '137 Patent and the '399 Patent, and such damages be trebled under 35 U.S.C. § 284 and awarded to Plaintiffs, with pre-judgment and post-judgment interest as allowed by law;

E. This case be adjudged an exceptional case under 35 U.S.C. § 285, and Plaintiffs be awarded attorneys' fees, expert witness fees, costs, and all expenses incurred in this action, with interest;

F. Plaintiffs be awarded all actual and compensatory damages; and

G. Plaintiffs be awarded such other and further relief as the Court deems just and proper.

**JURY DEMAND**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiffs demand a trial by jury on all issues triable by jury.

Dated: February 20, 2014

PERKINS COIE LLP

By s/ Lissa R. Koop  
John S. Skilton  
JSkilton@perkinscoie.com  
Michelle M. Umberger  
MUmberger@perkinscoie.com  
Lissa R. Koop  
LKoop@perkinscoie.com  
Anne M. Readel  
AReadel@perkinscoie.com  
PERKINS COIE LLP  
One East Main Street, Suite 201  
Madison, WI 53703  
(608) 663-7460 (Phone)  
(608) 663-7499 (Facsimile)

Colin G. Sandercock  
PERKINS COIE LLP  
700 Thirteenth Street N.W.  
Washington, DC 20005  
Tel: 202-654-6200 x 1630  
Fax: 202-654-6211

*Attorneys for Plaintiff,  
U.S. Water Services, Inc.*

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