

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

SLOAN VALVE COMPANY,	)	
a Delaware corporation	)	
	)	
Plaintiff	)	
vs.	)	Case No. 10-cv-204
	)	
ZURN INDUSTRIES, INC.	)	Judge:
a Delaware corporation	)	
	)	
and	)	Magistrate Judge:
	)	
ZURN INDUSTRIES, LLC,	)	JURY TRIAL DEMANDED
a Delaware limited liability company,	)	
	)	
Defendants	)	

**AMENDED AND SUPPLEMENTAL COMPLAINT**

Plaintiff, Sloan Valve Company (“SLOAN”), by and through its attorneys, for its Amended and Supplemental Complaint against Defendants Zurn Industries, Inc. and Zurn Industries, LLC (collectively referred to as “ZURN”), pleads and alleges as follows:

***Nature Of The Action***

1. This is an action for infringement of U.S. Patent No. 7,607,635 entitled “Flush Valve Handle Assembly Providing Dual Mode Operation” (“the *Wilson* Patent”) and of the corresponding U.S. Patent Application Publication No. 2006/0151729 (“the *Wilson* Patent Application”), both owned by SLOAN. A true and correct copy of the *Wilson* Patent is attached hereto as Exhibit 1 and a true and correct copy of the *Wilson* Patent Application is attached hereto as Exhibit 2.

2. After the *Wilson* Patent was issued by the United States Patent and Trademark Office (“the U.S. Patent Office”), ZURN filed a petition requesting that the U.S. Patent Office reexamine the validity of the *Wilson* Patent. After a lengthy reexamination proceeding, the U.S. Patent Office confirmed the validity of the claims of the *Wilson* Patent that had been challenged by ZURN. SLOAN amended some of the challenged claims to make certain feature of these claims more explicit. A true and correct copy of the Certificate of Reexamination is attached as Exhibit 3.

3. SLOAN seeks injunctive relief to prevent ZURN from continuing its infringement of the *Wilson* Patent.

4. In addition, SLOAN seeks monetary damages for ZURN’s infringement of the *Wilson* Patent and of the *Wilson* Patent Application.

### *The Parties*

5. Plaintiff, SLOAN, is a corporation organized under the laws of the State of Delaware. Its principal place of business is located in the Eastern Division of the Northern District of Illinois, at 10500 Seymour Avenue, in Franklin Park, Illinois, 60131.

6. Defendant, Zurn Industries, Inc., is a corporation organized under the laws of the State of Delaware. Its principal place of business is located at 1801 Pittsburgh Avenue in Erie, Pennsylvania, 16514.

7. Defendant, Zurn Industries, LLC is a limited liability company organized and existing under the laws of Delaware and its principal place of business is at 1801 Pittsburgh Avenue in Erie, Pennsylvania, 16514.

***Factual Background***

***SLOAN's Dual Mode Flush Invention***

8. SLOAN is a leading manufacturer of plumbing products and has been in business for more than 100 years.

9. To maintain its technological leadership, SLOAN operates a significant research and development department to invent and develop new and innovative plumbing products.

10. For years prior to 2004, there was a need in the plumbing industry for a reliable, efficient and inexpensive manual system for commercial dual mode manual flush valves that would give a user a choice to either flush the amount of water sufficient to evacuate solid waste or flush a significantly reduced amount of water sufficient to evacuate liquid waste.

11. The industry recognized that such dual mode flush valves would save significant amounts of water thereby conserving water resources. In 2001, The American Society of Mechanical Engineers issued an American National Standard for dual flushing devices which established performance standards for dual mode flush valves. However, as of 2004 manual dual mode flush valves for commercial installations were not available in the market.

12. In 2004, an engineer, John Wilson, while working at the research and development group of SLOAN, conceived a new dual mode flush valve and handle assembly, made drawings of its theoretical operation, and constructed initial prototypes. When the handle of this valve was pushed down, it would discharge the full amount of water (same as a single flush), sufficient to evacuate solid waste. However, when the handle of this valve was lifted up it would discharge a significantly reduced quantity of water that would be sufficient to evacuate liquid waste from a commercial fixture. This efficient and easy-to-operate dual mode flush valve

and handle assembly satisfied the long-standing need to save water by using a reduced amount of water for liquid waste and the full amount only for solid waste.

13. SLOAN recognized John Wilson's invention as a solution to satisfy the need for a dual mode flush product for commercial applications. During the summer of 2004, after reviewing prototypes of John Wilson's invention and drawings depicting its operation, SLOAN decided to invest in testing, developing and commercializing John Wilson's invention.

14. First, based on John Wilson's design calculations, SLOAN built multiple additional prototype units to test the commercial feasibility of John Wilson's invention. Based on these tests, SLOAN built a number of experimental handle assemblies which turned single flush valves into dual mode flush valves. Starting in about March, 2005, SLOAN installed the experimental handle for testing at a number of commercial locations throughout the United States to convert single mode flush valves into dual mode flush valves.

15. SLOAN exhibited its dual mode handle assemblies and its dual mode valves at the Greening the Heartland Conference which was held May 31-June 3, 2005 in Chicago.

16. The dual mode valve and handle assembly invented by John Wilson provided repeatable, predictable flush volumes under a broad range of operating conditions. The replacement handle assembly, which converted a single mode valve into a dual mode valve, saved significant amounts of water and proved to be easy and inexpensive to manufacture, install, and maintain. Moreover, existing single mode flush valves could be retrofitted merely by replacing the handle assembly of the valve with the handle assembly incorporating John Wilson's invention.

17. After favorable evaluations of the experimental site installations, on August 1, 2005, SLOAN formally announced commercial introduction of the dual mode product invented by John Wilson.

18. The SLOAN dual mode flush valve received industry recognition. For example, BuildingGreen LLC, which identifies itself as “an independent company committed to providing accurate, unbiased, and timely information designed to help building-industry professionals and policy makers improve the environmental performance, and reduce the adverse impacts, of buildings,” selected SLOAN’s dual mode flush valve as one of the “Top-10 Green Building Products” of 2005. In the Winter 2008, Smart Solutions trade publication reported that the SLOAN dual mode valves produced water savings of 30 percent to more than 50 percent, when operated in the liquid waste mode.

***ZURN Copied SLOAN’s Dual Mode Flush Handle and Valve***

19. At least as early as June, 2005, [REDACTED]

[REDACTED]

[REDACTED]

20. [REDACTED]

[REDACTED]

[REDACTED]

21. In response to an inquiry in July, 2005, [REDACTED]

[REDACTED]

22. In August, 2005, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

23. At the time, ZURN knew that SLOAN protected its innovative products through U.S. and foreign patents.

24. On August 4, 2005, three days after SLOAN announced commercial introduction of the dual mode flush valve and handle assembly invented by John Wilson, ZURN announced its introduction of a ZURN dual mode flush valve and handle assembly.

25. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

26. In the July through November 2005 time frame, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

27. Finally, in November 2005, [REDACTED]

[REDACTED]

28. [REDACTED]

[REDACTED]

[REDACTED]

29. Shortly after [REDACTED]

[REDACTED]

[REDACTED]

30. [REDACTED] ZURN was able to make its commercial dual flush products, which were strikingly similar to those of SLOAN.

31. On or about December 14, 2005, ZURN added the P6000-M-ADA-DF dual flush handle assembly to the “What’s New” page of its website, [www.zurn.com](http://www.zurn.com).

32. Since about December, 2005, ZURN has been offering for sale and selling dual mode handle assemblies and dual mode flush valves, which incorporate the features of John Wilson’s invention, and are covered by claims of the *Wilson* Patent Application and the *Wilson* Patent.

33. However, SLOAN was not able to locate any of ZURN’s dual flush products in the marketplace until about January 2006. The ZURN valve handle which SLOAN located in January 2006 was identified as *Zurn Commercial Brass* product P6000-M-ADA-DF. ZURN’s P6000-M-ADA-DF handle assembly incorporated John Wilson’s invention.

34. ZURN copied SLOAN’s dual mode flush handle assembly invented by John Wilson.

***SLOAN Has Obtained Patent Rights to  
Protect John Wilson’s Invention***

35. To protect its investment in research and development, SLOAN has relied on the protection of intellectual property law, including United States patent laws. The inventor of the dual mode flush valve and handle assembly, John Wilson, assigned his patent rights to the dual mode flush invention to SLOAN. To protect the dual mode flush invention, SLOAN filed a

patent application in the U.S. Patent Office describing and claiming the unique features and advantages of the dual mode flush handle assembly and valves incorporating such a handle assembly.

36. The U.S. Patent Office published SLOAN's patent application as the *Wilson* Patent Application on July 13, 2006.

37. The U.S. Patent Office examined the *Wilson* Patent Application, found John Wilson's invention to be patentable, and issued the *Wilson* Patent on October 27, 2009.

***Zurn Disregarded SLOAN's Patent Rights***

38. Zurn decided to proceed [REDACTED]

39. Initially, [REDACTED]

40. [REDACTED]

41. SLOAN's dual flush handles were sold in packages which indicated that patents were pending on SLOAN's dual flush product.

42. At least as early as October 24, 2006, ZURN's counsel found the *Wilson* Patent Application which had been published on July 13, 2006.

43. The commercial dual flush products which ZURN was selling at the time, infringed claims of the published *Wilson* Patent Application.



44. However, ZURN did not obtain a legal opinion on whether its product infringed any claim of the published application, even though [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

45. Upon learning of the *Wilson* Patent Application, ZURN did not take its dual flush product off the market and continued to sell its product without obtaining a legal opinion regarding infringement of any valid claim of the published application.

46. After the patent-in-suit issued, this lawsuit was filed, and ZURN received detailed infringement contentions and invalidity rebuttals from SLOAN, all of which demonstrated that there were valid and infringed claims in the *Wilson* Patent, ZURN did not remove the infringing product from the market.

47. ZURN requested reexamination of the *Wilson* Patent on September 17, 2010 and sought to stay these proceedings.

48. That request was based on a declaration of its engineer, Michael Funari (“the Funari Declaration”).

49. The Funari Declaration deceptively added content to one of the figures in a prior art patent to make it look as though the prior art patent disclosed a bore shape like that claimed in the *Wilson* Patent.

50. Additionally, ZURN knew or should have known when it filed the reexamination request that a patent drawing may not be used as evidence of dimensions. Nevertheless, ZURN

initiated the reexamination proceedings, continued to sell its infringing products, and sought to stay this proceeding.

51. On November 15, 2010, SLOAN filed a motion in this action that directly cited the Federal Circuit and Manual of Patent Examining Procedure (“MPEP”) authority that drawings in patents cannot be used as evidence of dimensions and that demonstrated that the Funari Declaration was a legally improper basis for reexamination.

52. Despite being provided with the Federal Circuit and MPEP authority, ZURN persisted in seeking and maintaining a stay of this action, did not inform the U.S. Patent Office of the fact that ZURN’s request for reexamination was improper, and did not stop selling the infringing products.

53. In its first office action of the reexamination on January 10, 2011, the U.S. Patent Office confirmed the patentability of claims 4, 6, 9-11, 28-30, 33, and 34 of the *Wilson* Patent.

54. Despite the fact that the reexamined *Wilson* Patent was going to contain confirmed, infringed claims, ZURN did not take its dual flush product off the market.

55. ZURN did not take its dual flush product off the market even after the U.S. Patent Office rejected ZURN’s arguments that the *Wilson* Patent were invalid and issued its reexamination certificate.

56. The U.S. Patent Office was provided with copies of the prior art which Zurn relied upon for its invalidity arguments but the U.S. Patent Office found these prior references did not invalidate the claims of the *Wilson* Patent and the U.S. Patent Office issued a certificate of reexaminations upholding the validity of the *Wilson* Patent.

57. After learning of the U.S. Patent Office rejection of ZURN’s invalidity arguments, ZURN did not take its infringing products off the U.S. market but instead has

continued to sell its infringing dual flush products in the United States in disregard of SLOAN's patent rights.

***ZURN Has Continually Thwarted SLOAN Discovery  
And Sought To Delay The Resolution Of This Case***

58. To conceal the details and the full extent of its copying of SLOAN's commercial dual flush products, ZURN failed to produce or destroyed documents relating ZURN's development of its infringing dual flush products.

59. ZURN also engaged in a litigation tactics designed to delay the litigation and to make the litigation expensive to SLOAN.

60. [REDACTED]  
[REDACTED]  
[REDACTED]

61. On information and belief, ZURN has not issued a document hold order to its employees who were likely to have relevant information.

62. ZURN failed to provide adequate responses to discovery requests necessitating prolonged expensive negotiations and motions to compel.

63. The court entered an Order on August 16, 2010, requiring ZURN to submit a detailed explanation of its document search strategy to counsel for SLOAN, produce additional documents, and submit a certificate of the completeness of its production.

64. SLOAN was required to take extensive depositions to uncover gaps in ZURN's search strategy and production.

65. For example, ZURN failed [REDACTED]  
[REDACTED]

66. ZURN also filed for reexamination of the *Wilson* Patent based on the deceptive declaration of its engineer, Michael Funari.

67. In an attempt to further delay the litigation, ZURN suggested that the U.S. Patent Office declare an interference between a *Funari* patent application directed to a single flush valve whose volume was adjustable by the installer and the *dual* flush valves invented by John Wilson. The U.S. Patent Office rejected ZURN's improper attempt to trigger an interference.

***SLOAN Has Suffered and Is Suffering Harm  
From ZURN's Continued Infringement***

68. SLOAN has been and is being damaged by ZURN'S use of the invention claimed in the *Wilson* Patent in several respects. First, ZURN'S infringement of this patent is depriving SLOAN of profits from sales of its patented dual flush valves and of handle assemblies which convert conventional single flush valves into dual flush valves.

69. Second, SLOAN is being placed at a competitive disadvantage by ZURN'S improper taking of the innovative results of SLOAN'S research and development without paying for them.

70. Third, ZURN'S continuing infringement of SLOAN's patent rights damages SLOAN'S goodwill and reputation as a leading source of technological advancements in the plumbing industry. The public and marketplace perception of SLOAN as the source of innovative plumbing products is harmed when infringers use SLOAN innovations without authorization or license.

71. Fourth, ZURN'S unauthorized making, using, selling, offering to sell and/or selling ZURN's dual mode flush devices in violation of the *Wilson* Patent Application and the *Wilson* Patent threatens the value of SLOAN'S intellectual property. Accordingly, unless and

until ZURN'S continued acts of infringement are enjoined, SLOAN will continue to suffer irreparable harm for which there is no adequate remedy at law.

### ***JURISDICTION AND VENUE***

72. This action arises under the Patent Statute, 35 U.S.C. § 1 *et seq.* This Court has subject matter jurisdiction over this patent infringement action under 28 U.S.C. §§ 1331 and 1338(a).

73. This Court has personal jurisdiction over Defendant Zurn Industries, LLC because Zurn Industries, LLC is doing business in this judicial district and is registered to do business in Illinois.

74. This Court has personal jurisdiction over Defendant, Zurn Industries, Inc., because, upon information and belief, Zurn Industries, Inc. is transacting business in this judicial district relating to acts of infringement complained of in this Complaint. A predecessor to Zurn Industries, Inc., a Pennsylvania Corporation that merged into Zurn Industries, Inc., did business and was registered to do business in Illinois until 2007.

75. Venue is proper in this judicial district under 28 U.S.C. §§ 1391 and 1400(b) because Defendant, Zurn Industries, Inc., is subject to personal jurisdiction in this judicial district by, upon information and belief, transacting business in this judicial district relating to the subject matter of this action at the time this action was commenced. Defendant, Zurn Industries, LLC, has committed acts of infringement, does business, is registered to do business and has a regular and established place of business in this judicial district. Moreover, the predecessor of Defendant Zurn Industries, Inc. was doing business and was registered to do business in Illinois at the time of infringement of the *Wilson* Patent Application.

***COUNT I***

***For Direct Infringement Of The Wilson Patent***

76. SLOAN pleads and realleges Paragraphs 1 through 75 of this Complaint.

77. SLOAN is the owner of the entire right, title and interest in and to the *Wilson* Patent.

78. ZURN is making, using, offering to sell, importing or selling dual mode handle assemblies and dual mode flush valves, including ZURN products designated as “P6000-M-ADA-DF AquaVantage Dual Flush Handle,” “Z6000-AV-DF AquaVantage AV Exposed Flush Valve with Top Spud Connection for Water Closets with Dual-Flush Handle” and as “Exposed Z6003 AV-DF Dual Flush Model” and these activities directly infringe the Claims 1, 4-6, 10-12, 14, 19, 29-31 and 33-34 of the *Wilson* Patent.

79. SLOAN has been damaged and is being damaged by ZURN’S infringement and SLOAN will continue to suffer irreparable harm unless ZURN’s infringement is enjoined by this Court.

80. ZURN has infringed the *Wilson* Patent with knowledge of this patent and without justification; therefore, ZURN’s infringement has been and is willful.

***COUNT II***

***For Infringement of the Wilson Patent Application***

81. SLOAN realleges and pleads paragraphs 1-75 of this Complaint.

82. SLOAN is the owner of the entire right, title and interest in and to the *Wilson* Patent Application.

83. ZURN made, used, offered for sale or sold in the United States the invention claimed in at least Claims 10-11 and 15 of the published *Wilson* Patent Application during the

period between publication of the *Wilson* Patent Application and the issuance of the *Wilson* Patent; therefore, Zurn infringed these claims.

84. Claims 10-11 and 15 of the published *Wilson* Patent Application are substantially identical to Claims 7-8 and 12, respectively, of the *Wilson* Patent, within the meaning of 35 U.S.C. § 154(d)(2).

85. Upon information and belief, ZURN had actual notice of the published *Wilson* Patent Application at the time it committed its acts of infringement of the *Wilson* Patent Application.

### ***COUNT III***

#### ***For Inducement to Infringe the Wilson Patent***

86. SLOAN realleges and pleads paragraphs 1-75 and 80 of this Complaint.

87. ZURN had knowledge of the *Wilson* Patent.

88. With knowledge of the *Wilson* Patent, ZURN actively induced infringement of the *Wilson* Patent by selling in the United States ZURN Dual Flush Handle Assembly, including Dual Flush Handle P6000-M-ADA-DF and providing instructions for installing such handles or handle assemblies into flush valves to produce dual mode flush valves which directly infringe Claims 1, 4-6, 7-8 and 29-31 of the *Wilson* Patent.

89. Zurn knew or should have known that its sale of its Dual Flush handles would induce actual infringement of the *Wilson* patent.

90. Upon information and belief, ZURN's Dual Flush Handles were installed within the United States into flush valves to produce dual mode flush valves which directly infringe Claims 1, 4-6, 7-8 and 29-31 of the *Wilson* Patent.

***COUNT IV***

***For Contributory Infringement***

91. SLOAN realleges and pleads paragraphs 1-75 and 80 of this Complaint

92. ZURN offered for sale and sold within the United States ZURN Dual Flush Handle Assemblies, including Dual Flush Handle P6000-M-ADA-DF which is a material part and a component of dual flush valves which directly infringe the *Wilson* Patent.

93. ZURN knew that its ZURN Dual Flush Handle Assemblies, including Dual Flush Handle P6000-M-ADA-DF were especially made or especially adopted for inclusion in flush valves which directly infringe Claims 1, 4-6, 7-8 and 29-31 of the *Wilson* Patent.

94. ZURN's Dual Flush Handle Assemblies, including Dual Flush Handle P6000-M-ADA-DF are not a staple article or commodity of commerce suitable for substantial noninfringing use.

95. Upon information and belief, ZURN's Dual Flush Handles were installed within the United States into flush valves to produce dual mode flush valves which directly infringe Claims 1, 4-6, 7-8 and 29-31 of the *Wilson* Patent.

**WHEREFORE**, Plaintiff respectfully requests that the Court:

A. Enjoin ZURN, its officers, agents, servants, employees, and attorneys, and those persons in active concert or participation with them who receive actual notice of the order by personal service or otherwise, from making, using, selling, offering to sell, importing, infringing valves or valve handles, or otherwise engaging in acts of infringement of the *Wilson* Patent;

B. Award to Plaintiff, SLOAN, the actual damages suffered by SLOAN as the result of infringement by ZURN of the *Wilson* Patent but not less than a reasonable royalty;



- C. Award to Plaintiff, SLOAN, a reasonable royalty for ZURN's infringement of the *Wilson* Patent Application.
- D. Declare that ZURN'S infringement is willful and award to Plaintiff, SLOAN, increased damages up to three times the actual damages, pursuant to 35 U.S.C. § 284;
- E. Declare this action to be an exceptional case pursuant to 35 U.S.C. § 285 and award to Plaintiff, SLOAN, its attorneys' fees;
- F. Award to Plaintiff SLOAN, its costs; and
- G. Grant to Plaintiff, SLOAN, such other and further relief as may be just and proper.

***JURY DEMAND***

Plaintiff demands trial by jury of all issues triable by jury.

Dated: November 29, 2011

Respectfully submitted,

/s/ Gregory S. Norrod  
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