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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF OHIO WESTERN DIVISION

E5 INCORPORATED.)
Plaintiff,)
) COMPLAINT FOR PATENT
vs.) INFRINGEMENT
)
PREMIERE CONCRETE) JURY TRIAL DEMANDED
ADMIXTURES LLC.)
)
Defendant.)
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Plaintiff E5 Incorporated ("E5") alleges as follows against Defendant Premiere Concrete Admixtures LLC ("Defendant" or "Premiere"). The allegations herein are made based on personal knowledge as to E5 with respect to its own actions and upon information and belief as to all others.

NATURE OF THE ACTION

1. This is a civil action for patent infringement under the Patent Laws of the United States, 35 U.S.C. § 1 et seq. and for such other relief as the Court deems just and proper. Plaintiff's claims are based on Defendant's infringement of United States Patent No. 11,279,658 and United States Patent No. 11,919,823 (collectively, the "Asserted Patents" or the "Patents-in-Suit").

THE PARTIES

2. Plaintiff E5 is a company organized and existing under the laws of the state of Delaware and having a principal place of business at 1718 Pleasant Stret, Noblesville, Indiana 46060.

3. Plaintiff E5 was previously known as Specification Products, Inc. ("SPI").

4. On information and belief, Defendant Premiere is a limited liability company organized and existing under the laws of the state of Delaware.

5. On information and belief, Premiere has a principal place of business at 508 Cedar Street, Pioneer, Ohio.

JURISDICTION AND VENUE

This civil action arises under the Patent Laws of the United States, Title 35,
 United States Code. This Court has original and exclusive subject matter jurisdiction under 28

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U.S.C. §§ 1331 & 1338(a) because Plaintiff's claim for patent infringement arises under the laws of the United States, including 35 U.S.C. § 271, et seq.

7. This Court has personal jurisdiction over Defendant because the company has continuous, systematic, and substantial presence in the State of Ohio and within this District, including on information and belief offices in Pioneer, Ohio; regularly conducts business and solicits business within the state of Ohio and within this District; has committed and continues to commit acts of patent infringement within this District, including, without limitation, by making, using, selling, and offering for sale certain products to consumers from and within this District; purposefully directs activities at residents of this District; and places certain products into the stream of commerce with the knowledge that such products would be sold in Ohio and this District, which acts form a substantial part of the events giving rise to Plaintiff's claims.

8. Venue is proper in this District under 28 U.S.C. §§ 1391(b) and 1400(b) because Defendant has its principal place of business in this District and because Defendant has committed acts of infringement and has a regular and established place of business in the State of Ohio and in this District.

FACTUAL BACKGROUND

E5'S INNOVATIVE NANO SILICA-BASED CONCRETE FORMULATIONS

9. E5 is a leader in the concrete industry focusing on research, development, and market introduction of new nano silica-based concrete technologies, that improve concrete both in its fresh state and in its cured state. E5 is committed to improving concrete while also reducing the carbon impact of concrete. E5's innovations allow for concrete mixes that are easier to pump, place, and finish, that are more durable, and that are more environmentally friendly than traditional concrete mixes. After years of research and testing, E5 developed an innovative nano

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silica-based concrete technology which improves concrete finishability, reduces concrete cracking and shrinkage, and, importantly, enables concrete curing without the use of traditional external curing methods.

Nano silicas are part of a complex field of chemistry and are used for various 10. purposes across a broad group of industries, including the electronics, food, and cosmetic industries. However, nano silicas have a history of being challenging when used in concrete. Nano silicas come in a wide variety of forms (e.g., solid powders, gels, colloidals), particle sizes, surface areas, pH levels, and surface modifications, and each variable impacts the performance of the nano silica in different ways and has different implications for its use, particularly in concrete which itself is a complex and highly variable material. Due to its submicroscopic size, high surface area, anionic nature, and intermolecular forces, among other characteristics, nano silica is unlike any other material used in concrete. Concrete mixtures vary from batch to batch because of differences in aggregates (and their mineral compositions, fines and moisture content), cement chemistries and their manufacturing methods, and the multitude of chemicals that may be added to any mix—as well as the effect of human factors and various ambient environmental conditions (temperature, wind, humidity, rain, etc.). Further, the durability of placed concrete is only seen over time with exposure to exterior elements, traffic, and other factors associated with its particular use. All these variables and complexities, in combination, mean that effective nano silica solutions for use in concrete cannot be successfully developed under controlled lab conditions—they must be developed in the field and on the industrial scale.

11. Before the field work of E5, which benefited from the experience and perspective of a finisher of concrete materials, almost all experimental work with nano silicas in concrete was conducted in laboratories by scientists with limited to no field experience. These laboratory

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experiments consistently encountered problems with the ability to disperse efficacious dosages of nano silica throughout the concrete mix, resulting in, at worst, agglomerations or, at best, inert effect of the nano silica. During this time, there were no commercially feasible nano silica-based admixtures available for bulk ready-mix concrete. A product for such uses simply had not been developed.

12. Joe Shetterley, the founder of E5 and one of the named inventors of E5's patents, is a third-generation concrete finisher with over thirty years of experience with concrete materials. Because of his experience, Mr. Shetterley understood that proper curing of concrete was the crucial step in creating durable concrete, and that traditional curing methods were costly and time intensive.

13. E5 began researching and developing a product that could cure concrete "from the inside out" in 2016. Initially, a topically applied material machined into the top surface of the concrete was used to aid finishing and curing. However, Mr. Shetterley believed this was too labor-intensive and time-consuming to be widely adopted. As a result, Mr. Shetterley began to test whether a similar effect could be achieved using an admixture that could be put in a ready-mix truck to eliminate the labor associated with applying a topical product to an exterior surface of concrete. This effort was highly iterative and time consuming due to the complexities of nano silica and concrete materials and the need to experiment under real world, industrial conditions.

14. Over time, E5 and Mr. Shetterley tested a number of different materials and methods of using such materials to improve the finishing and curing of concrete. After the initial topical method, later materials included a component of admixture but still required the use of one or more topical materials in combination with the admixture. Ultimately, E5 and Mr. Shetterley refined the materials such that an admixture could be effectively used on its own for

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finishing and curing. Over the course of this development, different raw materials, dosage rates, water concentrations, and concrete material sequencing and mixing processes were explored to determine which variables mattered most and which combination of variables provided the efficacy, reliability, and consistency required for mass commercial use.

15. As a result of rigorous experimental testing, E5 and Mr. Shetterley pioneered nano silica-based concrete admixtures that had never before been available for commercial, industrial use. E5 invented nano silica mixtures and methods of preparing concrete installations using the nano silica mixtures in manners to effectively control water contained within a given concrete mix to internally cure the concrete—eliminating the need for traditional curing methods, such as adding surface water during finishing of a concrete surface. E5 nano silica products have now been used in hundreds of major civil infrastructure projects and millions of cubic yards of concrete. E5 nano silica products have been utilized in projects all across the country as well as outside of the U.S. and are approved or are under evaluation in over one-half of the Departments of Transportation (DOTs) across the country.

16. E5 manufactures and sells a nano silica-based concrete admixture under the names "Internal Cure," "Liquid Fly Ash," and "ShotCure."

17. As a result of the substantial time, energy, and resources E5 and Mr. Shetterley have dedicated to the research and development of the use of nano silica-based admixtures in concrete, E5 procured a substantial patent portfolio to protect its industry-leading innovations.

On March 22, 2022, the USPTO duly and legally issued U.S. Patent No.
 11,279,658 (the "658 Patent") titled "Compositions for Improved Concrete Performance." E5 is
 the lawful owner by assignment of all right, title, and interest in the '658 Patent. A true and

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correct copy of the '658 Patent is attached as <u>**Exhibit 1**</u> and a true and correct copy of the *Ex Parte* Reexamination Certificate of the '658 Patent is attached as <u>**Exhibit 2**</u>.

19. On March 5, 2024, the USPTO duly and legally issued U.S. Patent No. 11,919,823 (the "823 Patent") titled "Compositions for Improved Concrete Performance." E5 is the lawful owner by assignment of all right, title, and interest in the '823 Patent. A true and correct copy of the '823 Patent is attached as <u>Exhibit 3</u>.

20. The Asserted Patents are valid and enforceable.

21. The Asserted Patents are directed to the effective use of nano silica-based admixtures in the preparation of industrial concrete installations. Among other benefits, the methods allow for the internal curing (or self-curing) of concrete, thereby reducing or eliminating the need for traditional external curing methods.

22. More particularly, the Asserted Patents are directed to methods for the preparation of industrial-scale concrete installations with reduced curling, cracking and shrinkage. The methods include the addition of amorphous silica, and more preferably, colloidal amorphous silica, having specific size and surface area characteristics, to a concrete mix after water has been added to the mix and the mix has been agitated for the other concrete materials to be sufficiently wetted.

PREMIERE'S MONITORING AND COPYING OF E5

23. Premiere is a late comer to nano silica concrete technologies and a follower of E5.

24. Premiere is a regional, general concrete admixture company that has historically supplied the same traditional concrete additives provided by all major concrete admixture companies, such as water reducers, retardants, accelerants, and air entrainment admixtures.

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25. Premiere manufactures and sells concrete admixture products for use in various concrete construction projects. Among other things, Premiere sells concrete admixture products to Ready-mix concrete producers, pavers, and precasters which, with Premiere's admixture products, create concrete mixtures by mixing Premiere's admixture products with other standard concrete components. Purchasers typically create concrete mixtures at their batch plants or facilities. The mixed, fresh concrete may then be delivered to a construction site and poured as desired.

26. Premiere sells a concrete admixture product containing colloidal silica known as "Ultrafinish 1L," under the trademark ULTRAFINISH 1LTM

27. On information and belief, Premiere began selling the Ultrafinish 1L product in2023.

28. On information and belief, Premiere has and continues to market and advertise that Ultrafinish 1L is the "same" as E5's Internal Cure product "at one-half the price."

29. On information and belief, Premiere has developed nano silica-based admixtures, including the Ultrafinish 1L product, based upon E5's nano silica-based admixtures after observing the success of E5's admixtures.

30. On information and belief, Premiere has and continues to closely and routinely monitor E5's intellectual property, including E5's product offerings, technical data sheets, marketing materials, issued patents, and pending patent applications, and attempts to coopt E5's success in the concrete industry. For example, since its inception, Premiere has made it a habit to closely monitor E5's patent filings before the USPTO in an attempt to subvert E5's intellectual property.

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31. Premiere has sought to take advantage of E5's breakthroughs regarding the application of nano silica in concrete installations and E5's work to create a market for nano silica in an industry that is reluctant to change. Simply put, Premiere attempts to take for itself the success E5 has obtained through hard work and dedication in paving the way for nano silicabased concrete technologies.

HISTORY BETWEEN E5 AND PREMIERE

32. The USPTO duly issued E5's '658 Patent on March 22, 2022. Unbeknownst to E5, on June 1, 2023, after the '658 Patent duly issued, Premiere anonymously through counsel filed a Request for *Ex Parte* Reexamination of the '658 Patent with the USPTO, challenging the validity of the '658 Patent. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶42. Despite Premiere's attempt to strike down the '658 Patent, with minor claim amendments to the '658 Patent made by E5's predecessor, SPI, the USPTO issued a Reexamination Certificate on February 9, 2024, re-confirming the validity of the pending claims of the '658 Patent.

33. Despite Premiere's attempt to invalidate the '658 Patent before the USPTO, the validity of the '658 Patent has been twice confirmed by the USPTO.

34. The patent application which ultimately issued as the '823 Patent was U.S. Patent Application No. 18/114,214 (the "'214 Application").

35. The '214 Application was filed on February 24, 2023 and, at the time of filing, inadvertently claimed priority to a patent application which had gone abandoned. The USPTO issued a Notice of Allowance for the '214 Application on October 16, 2023. However, on December 12, 2023 Premiere, anonymously through counsel, sent E5's predecessor's attorney of record a letter demanding that the '214 Application be withdrawn from issue or expressly

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abandoned. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶91. SPI promptly withdrew the '214 Application from issuance, corrected the priority claims of the '214 Application, and a subsequent Notice of Allowance was issued on January 22, 2024.

36. Despite Premiere's anonymous actions to subvert each of the '658 Patent and the '823 Patent at the USPTO, both the '658 Patent and the '823 Patent were duly issued by the USPTO and are valid.

37. Around the time of Premiere's anonymous actions, E5 became aware of Premiere's marketing of a nano silica-based concrete admixture. Premiere was manufacturing (or having manufactured) and offering for sale nano silica-based admixture products that were essentially "copies" of E5 products. Premiere claimed these products to be the same as E5's products but for half the cost. Premier has also sought to buy or source colloidal silica products from E5's supplier.

38. In early 2024, Mr. Shetterley requested a meeting with representatives of Premiere to discuss a potential business arrangement between the parties. E5 was seeking to determine whether there was any opportunity for a mutually-beneficial arrangement with Premiere, including potentially where it might sell E5 products in place of Premiere's infringing products. Representatives of E5 believed the meeting was cordial and the parties agreed to meet again within the next several weeks.

39. After the meeting, however, Premiere increased its efforts to compete with E5, directly targeting E5's customers, representing that Premiere was selling a product equivalent to E5 products but cheaper, and also publishing and circulating marketing materials suggesting that E5 was dishonest about the benefits of nano silica in concrete.

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40. As a result of Premiere's activities, on April 3, 2024, E5 sent a cease-and-desist letter to Premiere informing Premiere that its sales and offers for sales of certain concrete products, including the Ultrafinish 1L product, infringe the '658 Patent and '823 Patent. The letter informed Premiere of E5 patents, that E5 was aware Premiere supplied nano silica-based admixture products to ready-mix companies, and that E5 representatives personally witnessed the dosing and mixing of those admixture products within concrete and the placement of that concrete. The letter also stated that E5 testing showed use of Premiere's Ultrafinish 1L product infringed '658 and '823 Patents. The letter demanded Premiere refrain from marketing and selling nano silica-based concrete admixtures that infringed E5's patents and requested Premiere confirm, within ten days, its intent to not infringe E5's intellectual property rights.

41. On April 11, 2024, less than ten days after E5's letter, Premiere filed a declaratory judgment action in the Western Division of the Northern District of Ohio against E5, alleging, among other things, that the '658 Patent and '823 Patent were invalid and unenforceable. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1. As Premiere had twice already tried and failed to invalidate the E5 patents on different grounds, the complaint was an additional attempt to invalidate, this time based upon conclusory statements made "on information and belief" as a result of several old Facebook and LinkedIn posts. The complaint also alleged that the Ultrafinish 1L product did not meet the average silica particle sizes or the surface area of silica particles claimed in either the '658 Patent or the '823 Patent.

42. After lengthy negotiations between the parties, on October 18, 2024, E5 and Premiere entered into a settlement agreement and jointly moved to dismiss the case and enter a stipulated order of dismissal. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 12. The settlement agreement between the parties remains confidential.

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43. On October 21, 2024, the case was dismissed with prejudice pursuant to the stipulated order of dismissal. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 13. As part of the stipulation, Premiere agreed not to challenge, directly or through a third party, the validity or enforceability of the '658 Patent or '823 Patent in any action or proceeding in any court or forum. E5 agreed to not sue any party for infringement of the '658 Patent or '823 Patent based on the making, using, selling, offering for sale, or importing into the United States the Ultrafinish 1L product, provided that the Ultrafinish 1L product does not include (and is not modified to include) a quantity of amorphous silica wherein the average silica particle size is in the range from 1 to 55 nanometers and/or wherein the surface area of the silica particles is in the range of from about 300 to about 900 m^2/g .

44. The dismissal order also required that the District Court for the Northern District of Ohio, Western Division, retain jurisdiction over the enforcement of the order and the settlement agreement, the settlement agreement being incorporated by reference in full into the dismissal order. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 13.

45. Despite the agreement between the parties, after the dismissal of the prior case, Premiere has continued and continues to market its Ultrafinish 1L product as the same as E5 products, such as E5's Internal Cure, for less cost.

46. Premiere has not differentiated Ultrafinish 1L from E5's products, such as E5's Internal Cure and Liquid Fly Ash.

47. Since the dismissal of the prior litigation, Premiere has not issued marketing or advertising materials indicating that Ultrafinish 1L is different from E5's Products, such as E5's Internal Cure and Liquid Fly Ash.

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48. Since the dismissal of the prior litigation, Premiere has not issued marketing or advertising materials, such as safety data sheets, indicating that Ultrafinish 1L contains non-crystalline silica having an average silica particle size outside the range of 1 to 55 nanometers.

49. Since the dismissal of the prior litigation, Premiere has not issued marketing or advertising materials, such as safety data sheets, indicating that Ultrafinish 1L contains non-crystalline silica having a surface area of the silica particles outside the range of from 300 to about 900 m²/g.

50. E5's Internal Cure includes a quantity of amorphous silica wherein the average silica particle size is in the range from 1 to 55 nanometers.

51. E5's Internal Cure is intended to be used in processes for the preparation of concrete installations as claimed in the '658 Patent. E5's Internal Cure is intended to be used in processes for the preparation of a concrete mixture in a Ready-mix and processes for the preparation of a concrete installation as claimed in the '823 Patent.

52. On information and belief, Premiere's marketing and advertisements indicating that Premiere's products are the same as E5's products are admissions that Premiere's products, such as Ultrafinish 1L, include a quantity of amorphous silica wherein the average silica particle size is in the range from 1 to 55 nanometers and/or a quantity of amorphous silica wherein the surface area of the silica particles is in the range of from about 300 to about 900 m²/g.

53. On information and belief, Premiere's marketing and advertisements that Premiere's products are the same as E5's products are admissions that Premiere's products, such as Ultrafinish 1L, infringe and are intended to be used in manners infringing the '658 Patent and '823 Patent.

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54. Since the order dismissing Premiere's complaint, upon information and belief, Premiere has been making, using, selling, importing, and/or offering for sale Ultrafinish 1L products that contain amorphous silica wherein the average silica particle size is in the range from 1 to 55 nanometers.

55. On information and belief, Ultrafinish 1L includes a quantity of amorphous silica having an average silica particle size and/or a surface area of the particles withing the ranges carved out in the dismissal order of the prior litigation. As such, the filing of this action does not violate E5's agreement not to sue any party for infringement of the '658 Patent or the '823 Patent based on the making, using, selling, offering for sale, or importing into the United States the Ultrafinish 1L product.

56. The confidential settlement agreement between E5 and Premiere includes a number of mutual covenants upon which settlement of the prior litigation was contingent. On information and belief, Premiere's deliberate actions and purposeful failure to take agreed upon actions after the dismissal of the prior litigation represent material breaches of the confidential settlement agreement between the parties.

57. Premiere has also attempted to poach E5's customers, including customers located in Indiana. E5 has lost customers due to Premiere's marketing, advertising its products as being the same as E5 but for half the cost. For example, K&L Readymix has replaced E5's products with Premiere's Ultrafinish 1L due to Premiere's representations that it is the same as E5 Internal Cure but cheaper.

58. Premiere has also developed a comprehensive scheme to target E5's customers customers to whom E5 dedicated significant time and resources to demonstrate the benefits of nano silica-based concrete—and specifically undercut E5 once the customers had accepted the

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benefits of nano silica-based concrete. For example, based upon information and belief, Speedway Redi Mix, a long-time customer of E5, has also begun testing Ultrafinish 1L. Additionally, Premiere has also approached the Indiana Department of Transportation (INDOT), which has written express use of E5 Internal Cure into several construction memos, claiming that Ultrafinish 1L can do the same things as E5 Internal Cure.

59. E5 and its customers have been attending conferences at which Premiere is also present and marketing Ultrafinish 1L and E5 is scheduled to attend several more in the near term, including the Annual IRMCA Short Course Conference beginning January 12, 2025.

60. As a result of Premiere's infringement of the Asserted Patents, Premiere's heightened and concerted efforts to target E5 Customers, Premiere's failure to adhere by the terms of the settlement agreement, and Premiere's breach of its representations in the settlement agreement, and further to give notice to Premiere of its infringement prior to the conference occurring on January 12 and other upcoming conferences and trade shows, E5 was left with no choice but to file the instant action.

COUNT I: INFRINGEMENT OF THE '658 PATENT

61. E5 repeats, realleges, and incorporates by reference the allegations contained in the previous paragraphs of this Complaint as through fully set forth herein.

62. The '658 Patent is presumed to be valid under the U.S. patent laws.

63. Defendant, by and through its agents, officers, directors, resellers, retailers, employees, and servants, have and are currently infringing the '658 Patent by making, using, offering to sell, selling, exporting, and importing into the United States the Ultrafinish 1L product, which embodies claims set forth in the '658 Patent, and by directing and instructing

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others to prepare concrete installations in a manner which embodies claims set forth in the '658 Patent.

64. The following illustrates non-limiting examples of Defendant's infringement of the '658 Patent based on E5's current information and belief of Ultrafinish 1L. It does not set forth all of E5's infringement theories. Ultrafinish 1L and its instructed uses infringe other claims set forth in the '658 Patent, which will be disclosed in forthcoming infringement contentions under this District's Local Patent Rules. E5 makes this preliminary and exemplary identification of infringement claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to amend, supplement, and revise its infringement theories upon more information becoming available through formal discovery and this Court completing its claim construction proceedings.

65. Claim 1 of the '658 Patent states:

A process for the preparation of a concrete installation, said process comprising the steps of:

A) creating a concrete mix from components, said components comprising each of the following:

a) a quantity of dry cement mix, said cement mix characterized by:

i) a manufacturer suggested water/cement ratio value; wherein said suggested
ratio falls in the range of from about 0.35 to about 0.65; and whereupon combination with
b), the water/cement ratio is greater than the value corresponding to about 10% less than
the suggested value and not greater than the value corresponding to about 30% greater
than the suggested value;

or

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ii) manufacturer suggested water/cement ratio range, having an upper value and a lower value, and whereupon combination with b) below, the water/cement ratio is greater than the value corresponding to about 10% less than of the lower value and less than the value corresponding to about 30% greater than the upper value;

or

iii) an amount such that, whereupon combination with b) below, the water/cement ratio is in the range of from about 0.35 to 0.65;

b) a quantity of water,

c) a quantity of amorphous silica in the range of from about 0.1 to about 7.0 ounces per hundredweight of cement in a); wherein the average silica particle size is in the range of from 1 to 55 nanometers and/or wherein the surface area of the silica particles is in the range of from about 300 to about 900 m^2/g ;

d) a quantity of aggregate and/or a quantity of sand in the range of from about 400 to about 700 wt % bwoc;

wherein the amorphous silica is dispersed in the concrete mix without using a superplasticizer; and

B) wherein the water of b) is added in its entirety or in portions comprising an initial portion, comprising at least about 20 wt % of the quantity of water, and a tailwater portion; wherein the initial portion of water is combined with a) and the components of d) to form a first mix; and wherein the amorphous silica is added to the first mix to form a second mix;

AND

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wherein the tailwater is 1) added to the first mix or 2) added to the second mix; or 3) is co-added with the amorphous silica to the first mix, wherein the amorphous silica and the tailwater are, optionally, added optionally intercombined; and wherein 1) the first mix is agitated for a time t_{11} prior to the addition of the tailwater, for a time t_{12} after the addition of the tailwater but before the addition of the amorphous silica, and for a time t_{13} after the addition of the amorphous silica; or 2) the first mix is agitated for a time t_{21} prior to the addition of the amorphous silica, for a time t_{22} after the addition of the amorphous silica but before the addition of the tailwater, and for a time t_{23} after the addition of the amorphous silica and the tailwater, and for a time t_{31} prior to co-addition of the amorphous silica and the tailwater, and whereupon the concrete mix is then agitated for a time t_{32} ;

OR

C) wherein the quantity of water is added to a) and the components of d) to form a mix, whereupon said mix is agitated for a time t_a prior to the addition of the amorphous silica, whereupon the concrete mix is then agitated for a time t_b ; and

D) pouring the concrete mix of B) or C) to form a concrete installation;

wherein t_{11} is in the range of from about 2 minutes to about 8 minutes, t_{12} is in the range of from about 0.5 to about 4 minutes, t_{13} is in the range of from about 2 minutes to about 10 minutes, t_{21} is in the range of from about 2 minutes to about 8 minutes, t_{22} is in the range of from about 0.5 minutes to about 2 minutes, t_{23} is in the range of from about 2.5 minutes to about 2 minutes, t_{23} is in the range of from about 2 minutes to about 8 minutes, t_{31} is in the range of from about 2 minutes to about 8 minutes, t_{31} is in the range of from about 2 minutes to about 8 minutes, t_{32} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes, t_{31} is in the range of from about 2 minutes to about 10 minutes about 2 minutes to

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of from about 2 minutes to about 8 minutes and t_b is in the range of from about 2 minutes to about 10 minutes.

66. Ultrafinish 1L infringes at least claim 1 of the 658 Patent.

67. Ultrafinish 1L is used in a process for the preparation of a concrete installation. For example, Premiere advertises Ultrafinish 1L for use in concrete installations as part of a process for preparing a concrete installation. *See* Exhibits 4-5.

68. Ultrafinish 1L is used to create a concrete mix from components including a quantity of dry cement mix, a quantity of water, a quantity of amorphous silica, and a quantity of aggregate and/or a quantity of sand. For example, Premiere advertises Ultrafinish 1L as and/or as a component of a dry cement mix. *See* Exhibits 4-5. On information and belief, cement mixes are known to include a quantity of dry cement mix, a quantity of water, and a quantity of aggregate and/or a quantity of sand and are known to be mixed within a Ready-mix. Ultrafinish 1L includes "amorphous silica" and/or "colloidal silica" that is amorphous and is intended to be mixed with dry cement mix, water, and aggregate and/or sand. *See* Exhibits 4, 5, 8, 9.

69. Ultrafinish 1L is intended to be used with a quantity of dry cement mix as recited in claim 1 of the '658 Patent.

70. On information and belief, users applying and following industry standards to prepare a concrete mixture containing Ultrafinish 1L would provide a quantity of dry cement mix and a quantity of water with a manufacturer suggested water/cement ratio value in the range of from about 0.35 to about 0.65.

71. On information and belief, Premiere does not instruct users of Ultrafinish 1L against combining Ultrafinish 1L with a quantity of dry cement mix.

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72. The Ultrafinish 1L product is mixed with a quantity of water. For example, Premiere instructs users in its product data sheet as follows: "For best results, UltraFinishTM 1L should be introduced with final batch water." *See* Exhibits 6-7. Premiere also instructs users that "Admixtures should not come in contact with any dry cementitious material." *See* Exhibit 6.

73. The Ultrafinish 1L product includes a quantity of amorphous silica, wherein the average silica particle size is in the range of from 1 to 55 nanometers and/or wherein the surface area of the silica particles is in the range of from about 300 to about 900 m²/g, and is intended to be dosed in the range of from about 0.1 to about 7.0 ounces per hundredweight of cement. For example, Ultrafinish 1L includes "amorphous silica" and/or "colloidal silica" that is amorphous. *See* **Exhibit 4** ("colloidal silica"); **Exhibit 5** at 1, **Exhibit 8** at 1; *see also* **Exhibit 9** ("Non-crystalline silica"). For example, Premiere advertises that "Ultrafinish 1L is a colloidal silica admixture that improves concrete performance." *See* **Exhibits 4-5**. Premiere instructs users to dose Ultrafinish 1L "at a dosage rate of 4 oz/cwt of cementitious material. (260 mL/100kg)." *See* **Exhibits 6-7**.

74. Upon information and belief, the Ultrafinish 1L product has an average silica particle size of 1 to 55 nanometers.

75. On information and belief, the quantity of amorphous silica in Ultrafinish 1L is intended to be used in an amount from about 0.1 to about 7.0 ounces per hundredweight of cement.

76. In 2023 and 2024, an employee or representative of Premiere requested supply of colloidal nano silica product that consisted of the following formulation: "Half of the particles are 10-15 nm with a specific surface area of 180-250 m2/g. The other half of the particles are 70-115 nm with a specific surface area of 25-100 m2/g." *See* **Exhibit 10**.

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77. Premiere has and continues to market and advertise Ultrafinish 1L as being the same as E5's Internal Cure but for less cost. On information and belief, by Premiere's marketing and advertising, Premiere admits that Ultrafinish 1L includes a quantity of amorphous silica which is intended to be used in the range of from about 0.1 to about 7.0 ounces per hundredweight and wherein the average particle size of the amorphous silica is in the range of from about 1 to about 55 nanometers and/or wherein the surface area of the particles of the amorphous silica is in the range of from about 300 to about 900 m²/g.

78. Ultrafinish 1L is intended to be used with a quantity of aggregate and/or sand in the range of from about 400 to about 700 wt% bwoc. For example, it is common industry practice to mix dry cement mix or powder and water with aggregate and/or sand for the production of standard concrete mixtures. It is also common industry practice to mix dry cement mix with aggregate and/or sand in the range of from about 400 to about 700 wt% bwoc.

79. On information and belief, Premiere does not instruct users of Ultrafinish 1L against combining Ultrafinish 1L with aggregate and/or sand.

80. It is well-known in the concrete industry that specific preparation steps, sequences, mixing durations, and mixing concentrations must be controlled and followed for admixture products to work as intended.

81. Premiere directs and controls users in their use of Ultrafinish 1L according to procedures and mixtures provided by Premiere. For example, Premiere's technical materials for Ultrafinish 1L recite that "Proper mixing and proportioning of mixes must be incorporated." *See* **Exhibit 6.** Premiere's technical materials also provide, "Contact your technical sales representative before dosing outside of recommended ranges or for assistance with specialty applications" and "In all cases, consult the safety data sheet prior to use." *See* **Exhibit 6**. The

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technical materials also provide that "Premiere Concrete Admixtures is not responsible for incorrect use of UltrafinishTM 1L." *See* **Exhibit 6**.

82. The amorphous silica in Ultrafinish 1L is able and intended to be dispersed in the concrete mixture without using a superplasticizer.

83. On information and belief, the Ultrafinish 1L product does not include a superplasticizer and is essentially superplasticizer-free.

84. On information and belief, Premiere does not instruct users to disperse amorphous silica of the Ultrafinish 1L product in a concrete mix with a superplasticizer.

85. On information and belief, Premiere does not instruct users to use a superplasticizer in or with the Ultrafinish 1L product.

86. On information and belief, users of Ultrafinish 1L do not use Ultrafinish 1L with a superplasticizer to disperse amorphous silica.

87. Ultrafinish 1L is intended to be used in a process where the water is added in its entirety or in portions comprising an initial portion, consisting of at least about 20 wt % of the quantity of water, and a tailwater portion, wherein the initial portion of water is combined with the dry cement mix and the aggregate and/or sand to form a first mix and wherein the Ultrafinish 1L containing the amorphous silica is mixed with said first mix to form a second mix.

88. Ultrafinish 1L is intended to be mixed with the dry cement mix, water, and aggregate and/or sand as recited in claim 1 of the '658 Patent.

89. On information and belief, the water is mixed with the quantity of dry cement mix and the quantity of aggregate and/or sand and mixed for a first period of time prior to the addition of the amorphous silica included in the Ultrafinish 1L. Upon information and belief, generally this time period is in the range of about 2 minutes to about 8 minutes as this timing is

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standard industry practice. For example, it is common industry practice to load the dry cement mix, water, and aggregate and/or sand in a mixing truck and mix the components at the readymix plant and while in transit to a job location.

90. Ultrafinish 1L is intended to be added to the mixture of water, dry cement mix, and aggregate and/or sand and mixed for a second period of time. On information and belief, the Ultrafinish 1L product is intended to be used with tailwater as claimed in the '658 Patent. For example, Premiere instructs users to add or otherwise include the Ultrafinish 1L product with tailwater. As part of Premiere's sales materials, Premiere advocates "For best results, UltrafinishTM 1L should be introduced with final batch water." *See* Exhibit 6.

91. On information and belief, the tailwater and amorphous silica of Ultrafinish 1L are intended to be mixed with the first mix for a period of time between about 2 minutes and about 10 minutes.

92. Premiere instructs users to use Ultrafinish 1L "at a dosage rate of 4 oz/cwt of cementitious material. (260 mL/100kg)." *See* <u>Exhibits 6-7</u>. Premiere instructs users that "Admixtures should not come in contact with any dry cementitious material." *See* <u>Exhibit 6</u>.

93. Premiere advertises that with Ultrafinish 1L, "No jobsite water addition is needed to enhance concrete workability." *See* **Exhibit 7**. Water added on a jobsite is not considered "tailwater."

94. The concrete mixture containing Ultrafinish 1L is intended to be poured to form a concrete installation. For example, Premiere advertises that "Ultrafinish 1L makes concrete easier to place and finish. In addition, it promotes hardened properties similar to topically cured concrete." <u>Exhibits 4-5</u>. Premiere advertises the benefits of Ultrafinish as including: "Retain surface moisture," "Reduce re-tempering," "Minimize over-finishing," "Produce lower w/c ratio

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mixes that are workable," and "Improve finishability across all mix designs." *Id.* Premiere also advertises that "Ultrafinish 1L puts finishers in control by retaining surface moisture and minimizing evaporation." *Id.* Other Premiere promotional materials also tout that Ultrafinish 1L can "Eliminate topical curing." *See* Exhibits 4.

95. Premiere also directs users that "Additional admixtures must be batched at separate intervals and should not come in direct contact with any other admixture until they are mixed in the concrete batch. Admixtures should not come into contact with any dry cementitious material." **Exhibit 6**.

96. Ultrafinish 1L is intended to be used in a process and under the direction and control of Premiere in a manner which includes all the elements of claim 1 of the '658 Patent and therefore infringes claim 1 of the '658 Patent.

97. Claim 11 of the '658 Patent is a process claim that is similar to claim 1 described above. Premiere's Ultrafinish 1L and Premiere's direction and control over users regarding the use of Ultrafinish 1L similar infringe claim 11 of the '658 Patent for similar reasons as those stated above.

98. On information and belief, Premiere has been and still is directly infringing at least claims 1 and 11 of the '658 Patent, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a) by: making, selling, and offering for sale the Ultrafinish 1L product; using, testing, and demonstrating the Ultrafinish 1L product; and directing and/or controlling the Ultrafinish 1L users to perform the mixing steps outlined in instructions provided by Premiere.

99. On information and belief, users of Premiere's Ultrafinish 1L have been and still are directly infringing at least claims 1 and 11 of the '658 Patent, either literally or under the

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doctrine of equivalents, under 35 U.S.C. § 271(a) by using Ultrafinish 1L as directed and/or instructed by Premiere.

100. On information and belief, Premiere has been and still is indirectly infringing the '658 Patent under 35 U.S.C. § 271(b) by actively inducing direct infringement by customers who use Ultrafinish 1L through its advertising, marketing, sale, offer for sale and instruction of its concrete installations while Premiere had full knowledge E5's patents, including the '658 Patent. Premiere knew or should have known that its actions would induce direct infringement of the '658 Patent by others and intended that its actions would induce direct infringement by others. For example, Premiere has developed a routine of systematically monitoring E5's intellectual property, including E5's issued patents and patent applications pending before the USPTO. Premiere also specifically challenged the validity of the '658 Patent before the USPTO. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶42.

101. Premiere has been and still is indirectly infringing the '658 Patent under 35 U.S.C. § 271(c) by contributory infringement by providing its Ultrafinish 1L, a non-staple article of commerce, to others for use in an infringing method with full knowledge E5's patents, including the '658 Patent, and knowledge that Ultrafinish 1L is used as a material part of the claimed inventions of the '658 Patent. For example, Premiere has developed a routine of systematically monitoring E5's intellectual property, including E5's issued patents and patent applications pending before the USPTO, and introducing products based upon E5's products. Premiere also specifically challenged the validity of the '658 Patent before the USPTO. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶42. Upon information and belief, Premiere has induced and contributed to the infringement of the '658

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patent when customers of Premiere mix and/or add Ultrafinish 1L with tailwater as instructed by Premiere.

102. Premiere will continue to infringe unless enjoined by this Court.

103. On information and belief, Premiere has knowingly and willfully infringed the '658 Patent.

104. Premiere has been aware of the '658 Patent since at least June 1, 2023 when Premiere anonymously through counsel filed a Request for *Ex Parte* Reexamination of the '658 Patent with the USPTO, challenging the validity of the '658 Patent. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶42.

105. Premiere has been aware of its infringement of the '658 Patent at least as early as April 3, 2024. Defendant has made no effort to avoid infringement despite knowing that its actions were consciously wrongful and deliberate. Additionally, Defendant falsely represented to E5 that it did not infringe the '658 Patent.

106. As a result of Premiere's infringement of the '658 Patent, E5 has suffered monetary damages in an amount not yet determined, has suffered irreparable harm, and will continue to suffer irreparable harm in the future unless Premiere's infringing activities are enjoined by this Court. For example, Premiere has and continues to target and solicit E5's customers, offering Ultrafinish 1L for sale—simply following where E5 has paved the way. Upon information and belief, Premiere advertises and offers its Ultrafinish 1L for sale as being substantially the same as E5's Internal Cure in an attempt to steal customers, projects, and sales from E5.

107. E5 has lost customers to Premiere due to Premiere advertising the Ultrafinish 1L product as being the same as E5's Internal Cure at half the cost. For example, K&L Readymix

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has replaced E5's products with Premiere's Ultrafinish due to Premiere's representations that it is the same as E5 Internal Cure but cheaper.

108. E5 will be greatly and irreparably harmed unless preliminary and permanent injunctions are issued enjoining Premiere and its agents, servants, employees, attorneys, representatives, and all others acting on their behalf or under their direction and control from infringing the '658 Patent.

COUNT II: INFRINGEMENT OF THE '823 PATENT

109. E5 repeats, realleges, and incorporates by reference the allegations contained in the previous paragraphs of this Complaint as through fully set forth herein.

110. The '823 Patent is in effect and presumed to be valid under the U.S. patent laws.

111. The following illustrates non-limiting examples of Defendant's infringement of the '823 Patent based on E5's current information and belief of Ultrafinish 1L. It does not set forth all of E5's infringement theories. Ultrafinish 1L and its instructed uses infringe other claims set forth in the '823 Patent, which will be disclosed in forthcoming infringement contentions under this District's Local Patent Rules. E5 makes this preliminary and exemplary identification of infringement claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to amend, supplement, and revise its infringement theories upon more information becoming available through formal discovery and this Court completing its claim construction proceedings.

112. Defendant, by and through its agents, officers, directors, resellers, retailers, employees, and servants, have and are currently infringing the '823 Patent by making, using, offering to sell, selling, exporting, and importing into the United States and the Accused Products, which embody claims set forth in the '823 Patent, and by directing and instructing

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others to prepare concrete installations in manners which embody claims set forth in the '823 Patent.

113. Claim 1 of the '823 Patent states:

A process for the preparation of a concrete mixture in a Ready-mix, said process comprising the steps of:

A) creating a concrete mix from components in the Ready-mix, said components comprising each of the following:

a) a quantity of dry cement mix, said cement mix characterized by one of:

i) a manufacturer suggested water/cement ratio value; wherein said suggested ratio value falls in the range of from about 0.35 to about 0.65; and whereupon in combination with b), the water/cement ratio is not greater than the value corresponding to about 30% greater than the suggested value;

or

ii) a manufacturer suggested water/cement ratio range, the manufacturer
suggested water/cement ratio range having an upper value and a lower value, and
whereupon combination with b) below, the actual water/cement ratio is less than about
30% greater than the upper value;

b) a quantity of water;

c) a quantity of amorphous silica, wherein the average particle size of the amorphous silica is in the range of from about 1 to about 55 nanometers and/or wherein the surface area of the particles of the amorphous silica is in the range of from about 300 to about 900 m²/g;

d) a quantity of aggregate and/or sand; and

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B) wherein the water of b) is added in its entirety or in portions comprising an initial portion, consisting of at least about 20 wt % of the quantity of water, and a tailwater portion; wherein the initial portion of water is combined with a) and the components of d) to form a first mix; and

wherein the amorphous silica is added to the first mix to form a second mix;

AND

wherein the tailwater is 1) added to the first mix or 2) added to the second mix; or 3) is co-added with the amorphous silica to the first mix, wherein the amorphous silica and the tailwater are, optionally, intercombined; and wherein 1) the first mix is agitated for a time prior to the addition of the tailwater, for a time after the addition of the tailwater but before the addition of the amorphous silica, and for a time after the addition of the amorphous silica; or 2) the first mix is agitated for a time prior to the addition of the addition of the amorphous silica, for a time after the addition of the amorphous silica but before the addition of the addition of the tailwater, and for a time after the addition of the tailwater; or 3) the first mix is agitated for a time prior to co-addition of the amorphous silica and the tailwater, and whereupon the concrete mix is then agitated for a time;

OR

C) wherein the quantity of water of b) is added to a) and the components of d) to form a first mix, agitating the first mix for a first time, adding the amorphous silica of c) and adding a tailwater portion comprising the remainder of the quantity of water of b), if any, to the first mix to form a second mix, and agitating the second mix for a second time.

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114. Ultrafinish 1L is used in a process for the preparation of a concrete mixture in a Ready-mix. A Ready-mix is a well-known term in the concrete industry referring to a typical cement mixing truck. For example, Premiere advertises Ultrafinish 1L for use in concrete installations including cement mixing trucks. *See* **Exhibits 4-5**.

115. Ultrafinish 1L is used to create a concrete mix from components including a quantity of dry cement mix, a quantity of water, a quantity of amorphous silica, and a quantity of aggregate and/or a quantity of sand in a Ready-mix. For example, Premiere advertises Ultrafinish 1L as and/or as a component of ready-mix concrete. *See* **Exhibits 6-7**. On information and belief, concrete mixtures are known to include a quantity of dry cement mix, a quantity of water, and a quantity of aggregate and/or a quantity of sand and are known to be mixed within a Ready-mix. Ultrafinish 1L includes "amorphous silica" and/or "colloidal silica" that is amorphous and is intended to be mixed with dry cement mix, water, and aggregate and/or sand. *See* **Exhibits 4, 5, 8, 9**.

116. Ultrafinish 1L is intended to be used with a quantity of dry cement mix as recited in claim 1 of the '823 Patent.

117. On information and belief, users applying and following industry standards to prepare a concrete mixture containing Ultrafinish 1L would provide a quantity of dry cement mix and a quantity of water with a manufacturer suggested water/cement ratio value in the range of from about 0.35 to about 0.65.

118. On information and belief, Premiere does not instruct users of Ultrafinish 1L against combining Ultrafinish 1L with a quantity of dry cement mix.

119. The Ultrafinish 1L product is mixed with a quantity of water. For example,Premiere instructs users in its product data sheet as follows: "For best results, UltraFinish[™] 1L

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should be introduced with final batch water." *See* <u>Exhibits 6-7</u>. Premiere also instructs users that "Admixtures should not come in contact with any dry cementitious material." *See* <u>Exhibit 6</u>.

120. The Ultrafinish 1L product includes a quantity of amorphous silica wherein the average particle size of the amorphous silica is in the range of from about 1 to about 55 nanometers and/or wherein the surface area of the particles of the amorphous silica is in the range of from about 300 to about 900 m²/g. For example, Ultrafinish 1L includes "amorphous silica" and/or "colloidal silica" that is amorphous. *See* Exhibit 4 ("colloidal silica"); Exhibit 5 at 1, Exhibit 8 at 1; *see also* Exhibit 9 ("Non-crystalline silica"). For example, Premiere advertises that "Ultrafinish 1L is a colloidal silica admixture that improves concrete performance." *See*

Exhibits 4-5.

121. On information and belief, the average silica particle size of Ultrafinish 1L is in the range of from about 1 to about 55 nanometers.

122. In 2023 and 2024, an employee or representative of Premiere requested supply of colloidal nano silica product that consisted of the following formulation: "Half of the particles are 10-15 nm with a specific surface area of 180-250 m2/g. The other half of the particles are 70-115 nm with a specific surface area of 25-100 m2/g." *See* **Exhibit 10**.

123. Premiere has and continues to market and advertise Ultrafinish 1L as being the same as E5's Internal Cure but for less cost. On information and belief, by Premiere's marketing and advertising, Premiere admits that Ultrafinish 1L includes a quantity of amorphous silica wherein the average particle size of the amorphous silica is in the range of from about 1 to about 55 nanometers and/or wherein the surface area of the particles of the amorphous silica is in the range of from about 300 to about 900 m²/g.

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124. Ultrafinish 1L is intended to be used with a quantity of aggregate and/or sand. For example, it is common industry practice to mix dry cement mix or powder and water with aggregate and/or sand for the production of standard concrete mixtures. On information and belief, Premiere does not instruct users of Ultrafinish 1L against combining Ultrafinish 1L with aggregate and/or sand.

125. It is well-known in the concrete industry that specific preparation steps, sequences, durations, and mixing concentrations must be controlled and followed for admixture products to work as intended.

126. Premiere directs and controls users in their use of Ultrafinish 1L according to procedures and mixtures provided by Premiere. For example, Premiere's technical materials for Ultrafinish 1L recite that "Proper mixing and proportioning of mixes must be incorporated." *See* **Exhibit 6.** Premiere's technical materials also provide, "Contact your technical sales representative before dosing outside of recommended ranges or for assistance with specialty applications" and "In all cases, consult the safety data sheet prior to use." *See* **Exhibit 6**. The technical materials also provide that "Premiere Concrete Admixtures is not responsible for incorrect use of UltrafinishTM 1L." *See* **Exhibit 6**.

127. Ultrafinish 1L is intended to be used in a process where the water is added in its entirety or in portions comprising an initial portion, consisting of at least about 20 wt % of the quantity of water, and a tailwater portion, wherein the initial portion of water is combined with the dry cement mix and the aggregate and/or sand to form a first mix and wherein the Ultrafinish 1L containing the amorphous silica is mixed with said first mix to form a second mix.

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128. On information and belief, the water is mixed with the quantity of dry cement mix and the quantity of aggregate and/or sand and mixed for a first period of time prior to the addition of the amorphous silica included in the Ultrafinish 1L.

129. Ultrafinish 1L is intended to be added to the mixture of water, dry cement mix, and aggregate and/or sand and mixed for a second period of time.

130. Premiere instructs users to use Ultrafinish 1L "at a dosage rate of 4 oz/cwt of cementitious material. (260 mL/100kg)." *See* Exhibits 6-7.

131. Premiere instructs users that "Admixtures should not come in contact with any dry cementitious material." *See* **Exhibit 6**.

132. On information and belief, the Ultrafinish 1L product is intended to be used with tailwater as claimed in the '658 Patent. For example, Premiere instructs users to add or otherwise include the Ultrafinish 1L product with tailwater. As part of Premiere's sales materials, Premiere advocates "For best results, Ultrafinish[™] 1L should be introduced with final batch water." *See*

<u>Exhibit 6.</u>

133. Premiere advertises that with Ultrafinish 1L, "No jobsite water addition is needed to enhance concrete workability." *See* **Exhibit 7**. Water added on a jobsite is not considered "tailwater."

134. The concrete mixture containing Ultrafinish 1L is intended to be poured to form a concrete installation. For example, Premiere advertises that "Ultrafinish 1L makes concrete easier to place and finish. In addition, it promotes hardened properties similar to topically cured concrete." <u>Exhibits 4-5</u>. Premiere advertises the benefits of Ultrafinish as including: "Retain surface moisture," "Reduce re-tempering," "Minimize over-finishing," "Produce lower w/c ratio mixes that are workable," and "Improve finishability across all mix designs." *Id*. Premiere also

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advertises that "Ultrafinish 1L puts finishers in control by retaining surface moisture and minimizing evaporation." *Id.* Other Premiere promotional materials also tout that Ultrafinish 1L can "Eliminate topical curing." *See* Exhibits 4.

135. Premiere also directs users that "Additional admixtures must be batched at separate intervals and should not come in direct contact with any other admixture until they are mixed in the concrete batch. Admixtures should not come into contact with any dry cementitious material." **Exhibit 6**.

136. Ultrafinish 1L is intended to be used in a process and under the direction and control of Premiere in a manner which includes all the elements of claim 1 of the '823 Patent and therefore infringes claim 1 of the '823 Patent.

137. Claim 13 of the '823 Patent is a process claim that is similar to claim 1 described above. Premiere's Ultrafinish 1L and Premiere's direction and control over users regarding the use of Ultrafinish 1L similarly infringe claim 13 of the '823 Patent for similar reasons as those stated above.

138. On information and belief, Premiere has been and still is directly infringing at least claims 1 and 13 of the '823 Patent, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a) by: making, selling, and offering for sale the Ultrafinish 1L product; using, testing, and demonstrating the Ultrafinish 1L product; and directing and/or controlling the Ultrafinish 1L users to perform the mixing steps outlined in instructions provided by Premiere.

139. On information and belief, users of Premiere's Ultrafinish 1L have been and still are directly infringing at least claims 1 and 13 of the '823 Patent, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a) by using Ultrafinish 1L as directed and/or instructed by Premiere.

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140. On information and belief, Premiere has been and still is indirectly infringing the '823 Patent under 35 U.S.C. § 271(b) by actively inducing direct infringement by customers who use Ultrafinish 1L through its advertising, marketing, sale, offer for sale and instruction of its concrete installations while Premiere had full knowledge E5's patents, including the '823 Patent. Premiere knew or should have known that its actions would induce direct infringement of the '823 Patent by others and intended that its actions would induce direct infringement by others. For example, Premiere has developed a routine of systematically monitoring E5's intellectual property, including E5's issued patents and patent applications pending before the USPTO. Premiere also specifically demanded E5's predecessor's attorney of record a letter demanding that the '214 Application be withdrawn from issue or expressly abandoned at the USPTO before the '823 Patent issued. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶42.

141. Premiere has been and still is indirectly infringing the '823 Patent under 35 U.S.C. § 271(c) by contributory infringement by providing its Ultrafinish 1L, a non-staple article of commerce, to others for use in an infringing method with full knowledge E5's Patents, including the '823 Patent, and knowledge that Ultrafinish 1L is used as a material part of the claimed inventions of the '823 Patent. For example, Premiere has developed a routine of systematically monitoring E5's intellectual property, including E5's issued patents and patent applications pending before the USPTO. Premiere also specifically demanded E5's predecessor's attorney of record a letter demanding that the '214 Application be withdrawn from issue or expressly abandoned at the USPTO before the '823 Patent issued. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶42. Upon information and

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belief, Premiere has induced and contributed to the infringement of the '823 patent when customers of Premiere mix and/or add Ultrafinish 1L with tailwater as instructed by Premiere.

142. Premiere will continue to infringe unless enjoined by this Court.

143. On information and belief, Premiere has knowingly and willfully infringed the'823 Patent.

144. Premiere has been aware of the '214 Application, which ultimately issued as the '823 Patent since at least December 12, 2023 when Premiere, anonymously through counsel, sent E5's predecessor's attorney of record a letter demanding that the '214 Application be withdrawn from issue or expressly abandoned. *Premiere Concrete Admixtures, LLC v. E5 Incorporated*, 3:24-cv-00654, Dkt. No. 1, ¶91.

145. Premiere has been aware of its infringement of the '823 Patent at least as early as April 3, 2024. Defendant has made no effort to avoid infringement despite knowing that its actions were consciously wrongful and deliberate. Additionally, Defendant falsely represented to E5 that it did not infringe the '823 Patent.

146. As a result of Premiere's infringement of the '823 Patent, E5 has suffered monetary damages in an amount not yet determined, has suffered irreparable harm, and will continue to suffer irreparable harm in the future unless Premiere's infringing activities are enjoined by this Court. For example, Premiere has and continues to target and solicit E5's customers, offering Ultrafinish 1L for sale—simply following where E5 has paved the way. Upon information and belief, Premiere advertises and offers its Ultrafinish 1L for sale as being substantially the same as E5's Internal Cure in an attempt to steal customers, projects, and sales from E5.

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147. E5 has lost customers to Premiere due to Premiere advertising the Ultrafinish 1L product as being the same as E5's Internal Cure at half the cost. For example, K&L Readymix has replaced E5's products with Premiere's Ultrafinish due to Premiere's representations that it is the same as E5 Internal Cure but cheaper.

148. E5 will be greatly and irreparably harmed unless preliminary and permanent injunctions are issued enjoining Premiere and its agents, servants, employees, attorneys, representatives, and all others acting on their behalf or under their direction and control from infringing the '823 Patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff E5 Incorporated respectfully requests judgment in its favor and against Defendant Premiere Concrete Admixtures LLC as follows:

- A. An order preliminarily, and a judgment permanently, enjoining and restraining Defendant, its officers, agents, subsidiaries, servants, partners, employees, attorneys, and all others in active concert or participation with Defendant, from infringing any claim of the Asserted Patents or assisting, aiding, or abetting any other person or business entity in engaging in activities infringing any claim of the Asserted Patents;
- B. A judgment that Defendant has directly infringed and continues to infringe the Asserted Patents;
- C. A judgment that Defendant has indirectly infringed by contributory infringement and/or inducement, and continues to indirectly infringe the Asserted Patents;
- D. A declaration that the Asserted Patents are valid and enforceable;

- E. A judgment that Defendant's infringement of the Asserted Patents has been willful;
- F. A judgment against Defendant awarding E5 damages suffered by E5 pursuant to 35 U.S.C. § 284 on account of Defendant's infringements of the Asserted Patents;
- G. A judgment that Defendant's infringement was willful and egregious and that E5's damages be trebled or enhanced pursuant to 35 U.S.C. § 284 and that punitive damages be assessed against Defendant;
- H. A judgement that this is an exceptional case and an award of reasonable attorney fees to E5 under 35 U.S.C. § 285;
- I. A judgment that Defendant be directed to pay E5's costs incurred herein; and
- J. Such other and further relief as the Court deems just and equitable.

DEMAND FOR JURY TRIAL

Pursuant to Fed. R. Civ. P. Rule 38(b), E5 respectfully demand a trial by jury of all issues triable as of right to a jury.

Dated: January 10, 2025

Respectfully submitted,

<u>/s/ John S. Cipolla</u> John S. Cipolla (0043614) jcipolla@calfee.com John L. Reulbach III (0096837) jreulbach@calfee.com Calfee, Halter & Griswold LLP 1405 East Sixth Street Cleveland, Ohio 44114 Tel. 216.622.8200 / Fax 216.241.0816

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Of Counsel for Defendant E5 Incorporated