Roto-Mix LLC v. Sioux Automation Center Inc

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IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF IOWA

WESTERN DIVISION

ROTO-MIX LLC,

Plaintiff, No. 16-CV-4116-LRR vs. ORDER SIOUX AUTOMATION CENTER, INC.,

Defendant. SIOUX AUTOMATION CENTER, INC.,

Counter Claimant, vs. ROTO-MIX LLC,

Counter Defendant.

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I. INTRODUCTION This matter comes before the court for construction of the disputed claims of the two patents-in-suit: (1) Animal Feed and Industrial Mixer Having Staggered Rotor Paddles and Method for Making and Using Same, U.S. Patent No. 7,566,166 (filed June 26, 2006) (the "'166 Patent") (docket no. 26-1); and (2) Animal Feed and Industrial Mixer Having Staggered Rotor Paddles, U.S. Patent No. 8,177,419 (filed July 1, 2009) (the "'419 Patent") (docket no. 26-2).

II. RELEVANT FACTUAL AND PROCEDURAL BACKGROUND Plaintiff Roto-Mix, LLC ("Roto-Mix") is a Kansas limited liability company with its principal place of business in Dodge City, Kansas. See Complaint (docket no. 2) ¶ 2. On June 26, 2006, Roto-Mix applied for the '166 Patent. See '166 Patent. The '166 Patent describes "an animal feed and industr ial mixer for mixing an animal feed mixture and other industrial mixtures." '166 Patent col. 2 l. 39-41. On July 28, 2009, the United States Patent and Trademark Office issued the '166 Patent. See id. On July 1, 2009, shortly before the '166 Patent was issued, Roto-Mix filed a continuation application. See '419 Patent. On May 15, 2012, the continuation application was issued as the '419 Patent.

2 Id.

On September 21, 2016, Roto-Mix filed the present action against Defendant Sioux Automation Center, Inc. ("SAC"). SAC is an Iowa corporation with its principal place of business in Sioux Center, Iowa. See Complaint ¶ 3. Roto-Mix alleges that SAC manufactures, uses and sells products which infringe on the '166 Patent and the '419 Patent. See id. ¶¶ 5-22. Roto-Mix alleges that it has been damaged by SAC's infringement and will continue to be damaged unless SAC is permanently enjoined from infringing its patents. See id. ¶¶ 10, 18. Roto-Mix also seeks damages for the alleged infringements. SAC denies that it has infringed either the '166 Patent or the '419 Patent. See Answer and Counterclaims (docket no. 9) at 2-3. SAC also asserts several counterclaims against Roto-Mix. See id. at 5-7.

On July 3, 2017, the parties filed a "Joint Claim Construction Statement" ("Joint Statement") (docket no. 24) identifying a ll disputed claim terms and providing each parties' proposed construction. On July 31, 2017, Roto-Mix filed its "Opening Brief on Claim Construction Issues" ("Roto-Mix Brief") (docket no. 25). On that same date, SAC filed its "Opening Claim Construction Brief" ("SAC Brief") (docket no. 26). On August 14, 2017, Roto-Mix filed a Rebuttal ("Roto-M ix Rebuttal") (docket no. 28). On August 17, 2017, SAC filed a Rebuttal ("SAC Rebuttal") (docket no. 30).

On October 2, 2017, the court held a hearing pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996). See October 2, 2017 Minute Entry (docket no. 32); see also Markman, 517 U.S. at 384 (stating that claim construction is a question of law for the court), aff'g , 52 F.3d 967 (Fed. Cir. 1995) (en banc).

The court finds that the disputed claims are fully submitted and ready for construction.

III. SUBJECT MATTER JURISDICTION The court has original jurisdiction of civil actions "arising under any Act of

3 Congress relating to patents." 28 U.S.C. § 1338(a). Roto-Mix's Complaint and SAC's Counterclaims raise various claims of patent infringement, in violation of 35 U.S.C. § 271. Therefore, the court has subject-matter jurisdiction pursuant to 28 U.S.C. § 1338(a).

IV. PRINCIPLES OF CLAIM CONSTRUCTION A patent is a legal document that describes the exact scope of an invention to "secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them." Markman, 517 U.S. at 373 (alterations in original) (citation omitted). By statute, a patent consists of two different elements: (1) "one or more 'claims,' which 'particularly poin[t] out and distinctly clai[m] the subject matter which the applicant regards as his invention[;]'" and (2) the "specification," which describes the invention "in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same." Id. (citing 35 U.S.C. § 112). "It is a 'bedrock principle' of patent law that 'the claims of a patent defi ne the invention to which the patentee is entitled the right to exclude.'" Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The goal of claim construction is to give proper meaning and scope to claim language. See Abtox, Inc. v. Exitron Corp., 122 F.3d 1019, 1023 (Fed. Cir. 1997).

"[T]here is no magic formula or catechism for conducting claim construction." Phillips, 415 F.3d at 1324. However, the Federal Circuit Court of Appeals has developed the following general principles.

A. Claims Claim construction always starts with the language of the claim itself. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("First, we look to the words of the claims themselves . . . to define the scope of the patented invention."). "Claim terms are generally given their plain a nd ordinary meanings to one of skill in the

4 art when read in the context of the specification and prosecution history." Hill-Rom Servs., Inc. v. Stryker Corp, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (citing Phillips, 415 F.3d at 1313). "There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution." Id. (quoting Thorner v. Sony Comput. Entm't Am. LLC , 669 F.3d 1362, 1365 (Fed. Cir. 2012)). The ordinary rules of grammar and syntax also apply. See In re Hyatt, 708 F.2d 712, 714 (Fed. Cir. 1983) ("A claim must be read in accordance with the precepts of English grammar.").

"[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective

filing date of the patent application." Phillips , 415 F.3d at 1313 (citation omitted). The perspective of a person of ordinary skill in the art is "based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art." Id. In certain cases, however, the patentee may unequivocally impart a novel meaning to claim terms. See Omega Eng'g, Inc. v. Raytek Corp. , 334 F.3d 1314, 1323 (Fed. Cir. 2003) (citations omitted). "It is a well-established axiom in patent law that a patentee is free to be his or her own lexicographer and thus may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings." Hormone Research Found., Inc. v. Genentech, Inc., 904 F.2d 1558, 1563 (Fed. Cir. 1990) (citation omitted). Therefore, "it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning." Vitronics, 90 F.3d at 1582.

B. Specification The claims "must be read in view of th e specification, of which they are a part."

5 Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd , 517 U.S. 370 (1996). The specification is "the primary basis for construing the claims." Phillips, 415 F.3d at 1315 (quoting Standard Oil Co. v. Am. Cynamid Co., 774 F.2d 448, 452 (Fed. Cir. 1985)). "The close ki nship between the [specification] and the claims is enforced by the statutory requirement that the specification describe the claimed invention in 'full, clear, concise, and exact terms.'" Id. at 1316 (quoting 35 U.S.C. § 112). The Federal Circuit has summarized:

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction. Id. (quoting Renishaw PLC v. Marposs Societa' per Azioni , 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

If there is a dispute about the meaning of a claim term, the specification presents "the single best guide to the meaning of a disputed term." Vitronics, 90 F.3d at 1582. "[T]he purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so." Phillip s, 415 F.3d at 1323. It is well-settled, however, that courts should not ordinarily read a limitation into a claim from the specification. As the Federal Circuit makes clear:

[The Federal Circuit] has consistently adhered to the proposition that courts cannot alter what the patentee has chosen to claim as his invention, that limitations appearing in the specification will not be read into claims, and that interpreting what is meant by a word in a claim "is not to be confused with adding an extraneous limitation appearing in the specification, which is improper." Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1348 (Fed. Cir. 1998) (emphasis in original)

6 (citation omitted); accord KJC Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1356 (Fed. Cir. 2000)

("[A]lthough the specifications may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments." (alteration in original) (quoting Electro Med. Sys., S.A. v. Cooper Life Scis., Inc., 34 F.3d 1048, 1054 (Fed. Cir. 1994))). To avoid pitfalls, the court must remain focused "on understanding how a person of ordinary skill in the art would understand the claim terms." Phillips, 415 F.3d at 1323.

C. Prosecution History The court "should also consider the pate nt's prosecution history, if it is in evidence." Id. at 1317 (quoting Markman, 52 F.3d at 980). The prosecution history consists of the record of the patent before the PTO. See id. The prosecution history also includes the prior art cited during the examination of the patent. See id.

Although the prosecution history may assist in claim interpretation, as a general rule it may not "enlarge, diminish, or vary the limitations in the claims." Markman, 52 F.3d at 980. Moreover, the prosecution history "oft en lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317. "Nonetheless, the prosecution history can ofte n inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Id.

D. Extrinsic Evidence The claims, the specification and the patent's prosecution history comprise the so- called "intrinsic" evidence of the meaning of the claim terms. See Vitronics, 90 F.3d at 1582. The intrinsic evidence is considered the most important evidence for construing a patent. See id. Other evidence that may be considered in construing a patent is so-called "extrinsic evidence," which is "evidence [that] is external to the patent and file history,

7 such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles." Id. at 1584. For example, the court may:

consult dictionaries and technical treatises "at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." Phillips, 415 F.3d at 1322-23 (quoting Vitronics, 90 F.3d at 1584 n.6).

The Federal Circuit, however, has repeatedly cautioned district courts that, "while extrinsic evidence 'can shed useful light on the relevant art,' . . . it is 'less significant than the intrinsic record in determining "the le gally operative meaning of claim language."'" Id. at 1317 (quoting C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004)). Extrinsic evidence "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Id. at 1319. As the Federal Circuit articulated in Vitronics:

[I]n most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence. . . . The claims, specification, and [prosecution] history, rather than extrinsic evidence, constitute the public record of the patentee's claim, a record on which the public is entitled to rely. In other words, competitors are entitled to review the public record, apply the established rules of claim construction, ascertain the scope of the patentee's claimed invention and, thus, design around the claimed invention. Allowing the public record to be altered or changed by extrinsic evidence introduced at trial, such as expert testimony, would make this right meaningless. 90 F.3d at 1583 (citations omitted).

The court has discretion to admit extrinsic evidence. See Phillips, 415 F.3d at 1319. District courts are not "barred from c onsidering any particular sources or required

8 to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence." Id. at 1324. In exercising its discretion, however, the court should "keep in mind the flaws inherent in each type of evidence and assess that evidence accordingly." Id. at 1319. 1

V. ANALYSIS A. The '166 Patent (Claim 1) 1. Proposed constructions

Term Roto-Mix's Proposed

Construction

SAC's Proposed Construction ". . . each of the paddles being free from surfaces that impart axial movement in opposite directions to the mixture during rotation of the rotor shaft"

"[E]ach paddle must be free from two or more surfaces that impart axial movement in two or more opposite directions to the mixture during rotation of the rotor shaft."

"[T]he paddles must not impart axial movement in opposite directions to the mixture during rotation of the rotor shaft."

See Joint Statement at 2.

2. The parties' arguments The parties identify two issues in constructing this term. First, the parties dispute the construction of the word "each" as incor porated into the term. Roto-Mix argues that the word "'each' is used in its customary and ordinary fashion as a singular pronoun to refer to each paddle separately." Roto-Mix Rebuttal at 7. This term, therefore, should be interpreted as referring to each paddle individually and not collectively. See id. SAC,

1 Title 35 U.S.C. § 112(f) also provides for a means-plus-function or step-plus- function limitation. See Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1364 (Fed. Cir. 2000) (noting that this statute "allo ws patent applicants to claim an element of a combination functionally, without reciting structures for performing those functions"). Neither party claims that this statute applies. Therefore, the court will not address the relevant case law at this time.

9 however, contends that "each of the paddles " refers to the "collective 'paddles,' not each paddle individually" and points to sections of the specification that refer to the paddles collectively. SAC Brief at 10.

The second issue is whether "each of the paddles being free from surfaces that impart axial movement in opposite directions" limits the paddles from having any surface that imparts axial movement, or two or more surfaces that impart axial movement. Roto- Mix argues that it "did not limit its paddles to being free from surfaces that impart any axial movement." Roto-Mix Brief at 19 (em phasis omitted). Rather, the "phrase is a limitation on each paddle and requires each paddle to be free from 'surfaces ' that would otherwise impart axial movement in 'opposite direction s.'" Id. at 17 (emphasis in original). Roto-Mix contends that reading a "pluralism requirement" into this term is consistent with the specification, which states that "each paddle may 'impart a single axial direction, but not opposite directions to the materials being mixed.'" Id. at 18. SAC, alternatively, contends that the term limits the paddles from having any surface that imparts axial movement. See SAC Brief at 10. SAC contends that its interpretation is consistent with the ordinary meaning, specification and the prosecution history—in which Roto-Mix sought to distinguish its patent from what the parties refer to as the "Davis Patent,"

2 which covers a similar, but distinguishable, mixing apparatus. See id. at 10-14; SAC Rebuttal at 5-6.

3. The court's construction

a. "[E]ach" The court begins its construction by defining the term "each." The court finds that a person with ordinary skill in the art would understand "each" to refer to the paddles individually. The court notes that other sections of Claim 1 of the '166 Patent clearly refer

2 Material-Mixing Apparatus, U.S. Patent No. 3,638,920 (filed Nov. 27, 1970) (docket no. 26-3).

10 to "all of the paddles" when the patent seeks to refer to the paddles collectively, suggesting that "each" specifically denotes when the patent is referring to the paddles separately or individually. See '166 Patent at 14. The prosecution history of the '166 Patent supports this construction. The Examiner objected to Claim 18 of the originally filed '166 Patent because it used a plural verb, "include," rather than the singular, "included," in relation to the term "each of the paddles." See Initial Office Action (docket no. 25-4) at 4 ("'The method of claim 15 wherein each of the paddles include a paddle edge . . .' uses 'include' in the plural where the singular was apparently intended.

Appropriate correction is required." (alteration in original) (emphasis omitted)). This suggests that the PTO viewed the use of the term "each" as referring to each individual paddle. Finally, the court notes that extrinsic evidence supports the court's reading of the term. The dictionary defines "each" as follows: "Every (individual of a num ber) regarded or treated separately." Each, Oxford English Dictionary. SAC produced no evidence suggesting that a person with ordinary skill in the art would understand it differently.

SAC argues that the specification often refers to the paddles collectively and, thus, "each" should be interpre ted as referring to the paddles collectively. See SAC Rebuttal at 6. That the specification refers to the paddles in the plural does not prevent Claim 1 from using "each" to address the paddles individually. SAC's proposed construction of "each" twists the ordinary meaning in a wa y that is not supported by the specification or prosecution history. Accordingly, the court shall adopt Roto-Mix's proposed construction.

b. "[B]eing free from surfaces" The court next constructs the phrase "being free from surfaces that impart axial movement in opposite directions to the mixture during rotation of the rotor shaft." The court finds that the common usage of this term supports SAC's proposed construction. Roto-Mix is correct that the plural "surfaces " is used instead of the singular "surface." Despite use of the plural, a person with ordinary skill in the art would understand the

11 plural, when used in this context, to be inclusive of the singular. This is highlighted by examining this convention in other contexts; for example, in the phrase "the courtroom is free from judges that are hearing arguments." For Roto-Mix, this phrase is true so long as the courtroom does not contain two or more judges hearing arguments, that is, it is true as long as the courtroom has no judge or only a singular judge in it. For SAC, however, this phrase is true if there are not any judges hearing argument in the courtroom. SAC's construction is the common usage and Roto-Mix has not established that a person with ordinary skill in the art would understand the term according to the hyper-technical manner proposed by it.

This construction is also supported by the specification. The specification for the '166 Patent repeatedly states that the paddles are designed to "lift[] and tumbl[e]" the mixture, not to impart axial movement to the mixture. See, e.g., '166 Patent col. 2 l. 22- 25 ("[T]he paddles turning rotation of the rotor imparting only lifting and tumbling action and not imparting any axial or end to end movement with respect to the rotation of the rotor."); col. 3 l. 2-5 ("Each of the paddles is free from surfaces that impart axial movement to the feed mixer during rotation of the rotor shaft but is positioned to contribute to an improved tumbling action."); co l. 3 l. 26-29 ("[T]he rotation of the rotor shaft and paddles on the arm ends does not cause the feed mixer to move in an axial direction, but does impart a lifting and tumbling action to the mixer."). The specification also distinguishes the '166 Patent from the Da vis Patent by stating that the Davis Patent:

shows paddles that are canted with respect to the axis of [the] shaft so as to impart an axial

movement to the material being mixed. . . . In contrast, the present invention . . . has paddles that are parallel to the axis of the rotor shaft. Consequently, the paddles of the present invention lift and tumble the ingredients being mixed and do not impart an axial motion to the ingredients being mixed.

12 Id. col. 1 l. 34-46 (formatting omitted). In contrasting the Davis Patent, the specification notes that the Davis Patent depicts paddles canted so as to impart axial movement in a single direction and distinguishes the '166 Pa tent as having paddles that do not impart "an" axial movement.

3 See id. The specification's description of the paddles is illustrated by figures showing paddles that lift and tumble but do not add axial movement to the mixture. See id. fig. 2-5, 7-8. As such, the specification supports SAC's proposed construction.

The prosecution history also supports SAC's proposed construction. In a Request for Continued Examination (docket no 25-7), which Roto-Mix filed December 18, 2008, Roto-Mix again distinguished the Davis Patent:

The Davis [P]atent . . . shows axial movement which is precluded by the combination of [C]laim 1 in that each of the paddles being free from surfaces that "impart axial movement in opposite directions to the feed mixture during the rotation of the rotor shaft." It would not be obvious to create these paddles that do not impart axial movement, and therefore the Davis [P]atent . . . does not anticipate the patents. Similarly the Rozeboom [P]atent does not show a device that precludes axial movement. Request for Continued Examination at 12. This prosecution history highlights that Claim 1 precludes paddles that impart axial movement and that part of the reason the '166 Patent is novel is because it was not obvious to create "paddles that do not impart axial movement." See id.

3 At the Markman hearing, Roto-Mix suggested that the paddles depicted in the Davis Patent include the blades on the shafts which impart axial movement in an opposite direction to the paddles and, as such, the Davis Patent depicts paddles imparting axial movement in two or more directions. The specification does not, however, adopt this understanding of the paddles. Rather, it specifically discusses the "paddles that are canted . . . so as to impart an axial movement" and the "shafts or arms [which] have blades . . . that also impart an axial movement." '166 Patent col. 1 l. 34-39.

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The only support the court can find for Roto-Mix's proposed construction is an alternative statement included in the specification. See '166 Patent . col. 5. l. 48-53 ("[P]referably the paddles . . . include longitudi nal axes that are parallel to shaft so as to impart a lifting and tumbling action, but not an axial direction to the materials being mixed. Alternatively the paddles impart a single axial direction, but not opposite directions to the materials being mixed."). Th e use of the alternate suggests that the claim language would not ordinarily support this construction. Further, this alternate language runs

counter to every other portion of the specification and the prosecution history, which make clear that the paddles are designed to lift and tumble but not impart axial movement. The court finds that a person of ordinary skill—in light of the common usage, specification and prosecution history—would understand this disputed term to limit the paddles from having any surface which imparts axial movement. Accordingly, the court shall adopt a construction similar to that of SAC.

c. Summary The meaning of the term "each of the paddles being free from surfaces that impart axial movement in opposite directions to the mixture during rotation of the rotor shaft" as used in Claim 1 of the '166 Patent, is that each paddle must be free from any surface that imparts axial movement in opposite directions to the mixture during rotation of the rotor shaft. The court finds that this construction gives the term its plain and ordinary meaning in light of the specification and prosecution history.

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B. The '166 Patent (Claim 2) and the '419 Patent (Claims 5 and 7) 1. Proposed constructions

Term Roto-Mix's Proposed

Construction

SAC's Proposed Construction ". . . the paddles each have a paddle edge extending in a line parallel to the longitudinal axis of the rotor shaft"

"[E]ach paddle has a portion that forms a line contacting the wall of the second chamber where the contact line would, if extended forever, never contact the line formed by the rotational axis of the rotor shaft."

"[E]ach paddle has a paddle edge extending in a line that is in the same plane as the longitudinal axis of the rotor shaft, and which, if extended forever, would never contact the line formed by the rotational axis of the rotor shaft; that is, not canted with respect to the longitudinal axis of the rotor shaft." See Joint Statement at 4-5, 8-9.

2. The parties' arguments The parties dispute the construction of "lin e parallel to the longitudinal axis of the rotor shaft."

4 Roto-Mix argues that this limitation "reinforces that [C]laim 1 allows each paddle to impart axial movement in at least one direction—for example, via canting (angling) of the paddle—but not in two opposite directions, while [C]laim 2, with its requirement of at least one parallel edge on the paddle further minimizes axial movement by requiring parallelism." Roto-Mix Brief at 20. Roto-Mix does not believe that this

4 The parties agree that the limitations at issue in Claim 2 of the '166 Patent and Claims 5 and 7 of the '419 Patent should be interpreted consistently. See Roto-Mix Brief at 13; SAC Brief at 19. As such, the court shall interpret these limitations consistently. See, e.g., Phillips, 415 F.3d at 1314 ("Because claim terms are normally used consistently throughout [a] patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims."); Dayco Prods., Inc. v. Total Containment, Inc., 258 F.3d 1317, 1319, 1325-26 (Fed. Cir. 2001) (noting that where patents are derived from the same parent application and have "nearly identical" specifications, the same words in multiple patents will ordinarily have the same meaning).

15 limitation requires the parallel lines to remain equidistant to each other, but only requires that the lines, if extended forever, would never contact each other. SAC contends that this limitation requires both that the lines extend on the same plane, remaining equidistant from each other indefinitely, and that the lines never touch. See SAC Brief at 14-15, 19.

3. The court's construction The court finds that a person with ordinary skill in the art would understand "parallel," as used, to require that the lines remain equidistant to each other. The '166 and '419 Patent specifications support this construction when distinguishing the Davis Patent, which:

shows paddles that are canted with respect to the axis of the shaft so as to impart an axial movement to the material being mixed. . . . In contrast, the present invention . . . has paddles that are parallel to the axis of the rotor shaft. Consequently, the paddles of the present invention lift and tumble the ingredients being mixed and do not impart an axial motion to the ingredients being mixed. '166 Patent col. 1 l. 35-46 (formatting omitted); '419 Patent col. 1 l. 40-51 (formatting omitted). The specification is clear that the parallel requirement of the claim language prevents the paddles from being canted like those in the Davis Patent. Both patents also provide figures which illustrate paddles with edge lines that would, if extended forever, remain equidistant to the line extending from the rotor shaft. See '166 Patent fig. 2-5, 7-8; '419 Patent fig. 2-5, 7-8. The dictionary definition of parallel also supports this construction. See, e.g., Parallel, Oxford English Dictionary (defining"parallel" as: "lying or extending alongside each other and always at the same distance apart; continuously equidistant"). Roto-Mix presents no evidence that a person of ordinary skill would construe "parallel" in a way counter to the plain and ordinary meaning.

Roto-Mix's proposed construction abandons the common understanding of parallel, which requires lines to remain equidistant, and instead proposes an interpretation where

16 the parallel limitation only requires that the lines not intersect. Roto-Mix points to nothing in the record supporting this counterintuitive definition. Indeed, the common usage is supported by the specifications. See, e.g., '166 Patent col. 3 l. 50-55 ("The paddles are oriented in a direction parallel with the axis of the rotor shaft within the second chamber to prevent axial movement of the feed materials within the second chamber, while allowing lifting and tumbling action of the mixture between the first and second chambers."); '419 Patent col. 3 l. 23-25 ("[T]he paddles each ha ve a

paddle edge extending in a line parallel to the longitudinal axis of the rotor shaft."). Thus, the court adopts a construction similar to the construction proposed by SAC.

Accordingly, the meaning of the term "the paddles each have a paddle edge extending in a line parallel to the longitudinal axis of the rotor shaft," as used in Claim 2 of the '166 Patent and Claims 5 and 7 of the '419 Patent, is that each paddle has a paddle edge which, if extended forever, would remain parallel—that is, extending alongside and always at the same distance apart; continuously equidistant—to the longitudinal axis of the rotor shaft. The court finds that this construction gives the term its plain and ordinary meaning in light of the specification and prosecution history.

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C. The '419 Patent (Claims 1 and 6) 1. Proposed constructions

Term Roto-Mix's Proposed

Construction

SAC's Proposed Construction ". . . each of the paddles is free from surfaces that would impart significant axial movement to a mixture in the second chamber as the rotor shaft is rotated"

"[E]ach paddle must be free from two or more surfaces that impart an important, weighty, and notable, movement of the mixture in an axial direction."

"[E]ach paddle must be free of a surface that imparts a perceptible, observable movement of the mixture in an axial direction."

See Joint Statement at 6-7.

2. The parties' arguments This dispute centers on the proper construction of the word "significant."

5 Roto- Mix argues that significant should be given its plain and ordinary meaning. Roto-Mix Rebuttal at 10. Roto-Mix contends that "under SAC's interpretation, significant axial movement is effectively synonymous with mere axial movement." Id. This is improper because the "inclusion of 'significant' reinforces the inventors' intention that the device focus on lifting and tumbling the mixture." Id. SAC contends that "'significant' operates as language of magnitude" because it describes how much axial movement is allowed. SAC Brief at 17. SAC argues that the specification only allows the paddles to lift and tumble the mixture but not impart any axial movement. Id. Thus, SAC believes that significant prevents "perceptible, observable" axial movement of the mixture.

5 The parties agree that the limitations at issue in Claims 1 and 6 of the '419 Patent should be

interpreted consistently. See Joint Statement at 6-7. As such, the court shall interpret these limitations consistently. See Phillips, 415 F.3d at 1314 ("Because claim terms are normally used consistently throughout a patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.").

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3. The court's construction As an initial matter, the court constructs "each of the paddles is free from surfaces that would impart . . . axial movement to a mixture" in a manner consistent with the court's construction of Claim 1 of the '166 Patent. The parties have not provided any argument suggesting that this portion of the term should be constructed differently. Further, the '419 Patent is a continuation patent that is nearly identical to the '166 Patent. See Dayco, 258 F.3d at 1319, 1325-26 (noting that where patents are derived from the same parent application and have "nearly identical" specifications, the same words in multiple patents will ordinarily have the same meaning). As such, the same principles of construction apply.

The court next turns to the construction of "significant." The use of significant in Claims 1 and 6 is instructive; significant is used to describe the magnitude of axial movement allowed. As Roto-Mix notes, it is reasonable to expect that the paddles may impart some minor axial movement to the mixture. This is true even if the paddles are parallel to the rotor shaft and free from any surface designed to impart axial movement. The addition of "significant" allows the paddles to impart incidental axial movement but prevents the kinds of notable axial movement that would result from a paddle surface designed to produce the same. The court notes that extrinsic evidence supports the court's reading of the term. The dictionary defines "significant" as follows: "Sufficiently great or important to be worthy of attention; noteworthy; consequential, influential." Significant, Oxford English Dictionary. SAC's proposed definition, which limits any perceptible axial movement, is counter to the common understanding of significant and would effectively erase "significant" from the claim language. SAC points to nothing in the specification or elsewhere, and the court finds nothing, that suggests "the inventor has used [the term "significant"] in a manner inconsistent with [its] ordinary meaning."

19 Vitronics, 90 F.3d at 1582. Accordingly, the court adopts a construction of "significant" similar to that proposed by Roto-Mix.

The meaning of the term "each of the pa ddles is free from surfaces that would impart significant axial movement to a mixture in the second chamber as the rotor shaft is rotated" as used in Claims 1 and 6 of the '419 Patent, is that each paddle must be free from any surface that imparts important and notable axial movement to a mixture in the second chamber as the rotor shaft is rotated. The court finds that this construction gives the term its plain and ordinary meaning in light of the specification and prosecution history.

VI. CONCLUSION The court has construed the various disputed claims in the two patents-in-suit, as set forth herein.

IT IS SO ORDERED. DATED this 27th day of December, 2017.

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