

construction will be the one that “stays true to the claim language and most naturally aligns with the patent’s description of the invention.” *Id.*

In construing disputed terms, a court looks first to the claim language, for “[i]t is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Generally, the words of a claim should be given their “ordinary and customary meaning,” which is “the meaning that the term[s] would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1312–13.

In many cases, the meaning of a term to a person skilled in the art will not be immediately apparent, and a court must turn to other sources to determine the term’s meaning. *See id.* at 1314. “Those sources include the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.*

Courts should also consider the context in which the term is used in an asserted claim or in related claims in the patent, bearing in mind that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* at 1313. Indeed, the specification “is always highly relevant to the claim construction analysis” and “[u]sually . . . dispositive; it is the single best guide to the meaning of a disputed term.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Where the specification reveals that the patentee has given a special definition to a claim term that differs from the meaning it would ordinarily possess, the inventor’s lexicography governs.

Id. at 1316. Likewise, where the specification reveals an intentional disclaimer or disavowal of claim scope by the inventor, the inventor’s intention, as revealed through the specification, is dispositive. *Id.* Nevertheless, claims are not necessarily limited to the disclosed embodiments. *Id.* at 1323. The patent’s prosecution history is also relevant to the extent it “demonstrat[es] how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution.” *Id.* at 1317.

Finally, courts may consider extrinsic evidence such as “expert and inventor testimony, dictionaries, and learned treatises.” *Id.* (citing *Markman*, 52 F.3d at 980). Such evidence, however, is “less reliable than the patent and its prosecution history in determining how to read claim terms,” and thus is considered “less significant than the intrinsic record.” *Id.* at 1317–18.

B. Means-Plus-Function Claims

A patentee may claim an element of the invention in terms of the element’s function, without reciting a corresponding structure in the claim itself. 35 U.S.C. § 112, ¶ 6. However, a claimed function is valid only if the specification “set forth . . . adequate disclosure showing what is meant by the language.” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008) (quotation omitted).

Construction of a means-plus-function limitation requires the court to (a) determine the claimed function and (b) “identify the corresponding structure in the written description of the patent that performs the function.” *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311 (Fed. Cir. 2012). “A structure disclosed in the specification qualifies as a ‘corresponding structure’ if the specification or the prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* (citation omitted).

II. OVERVIEW OF THE TECHNOLOGY IN THE PATENTS-IN-SUIT

Bridges and overpasses are often made of concrete segments. These segments are bound together by cables that run through interior ducts in each concrete segment. To assemble the segments, the cables are tensioned. It is important to protect the interior cables from corrosive elements because they can become corroded, and corroded cables can weaken and cause the structure to fail. For example, roads are often treated with salt, which can leak through the area between the adjoining concrete segments and enter into the ducts. Therefore, it is crucial to protect the connections between the ducts at each junction of the concrete segments, to protect the cables, not only from corrosive elements, but from unwanted liquids. *See* Pl.’s Opening Claim Construction Br. at 2; Def.’s Opening Claim Construction Br. at 2.

In brief, the patents at issue in this case describe a system for coupling the ducts at the junctions of concrete segments to protect the cables from corrosion. The patents require a pair of “coupler members,” both of which extend “over and around” the two facing duct ends. A “gasket means” is inserted between the two coupler members, which are then pressed together to create an airtight and watertight seal between the ducts at the segment-to-segment junctions.

The Court interprets the disputed terms as stated in Exhibit A.

SO ORDERED.

August 13, 2015.



BARBARA M. G. LYNN
UNITED STATES DISTRICT JUDGE
NORTHERN DISTRICT OF TEXAS

EXHIBIT A
CLAIM CONSTRUCTIONS

Claim Term	Sorkin's Proposed Construction	Vstructural's Proposed Construction	Court's Construction	Explanation
<i>duct</i> ('435 Patent: Claim 3) ('821 Patent: Claim 1) ('105 Patent: Claim 1)	Plain meaning “any tube, canal, pipe, or conduit by which a fluid, air, or other substance is conducted or conveyed”	“a tube that forms a conduit through the concrete segment”	“a conduit through the concrete segment”	Court construed at Motion Hearing 3/26/15, p.23
<i>extending over and around</i> ('435 Patent: Claim 3) ('821 Patent: Claim 1) ('105 Patent: Claim 1)	“extend” means “to stretch, draw, or arrange in a given direction or so as to reach a particular point, as a cord, wall, or line of troops” “over” means “above in place or in position”	“overlapping”	The phrase means that the duct fits inside the coupler.	Court construed at Motion Hearing 3/26/15, p.31

EXHIBIT A
CLAIM CONSTRUCTIONS

Claim Term	Sorkin's Proposed Construction	Vstructural's Proposed Construction	Court's Construction	Explanation
<p><i>aligned with and in alignment of</i></p> <p>('821 Patent: Claim 1)</p>	<p>"place or align in a straight line or into correct relative positions"</p>	<p>"co-axial"</p>	<p>"in a straight line but allowing for the possibility of a slight misalignment"</p>	<p>The primary dispute between the parties is whether "align" requires the ducts to be in a straight line, or whether it may also describe a general spatial relationship. Sorkin opposes defining align as "in a straight line" because Sorkin argues the primary purpose of its invention is to allow for slight misalignment of the ducts and couplers, while maintaining insulation. Defendants admit that the specification does allow for the possibility of "slight misalignment," and in one instance allows the ducts to be "generally longitudinally aligned." ['821 Patent 9:22; 6:44-56.]</p> <p>The Court finds that a person reasonably skilled in the art would construe "align" to mean "in a straight line," with the possibility of slight deviation. Sorkin's alternative proposal requiring correct relative positions is too vague and general to have meaning.</p>

EXHIBIT A
CLAIM CONSTRUCTIONS

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<i>acute angle</i> '821 Patent: Claim 1	"an angle less than 90 degrees"	"an angle greater than 0 and less than 90 degrees"	"an angle greater than 0 and less than 90 degrees"	Court construed at Motion Hearing 3/26/15, p.38
Claim Term	Sorkin's Proposed Construction	Vstructural's Proposed Construction	Court's Construction	Explanation
<i>gasket means</i> ('821 Patent: Claim 1)	"a sheet or ring of rubber or other material sealing the junction between two surfaces in an engine or other device."	Means plus function, § 112(f) Function: "preventing liquid from passing between said ends of said first and second coupler members into an interior of either of said first and second ducts" Structure: "Gasket 132, an elastomeric (or other resilient, hydrophobic material) oval-shaped member, fitted into the interior of a V-shaped groove at the end of a coupler member and extending	Means plus function, § 112(f). Function: "preventing liquid from passing between said ends of said first and second coupler members into an interior of either of said first and second ducts" Structure: "Gasket 132, an elastomeric (or other resilient, hydrophobic material) oval-shaped member, shaped to fit into the interior of a V-shaped groove at the end of a coupler member and extending	At the Motion Hearing, the Court construed "gasket means" as a means-plus-function term under § 112(f), and the function as "preventing liquid from passing between said ends of said first and second coupler members into an interior of either of said first and second ducts." Mt. Hrg. Trs. p. 58 The Court must "look to the specification and identify the corresponding structure for that function." <i>Golight Inc. v. Wal-Mart Stores, Inc.</i> , 355 F.3d 1327, 1324 (Fed. Cir. 2004). The specification states "[t]he gasket 132 is particularly designed to prevent liquid from passing between the ends of the respective coupler members and into the interior of the ducts." ['821, 7:15-19].

EXHIBIT A
CLAIM CONSTRUCTIONS

		in a generally liquid-tight relationship into the other of the V-shaped grooves and having a cross-sectional thickness greater than the depth of either coupler member's V-shaped groove"	in a generally liquid-tight relationship into the other of the V-shaped grooves, and having a cross-sectional thickness greater than the depth of either coupler member's V-shaped groove" ¹	<p>The Court finds that is the structure. <i>See</i> Figures 6 and 7.</p> <p>The parties agree that the gasket must be elastomeric or other resilient, hydrophobic material; therefore, this is part of the structure.</p> <p>The Court finds that an essential aspect of the structure of the gasket is a shape that fits into the interior of a V-shaped groove of the coupler member and extends in a generally liquid-tight relationship into the other of the V-shaped grooves. The specification clearly provides that the "gasket member is an elastomeric oval shaped member...", which is "fitted into the interior of one of the V-shaped grooves and extending in generally liquid-tight relationship into the other of the V-shaped grooves," and has "a cross-sectional thickness greater than the depth of either of the V-shaped groove at the respective ends and of the coupler members," such that "<i>as a result</i>, this</p>
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¹ Means-plus-function claims extend to the equivalents of the structure disclosed in the specification. The statute itself provides, "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112. Accordingly, it would be redundant to include "and equivalents" as part of the structure defined in the specification.

EXHIBIT A
CLAIM CONSTRUCTIONS

				<p>elastomeric ring will <i>effectively</i> ‘fill’ the interior of the respective V-shaped grooves.” ...” [‘821, 8:30-40].</p> <p>Accordingly, the oval shape, the way the gasket’s shape must allow it to fit into the coupler members, and the thickness of the gasket are all essential ways the structure of the gasket allows the gasket to perform its stated function of creating a liquid-tight relationship.</p> <p>Sorkin failed to overcome the presumption that “gasket means” is a means-plus-function claim.</p> <p>Sorkin’s primary objection to VSL’s proposed structure was that the phrase “fitted into the interior of a V-shaped groove at the end of a coupler member” created a limitation on the shape of the coupler members, not the gasket itself. The Court has adopted an alternative proposed by VSL at the motion hearing, that the gasket is “shaped to fit into the interior of a V-shaped groove at the end of a coupler member” which places the emphasis on the shape of the gasket member itself.</p>
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EXHIBIT A
CLAIM CONSTRUCTIONS

				Given that the patentee chose to include a single embodiment of the invention, the means-plus-function claims limitations will be limited to the single disclosed structure and equivalents thereof. <i>Mettler-Toledo, Inc. v. B-Tek Scales, LLC</i> , 671 F.3d 1291, 1296 (Fed. Cir. 2012)
<i>gasket means</i> (‘105 Patent: Claim 1) ²	“a sheet or ring of rubber or other material sealing the junction between two surfaces in an engine or other device.”	Means plus function, § 112(f) Function: “preventing liquid from passing between said ends of said first and second coupler members into an interior of either of said first and second ducts” Structure: “Gasket 132, an elastomeric (or other resilient, hydrophobic material) ring fixedly received in one of the seat openings and having a	Means plus function, § 112(f) Function: “preventing liquid from passing between said ends of said first and second coupler members into an interior of either of said first and second ducts” Structure: “Gasket 132, an elastomeric (or other resilient, hydrophobic material) ring, shaped to fit in one of the seat openings, and having a	At the Motion Hearing, the Court construed “gasket means” as a means-plus-function term under § 112(f), and the function as “preventing liquid from passing between said ends of said first and second coupler members into an interior of either of said first and second ducts.” The Court finds that the structure linked to the recited function is Gasket 132, as labeled in Figures 6 and 7. The parties agree that the material of the gasket must be elastomeric or other resilient, hydrophobic material; therefore, the Court finds this is part of the structure. The Court also finds that the specification consistently refers to the gasket as a

² The Court construes the term “gasket means” differently in the ‘105 and ‘821 patents because, as the parties argue in their briefings, the specifications in the patents differ.

EXHIBIT A
CLAIM CONSTRUCTIONS

		cross-sectional thickness greater than a combined depths of the seat openings”	cross-sectional thickness greater than the combined depths of the seat openings” ³	<p>“ring,” which is a generally round shape that is part of the structure. [‘105, 7:28-33].</p> <p>Regarding the relationship of the gasket to the seat openings, the Court finds that the specification consistently claims that the gasket is “received” into, or “fills” the seats of the couplers [‘105, 7: 16; 7:33-34]. Accordingly, the Court finds that the structure of the gasket must be “shaped to fit in one of the seat openings.”</p> <p>Finally, the gasket must have a “cross-sectional thickness greater than the combined depths of the seat openings” because that thickness is essential to the gasket’s function of “effectively ‘fill[ing]’ the outer portions of the seats.” [‘105, 7:33-35]. That is important so in the event of misalignment or warping, the seal remains intact. [‘105, 7:34-37].</p>
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³ See Note 1.

EXHIBIT A
CLAIM CONSTRUCTIONS

Claim Term	Sorkin's Proposed Construction	Vstructural's Proposed Construction	Court's Construction	Explanation
<i>seat opening</i> ('105 Patent: Claim 1)	<p>“seat opening” has its plain meaning</p> <p>“seat” means “a place in which something belongs, occurs, or is established”</p> <p>“opening” means “a void in solid matter; a gap, hole or aperture”</p>	“a generally wide slot with an opening facing the other coupler member”	“a space into which the gasket will fit securely”	Court construed at Motion Hearing 3/26/15, p. 63-64

EXHIBIT A
CLAIM CONSTRUCTIONS

Claim Term	Sorkin's Proposed Construction	Vstructural's Proposed Construction	Court's Construction	Explanation
<i>Seat opening adjacent said seat of said second duct</i> ('105 Patent: Claim 1)	<p>“seat opening” has its plain meaning</p> <p>“seat” means “a place in which something belongs, occurs, or is established”</p> <p>“end” means “a part or place at or adjacent to an extremity”</p> <p>“opening” means “a void in solid matter; a gap, hole or aperture”</p> <p>“adjacent” means “lying near, close, or contiguous; adjoining; neighboring; just before; after; or facing”</p> <p>“seat opening adjacent said end of said first duct” has plain meaning</p>	Indefinite	The Court agrees that “the adjacent said seat of said second duct” is indefinite and cannot be construed.	The claims and specifications describe the coupler members as having “seat openings” and the ducts having “an end and an exterior surface.” Nowhere in any of the claims or in the specification does the patent describe a second duct having a “seat” or otherwise explain what that means. Based on the undisputed intrinsic evidence, Claim 1 of the ‘105 Patent fails for indefiniteness. In light of the intrinsic evidence, which makes clear that the term “seat opening adjacent said seat of said second duct” is indefinite, the Court need not consider extrinsic evidence.