

United States District Court,
D. Oregon.

VERSA CORPORATION, an Oregon corporation,
Plaintiff.

v.

AG-BAG INTERNATIONAL LIMITED, a Nebraska corporation,
Defendant.

No. CV-01-544-HU

Oct. 21, 2002.

Dennis L. Thomte, Shane M. Niebergall, Thomte Mazour & Niebergall, LLC, Omaha, NE, J. Peter Staples, Chernoff Vilhauer McClung & Stenzel, LLP, Portland, OR, for Plaintiff.

Christopher J. Lewis, David W. Axelrod, Schwabe Williamson & Wyatt, Portland, OR, for Defendant.

OPINION ON CLAIMS CONSTRUCTION

HUBEL, Magistrate Judge.

Plaintiff Versa Corporation brings this patent infringement action against defendant Ag-Bag International Limited. Defendant counterclaims for patent infringement. The patents involved in this case all concern agricultural equipment. Three of the four patents at issue, those owned by plaintiff, concern a machine for bagging agricultural compost. The fourth patent, owned by defendant, concerns a method for treating bagged organic material.

This Opinion construes the patent claims.

BACKGROUND

The patents and the claims at issue are:

1. Patent No. 5,345,744- "*the* '744 patent "

Plaintiff is the owner of the '744 patent which issued September 13, 1994, and is entitled "MEANS FOR CREATING AIR CHANNELS IN BAGGED COMPOST MATERIAL." Exh. A to Compl. at p. 1. The abstract of the patent describes the invention:

A compost bagging machine is described including a wheeled frame having a tunnel mounted thereon which is adapted to receive the opened mouth of a bag. The inside surface of the tunnel is provided with a plurality of spaced apart flutes which create air channels in the material within the bag. An elongated perforated pipe is also positioned within the material in the bag and the bagging machine moves relative to the bag during

the bagging operation. The presence of air in the channels created by the flutes and the air present in the perforated pipe ensures that sufficient air will be present in the mass to achieve complete decomposition of the material.

Id.

Plaintiff sues defendant for infringing this patent. Defendant raises affirmative defenses of invalidity and non-infringement and counterclaims for a declaratory judgment of invalidity and non-infringement.

2. Patent No. 5,426,910- "*the* '910 patent "

Plaintiff owns this patent which issued June 27, 1995, and is entitled "MEANS FOR CREATING AIR CHANNELS IN BAGGED COMPOST MATERIAL." Exh. B to Compl. at p. 1. The abstract describing the invention is identical to that describing the '744 patent.

As with the '744 patent, plaintiff sues defendant for infringing the '910 patent. Defendant raises affirmative defenses of invalidity and non-infringement and counterclaims for a declaratory judgment of invalidity and non-infringement.

3. Patent No. 5,452,562- "*the* '562 patent "

Plaintiff owns this patent which issued September 26, 1995, and is entitled "METHOD AND MEANS FOR COMPOSTING ORGANIC MATERIAL." Exh. C to Compl. at p. 1. The abstract describing the invention is almost identical to that describing the '744 patent. The differences, which consist of some additional language, are underlined:

A compost bagging machine is described including a wheeled frame having a tunnel mounted thereon which is adapted to receive the opened mouth of a *clear and transparent* bag. The inside surface of the tunnel is provided with a plurality of spaced-apart flutes which create air channels in the material within the bag. An elongated perforated pipe is also positioned within the material in the bag and the bagging machine moves relative to the bag during the bagging operation. The presence of air in the channels created by the flutes and the air present in the perforated pipe ensures that sufficient air will be present in the mass to achieve complete decomposition of the material. *The method of composting material within the clear and transparent bag is also disclosed.*

Id. (emphasis added).

As with the '744 patent and the '910 patent, plaintiff sues defendant for infringing the '562 patent. Defendant raises affirmative defenses of invalidity and non-infringement and counterclaims for a declaratory judgment of invalidity and non-infringement.

4. Patent No. 5,461,843- "*the* '843 patent "

Defendant owns this patent which issued October 31, 1995, and is entitled "METHOD FOR TREATMENT OF BAGGED ORGANIC MATERIALS." Exh. A to Am. Answer at p. 1. The abstract of the patent describes the invention:

A method and apparatus for treating bagged materials. A bagging machine is equipped with feed tubes that

feed a conduit through a bag filling tunnel of the machine and through the open end of the bag and into the bag. The conduit is perforated and when the bag is filled, the length of the conduit is extended out through the bag end to be connected to a treatment media, e.g. forced air. An opening is provided at the rear end to provide an exhaust opening for air that is forced into the conduit, out the perforations and through the bagged material. The air will dry the material to lower the moisture content or provide oxygen as may be desired to enhance decomposition. Water may also be introduced as desired.

Id.

As a fourth counterclaim, defendant sues plaintiff for infringing the '843 patent. In its reply to the counterclaim, plaintiff asserts four affirmative defenses: failure to state a claim, non-infringement, invalidity, and estoppel. Plaintiff also brings what it calls a "cross-claim," for declaratory judgment for invalidity and non-infringement of the '843 patent. FN1

FN1. I do not consider this a true "cross-claim" because it is not brought against a co-party. I consider it an additional claim by plaintiff.

CLAIM CONSTRUCTION STANDARDS

I. Generally

The first step in any validity or infringement analysis is to construe the claims. *See, e.g.,* Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1353 (Fed.Cir.1999) ("the first step in any validity analysis is to construe the claims of the invention to determine the subject matter for which patent protection is sought"); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed.Cir.1995) (en banc) (first step in two-step patent infringement analysis is to determine "the meaning and scope of the patent claims asserted to be infringed[, ...] commonly known as claim construction or interpretation[.]"), *aff'd*, 517 U.S. 370 (1996). The meaning of a term in a patent claim is a matter of law to be resolved by the court. *Markman*, 517 U.S. at 389-91.

Claims should be interpreted, when reasonably possible, to preserve their validity. *Modine Mfg. Co. v. United States Int'l Trade Comm'n*, 75 F.3d 1545, 1556 (Fed.Cir.1996). In construing a claim, the court should first look to the intrinsic evidence, that is, the claims themselves, the written description portion of the specification, and the prosecution history. *Bell Howell Document Mgmt. Prods. Co. v. Altek Sys.*, 132 F.3d 701, 705 (Fed.Cir.1997).

Generally, claim construction begins with the words of the claim. *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1363 (Fed.Cir.1999).

It is standard practice that in determining the proper construction of an asserted claim, the court looks first to the intrinsic evidence—the patent specification, including of course the written description, and, if in evidence, the prosecution history. Absent an express definition in the specification of a particular claim term, the words are given their ordinary and accustomed meaning; if a term of art, it is given the ordinary and accustomed meaning as understood by those of ordinary skill in the art.

Zelinski v. Brunswick Corp., 185 F.3d 1311, 1315 (Fed.Cir.1999); *see also* *Georgia-Pacific Corp. v. United States Gypsum Co.*, 195 F.3d 1322, 1332 (Fed.Cir.1999) ("The specification of the patent in suit is the best

guide to the meaning of a disputed term."), *amended*, 204 F.3d 1359 (Fed.Cir.), *cert. denied*, 121 S.Ct. 54 (2000).

Terms in a claim are given their ordinary meaning to one skilled in the art unless it appears from the patent and prosecution history that the inventor used them differently. A patentee may be his own lexicographer, but any special definition given to a word must be clearly defined in the specification or file history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996).

Additionally, a claim term should generally be read so as not to exclude the inventor's device or the inventor's preferred embodiment. *See, e.g.*, *id.* at 1581 (claim interpretations excluding the preferred embodiment are heavily disfavored); *Modine Mfg.*, 75 F.3d at 1550 ("[A] claim interpretation that would exclude the inventor's device is rarely the correct interpretation[.]").

While examining the patent specification is appropriate, it is improper to import, or "read in" to a claim, a limitation from the specification's general discussion, embodiments, and examples. *See, e.g.*, *Intel Corp. v. United States Int'l Trade Comm'n*, 946 F.2d 821, 836 (Fed.Cir.1991) ("Where a specification does not require a limitation, that limitation should not be read from the specification into the claims.") (internal quotation omitted); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed.Cir.1988) ("Although the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.").

It is also improper to eliminate, ignore, or "read out" a claim limitation from a claim in order to extend a patent to subject matter disclosed, but not claimed. *See, e.g.*, *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 93 F.3d 1572, 1582-83 (Fed.Cir.1996) (court cannot read a limitation out of a claim); *see also Unique Concepts v. Brown*, 939 F.2d 1558, 1562 (Fed.Cir.1991) (patentee cannot be allowed to expressly state throughout specification and claims that his invention includes a limitation and then be allowed to avoid that claim limitation in infringement suit by pointing to one part of specification stating an alternative lacking the specification).

Claims are not limited to the preferred embodiment. *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1158 (Fed.Cir.1997) ("as a general matter, the claims of a patent are not limited by preferred embodiments."); *see also Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1559 (Fed.Cir.1996) ("A preferred embodiment ... is just that, and the scope of a patentee's claims is not necessarily or automatically limited to the preferred embodiment.").

Finally, when intrinsic evidence is unambiguous, it is improper for the court to rely on extrinsic evidence to contradict the meaning of the claims. *See Pitney Bowes, Inc., v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308-9 (Fed.Cir.1999). If, after considering the intrinsic evidence, a claim term is ambiguous, a court may look to extrinsic evidence to assist in determining the meaning or scope of terms in a claim. *Vitronics*, 90 F.3d at 1584. Extrinsic evidence includes expert testimony, inventor testimony, and technical treatises or articles. *Id.* Extrinsic evidence cannot, however, alter the clear meaning of a claim arising from the patent or prosecution history. *Id.*

II. Means-Plus-Function

Patent claim elements may be written by describing the function, rather than the structure, of the element.

The relevant statute 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. s. 112, para. 6. Elements of a claim written this way are referred to as "means-plus-function" elements.

Whether the language of a claim is to be interpreted according to s. 112, para. 6 is a matter of claim construction, and thus, is a question of law. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1360 (Fed.Cir.2000). Use of the term "means" creates a presumption that the element is to be construed in accordance with s. 112, para. 6. *Id.* at 1361. The presumption may be rebutted, however, when the claim element recites sufficiently definite structure or material to perform the claimed function. *Id.*

Absence of the term "means" creates a presumption that the element is not to be construed in accordance with s. 112, para. 6. *John D. Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed.Cir.2000). However, this presumption may be rebutted when the claim element does not recite sufficiently definite structure or material to perform the claimed function. *Id.* at 880-81.

In means-plus-function claims, the claims construction analysis has two parts: (1) determining the function claimed in the particular element; and (2) determining what structure or material disclosed in the specification performs the function claimed in that element. *See, e.g., Kemco Sales.*, 208 F.3d at 1360 ("Once a court establishes that a means-plus-function limitation is at issue, it must construe that limitation, thereby determining what the claimed function is and what structures disclosed in the written description correspond to the "means" for performing that function ."); *IMS Tech. v. Haas Automation, Inc.*, 206 F.3d 1422, 1430 (Fed.Cir.2000) ("Claim construction of a s. 112, para. 6 limitation includes identifying the claimed function and determining the corresponding structure or act disclosed in the specification[.]").

When the claims include means-plus-function terms in accordance with s. 112, para. 6, claim scope is not limited to the preferred embodiments, but includes equivalents thereof. *Vulcan Eng'g Co. v. Fata Aluminum, Inc.*, 278 F.3d 1366, 1376 (Fed.Cir.2002), *petition for cert. filed*, 70 U.S.L.W. 3776 (U.S. June 5, 2002) (No. 01-1791); *see also J & M Corp. v. Harley-Davidson, Inc.*, 269 F.3d 1360, 1367 (Fed.Cir.2001) ("The literal scope of a properly construed means-plus-function limitation does not extend to all means for performing a certain function. Rather, the scope of such claim language is sharply limited to the structure disclosed in the specification and its equivalents. Moreover, the extent of equivalents must be interpreted in light of the disclosure of the invention in the specification, as a whole, as well as the prosecution history.").

"[S]tructure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424, (Fed.Cir.1997); *see also Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1377 (Fed.Cir.2001) ("As a quid pro quo for the convenience of employing s. 112, paragraph 6, Budde has a duty to clearly link or associate structure to the claimed function.").

DISCUSSION

I. The '744 Patent

Plaintiff alleges that defendant infringes Claim 1 of the '744 patent. The first six elements of this claim are identical to the first six elements of Claims 1 and 3 of the '910 patent and Claim 1 of the '562 patent. The parties make no suggestion that the identical language should be construed differently because it appears in a separate claim in a separate patent. Thus, my discussion of the first six elements of Claim 1 of the '744 patent (what I have labeled below as Elements A through F), controls for the first six elements of Claims 1 and 3 of the '910 patent and Claim 1 of the '562 patent.

Claim 1 of the '744 patent reads:

A compost bagging machine for bagging compost material into an elongated flexible bag having a fixed end and an open mouth;

a wheeled frame means having rearward and forward ends;

a tunnel means on said wheeled frame means and having an intake end for receiving compost material and an output end adapted to receive the mouth of the bag;

a hopper means on said wheeled frame means for receiving compost material;

means at the intake end of said tunnel means for forcing the compost material into said tunnel means, into said bag, and to move said wheeled frame means away from said fixed end of said bag;

means associated with the bagging machine for creating air channels in the compost material in said bag to enhance the composting of the compost material;

said means for creating air channels comprising means for positioning an elongated, perforated pipe means in the compost material;

said means for positioning the elongated pipe means in the compost material including means for positioning the pipe means in a horizontal position, a reel means positioned on said wheeled frame means outwardly of said tunnel means, said reel means having the elongated pipe means wound thereon, and a guide means extending between said reel means and the interior of said tunnel means for guiding the pipe means from said reel means into the interior of said tunnel means.

Exh. A to Compl. at p. 7.

A. Element A

This element reads:

A compost bagging machine for bagging compost material into an elongated flexible bag having a fixed end and an open mouth;

Id. The parties agree that Element A is not written in means-plus-function language implicating s. 112, para. 6. I agree.

Additionally, the parties agree that the proper construction of Element A is to consider it prefatory language indicating that the patent claim is drawn to a bagging machine that places organic material into an elongated flexible bag where the material is composted, with the bag having a closed end that is in a fixed position, and an open end used to fill the bag. Joint Claim Constr. Statement (JCCS) at p. 2 (docket # 46) (also filed as Exhibit E to Thomte Declaration and as Exhibit D to Defendant's Response Memorandum Regarding the '744, '910, and '562 patents).

The words of Element A, given their ordinary and accustomed meanings, support this construction.

B. Element B

This element reads:

a wheeled frame means having rearward and forward ends;

Exh. A to Compl. at p. 7. Although the word "means" appears in this element, the parties agree that this is not means-plus-function language implicating s. 112, para. 6. JCCS at p. 2. As noted above, the presence of the term "means, creates a presumption that the element is to be construed in accordance with s. 112, para. 6. *Kemco Sales, 208 F.3d at 1361*. However, the presumption may be rebutted when the claim element recites sufficiently definite structure or material to perform the claimed function. *Id.*

Here, I assume the parties agree that s. 112, para. 6 is not implicated because the claim element "wheeled frame means having rearward and forward ends," suggests sufficiently definite structure or material to understand the fairly simple claimed function-that of a frame, with rearward and forward ends, on wheels. I agree with the parties that this is not a means-plus-function claim.

The parties propose differing constructions. Plaintiff's proposed construction is:

The "wheeled frame means" comprises a frame which is supported upon wheels and which has a rearward and forward end.

JCCS at p. 2. Defendant's proposed construction is:

The "wheeled frame" consists of a frame that supports all of the elements of the compost bagging machine and moves on wheels relative to the fixed end of the bag. The "wheeled frame means" is structured such that the bagging process moves organic material deposited at the forward end of the frame to the rear of the frame and into a compost bag.

Id. Other than these proposed constructions in the JCCS, neither party makes any additional argument in the briefing in support of its proposal.

I adopt plaintiff's proposed construction. Starting with the ordinary and accustomed meaning of the language in this element, there is a frame on wheels which has two ends-one forward and one rearward. In the patent's "DESCRIPTION OF THE PREFERRED EMBODIMENT," the "wheeled frame means" is described "as including two pairs of front wheels 24 and two pairs of rear wheels 26 mounted on opposite sides of the machine in conventional fashion." Exh. A to Compl. at p. 6 (col. 2, lines 41-43). In addition, "[a] conventional braking means is provided and is well known in the prior art to resist the movement of the

bagging machine 10 away from the fixed end of the bag 16 as the bag 16 is being filled." *Id.* (col. 2, line 43-47).

While this language adds some description to the "wheeled frame means" in Element B, nothing in the plain language or the patent specification suggests that the wheeled frame means should be construed as "support[ing] all of the elements of the compost bagging machine" or that the "wheeled frame means" must be construed with the limitation that the bagging process moves organic material deposited at the forward end of the frame to the rear end of the frame and into a compost bag. While this may be how the machine actually works, I do not see any language, patent specification, or prosecution history that supports construing the "wheeled frame means" element as broadly as defendant suggests.

C. Element C

This element reads:

a tunnel means on said wheeled frame means and having an intake end for receiving compost material and an output end adapted to receive the mouth of the bag;

Exh. A to Compl. at p. 7.

The JCCS is unclear as to whether the parties agree that this is a means-plus-function claim. *See* JCCS at p. 3 (showing that defendant believes this element implicates s. 112, para. 6; plaintiff's position is not shown). However, plaintiff states in its reply brief that "[t]he parties agree that the 'tunnel means' is governed by s. 112, paragraph 6." Pltf's Reply to Deft's Resp. on Claim Constr. of '744, '910, and '562 Patents at p. 10.

Given the presumption created by the use of the term "means," and the lack of specific structure or materials actually contained in the claim element, I agree that Element C is written in means-plus-function language. As defendant notes, while some structure is recited in the element, namely an "intake end," and an "output end," this recitation is not sufficient to preclude application of s. 112, para. 6, as the input end and output end only serve to specify the function and do not provide specific structure or materials.

As noted above, the first step in a means-plus-function claims construction analysis is to identify the claimed function. In identifying the function of a means-plus-function claim, a claimed function may not be improperly narrowed or limited beyond the scope of the claim language. *Micro Chem. Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed.Cir.1999). Conversely, neither may the function be improperly broadened by ignoring the clear limitations contained in the claim language. *Lockheed Martin Corp. v. Space Systems/Loral Inc.*, 249 F.3d 1314, 1323 (Fed.Cir.2001), *vacated on other grounds*, 122 S.Ct. 2349 (2002). The function of a means-plus-function claim must be construed to include the limitations contained in the claim language. *Id.*

Correctly identifying the claimed function is important, because "[a]n error in identification of the function can improperly alter the identification of structure in the specification corresponding to that function." *Micro Chem.*, 194 F.3d at 1257. In construing the functional statement in a means-plus-function limitation, the court must take great care not to impermissibly limit the function by adopting a function different from that explicitly recited in the claim. *Generation II Orthotics, Inc. v. Medical Tech., Inc.*, 263 F.3d 1356, 1364-65 (Fed.Cir.2001).

Defendant suggests that the function be identified as follows: "The 'tunnel means ... for receiving' functions as a passageway between the intake hopper and the bag, and provides a compartment in which the organic material is received, compacted and shaped for deposit into the bag." JCCS at p. 3. Plaintiff offers no competing construction of the function.

I agree with defendant that the words used in Element C clearly support identifying the function as a passageway between the intake hopper and the bag, and providing a compartment into which the organic material is received and from which the organic material is transferred to the bag. While I do not believe the tunnel means provides a forcing compaction function, I agree with defendant that the tunnel itself serves to compact and shape the material for deposit into the bag. Without such a compaction function, any air channels in the deposited material would not retain their shape. Thus, I adopt defendant's proposed identified function of Element C as a passageway between the intake hopper and the bag, and as a compartment into which the organic material is received, compacted, and shaped for deposit into the bag.

As for the corresponding structure, the major disagreement between the parties is whether the tunnel means includes a "plurality of flutes" for creating air channels. Plaintiff points to the following language in the '744 patent specification in support of its position that the corresponding structure does not require the flutes: "Machine 10 includes a wheeled frame means 12 having a tunnel 14 mounted thereon upon which is normally positioned the open mouth of a bag 16 as illustrated in FIG 1." Exh. A to Compl. at p. 6 (col. 2, lines 27-31). Plaintiff also points to this language: "For purposes of description, tunnel 14 will be described as including an outer surface 34 and an inner surface 36. Tunnel 14 also includes a top wall 38, side walls 40 and 42 and bottom wall 44 ." Id. (col. 2, lines 60-63). This identical language is seen in the '910 patent (Exh. B to Compl. at p. 6, col. 2, lines 36-39; at p. 7, col. 3, lines 1-4) and in the '562 patent (Exh. C to Compl. at pp. 7, col. 2, lines 61-63; at p. 8, col. 3, lines 24-27).

Defendant suggests that the corresponding structure for the "tunnel means" includes an intake end for receiving compost material and an output end adapted to receive the mouth of a bag. This is taken from the claim element language itself. In addition, like plaintiff, defendant points to the part of the patent specification that provides that the tunnel includes a top wall, sidewalls, and a bottom wall, each with an inner and outer surface. This is based on the patent specification language quoted above and relied on by plaintiff.

Defendant goes on, however, to assert that the corresponding structure also includes a "plurality of flutes, which shape the organic mass by adding air channels as the mass passes from the tunnel into the bag." JCCS at p. 3. In support of this construction, defendant relies on both the prosecution history and certain language in the patent specification. I address defendant's arguments in turn.

1. Prosecution History

Defendant contends that the identification of the corresponding structure as including the plurality of flutes is supported by the prosecution history. I disagree. Although somewhat torturous, my tracing of the prosecution history shows that what finally issued as Claim 1 of the '744 patent was not based on Application Claim 1 which included the flutes.

Plaintiff first submitted the patent application with sixteen claims. Defts' Exh. H-1. Application Claim 1 was an independent claim. Id. Application Claims 2-6 depended from Application Claim 1 and were directed to requiring flutes to create air channels. Id. Application Claims 7-12 also depended from Application Claim 1

and were directed to positioning the pipe in the bagged material to create air channels. Id. Application Claim 13 was an independent claim, with Application Claims 14-16 depending from Application Claim 13. Id. The patent examiner rejected all of the claims as being anticipated or obvious. Deft's Exh. H-2 at pp. 2-5.

In response to the rejection, plaintiff amended the application in the following respects: (1) cancelling Application Claims 2, 7, 9, 10, and 14-16; (2) amending Application Claims 3 and 12 to show them depending from Claim 1 instead of Claim 2; (3) adding new Application Claim 17; and (4) rewriting Application Claims 1, 8, and 13. In explaining the changes to Application Claim 1, plaintiff stated that "[Application] Claim 1 now calls for the tunnel means having inwardly projecting flutes for 'creating air channels.'" Deft's Exh. H-3 at p. 5. Plaintiff also stated, in response to the patent examiner's rejection of Application Claim 1 as being anticipated by the Eggenmuller '061 patent, "[w]ith the amending of [Application] claim 1 to call for the use of flutes to create air channels, applicant believes that [Application] claim 1 is no longer anticipated by Eggenmuller. [Application] Claims 8, 11 and 12, which depend from [Application] claim 1, are also believed to be allowable." Id.

Previously, Application Claim 8 was depended from Application Claim 7 which was depended from Application Claim 1. In the initial application, Application Claim 8 stated: "The compost bagging machine of [Application] claim 7 wherein said means for positioning the elongated pipe means in the compost material includes means for positioning the pipe means in a horizontal position." Deft's Exh. H-1 at p. 10.

In the amended application, Application Claim 8 was rewritten to read:

The compost bagging machine of [Application] claim [7] 17 wherein said means for positioning the elongated pipe means in the compost material includes means for positioning the pipe means in a horizontal position, a reel means positioned on said wheeled frame means outwardly of said tunnel means, said reel means having the elongated pipe means wound thereon, and a guide means extending between said reel means and the interior of said tunnel means for guiding the pipe means from said reel means into the interior of said tunnel means.

Deft's Exh. H-3 at pp. 2-3 (bracketed word "Application" added; all other brackets and underlines in original).

In response to the amended application, the patent examiner rejected Application Claims 1, 3-6, 11-13, and 17. Deft's Exh. H-4 at p. 1. The examiner stated, however, that "[Application] Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Id. at p. 3.

Plaintiff submitted another amended application, this time cancelling Application Claims 3-6, 11, and 13, adding a new Application Claim 18, and rewriting Application Claims 1, 8, and 17. Deft's Exh. H-5. The patent examiner rejected Application Claims 1, 3-6, 11-13, and 17. Deft's Exh. H-6. The examiner stated that Application Claim 8 would be allowed if submitted in a separately filed amendment cancelling the non-allowable claims. Id. In response, plaintiff cancelled Application Claims 1, 3-6, 8, 11-13, and 17 and submitted new Application Claim 18. Deft's Exh. H-8 at p. 1. Plaintiff explained that in response to the examiner's latest communication, Application Claim 8 had been rewritten as a newly submitted Application Claim 18 and that it essentially corresponded to the previously submitted Application Claim 8 except that a duplicative paragraph had been omitted and more correct punctuation had been added. Id. at p. 2. Application Claim 18 was then allowed. Deft's Exh. H-9. It issued as Claim 1 of the '744 patent.

Defendant notes that Application Claim 8, which was resubmitted as Application Claim 18, and which ultimately issued as Claim 1 of the '744 patent, was amended in response to the examiner's suggestion to include all of the limitations of the "base claim" and any intervening claims. Defendant suggests that the "base claim" referred to by the examiner was Application Claim 1, and thus, Application Claim 8 depended from Application Claim 1.

Application Claim 1, as noted above, was initially amended to include the use of flutes to create air channels, thus distinguishing Application Claim 1 from the prior art. Because, defendant argues, Application Claim 8 (which eventually issued as Claim 1 of the '744 patent), incorporated the limitations from Application Claim 1 to satisfy the examiner's concerns, and Application Claim 1, as amended, called for the creation of air channels by positioning inwardly projecting flutes on the inner surface of the tunnel means, then Claim 1 of the '744 patent, "unquestionably call[s] for ... flutes." Deft's Mem. at p. 22. In support of its argument that the "base claim" referred to by the examiner is Application Claim 1, defendant points to plaintiff's representation to the examiner that Application Claims 8, 11, and 12 depended from Application Claim 1. Deft's Exh. H-3 at p. 5.

In response, plaintiff argues that Application Claim 8, although originally depended from Application Claim 7 which was depended from Application Claim 1, was amended in the first amendment to depend from Application Claim 17 rather than Application Claim 1. As noted above, the amended language submitted by plaintiff in the first amendment of Application Claim 8 changed the reference to the compost bagging machine to which Application Claim 8 was derived, from the machine in Application Claim 7 to the machine in Application Claim 17. Deft's Exh. H-3 at pp. 2-3. Plaintiff contends that the language in the explanation to the examiner referring to amended Application Claim 8 as depending from Application Claim 1 was in error. Thus, the "base claim" to which the examiner was referring and upon which amended Application Claim 8 was written, was Application Claim 17, not Application Claim 1.

I agree with plaintiff. First, the first amended Application Claim 8 referred to Application Claim 17 as the claim from which it depended, not Application Claim 7 (which in turn depended from Application Claim 1) or Application Claim 1. Second, while much of the language of amended Application Claims 1, 8, and 17 is identical, Application Claim 8 in its second amendment (after the examiner suggested that it would issue as an independent claim if rewritten in independent form including all of the limitations of the base claim and any intervening claims), more closely tracks the language in Application Claim 17 and omits some of the language in Application Claim 1 referring to the flutes positioned on the inner surface of the tunnel means.

Thus, I reject defendant's argument that the prosecution history identifies the structure corresponding to the tunnel means as including the plurality of flutes positioned inside the tunnel.

2. Patent Specification Language

Defendant cites to two portions of the patent specification in support of its argument that the corresponding structure to the tunnel means includes the flutes. The first, seen in the "SUMMARY OF THE INVENTION," provides that "[t]he interior surface of the tunnel is provided with a plurality of spaced-apart flutes which create grooves or channels in the exterior surface of the material as the material is being placed into the bag." Exh. A to Compl. at p. 6 (col. 2, lines 8-13). The second provides that "[a] plurality of spaced-apart flutes or channels 46 are secured to the inner surfaces of top wall 38, side walls 40 and 42 and bottom wall 44 as seen in the drawings." Id. (col. 2, lines 64-66). In addition, defendant points to Figures 2 and 3

accompanying the patent which show the flutes inside the tunnel.

Defendant contends that the specification's references to the flutes in the tunnel compel an interpretation that the corresponding structure to the tunnel function includes the flutes. In addition to the language quoted above and cited by defendant, the following language also appears in the specification:

Preferably, the flutes 46 are elongated and have a V-shaped cross section. It can also be seen that the flutes 46 are tapered so as to have an increasing height or depth from the forward to rearward ends thereof. The flutes 46 are preferably welded to the inside surfaces of the tunnel 14 in conventional fashion. As the material to be composted is forced through the tunnel 14 into the bag 16, the flutes or channels 46 create indentations, channels or grooves 48 in the exterior surface of the material 47 positioned in the bag 16 to ensure that air will be present within the bag to enable the material to properly decompose.

Exh. A to Compl. at p. 7 (col. 2, lines 67-68 col. 3, lines 1-10). Given that the flutes are specifically noted in the abstract, the summary, and the preferred embodiment, and that the patent is intended to be a "MEANS FOR CREATING AIR CHANNELS IN BAGGED COMPOST MATERIAL," and without the flutes only one method of creating air channels would be apparent (through the pipe), defendant has a tenable argument that the corresponding structure to the tunnel function includes the plurality of flutes.

Plaintiff argues that in analyzing s. 112, para. 6 means-plus-function claims, the court is not permitted to incorporate "structure from the written description beyond that necessary to perform the claimed function." *Asyst Techs., Inc. v. Empak Inc.*, 268 F.3d 1364, 1369-70 (Fed.Cir.2001) (internal quotation omitted). As noted above, "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *B. Braun Med., Inc.*, 124 F.3d at 1424.

Even though the patent specification identifies the plurality of flutes as being inside the tunnel, I conclude that to construe the flutes as part of the corresponding structure of the tunnel function, as that function has been identified, would improperly incorporate structure from the specification beyond what is necessary to accomplish the identified function. I see no clear link between the flutes and the *function* of the tunnel.

As indicated above, the function of the tunnel means is a passageway between the intake hopper and the bag, and a compartment into which the material is received, compacted, and shaped for deposit into the bag. The function has nothing to do with creating air channels which is the purpose of the flutes. The compaction function of the tunnel impacts the density of the compost which affects the maintenance of the channels after they are created. The tunnel function is not related to *creating* the channels. Incorporating the flutes into the corresponding structure would go beyond what is necessary to perform the claimed function of the tunnel means. As a result, I construe the corresponding structure of the tunnel means to include an intake end for receiving compost material, and an output end adapted to receive the mouth of a bag, with a top wall, sidewalls, and a bottom wall, each with an inner and outer surface.

D. Element D

This element reads:

a hopper means on said wheeled frame means for receiving compost material;

Exh. A to Compl. at p. 7.

Here, the JCCS shows that defendant believes this element is written in means-plus-function language, implicating s. 112, para. 6. JCCS at p. 4. Although my impression from the representations made at oral argument was that the parties agreed that this element was a means-plus-function element, the JCCS shows that plaintiff disagrees with defendant's position. *Id.* Neither party discusses this element outside of the positions noted in the JCCS.

Given the presumption created by the inclusion of the word "means," and that the element lacks a recitation of sufficiently definite structure or material in support of the function, I interpret Element D to be a means-plus-function claim. The function of the hopper means is clearly identified in the claim language as a receptacle for receiving the compost material.

As for the corresponding structure, the specification provides that "[a] hopper is provided on the wheeled frame means for receiving the compost material and is adapted to supply the same to a rotatable rotor or the like which forces the material into the tunnel and into the bag." Exh. A to Compl. at p. 6 (col. 2, lines 4-8). Additionally, the specification further states that the

[b]agging machine 10 includes a hopper means 28 at the forward end thereof which is adapted to receive the material to be composted from a truck, wagon, etc. The design of the hopper means 28 does not form a portion of the invention and could be replaced by a conventional feed table.

Id. (col. 2, lines 48-53). The hopper is also shown in Figure 2. *Id.* at p. 3.

Defendant argues that the corresponding structure of the "hopper means for receiving" is a funnel shaped chamber that directs material down and rearward to the rotor. Plaintiff contends that the "hopper means" limitation should be construed as any receptacle or feed table which is designed to have compost material deposited therein or placed thereon.

I agree with plaintiff. I see nothing in the specification or the drawing in Figure 2 suggesting that the hopper's structure must direct material downward and rearward to the rotor. I also see nothing requiring it to be funnel shaped. Also, given the specification's express language that the hopper's design is not part of the invention, the corresponding structure should be identified as any receptacle or feed table designed to have compost material deposited therein and from which the compost material is supplied to the rotor.

E. Element E

This element reads:

means at the intake end of said tunnel means for forcing the compost material into said tunnel means, into said bag, and to move said wheeled frame means away from said fixed end of said bag;

Exh. A to Compl. at p. 7.

The parties agree that this element recites means-plus-function language implicating s. 112, para. 6. JCCS at p. 4. I agree. Based on the plain language, the function of this element is to move the compost from the hopper into the tunnel and the bag so as to cause the wheeled frame to move away from the fixed end of the

bag.

The specification states that the hopper is adapted to supply the compost material "to a rotatable rotor or the like which forces the material into the tunnel and into the bag." Exh. A to Compl. at p. 6 (col. 2, lines 7-8). It also states that

[a] means is provided at the forward end of the tunnel 14 for forcing the material into the tunnel and into the bag. In the embodiment shown, a rotatable rotor 32 of conventional design is illustrated but it should be noted that the same could be replaced by any suitable means which forces the material to be composted into the bag.

Id. (col. 2, lines 54-59). Figure 1 shows the use of a rotor. *Id.* at p. 2. Figure 2 shows tines poking through a grate or comb and identifies the tines as being part of the rotor. *Id.* at p. 3.

Defendant argues that as the rotor is the only structure identified in the specification for the forcing means, this element must be interpreted to include a rotor as the corresponding structure. Plaintiff does not dispute that the element should be interpreted to include a rotator of conventional design or its equivalent as the corresponding structure.

Plaintiff, however, wants to go one step further. Plaintiff argues that when, in a means-plus-function claim, the disclosed physical structure is of little or no importance to the claimed invention, there may be a broader range of equivalent structures than if the physical characteristics are critical in performing the claimed function in the context of the claimed invention. *IMS Tech.*, 206 F.3d at 1436. The *IMS Technology* court noted that an analysis of insubstantial differences in the context of an invention can result in a finding of equivalents under s. 112, para. 6, even though the two structures at issue arguably would not be considered equivalent in other contexts such as performing functions other than the claimed function. *Id.*

Plaintiff argues that it is clear that a rotor, as disclosed in the patents, is known in the art and thus, the rotor itself is of little significance to the claimed invention for a means to create air channels in bagged compost material. As a result, plaintiff argues, other structures are available in the art that are capable of performing the claimed function and should be considered "equivalents" of the rotor. Such structures include, according to plaintiff, equivalent structure from a number of prior art patents what would be known to one of skill in the art to be interchangeable with the rotor described in the specification. *See JCCS* at pp 4-5 (identifying various prior art patents disclosing a(1) rotor, (2) pusher tines or tine sets, (3) a plunger, piston, or ram, (4) pressing tools, (5) an auger conveyor or conveyors, (6) feeder bars, or (7) a packer plate).

Defendant argues that when a patentee claims in means-plus-function format, s. 112, para. 6 "rules out the possibility that any and every means which performs the function specified in the claim literally satisfies that limitation." *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1536 (Fed.Cir.1991) (emphasis omitted). Defendant notes that the corresponding structure is limited to the structure specifically identified in the specification, and its equivalents. *Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1042 (Fed.Cir.1993).

I conclude that the corresponding structure identified in the specification is a rotor or other equivalent device, located near the forward end of the tunnel, capable of moving the material from the intake end of the tunnel, into the tunnel, and into the bag, and capable of moving the material such that the wheeled frame moves away from the fixed end of the bag. I agree with defendant that the corresponding structure includes

the rotor. However, I disagree with defendant that the corresponding structure is limited to a rotor only. While it is accurate to state that the corresponding structure does not include all means for performing the function of moving the material, it is also accurate to state that the claim scope is not limited to the preferred embodiments but includes equivalents thereof. *Vulcan Eng'g*, 278 F.3d at 1376. The rotor certainly appears to be the preferred embodiment of this structure. But, the specification language expressly states that any suitable means which forces the material into the bag is contemplated. Exh. A to Compl. at p. 6 (col. 2, line 58). It also refers to a "rotatable rotor *or the like*]." *Id.* (col. 2, line 7) (emphasis added). Thus, I do not find that the corresponding structure is limited to the rotor as the only structure capable of performing the function. On the record before me, I cannot definitively conclude that all of the devices cited by plaintiff as being disclosed by various prior art patents are the equivalents of a rotor. Nonetheless, it is apparent that the corresponding structure of Element E includes the rotor and any equivalent devices.

F. Element F

This element reads:

means associated with the bagging machine for creating air channels in the compost material in said bag to enhance the composting of the compost material;

Exh. A to Compl. at p. 7. Both parties agree that this element is written in means-plus-function language implicating s. 112, para. 6. I agree.

The function, as identified by the claim language itself, is to create air channels in the bagged compost material to aid in its decomposition. The major dispute between the parties regarding this element is whether the corresponding structure includes flutes inside the tunnel or whether it is limited to a perforated pipe inserted into and running the length of the bag.

In the section of the specification entitled "BACKGROUND OF THE INVENTION," the patentee explains that agricultural feed bagging machines have been used for several years to pack or bag silage or the like into elongated plastic bags. *Id.* at p. 6 (col. 1, lines 6-8). In all of the feed bagging machines of the prior art, the silage is packed into the bags in an air-tight condition so that proper fermentation of the silage material takes place. *Id.* (col. 1, lines 12-15). In the prior art, an effort was made to eliminate air within the bags. *Id.* (col. 1, lines 15-17).

Recently, the patentee explains, it has been discovered that compost material, or material to be composted, may be composted in large plastic bags. *Id.* (col. 1, lines 18-20). In such cases, air must be present for the proper decomposition. *Id.* (col. 1, lines 20-23). Feed bagging machines of the prior art are not suitable for use in the placing of the material to be composted in the bag because the material would not have sufficient air within the bag to enable the material to decompose. *Id.* (col. 1, lines 26-30).

Thus,

It is therefore a principal object of the invention to provide a method and means for creating air channels in bagged compost material so that the compost material will properly decompose.

* * *

A further object of the invention is to provide a compost bagging machine including means for positioning an elongated perforated pipe in the compost material.

A further object of the invention is to provide a compost bagging machine including a means for creating a plurality of spaced apart air channels in the exterior surface of the bagged material.

Id. (col. 1, lines 32-35, 39-46).

The specification further states, in the summary of the invention, that "[t]he interior surface of the tunnel is provided with a plurality of spaced-apart flutes which create grooves or channels in the exterior surface of the material as the material is being placed into the bag." *Id.* (col. 2, lines 8-12). Additionally, the "bagging machine also includes means for positioning an elongated perforated pipe in the material. The air present in the grooves in the material and the air present in the perforated pipe causes the material to properly decompose." *Id.* (col. 2, lines 12-16).

In the description of the preferred embodiment, the specification provides that

A plurality of spaced-apart flutes or channels 46 are secured to the inner surfaces of the top wall 38 [of the tunnel], side walls 40 and 42 and bottom wall 44 as seen in the drawings. Preferably, the flutes 46 are elongated and have a V-shaped cross section. It can also be seen that the flutes 46 are tapered so as to have an increasing height or depth from the forward to rearward ends thereof. The flutes 46 are preferably welded to the inside surfaces of the tunnel 14 in conventional fashion. As the material to be composted is forced through the tunnel 14 into the bag 16, the flutes or channels 46 create indentations, channels or grooves 48 in the exterior surface of the material 47 positioned in the bag 16 to ensure that air will be present within the bag to enable the material to properly decompose.

Means is also provided for positioning an elongated perforated pipe or tube in the approximate center of the mass so that additional air is provided to the mass to ensure that sufficient air will be present in the mass to achieve proper decomposition. The perforated pipe could either be a single length of pipe 50 wound upon reel 52 or may be comprised of individual sections of pipe. It should be understood that it is preferred that the pipe 50 be positioned in the center of the mass of the material in addition to the channels 48. However, it is believed that sufficient air will be present to achieve decomposition with either the channels 48 or the perforated pipe 50 although it is preferred that both the flutes 46 and the pipe 50 be utilized. It should also be noted that even though the drawings only illustrate a single pipe being positioned in the mass, additional pipes could be positioned therein if necessary.

Id. (col. 2, lines 64-68-col. 3, lines 1-27).

In addition, Figure 2 shows flutes lining the inside of the tunnel and a perforated pipe coming into the tunnel from a reel attached above the tunnel and protruding from a positioning device located in the center of the tunnel, above the comb into which the tines from the rotor pass. *Id.* at p. 3.

Defendant argues that the corresponding structure that performs the identified function is both the flutes lining the inside of the tunnel so as to shape air tunnels along the outer circumference of the material as it is compacted and forced into the bag, and the perforated pipe inserted into the middle of the organic material to allow air to enter the center of the mass. Defendant acknowledges that the specification states that enough air may be present with either fluted air channels or the perforated pipe. But, defendant argues that the claim

as presented and argued to the patent examiner along with the specifications, describes both flutes and pipes as the corresponding structures to the "means ... for creating air channels."

In contrast, plaintiff argues that the flutes and perforated pipe are alternative corresponding structures, not a single structure that requires both flutes and the perforated pipe as defendant suggests. *See Ishida Co. v. Taylor*, 221 F.3d 1310, 1316 (Fed.Cir.2000) (means-plus-function elements may disclose alternative structures for accomplishing the claimed function); *Serrano v. Telular Corp.*, 111 F.3d 1578, 1583 (Fed.Cir.1997) (claim element may embrace distinct and alternative described structures for performing the claimed function; "[d]isclosed structure includes that which is described in a patent specification, including any alternative structures identified.").

Defendant contends that the prosecution history requires that the "means for creating air channels" includes both flutes and a support reel and guide means for positioning a pipe in the compost material. In support of this position, defendant relies on the prosecution history argument made above in connection with the "tunnel means" element, Element C. For the reasons explained above, I agree with plaintiff that while there is ample reference to the plurality of flutes in connection with Application Claim 1, Application Claim 8 (which became Claim 1 of the '744 patent), was not based on Application Claim 1 but rather, was based on Application Claim 17. Thus, I disagree with defendant's position that the prosecution history requires that the flutes be viewed as a corresponding structure to the "air channel means" in this element. Accordingly, I disagree with defendant's argument that plaintiff made a bargain with the examiner during the prosecution of the patent such that by incorporating both the flutes and the reel and guide means to position a perforated pipe in the compost material, Application Claim 8 would be allowed.

Next, defendant argues that the wording of the next two elements, Elements G and H, does not limit the "air channel means" in Element F to the positioning pipe. Elements G and H in the '744 patent FN2 read as follows:

FN2. Element G in Claim 3 of the '910 patent and in Claim 1 of the '562 patent are identical to Element G of the '744 patent. Element G in Claim 1 of the '910 patent has some different additional language. Element H in Claim 3 of the '910 patent and in Claim H of the '562 patent are almost identical to Element H in the '744 patent. They are different only in the addition of the word "substantially" before "horizontal position." Element H in Claim 1 of the '910 patent is quite different from Element H in the other patents.

said means for creating air channels comprising means for positioning an elongated, perforated pipe means in the compost material;

said means for positioning the elongated pipe means in the compost material including means for positioning the pipe means in a horizontal position, a reel means positioned on said wheeled frame means outwardly of said tunnel means, said reel means having the elongated pipe means wound thereon, and a guide means extending between said reel means and the interior of said tunnel means for guiding the pipe means from said reel means into the interior of said tunnel means.

Exh. A to Compl. at p. 7.

Defendant anticipates that plaintiff will argue that the corresponding structure for the "means for creating air channels" in Element F is limited to the perforated pipe because plaintiff qualified the "means for creating air channels" in Element F by further limiting it in Element G with a means for positioning the elongated, perforated pipe and additionally limiting it in Element H by requiring a reel and guide means. Defendant

argues that such an argument is untenable because plaintiff used the word "comprising" to add the additional positioning and reel and guide means structure to the "means for creating air channels."

As a general rule of patent construction, use of the word "comprising" means including the elements that follow, but not excluding additional, unrecited elements. *Georgia-Pacific Corp.*, 195 F.3d at 1327-28. In contrast, use of the word "consisting of" means including only the elements that follow in the body and no more. *See Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc.*, 212 F.3d 1377, 1382-83 (Fed.Cir.2000) ("The phrase 'consisting of' is a term of art in patent law signifying restriction and exclusion, while, in contrast, the term 'comprising' indicates an open-ended construction. simple terms, a drafter uses the phrase 'consisting of' to mean 'I claim what follows and nothing else.' A drafter uses the term 'comprising' to mean 'I claim at least what follows and potentially more.' ") (citations omitted).

Defendant argues that by using "comprising" instead of "consisting of" to limit the express "means for creating air channels" claim element in Element F, plaintiff made clear that it did not intend to fully specify Element F's "means for creating air channels" by identifying all of the structure necessary to perform that function in Elements G and H.

While defendant's argument is persuasive, its anticipation of plaintiff's argument is not quite on the mark. In contrast to what defendant anticipated plaintiff's argument would be, plaintiff does not suggest that the language in Elements G and H limit the corresponding structure of Element F to the reel and positioning means used to position the perforated pipe. Rather, plaintiff agrees with defendant that its use of the word "comprising" meant that plaintiff did not intend to fully specify the "means for creating air channels" element by identifying all of the structure necessary to perform the function. But, plaintiff argues, the use of the word "comprising" does not mean, as defendant suggests, that the flutes and the perforated pipe descending from the reel and a positioning means are a single corresponding structure.

Nonetheless, while the law supports plaintiff's position that a patentee in a means-plus-function claim may disclose alternate corresponding structures, I do not agree with plaintiff that the flutes and the pipe are alternate structures in this case. First, the air channel means element itself uses the word "channels" in the plural, indicating that more than one air channel is contemplated. Although the specification indicates that more than one pipe may be used, the overwhelming number of references in the specification are to a single pipe only. Thus, the flutes, which are multiple objects, are the only disclosed structure capable of creating more than one channel.

Second, the title of the patent also refers to "channels" in the plural. Third, as seen from the quoted portions above, the specification is rife with references to the flutes in the background, the summary of the invention, and the description of the preferred embodiment. Furthermore, Figures 2 and 3, the only figures to show the interior of the tunnel, reflect the incorporation of both flutes and pipe. Additionally, Figure 5, showing the mass compacted into the bag without the machine attached, shows channels in the exterior surface of the material created by the flutes.

Defendant also makes the argument that identifying the corresponding structure as only the reel/guide with perforated pipe would render other parts of the claim meaningless in contrast to well-established patent law construction canons that require all elements to be considered meaningful and that instruct that it is improper to eliminate or ignore a claim limitation to extend a patent to subject matter disclosed, but not claimed. Defendant contends that if the corresponding structure is identified as only the reel/guide with perforated pipe, then the "air channel" element in Element F is redundant and meaningless, as is the "positioning

means" element in Element G, because Element H covers the reel, the guide, and the pipe. This, defendant argues, is in contrast to the well-of construction cited above.

I agree with defendant's contention. To read the flutes entirely out of the corresponding structure for the "air channel" element would render the "air channel" element meaningless and thus, would not be a favored construction. *See Kraft Foods, Inc. v. International Trading Co.*, 203 F.3d 1362, 1366 (Fed.Cir.2000) (two claims of the same patent are presumptively of different scope); *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed.Cir.1998) (rejecting construction which would have rendered one claim of patent superfluous or redundant).

I recognize that the description of the preferred embodiment indicates that the desired decomposition could be achieved with either the channels created by the flutes or the pipe. However, despite this description, I reject plaintiff's argument that the structure is correctly identified as either the flutes or the reel/guide and pipe. Given the overwhelming number of references throughout the patent specification to the flutes, and their depiction in the drawings, combined with the element's textual reference to "channels" in the plural, I conclude that the proper corresponding structure for the air channel means is the flutes and the perforated pipe. *See Unique Concepts*, 939 F.2d at 1562 (patentee cannot be allowed to expressly state throughout specification and claims that his invention includes a limitation and then be allowed to avoid that claim limitation by pointing to one part of specification stating an alternative). The flutes as well as the pipe are corresponding structure because the specification clearly links both the flutes and the pipe to the air channel creation function.

G. Element G FN3

FN3. The language in this element is identical to that in Claim 3 of the '910 patent and to that in Claim 1 of the '562 patent. Claim 1 of the '910 patent has some identical language but adds different language. The impact of any differences are discussed below.

This element reads:

said means for creating air channels comprising means for positioning an elongated, perforated pipe means in the compost material;

Exh. A to Compl. at p. 7.

The parties agree that this element is expressed in means-plus-function language, implicating s. 112, para. 6. I agree. The function identified by this element is the positioning of an elongated, perforated pipe in the compost material to allow air into the compost material.

The specification states that

Means is also provided for positioning an elongated perforated pipe or tube in the approximate center of the mass so that additional air is provided to the mass to ensure that sufficient air will be present in the mass to achieve proper decomposition. The perforated pipe could either be a single length of pipe 50 wound upon reel 52 or may be comprised of individual sections of pipe. It should be understood that it is preferred that the pipe 50 be positioned in the center of the mass of the material in addition to the channels 48.

Exh. A to Compl. at p. 7 (col. 3, lines 11-20). It additionally provides that "[i]t should also be noted that even though the drawings only illustrate a single pipe being positioned in the mass, additional pipes could be positioned therein if necessary." Id. (col. 3, lines 24-27).

Defendant also urges that the following specification language is relevant:

Reel 52 is rotatably mounted on the wheeled frame means above the tunnel 14 as seen in the drawings by any conventional fashion. The pipe 50 is coiled on the reel 52 and is fed therefrom downwardly and rearwardly through a pipe guide 54. It is recommended that the cross-section of the rearward end of the pipe guide 54 have the triangular cross-section as illustrated in FIG. 2. The distal end 56 of the pipe 50 would be extended outwardly of the distal end or the fixed end of the bag 16 as seen in FIG 1. As the bagging machine moves relative to the bag 16, the pipe 50 is pulled from the reel 52 and is positioned in the approximate center of the mass as illustrated in FIGS. 1 and 5.

Id. (col. 3, lines 28-40). Additionally, Figure 1 shows the pipe coming off of a reel, straight down vertically into a tube which is at first outside of the tunnel. Id. at p. 2. Then, the tube, with pipe inside it, curves ninety degrees so that it is horizontal and enters the interior of the tunnel, at a point which appears to be halfway between the top and bottom of the tunnel. Id. The tube continues about half the length of the tunnel and then stops, with the pipe continuing out of it. Id.

Figure 2 shows the interior of the tunnel with a triangular-shaped tube with a perforated pipe coming out of it in the center of the interior of the tunnel. Id. at p. 3. The pipe is also seen wound on a reel which sits on top of the tunnel. Id. Figure 3 also shows the interior of the tunnel from a straight-on cross-section view. Id. at p. 4. It shows the pipe protruding from the triangular-shaped tube in the middle of the tunnel which is filled with compost material. Id. It also shows the pipe wound about the reel atop of the tunnel and descending outside of the tunnel into a tube on the far side of the tunnel. Id.

Plaintiff contends that the corresponding structure for the "positioning" means in this element should be construed as a supply of perforated pipe or pipes which are inserted into the compost material by way of a guide tube, pipe, passageway, chamber, or channel through which the pipe is passed as the compost is bagged.

Defendant urges that the corresponding structure includes (1) the reel means (as further defined) to support the perforated pipe as it is fed into the guide and (2) the guide means (further defined) to direct the pipe from the support reel into the center of the compost material.

I agree with defendant. The specification identifies only one method for positioning the pipe—the use of a reel to initially hold the pipe and a tube which directs the pipe from the reel into the proper position in the tunnel to be inserted into the compost material. I agree that some of the specification language regarding the positioning means does not implicate the reel or the guide tube. But, similar to the specification's overwhelming references to the flutes in relation to the tunnel means of Element F, when the entire specification is read, the only structure for positioning the pipe in the desired center of the compost material, or anywhere in the compost material for that matter, is the reel and the guide. Thus, I identify the corresponding structure for the "positioning" element as the reel and a guide tube.

H. Element H

The parties have split the next "element" into three separate elements which I will discuss separately. The first part, Element H, is the "horizontal position means." The second part, Element I, is the "reel means." And the third part, Element J, is the "guide means."

The language of "Element H" from the '744 patent reads:

said means for positioning the elongated pipe means in the compost material including means for positioning the pipe means in a horizontal position[.]

Exh. A to Compl. at p. 7. The language in Claim 3 of the '910 patent and Claim 1 of the '562 varies only by the addition of the word "substantially" and by a slight change of "including" to "includes":

said means for positioning the elongated pipe means in the compost material includes means for positioning the pipe means in a substantially horizontal position[.]

Exh. B to Compl. at p. 7; Exh. C to Compl. at p. 8. The parties do not contend that the addition of the word "substantially" in Claim 3 of the '910 patent and in Claim 1 of the '562 patent, or the change from "including" to "includes" are material to the case. JCCS at p. 9.

The parties agree that this is means-plus-function language, implicating s. 112, para. 6. I agree.

Based on the plain language, the identified function of this element is to position the pipe horizontally within the compost material, or at least in a substantially horizontal position. Relevant portions of the specification provide that

Means is also provided for positioning an elongated perforated pipe or tube in the approximate center of the mass so that additional air is provided to the mass to ensure that sufficient air will be present in the mass to achieve proper decomposition. The perforated pipe could either be a single length of pipe 50 wound upon reel 52 or may be comprised of individual sections of pipe. It should be understood that it is preferred that the pipe 50 be positioned in the center of the mass of the material in addition to the channels 48.

Exh. A to Compl. at p. 7 (col. 3, lines 11-20). Additionally, the specification provides that

Reel 52 is rotatably mounted on the wheeled frame means above the tunnel 14 as seen in the drawings by any conventional fashion. The pipe 50 is coiled on the reel 52 and is fed therefrom downwardly and rearwardly through a pipe guide 54. It is recommended that the cross-section of the rearward end of the pipe guide 54 have the triangular cross-section as illustrated in FIG. 2. The distal end 56 of the pipe 50 would be extended outwardly of the distal end or the fixed end of the bag 16 as seen in FIG 1. As the bagging machine moves relative to the bag 16, the pipe 50 is pulled from the reel 52 and is positioned in the approximate center of the mass as illustrated in FIGS. 1 and 5.

Id. (col. 3, lines 28-40).

As noted above in connection with Element G, Figure 1 shows the pipe coming off of a reel, straight down vertically into a tube which is at first outside of the tunnel. Id. at p. 2. Then, the tube, with pipe inside it, curves ninety degrees so that it is horizontal and enters the interior of the tunnel. Id. The tube continues about half the length of the tunnel and then stops, with the pipe continuing out of it. Id.

Figure 2 shows a triangular-shaped tube with a perforated pipe coming out of it in the center of the tunnel interior. Id. at p. 3. The pipe is also seen wound on a reel which sits on top of the tunnel. Id. Figure 3 also shows the interior of the tunnel from a straight-on cross-section view. Id. at p. 4. It shows the pipe protruding from the triangular-shaped tube in the middle of the tunnel which is filled with compost material. Id. It also shows the pipe wound about the reel atop of the tunnel and descending outside of the tunnel into a tube on the far side of the tunnel. Id.

Based on the structure described in the specification, I conclude that the structure corresponding to the horizontal positioning means is the pipe guide which is attached to the outside of the tunnel and which receives the pipe from the reel and which then guides the pipe, by curving ninety-degrees to become horizontal, into the interior and to the center of the tunnel.

I. Element I

In Claim 1 of the '744 patent, this element reads:

a reel means positioned on said wheeled frame means outwardly of said tunnel means, said reel means having the elongated pipe means wound thereon[.]

Exh. A to Compl. at p. 7. Claim 3 of the '910 patent and Claim 1 of the '562 patent have slightly different language:

said means for positioning the elongated pipe means including a reel means positioned on said wheeled frame means outwardly of said tunnel means, said reel means having the elongated pip means wound thereon[.]

Exh. B to Compl. at p. 7; Exh. C to Compl. at p. 8.

The parties appear to agree that the differences between Claim 1 of the '744 patent on the one hand and Claim 3 of the '910 patent and Claim 1 of the '562 patent on the other hand, are not material. The parties also agree that despite the presence of the word "means," this element does not state a means-plus-function claim implicating s. 112, para. 6. As defendant explains, where a term has a generally understood structural meaning in the art, the term should be given such a meaning. *See Mas Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206, 1213 (Fed.Cir.1998) (despite lack of use of word "means," element was construed to be in means-plus-function format because the "lever moving element" had not been shown to have a generally understood structural meaning in the art.). Here, the parties agree, a reel is simply a "revolvable device on which something flexible is wound." I accept the parties' argument and agree that this element does not implicate s. 112, para. 6.

Defendant notes, and I agree, that the specification and prosecution history do not suggest any contrary meaning given by plaintiff for the word "reel." The specification states: "[r]eel 52 is rotatably mounted on the wheeled frame means above the tunnel 14 as seen in drawings by any conventional fashion." Exh. A to Compl. at p. 7 (col. 3, lines 28-30). During prosecution, the examiner mentioned only the reel and no other structure. In rejecting plaintiff's claims at one point, the examiner stated that "[r]eels are well known in the packaging art[.]" Exh. H-2 at p. 5. In this case, based on the element language and the specification, I construe this element to mean a revolvable device upon which the perforated pipe is wound, located on top

(outside) of the tunnel which then feeds the pipe into the pipe guide located outside of the tunnel.

J. Element J

In Claim 1 of the '744 patent and in Claim 1 of the '562 patent, this element reads:

a guide means extending between said reel means and the interior of said tunnel means for guiding the pipe means from said reel means into the interior of said tunnel means.

Exh. A to Compl. at p. 7; Exh. C to Compl. at p. 8. Claim 3 of the '910 patent uses slightly different words:

a guide means for guiding the pipe means from said reel means into the interior of the tunnel means.

Exh. B to Compl. at p. 7. Again, the parties do not appear to claim that the differences between Claim 1 of the '744 patent and Claim 1 of the '562 patent on the one hand, and Claim 3 of the '910 patent on the other hand, are material.

The parties agree that the element is in means-plus-function format and thus, implicates s. 112, para. 6. I agree. Based on the language of the element, the element's function is properly identified as directing the pipe wound on the reel, from the reel into the tunnel and into the organic material as it is forced into the bag.

Relevant specification language is:

The pipe 50 is coiled on the reel 52 and is fed therefrom downwardly and rearwardly through a pipe guide 54. It is recommended that the cross-section of the rearward end of the pipe guide 54 have the triangular cross-section as illustrated in FIG 2. The distal end 56 of the pipe 50 would be extended outwardly of the distal end or the fixed end of the bag 16 as seen in FIG 1. As the bagging machine moves relative to the bag 16, the pipe 50 is pulled from the reel 52 and is positioned in the approximate center of the mass as illustrated in FIGS. 1 and 5.

Exh. A to Compl. at p. 7 (col. 3, lines 30-40). Figures 1, 2, and 3 as described above are also relevant.

The parties dispute the proper corresponding structure. Defendant contends that the corresponding structure for the identified function of guiding the pipe is a triangular-shaped channel positioned below the reel, extending downward and rearward from the reel on the outside of the tunnel and then bending ninety degrees and continuing horizontally into the tunnel. Defendant contends that this is the correct corresponding structure because it is the only structure cited in the specification for performing the function of guiding the pipe into the organic material.

Plaintiff contends that the corresponding structure should be interpreted as any pipe, tube, channel, or passageway through which the pipe passes. It appears that the major point in dispute is whether the guide is triangular in shape. Although the specification does not reveal what material the guide is made of, the specification and the drawings clearly identify a fixed object which acts as a tube, pipe, channel, or passageway such that a pipe may travel through it, and which starts outside of the tunnel so as to receive the pipe being fed from the reel, and then turning ninety degrees and continuing to the interior of the tunnel in a horizontal position. The guide must be positioned so that it, and the perforated pipe emitting from it into the compost material in the tunnel, avoid the rotor, the rotor teeth, and the comb.

The patent clearly states that the triangular shape of the guide is "recommended." Exh. A to Compl. at p. 7 (col. 3, lines 32-35). Plaintiff argues that to construe the triangular shape as part of the corresponding structure would be to improperly narrow the scope of the claim.

I agree with plaintiff. As noted above, under s. 112, para. 6, a court may not import into the claim structural limitations from the written description that are unnecessary to perform the claimed function. *Micro Chem.*, 194 F.3d at 1258. Here, because the specification only recommends the triangular shape, it is not required to perform the function.

In contrast to the analysis in regard to Element F where the specification suggested through its numerous references to the flutes that they were part of the corresponding structure, and in contrast to the analysis of Element G where the specification's lack of reference to any other structure to perform the identified function indicated that the reel and the guide were the corresponding structure, here nothing in the specification or in the prosecution history suggests that the triangular shape of the guide tube is necessary. Rather, it is the presence of a guide tube of any shape that appears to perform the function. Thus, I conclude that the corresponding structure for Element J is any pipe, tube, channel, or passageway, through which the perforated pipe may pass, positioned below the reel, extending downward and rearward from the reel on the outside of the tunnel and then bending ninety degrees and continuing into the tunnel such that it is in a horizontal position within the tunnel.

II. The '910 Patent

Most of the claim construction issues for the '910 patent have been resolved in the discussion of the identical or substantially similar elements of the '744 patent. Thus, separately addressed here are claim elements with materially different language and thus, are not covered by the claim construction of the identical or substantially similar element in the discussion of the '744 patent above.

A. Element G

In the JCCS, the parties represent that Element G of Claim 1 of the '910 patent is written with additional limitations not included in the language of Element G of the other claims in this action. Element G of Claim 1 of the '910 patent states:

said means for creating air channels comprising positioning means which positions at least one elongated, perforated pipe extending substantially the entire length of the compost material in the bag as said bagging machine bags the compost material in said bag[.]

Exh. B to Compl. at p. 7.

The parties agree that this element is expressed in means-plus-function language, implicating s. 112, para. 6. I agree. The function identified by this element is the positioning of an elongated, perforated pipe in the compost material, with the pipe extending substantially the length of the bag, so that air is allowed into the compost material.

Defendant urges that the structure of the "positioning" means is the same as that identified for Element G of Claim 1 of the '744 patent and that the only substantive difference is that the element language here requires the pipe to extend substantially the entire length of the bag. Plaintiff contends that the corresponding

structure is any pipe, tube, channel, or passageway through which the pipe passes.

The relevant specification language is identical to that contained in the specification for the '744 patent. Because the specification language is the same and the differences in the element language require only that the structure allow insertion of the pipe substantially the entire length of the bag, I agree with defendant that the proper corresponding structure for the "positioning" element is the reel and a guide tube.

B. Element H

The parties state that Element H of Claim 1 of the '910 patent is written with additional limitations not included in the language of Element H of the other claims in suit. Element H of Claim 1 of the '910 patent reads:

said perforated pipe having openings formed therein for substantially the entire length thereof[.]"

Exh. B to Compl. at p. 7.

Defendant contends that this element is not written in means-plus-function format. I agree. The parties agree on the following construction: the pipe is perforated or punctured over "substantially" the entire length of the pipe. I accept the parties' construction.

C. Element I

Element I of Claim 1 of the '910 patent is different from Element I in each of the other claims at issue. Element I of Claim 1 of the '910 patent reads:

a pipe support on said wheeled frame means for supporting said perforated pipe thereon prior to said perforated pipe being positioned in said compost material by said positioning means as said bagging machine bags the compost material in said bag.

Exh. B. to Compl. at p. 7. The parties agree that despite the absence of the word "means," this element should be construed under s. 112, para. 6, as it recites a function without reciting any structure. Defendant notes in the JCCS that the term "pipe support" is not a term of art denoting any structure and thus, the element has to be read to include corresponding structures identified in the specification. I agree with the parties.

Based on the language of the element, the function of the pipe support is to support the perforated pipe before it is positioned in the compost material by the positioning means.

Nothing in the patent specification expressly refers to a "pipe support." Based on the element's language, the pipe support is something that supports the pipe "prior to" it being put in the compost material by the positioning means. Thus, the language suggests that the pipe support is something other than the positioning means. As indicated above, I construe the "positioning means" of Element G of Claim 1 of the '910 patent as including both the reel and the guide. Thus, consistent with that interpretation, if the language here is construed to mean that the pipe support is something other than the positioning means, the corresponding structure to the pipe support means would have to be identified as structure intended to support the pipe on the frame *before* it is positioned in the compost material by the reel and the guide, e. g. "the positioning means."

However, because the pipe is found only on the reel, in the guide, and then in the compost material itself, I cannot conclude that the pipe support is something other than the positioning means. Rather, I read the language in the element to mean that the properly identified corresponding structure to the pipe support is structure supporting the pipe before it is actually properly placed in the compost material by the guide, and thus, the corresponding structure for the pipe support is the reel. While the positioning means includes both the reel and the guide, it is the guide that actually feeds the pipe into the proper position in the compost material. Thus, because the element language suggests that the proper structure for the pipe support is something that supports the pipe "prior to" it being placed in the compost material, the appropriate corresponding structure for the pipe support is the reel.

III. The '562 Patent

All claim construction issues relative to the '562 patent are discussed in the context of the '744 patent.

IV. The '843 Patent

This patent is owned by defendant and is the basis of defendant's counter-infringement claim against plaintiff. The patent has three claims, with Claim 2 depending from Claim 1, and Claim 3 depending from Claim 2. Defendant alleges that plaintiff has infringed Claims 1 and 2, but not Claim 3. The relevant Claims provide:

1. A method of treating organic materials comprising:

enclosing organic materials in large plastic storage bags that are impervious to moisture and air;

providing at least one conduit in the organic material as enclosed which has one end extended out of the bag and exposed to the exterior of the bag, and providing multiple openings through the walls of the conduit along the length of the conduit inside the bag and exposed to the organic material therein;

providing a vent opening in the bag at a position spaced from the conduit and spaced from the one end of the conduit extended out of the bag, and

forcing a media suitable for treating the organic material in the bag into the exposed end of the conduit, through the openings in the conduit and into the material in the bag for treating said material said vent opening positioned for circulation of said media through said organic material and out of the vent opening.

2. A method as defined in claim 1 wherein the media is air, attaching a blower to the exposed end and blowing air into said conduit for aerating said material.

Exh. A to Am. Answer at p. 7.

The parties agree that none of the elements of these two claims are written in means-plus-function format invoking s. 112, para. 6. I agree.

A. Claim 1, Element A

The language identified by the parties in their Supplemental Joint Claim Construction Statement (SJCCS) as

Element A reads:

A method of treating organic materials comprising:

enclosing organic materials in large plastic storage bags that are impervious to moisture and air;

Id. The parties agree that the preamble ("A method of treating organic materials comprising:"), requires no special construction. The parties also agree that the method of Claim 1 is not limited to the processes of fermenting, drying, or composting organic materials, but is directed more broadly to "treating organic materials." Defendant notes that drying, fermenting, and composting are in the specification as example applications for the method of Claim 1.

The parties agree that no "term" in the remaining part of Element A needs to be specially construed. Plaintiff states that no construction is required and that the element does not limit the bag to any particular length or diameter. Defendant agrees, but suggests that the element includes filling large storage bags with organic materials using bagging machines. Defendant argues that by using the term "large" to modify "plastic storage bags," the method of Claim 1 requires the use of bagging machines as distinguished from, for example, filling large garbage bags with lawn clippings or leaves. Defendant cites to specification language which identifies, in the background section, large plastic bags as "4-12 feet in diameter and 300 feet in length." Id. at p. 5 (col. 1, lines 14-15).

While I agree that the element language does not limit the bag to any particular length or diameter, I reject defendant's argument that just because the claim uses the adjective "large" to modify "plastic storage bags," and just because the specification identifies the dimensions of the large bags, it is necessarily implied that the bags must be filled by a bagging machine. Thus, I construe Element A to mean a method of enclosing organic materials in large plastic storage bags that are impervious to moisture and air, which may be accomplished with bagging machines. B. Claim 1, Element B

The language identified by the parties in their SJCCS as Element B reads:

providing at least one conduit in the organic material as enclosed which has one end extended out of the bag and exposed to the exterior of the bag, and providing multiple openings through the walls of the conduit along the length of the conduit inside the bag and exposed to the organic material therein;

Id. at p. 7.

The parties agree that this element calls for inserting at least one perforated conduit in the bagged organic material, leaving one end exposed to the outside of the bag and the perforated portion exposed to the contents of the bag. The end left exposed to the outside of the bag is not perforated, or the perforations have been sealed in some manner, and the portion of the conduit inside the bag contains multiple perforations. This is supported by the following specification language:

With reference to FIG. 1, the start-up end 18 of the conduit may or may not be plugged as desired to control the flow rate through the slots 16 and a rearmost section 18 of the conduit will not be perforated so as to maintain air pressure through the conduit until flowing air reaches the filled portion of the bag. The transition from perforated to non-perforated conduit can be provided in a number of ways. For example, as illustrated in FIG 1b, different sections of the conduit can be readily coupled together. Thus, once the end of

the bag is determined, the perforated conduit 14 can be severed and a non-perforated section 18 can be added for extension out the end of the bag. As shown, the end of conduit section 18 can be split and the circumference reduced (by overlapping the split sides as indicated by fullline S and S) to fit the end of the perforated conduit. A more simple approach would be to simply extend the same perforating conduit out through the bag end but wrap that portion designated as section 18 with tape or the like to close the perforations. A third alternative is to generate the perforations as the conduit is being placed in the bag and simply discontinue the perforations when the bag end is reached.

Id. at p. 6 (col. 3, lines 42-62).

The parties dispute, however, whether or not the inserted conduit must run "substantially the length of the bag." Defendant contends that the conduit must run substantially the length of the bagged organic material in order to "expose" the organic material in the bag to the media being injected. Plaintiff states that other than the construction noted above, no further limitation regarding the dimensions of the conduit, or its positioning with respect to the bag, are set forth.

In support of its argument, defendant cites to the following language in the specification: "As illustrated, a perforated conduit 14 is laid along the interior of the bag substantially the full length of the bag." Id. at p. 6 (col. 3, lines 18-20). Defendant also notes that Figures 1 and 2 show the conduit running the length of the bag.

As noted above, claim construction begins with the words of the claim, and then includes the specification and prosecution history. *Bell Howell*, 132 F.3d at 705. Here, the words of the claim include no reference to the placement of the conduit inside the bag. However, the specification and drawings indicate that the conduit runs substantially the length of the bag. While it is improper to "read in" to a claim a limitation from the specification's general discussion, embodiments, and examples when the specification does not *require* the limitation, I conclude that here, because the "start-up end" of the conduit does not extend beyond the end of the bag, but ends inside the bag, if the conduit does not run the entire length of the bag there is no way to "expose" the organic material in the entire bag to whatever is being injected. Thus, I agree with defendant that the element includes the limitation that the conduit run substantially the length of the bag.

C. Claim 1, Element C

The language identified by the parties in their SJCCS as Element C of the '910 patent provides that:

providing a vent opening in the bag at a position spaced from the conduit and spaced from the one end of the conduit extended out of the bag,

Id. at p. 7. The parties appear to have no dispute over the construction of this element. The method requires inclusion of an opening in the bag, or a device attached to the bag, which allows the media to exit the bag once it is exposed to the bagged organic material, with the opening placed away from the conduit and away from the one end of the conduit extending out of the bag, that is, away from the media-introducing portion of the conduit. This is a reasonable construction of the language of Element C.

D. Claim 1, Element D

The language identified by the parties in their SJCCS as Element D of the '910 patent provides that:

forcing a media suitable for treating the organic material in the bag into the exposed end of the conduit, through the openings in the conduit and into the material in the bag for treating said material said vent opening positioned for circulation of said media through said organic material and out of the vent opening.

Id. at p. 7. The parties agree that an external force must be supplied to force "media" into the end of the conduit extending out of the bag so that the "media" is forced through the conduit and out the perforations along the conduit within the bag. The parties appear to further agree that the media is forced into the organic material in the bag and then escapes out the vent opening.

As defendant notes, examples of sources of force include blowers, fans, and pumps, although the specification references only blowers. *Id.* at pp. 5-6 (col. 2, lines 28-30; col. 3, lines 63-67; col. 4, lines 1-2). Based on the claim language which does not limit the forcing mechanism to blowers, I conclude that the proper construction is that the method describes using a blower or some other forcing mechanism, connected to the perforated conduit(s) to force the treatment media into the organic material.

The parties agree that the term "media" includes ambient air, oxygen, and moisture, e.g. air having a desired moisture content, or lack of moisture content. Various parts of the specification language support this construction. First, in the background section of the patent, the specification provides that

the fermenting process for producing silage requires a high level of moisture content, i.e. a moisture content above about 22%. Storage preservation for grain requires a low level of moisture content, i.e. below about 15%. Decomposition of garbage requires a moisture content (in the presence of air) of between about 18% to 90%.

Id. at p. 5 (col. 1, lines 40-45). Additionally, the detailed description of the invention states that

If the material 12 is grain that is in a too-moist condition for conventional storage, i.e. with a moisture content above 15%, it must be dried in order to prevent decay or fermenting. If the material is garbage that is to be composted, it must be provided, e.g. with oxygen as well as moisture to maintain the decaying process. In either event, the treatment prescribed is most likely to be aeration of the material with ambient air.

Id. at p. 6 (col. 3, lines 11-18). There are additional references to ambient air. *See Id.* at pp. 5, 6 (col. 2, lines 29-31; col. 3, lines 65-66); *see also Id.* at p. 5 (col. 2, lines 35-43) (describing the moisture content of the ambient air to be blown through the conduit for grain, compost, and silage).

Defendant, however, adds that "media" should also include "air having other treatment enhancing materials mixed therewith." Deft's Memo. on Claim Constr. for '843 Patent at p. 6. Plaintiff states that nowhere in the specification is there a discussion of "other treatment enhancing materials." Plaintiff notes that in the description of the invention, when discussing the moisture content of the ambient air to be blown through the conduit for various organic materials, the specification states that

[f] or compost, ambient air may be blown through the conduit to reduce the moisture content down to the range of between 18% and 22% or if moisture is required, a water saturated air, e.g. steam or even liquid water may be introduced through the conduit.

Exh. A to Am. Answer at p. 5 (col. 2, lines 37-41). Thus, plaintiff contends that "media" should be construed to mean ambient air or oxygen mixed with water.

Nothing in the language of the claim element itself limits treatment media to ambient air or oxygen and moisture. While the specification language suggests these are the intended media, I do not construe the element with that limitation. First, I am concerned that to construe the element as limited to ambient air, oxygen, and moisture would be improperly "reading in" a limitation from the specification into the claim element when such a limitation is not actually required by the specification, but is used only to describe the different types of media.

Second, as noted above, the parties agree that the method of Claim 1 is not limited to the processes of fermenting, drying, or composting organic materials, but is directed more broadly to "treating organic materials." The references in the specification to ambient air, oxygen, and moisture are mentioned only in the context of fermenting silage, drying grain, or composting garbage. Thus, because the references to these three media are linked only to examples of organic material which the parties have agreed do not limit the types of organic material that may be treated, I cannot conclude that the media disclosed in this element should be similarly limited. I adopt defendant's proposed construction.

H. Claim 2

Claim 2 is quoted above. The parties agree that no construction of this claim is required. I agree.

CONCLUSION

The claims at issue in the four patents are to be construed consistent with this Opinion.

IT IS SO ORDERED.

D.Or.,2002.

Versa Corp. v. Ag-Bag Intern. Ltd.

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