United States District Court,
E.D. Virginia, Norfolk Division.

FELLOWES, INC,
Plaintiff.
v.
MICHILIN PROSPERITY COMPANY, LTD. and Intek America, Inc,
Defendants.

Civil Action No. 2:06cv289

Dec. 15, 2006.

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OPINION AND ORDER

ROBERT G. DOUMAR**, United States District Judge.**

This case involves an action alleging infringement of two patents owned by Plaintiff Fellowes, Inc. ("Fellowes") which disclose inventions used in paper shredders. The first patent is entitled "Shredder With Lock For On/Off Switch" and was issued on May 9, 2006, as United States Patent No. 7,040,559 (the "'559 patent"). The second patent is entitled "Paper Shredder Shaft" and was issued on July 17, 2001, as United States Patent No. 6,260,780 (the "'780 Patent"). Presently before the Court is the claim construction of several terms found in claims in the '559 patent and the ' 780 patent. The Court's construction of these terms is explained herein.

I. Background

Fellowes, an Illinois corporation, is the assignee of the '780 and '559 patents. On May 23, 2006, Fellowes filed suit against Michilin Prosperity Company, Ltd. ("Michilin"), alleging in a two-count complaint that Michilin infringed the '780 and '559 patents by "making, using, importing, offering for sale, and/or selling in the United States, including in the Eastern District of Virginia," shredders covered by one or more of the claims in Fellowes' patents. Pl.'s Compl. 4-7. On October 16, 2006, Fellowes amended its complaint to add Intek America, Inc. ("Intek") as a defendant. In a joint statement submitted to the Court, the parties agreed to limit the claim construction to claims 1, 14, 15, and 16 of the '559 patent and claims 1, 2, 3, 5, 7, 9, 10

and 12 of the '780 patent. On October 23, 2006, this Court held a Markman hearing. FN1 Fellowes and Michilin submitted a Joint Markman Statement and accompanying briefs on October 20, 2006. Intek filed a brief in support of its proposed claim construction on November 13, 2006. On November 22, 2006, Intek filed, with the Court's permission, an amended brief on its proposed claim construction which superceded its previous brief. On December 4, 2006, Fellowes filed a brief in response to Intek's amended brief.

FN1. Intek did not participate in the Markman hearing, though its counsel appeared and notified the Court that it was representing Intek in this case. Intek subsequently submitted briefs on claim construction and did not desire a second Markman hearing.

In this case, the parties have raised sophistry to a premiere art. As one travels life's byways, one often encounters problems akin to picking flyspecks from pepper. The attorneys in this case have left no doubt about their ability to do so, especially where the same attorneys represent two different defendants that attach different meanings to the same phrases.

A. The '559 Patent

The '559 patent discloses, as described in the patent's abstract, a "shredder with a switch lock that locks the on/off switch in its on/off position." The patent consists of thirty-seven claims, of which Claims 1, 14, 15, and 16 are alleged to be infringed. The Court will not construe Claims 14, 15, and 16 because the parties agree on their construction. The dispute focuses solely on Claim 1, which reads in its entirety as follows, with the portions of the claim requiring construction bolded:

A shredder comprising:

a housing;

a shredder mechanism mounted in the housing and including an electrically powered motor and cutter elements, the shredder mechanism enabling articles to be shredded to be fed into the cutter elements and the motor being operable to drive the cutter elements so that the cutter elements shred the articles fed therein;

a throat opening provided on the housing for enabling articles to be fed into the shredder mechanism;

an on/off switch **provided on an exterior of the housing** and **electrically coupled to the motor of the shredder mechanism,** the switch including a manually engageable portion manually movable by a user's hand between at least (a) an on position wherein the switch enables delivery of electric power to the motor and (b) an off position disabling the delivery of electric power to the motor;

a switch lock movable between (a) a locking position wherein the switch is locked in the off position and (b) a releasing position wherein the switch is released for movement from the off position;

wherein the switch lock includes a manually engageable portion **provided on the exterior of the housing,** the manually engageable portion being manually movable by the user's hand to move the switch lock between the locking and releasing positions.

'559 Patent, col. 6, lines 36-62.

B. The '780 Patent

The '780 patent consists of twelve claims, of which 1, 2, 3, 5, 7, 9, 10 and 12 are alleged to be infringed. The parties having agreed on the construction of claims 2, 3, and 10, the Court will limit its construction to those claims which are in dispute, namely claims 1, 5, 7, 9 and 12. The entirety of Claim 1 of the '780 patent is as below, with the disputed portions bolded:

A cutting cylinder comprising a shaft having at least two **spaced apart cutting disks each having at least two circumferentially spaced teeth** and **a spacer located between two adjacent disks** wherein the cutting disks are displaced in the longitudinal direction of the cutting cylinder, and the surface of the spacer has a linear measure greater than **the distance between the two adjacent disks.**

'780 Patent, cols. 3-4, lines 46-49.

The parties agree that Claim 5 of the '780 patent is a dependent claim that requires all the limitations of claim 1. FN2 Claim 5 reads in its entirety, with the disputed portions bolded:

FN2. *See* 35 U.S.C. s. 112, para. 4 ("[A] claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.").

The cutting cylinder of claim **1 wherein the circumference of the spacer at at least one point is greater than the circumference at at least one other point.**
'780 Patent, col. 4, lines 17-19. Claim 7 of the '780 patent, which the parties agree is dependent upon Claim 5, reads as follows:
The cutting cylinder of claim 5 **wherein the circumference of the spacer at its center is less than the circumference of the spacer at at least one of its edges.**

'780 Patent, col. 4, lines, 23-25. Claim 9 of the '780 patent is a dependent claim that requires all the limitations of claim 1. Claim 9 reads:
The cutting cylinder of claim **1** wherein a spacer is located between each adjacent disk and **wherein the surface of each spacer has a linear measure greater than the distance between each adjacent cutting disk.**

'780 Patent, col. 4, lines 30-31. The final claim of the '780 Patent at issue, Claim 12, an independent claim, reads:
A cross-cutting cylinder comprising:

a. a plurality of **cutting disks** with **each disk having at least two circumferentially spaced teeth,** with the disks arranged in a longitudinal direction of the cutting cylinder to provide a helix; and

b. **a spacer** located between each adjacent disk, wherein a surface of the spacer has a linear measure greater than **the distance between each adjacent disk.**

'780 Patent, col. 4, lines 39-47.

II. Claim Construction

A. Standard of Review

Patents consist of "claims," and claim construction is a "question of law, to be determined by the court." Markman v. Westview Instruments, Inc., 517 U.S. 370, 384, 116 S.Ct. 1384, 1393 (1996); Markman v. Westview Instruments, Inc., 52 F.3d 967, 997 (Fed.Cir.1995). "It is a bed-rock principle of patent law that the claims of a patent define the invention to which the patentee is entitled to the right to exclude." Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005) (internal citations and quotations omitted); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996) ("we look to the words of the claims themselves ... to define the scope of the patented invention"); *see also* ERNEST BAINBRIDGE LIPSCOMB III, LIPSCOMB'S WALKER ON PATENTS s. 21:1 (3rd ed.1987). A court need only construe, however, claims "that are in controversy, and only to the extent necessary to resolve the controversy." Vivid Techs ., Inc. v. Am. Science & Eng'g, Inc., 200 F.3d 795, 803 (Fed.Cir.1999).

As the United States Court of Appeals for the Federal Circuit has frequently stated, the words of a claim "are generally given their ordinary and customary meaning." Phillips, 415 F.3d at 1312; Vitronics, 90 F.3d at 1582; *see also* Toro Corp. v. White Consol. Indus., Inc., 199 F.3d 1295, 1299 (Fed.Cir.1999). The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of "ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Phillips, 415 F.3d at 1313; *see also* Multiform Dessicants, Inc. v. Medzam, Inc., 133 F .3d 1473, 1477 (Fed.Cir.1998) ("It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed."); Hoechst Celanese Corp. v. BP Chems. Ltd., 78 F.3d 1575, 1578 (Fed.Cir.1996) ("A technical term used in a patent document is interpreted as having the meaning that it would be given by persons experienced in the field of the invention, unless it is apparent from the patent and the prosecution history that the inventor used the term with a different meaning."). Inventors "are typically persons skilled in the field of the invention." Phillips, 415 F.3d at 1313.

To ascertain the meaning of claims, the Court must first consider the intrinsic record, which consists of three sources: the claims, the specification, and the prosecution history. Markman, 52 F.3d at 979; Applied Material, Inc. v. Tokyo Seimitsu, Co., Ltd., 2006 WL 2376222, (E.D.Va.2006). The first and most important step in the court's inquiry is to examine the words used in the claims themselves, both asserted and unasserted. Vitronics, 90 F.3d at 1582; *accord* Phillips, 415 F.3d at 1314 ("[T]he claims themselves provide substantial guidance as to the meaning of the particular claim terms."); Digital Biometrics, Inc. v. Indentix, Inc., 149 F.3d 1335, 1344 (Fed.Cir.1998) ("The actual words of the claim are the controlling focus."). Because claim terms are often used "consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." Phillips, 415 F.3d at 1314.

The next source to be considered is the specification, as the person of ordinary skill in the art is "deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Cook Biotech, Inc. v. Acell, Inc., 460 F.3d 1365, 1373 (Fed.Cir.2006) (citations and quotations omitted). The claims "must be read in view of the specification, of which they are a part." Markman, 52 F.3d at 979 (the specification "contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention"). The specification is "always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." Phillips, 415 F.3d at 1315 (quotations and citations omitted); *see also* 35 U.S.C s. 112, para. 1 (the specification must describe the claimed invention in "full, clear, concise, and exact terms"). The specification "may reveal a special definition given to a claim term by

the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." Phillips, 415 F.3d at 1316; *see also* ASM Am., Inc. v. Genus, Inc., 401 F.3d 1340, 1344 (Fed.Cir.2005) ("When a patentee defines a term in the specification, that definition ordinarily controls."); In re Vogel, 422 F.2d 438, 441, 164 U.S.P.Q. 619, 621 (C.C.P.A.1970) ("Occasionally the disclosure will serve as a dictionary for terms appearing in the claims, and in such instances the disclosure may be used in interpreting the coverage of the claim").

The Federal Circuit has cited as a "well-established" principle, however, that a "court may not import limitations from the written description into the claims." Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1347 (Fed.Cir.1998). References to a "preferred embodiment ... are not claim limitations." Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 865 (Fed.Cir.1988); *see also* Electro Med. Sys. S.A. v. Cooper Life Sciences, 34 F.3d 1048, 1054 (Fed.Cir.1994) ("[C]laims are not to be interpreted by adding limitations appearing only in the specification."); Raytheon Co. v. Roper Corp., 724 F.2d 951, 957 (Fed.Cir.1983) ("That claims are interpreted in light of the specification does not mean that everything expressed in the specification must be read into all the claims."); Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1341 (Fed.Cir.2001) ("[W]e are not at liberty to read [features not recited in the independent claims] into the claims.").

The third intrinsic source to be considered is the patent's prosecution history, if it is in evidence. Markman, 52 F.3d at 980. The prosecution history consists of the complete record of the proceedings before the United States Patent and Trademark Office ("USPTO") and includes the prior art cited during the examination of the patent. Phillips, 415 F.3d at 1317. The purpose of consulting the prosecution history is to determine "how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it otherwise would be." *Id.* (citing Vitronics, 90 F.3d at 1582-83). The court consults the prosecution history in order to "exclude any interpretation that was disclaimed during prosecution." Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed.Cir.2005). Although the prosecution history "provides evidence of how the PTO and the inventor understood the patent," it is "less useful for claim construction purposes" because it reflects the ongoing negotiation between the PTO and the applicant and thus "often lacks the clarity of the specification." Phillips, 415 F.3d at 1317; *see also* Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1380-82 (Fed.Cir.2002) ("It is inappropriate to limit a broad definition of a claim term based on prosecution history that is itself ambiguous.").

The doctrine of "prosecution disclaimer" precludes patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution. *See* Corbin Cabinet Lock Co. v. Eagle Lock Co., 150 U.S. 38, 40, 14 S.Ct. 28, 29 (1893); Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211, 220-21, 61 S.Ct. 235, 239-40 (1940); Omega, Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323 (Fed.Cir.2003). The doctrine applies, for example, where the patentee "explicitly characterizes an aspect of his invention in a specific manner to overcome prior art." Purdue Pharma L.P. v. Endo Pharms., Inc., 438 F.3d 1123, 1136 (Fed.Cir.2006). For "prosecution disclaimer" to arise, however, the alleged disavowing statements in the prosecution history must be "clear and unmistakable." Omega, Eng'g, 334 F .3d at 1325-26 ("[W]e ... have consistently rejected prosecution statements too vague or ambiguous to qualify as a disavowal of claim scope ...."); *accord* Resqnet.com, Inc. v. Lansa, Inc., 346 F .3d 1374, 1383 (Fed.Cir.2003) (finding that prosecution record evinced "no 'clear and unmistakable' disavowal of claim scope"); *N.* Telecom Ltd. v. Samsung Elecs. Co., 215 F.3d 1281, 1294-95 (Fed.Cir.2000) (prosecution history lacked sufficient "clarity and deliberateness" to justify limited reading of claim); York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.3d 1568, 1575 (Fed.Cir.1996) ("Unless altering claim language to escape an examiner rejection, a

patent applicant only limits claims during prosecution by clearly disavowing claim coverage.").

After consulting the intrinsic evidence, courts may refer to extrinsic evidence, including expert and inventor testimony, treatises, and dictionaries, to resolve the scope and meaning of a claim term. Phillips, 415 F.3d at 1317; CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed.Cir.2002). The Federal Circuit clarified in *Phillips* that courts "may ... rely on dictionary definitions when construing claim terms" and that "dictionaries ... are often useful to assist in understanding the commonly understood meaning of words." 415 F.3d at 1322 (citations omitted). The court must ensure, however, that any reliance on dictionaries accords with the intrinsic evidence in the patent. *Id*. The Federal Circuit further observed that external evidence is unlikely to be as reliable as intrinsic evidence and should thus be considered in the context of intrinsic evidence. *Id*. at 1318-19.

B. '559 Patent

The purpose of the invention in the '559 Patent is "to provide a construction [of shredder] that has a reduced chance of being inadvertently actuated." '559 Patent, col. 1, lines 20-22.

1. "A Shredder" and "A Shredding Mechanism"

Fellowes and Michilin propose that "a shredder," element 1(a), FN3 is "a well known device used for shredding documents, CDs, floppy disks, or other information-carrying media." Intek construes "a shredder" to mean "a well known device used for shredding items, such as documents, CDs, floppy disks and other articles." Fellowes and Michilin both define "a shredder mechanism," element 1(d), as "a device that shreds documents, CDs, floppy disks, or other information-carrying media." Intek construes the term "shredding mechanism" to mean "a device that shreds items, such as documents, CDs, floppy disks and other articles."

FN3. This order's references to "elements" such as "1(a)" is based upon the "elements" used to refer to particular claim terms that the parties have adopted in their claim charts and briefs.

The only identifiable issue with respect to elements 1(a) and 1(d) is the difference, if any, between "other information carrying media" and "other articles." Fellowes contends that the term "other articles" is overly broad and that "information-carrying media" is consistent with the specifications and the purpose of shredders, that is, to destroy confidential information. Fellowes' Resp. to Intek's Br. 11 [Doc. No. 88]. None of the claims in the '559 Patent specify, however, that the "shredder" or "shredder mechanism" shreds solely "information carrying media." Indeed, Claim 1 refers to "articles" being shredded. *See* '559 Patent, col. 6, lines 39-45 ("[The] shredder mechanism enabling *articles* to be shredded to be fed into the cutter elements and the motor being operable to drive the cutter elements so that the cutter elements shred the *articles* fed therein [and] a throat opening provided on the housing for enabling *articles* to be fed into the shredder mechanism.") (emphasis added). The specifications refer to "shredders" as "well known devices used for shredding items, such as documents, CDs, floppy disks, etc." Id. at col. 1, lines 11-12. The Court agrees with Intek that the specifications do not limit the "shredder" or "shredder mechanism" to any particular media, and finds it unnecessary to address the parties' arguments over the significance of "etc." in this phrase. *See* id. at col. 2, lines 49-52 ("[T]he shredder 10 may have any suitable construction or configuration"); id. at col. 2, lines 58-61 (the cutter elements generally "shred articles fed therein"); id. at col. 2, lines 66-67 ("Generally, any suitable shredder mechanism 16 known in the art or developed hereafter may be used."). The Court **FINDS** that a "shredder," element 1(a), is "a well known device used for shredding items, such as documents, CDs, floppy disks and other articles" and a "shredder mechanism,"

element 1(d), is "a device that shreds items, such as documents, CDs, floppy disks and other articles."

2. "Provided on an Exterior of the Housing"

One of the most important issues with respect to Claim 1 of the '559 Patent is the meaning of "provided on an exterior of the housing," element 1(n), in reference to the "on/off switch." All three parties agree that an "on/off switch," element 1(m), is "a switch that moves between at least an on position and an off position." Claim 1 states that the "on/off switch" is "provided on an exterior of the housing and electrically coupled to the motor of the shredder mechanism." Fellowes' construes this to mean that "the on/off switch is located *at least in part* outside the housing so that it can be operated by the user." Fellowes' Opening Br. on Claim Construction 27 [Doc. No. 40] (emphasis added). Michilin, relying upon the prosecution history, urges the Court to find that the "on/off switch" is located, apparently exclusively, on the "exterior of the housing." Intek proposes that "the on/off switch is in contact with and supported by an exterior surface of the housing." The parties do not dispute that the "housing," element 1(c), is a "shell that houses components of the shredder."

Notwithstanding the parties' efforts to extract meaning from the words "provided on," the Court finds this phrase to be ambiguous as to whether the "on/off switch" is located entirely on the exterior of the housing, partially on the exterior, or on the interior. The Court finds the matter easily resolved, however, by looking to the rest of the claim itself and the preferred embodiments. Claim 1 teaches that the "on/off switch" is "electrically coupled to the motor of the shredder mechanism" and "includ[es] a manually engageable portion." '559 Patent, col. 6, lines 46-50. The preferred embodiments clearly show that parts of the "on/off switch" are located on the interior of the housing, while other parts are located on the exterior. *See* id. figs. 2 (outside view) & 5-6 (inside view); id. at col. 3, lines 36-40 (the "on/off switch 42 includes a switch module 44 ... mounted to the top wall 24 underneath the recess 38 by fasteners 45, and a manually engageable portion 46 that moves laterally within the recess 38"). Figure 2 shows a "manually engageable portion" on the exterior of the housing, and the "switch module" on the interior of the housing. If the claim were construed as limiting the location of the "on/off switch" to the exterior of the housing, as Michilin argues, the preferred embodiment in Figure 2 would not fall within the scope of the patent claim, a result which is untenable. *See* SanDisk Corp. v. Memorex Prods., Inc., 415 F.3d 1278, 1285 (Fed.Cir.2005) ("A claim construction that excludes a preferred embodiment ... 'is rarely, if ever, correct .' ") (quoting Vitronics, 90 F.3d at 1583). Finally, Michilin's construction of "provided on an exterior of the housing" in Claim 1 is inconsistent with the plain meaning of Claim 19, which is dependent upon Claim 1. "A claim term used in multiple claims should be construed consistently." Inverness Med. Switzerland GmbH v. Princeton Biomeditech Corp., 309 F.3d 1365, 1371 (Fed.Cir.2002); Forest Labs., Inc. v. Abbott Labs., 239 F.3d 1305, 1310 (Fed.Cir.2001) ("We ... construe independent claims consistently with the claims that depend from them."). Claim 19 refers to the "on/off switch" which "has a switch module located *beneath the top wall* and connected to the motor ...." '559 Patent, col. 8, lines 41-42 (emphasis added). Michilin's construction of Claim 1, element 1(n), cannot be reconciled with Claim 19 because the "on/off switch" cannot be exclusively on the exterior of the housing *and* have a "switch module located beneath the top wall."

Michilin and Intek make much of the fact that during the prosecution of the ' 559 Patent the patentee amended its application to add "provided on an exterior of the housing" in order to distinguish Claim 1 from the prior art. On September 20, 2005, the USPTO issued an Office Action in which it rejected Claim 1, among other claims, as unpatentable under 35 U.S.C. s. 103(a) over the admitted prior art, namely Patent No. 6,274,828 ("the Chu patent" or "the '828 Patent"). The Chu patent disclosed an electric power hand tool that included a "lock for preventing unintentional closing." '828 Patent, Intek's Am. Br. in Supp. of its

Proposed Claim Construction, Ex. 12 ("Intek Br.") [Doc. No. 85]. FN4 The USPTO found that a paper shredder having a "switch lock" to prevent operator injury was "obvious" in light of the Chu patent. '559 Patent, FE 000159. In response to the USPTO's rejection, on November 2, 2005, the patentee added amendments to its claim, including the phrase "provided on an exterior of the housing" after the term "on/off switch." Id. at FE 000165. In addition to the amendment, the patentee argued to the USPTO that "the 'on/off switch' and the 'manually engageable portion' of the 'switch lock' are both 'provided on an exterior of the housing.' *See* id. at FE 000175. Following these amendments, the USPTO allowed the ' 559 Patent to issue. The Court sees no sufficient basis for applying prosecution disclaimer on these facts. Even assuming that the "on/off switch" must be "provided on an exterior of the housing" in order to overcome the Chu patent, Fellowes' construction-placing the "on/off switch" "at least in part" on an exterior of the housing-is entirely consistent with the patentees' amendment and supporting arguments to the USPTO. Intek is therefore incorrect in its assertion that Fellowes' construction, if adopted, would "render [ ] meaningless" the phrase "on an exterior of the housing." Intek Br. 23. The Court finds no "clear and unmistakable" disavowal of Fellowes' construction in the prosecution history. *See* Omega, Eng'g, 334 F.3d at 1325-26. The Court refuses, however, to add surplusage to the claims, and sees no value in adding Fellowes' phrase "so that it can be operated by the user."

FN4. Michilin directs the Court's attention to Figure 6 of the Chu patent. Figure 6 "is a cross-sectional side view of an electrical power hand tool incorporating the [on-off] switch of FIG. 1." '828 Patent, col. 2, lines 23-24. In Michilin's view, which the Court does not necessarily share, the "on-off switch" in Figure 6, depicted as element 100, is "in a housing." Markman Hr'g Tr. 42.

The only remaining issue is whether to adopt Intek's position that the "on/off switch is in contact with and supported by an exterior of the housing." Intek points to Figure 2 of the '559 Patent, which depicts a "perspective view" of the shredder without the container and with the switch lock in the releasing position thereof." '559 Patent, col. 1, lines 54-56. According to Intek, Figure 2 shows that a "a switch recess 38 formed in an exterior of the surface, top wall 24, of the housing 14 receives the on/off switch 42. Thus, on/off switch 42 is provided on (in contact with and supported by) an exterior surface of the housing." Intek Br. 21; *see* Stern Decl., Intek Br., Ex. 14, 9 para. 41. The Court is not convinced by Intek's argument. Nowhere in the patent claims or specifications is the "on/off switch" described as being "in contact with and supported by" an exterior of the housing. The notion that the "on/off switch" is "supported by" the "exterior of the housing" is seemingly irreconcilable with the specifications' description of the "on/off switch" as "includ[ing] a switch module 44 (FIGS.4A-6) mounted to the top wall 24 *underneath the recess* 38 by fasteners 45, and a manually engageable portion 46 that moves laterally within the recess 38." '559 Patent, col. 3, lines 36-40 (emphasis added). *See* SanDisk, 415 F.3d at 1285 ("A claim construction that excludes a preferred embodiment ... 'is rarely, if ever, correct.' ") (quoting Vitronics, 90 F.3d at 1583). Intek argues, and Fellowes disputes, that "[t]here is not a single embodiment or description that shows than an on/off switch can be 'outside the housing' but not in contact with and supported by an exterior surface of the housing." Intek Br. 23; Fellowes' Resp. to Intek's Br. 4 [Doc. No. 88] (citing '780 Patent, fig. 11B). Whomever is correct on this particular point, the specifications make clear that the embodiments in the '559 Patent "have been provided solely for the purposes of illustrating the structural and functional principles of the present invention, and should not be considered limiting. To the contrary, the present invention is intended to encompass all variations, modifications, and alterations within the spirit of the appended claims." '559 Patent, col. 6, lines 27-34. In light of the specifications and the claim itself, the Court finds no basis to graft "in support of and in contact with" onto its construction. Finding no need to address Fellowes' additional arguments on this point, the Court **FINDS** that the phrase "provided on an exterior of the housing," element

1(n), means simply that "the on/off switch is located at least in part outside the housing."

3. "Electrically Coupled to the Motor of the Shredder Mechanism"

The next issue is Claim 1's requirement that the "on/off switch" be "electrically coupled to the motor of the shredder mechanism," element 1(o). Fellowes proposes that this means that the "on/off switch" "transmits an electrical signal to the shredder mechanism's motor." Michilin and Intek both submit that it means that the "on/off switch is electrically coupled to the shredder mechanism's motor."

The differences between "electrically coupled" and "transmits an electrical signal" are seemingly immaterial and received scant attention in the parties' briefs. FN5 Both parties' constructions are consistent with the plain language of Claim 1, which reveals that in order to turn the shredder on and off, i.e. to operate it, the "on/off switch" must be capable of enabling and disabling the delivery of electric power to the motor. *See* '559 Patent, col. 6, lines 46-54 (describing the "on/off switch" as "movable ... between at least (a) an on position wherein the switch enables delivery of electric power to the motor and (b) an off position disabling the delivery of power to the motor"). The Court adopts Fellowes' construction because it is consistent with the claim language, as well as the Court's construction of the phrase "provided on an exterior of the housing," and **FINDS** that "electrically coupled to the motor of the shredder mechanism," element 1(o), means "the on/off switch transmits an electrical signal to the shredder mechanism's motor."

FN5. Fellowes and Michilin briefly addressed the construction of "electrically coupled to the motor of the shredder mechanism" at the Markman hearing and in their opening briefs. Markman Hr'g Tr. 21-27; Fellowes' Opening Br. on Claim Construction 28; Michilin's Markman Proceeding Opening Br. 22-23. Although Intek discussed this element in its amended brief, Fellowes did not mention it in its response to Intek's amended brief. *See* Intek Br. 23; Fellowes' Resp. to Intek's Br.

4. A "Switch Lock"

Fellowes defines "a switch lock" in Claim 1, element 1(t), as "a device that prevents movement of the on/off switch." Michilin proposes that a "switch lock" is "a device located on the exterior of the housing of the shredder that prevents movement of the on/off switch." Intek merely urges the Court to find the switch lock to be "distinct and separate from an on/off switch."

Fellowes' view that the "switch lock" "prevents movement of the on/off switch" is supported by a plain reading of Claim 1, the summary of the invention and the specifications. Claim 1 teaches that the "switch lock" is movable from a "locking position wherein the switch is locked in the off position" to a "releasing position wherein the switch is released for movement from the off position." '559 Patent, col. 6, lines 54-57. *See* id. at col. 1, lines 26-28 ("One aspect of the invention provides a shredder with a switch lock that locks the on/off switch in its off position."); id. at col. 5, lines 3-8 (in order to activate the shredder, the switch lock "must first be moved to its releasing position, and then the switch 42 is moved to its on or reverse position. This reduces the likelihood of the shredder mechanism 16 being activated unintentionally.").

Michilin's argument that the "manually engageable portion" of the "switch lock" must be located on the exterior of the housing is rejected in that fashion and the reasons are set forth below in the construction of the terms "provided on the exterior of the housing," element 1(y). *See* Section 5. The only remaining issue is whether, as Intek submits, the "switch lock" is "distinct and separate" from "an on/off switch." Intek points to the word "a" before the term "switch lock," as well as the specifications and figures, as evidence that "a

switch lock" is a "new element, different" from the "on/off switch." Intek Br. 23 (citing '559 Patent, figs. 1-3, 7-10). Intek may be correct that "a switch lock" and "an on/off switch" are "different" and provide "separate and distinct functions." Id. at 23-25. Yet although the "switch lock" provides a distinct service from the "on/off switch," it could not be separated from the "on/off switch," as it is manually operated to lock the "on/off switch." The Court rejects Intek's construction for present purposes and **FINDS** that "a switch lock," element 1(t), is "a device that prevents movement of the on/off switch."

5. "Provided on the Exterior of the Housing"

Fellowes argues that the "switch lock" consists of a "manually engageable" portion on the exterior of the housing and a "locking portion" on the interior of the housing. It urges the Court to define "provided on the exterior of the housing" to mean that the "switch lock's" "manually engageable portion" is "located *at least in part* outside the housing so that it can be operated by the user" (emphasis added). Michilin argues that the switch lock's "manually engageable portion" "is located on the exterior of the housing." Intek argues that "the switch lock's manually engageable portion is in contact with and supported by the same exterior surface of the housing as the *separate and distinct* on/off switch" (emphasis added).

The Court finds Fellowes' position to be supported by the specifications and figures in the '559 Patent. The specifications state that "[t]he switch lock 52 includes a manually enagageable portion 54 that is movable by a user's hand and a locking portion 56 .... The manually engageable portion 54 is seated in the recess 50 and the locking portion 56 is located beneath the top wall 24." ' 559 Patent, col. 4, lines 8-12. *See* id. figs. 2, 5-6. Neither the specifications nor the claims limit the "manually engageable" portion to being entirely outside the housing. In addition, Intek's attempt to add the phrase "as separate and distinct from the on/off switch" is unacceptable, as it would confuse the usage of the words in the context utilized.

Michilin argues that Fellowes disclaimed a broader definition of "switch lock" during the patent's prosecution. As noted above, the patentee amended Claim 1 by adding the phrase "provided on the exterior of the housing" in order to distinguish the "switch lock" in its patent from the device described in the Chu patent. '559 Patent, FE 000165. In addition, the patentee argued in a statement to the USPTO that among other differences between the "switch locks" in the proposed invention and Chu, the "location of the 'switch lock' [in the ' 559 Patent] is more specifically defined *as being on the exterior* of [the] housing of the shredder" (emphasis added). Id. at FE 000176. Although it is perhaps a close question in light of the patentee's description of the "switch lock" as " *being* " on the exterior of the housing, as opposed to the more ambiguous phrase "provided on" in the claim itself, the Court finds insufficient "clarity and deliberateness" in the patentee's amendment and accompanying arguments to justify applying the doctrine of prosecution disclaimer. *See N*. Telecom Ltd., 215 F.3d at 1294. For the same reasons it found no disclaimer in the phrase "provided on an exterior of the housing" as it applied to the "on/off switch," element 1(n), the Court finds no disclaimer with respect to the phrase "provided on the exterior of the housing" as it applies to the "switch lock." The Court finds Fellowes' phrase "so that it can be operated by the user" to be obvious, as otherwise the lock would be superfluous.

Next is Intek's argument that "provided on the exterior of the housing" means the "manually engageable portion" of the "switch lock" "is in contact with and supported by the same exterior surface of the housing as the separate and distinct on/off switch." *See,* Stern Decl., Intek Br., Ex. 14, 9. The Court rejects Intek's construction for the same reasons that it rejected the "in contact with and supported by" language as it applied to the "on/off switch," element 1(n). Accordingly, the Court **FINDS** that "provided on the exterior of the housing," element 1(y), means "the switch lock's manually engageable portion is located at least in part

outside the housing."

C. '780 Patent

For purposes of introduction, the Court will briefly describe the '780 Patent. The '780 Patent is titled "Paper Shredder Shaft" and teaches a "cross cutting cylinder for shredding paper." '780 Patent, col. 1, lines 4-5. Unlike a "straight or strip cut shredder," which cuts or tears paper into narrow strips or chips, a "cross-cut shredder" cuts such items into "small paper chips" in order to destroy documents in a manner that better preserves confidentiality. '780 Patent, col. 1, lines 26-40; *see* Markman Hr'g Tr. 71. The heart of the invention in the '780 Patent is an allegedly novel "spacer" which is "disposed between adjacent [cutting] disks" arranged "along the axis of the [shredder] cylinder." '780 Patent, ABSTRACT. The invention is designed to provide a more effective means of dislodging paper chips that fall into the space between the cutting blades and can jam the shredder and prevent its operation. Id. at col. 1, lines 38-40, 51-56.

1. "Cutting Disks"

The Court will begin with the term "cutting disks" as it appears in independent claims 1 and 12, elements 1(g) and 12(d), of the '780 Patent. Fellowes proposes that "cutting disks" are "generally round or ring-shaped elements that are designed for cutting paper." Michilin proposes the same definition with the limitation that such "cutting disks" "include end surfaces which lie in parallel planes." Intek argues that "cutting disks" are "unitary, flat, disk-shaped elements that include side surfaces which lie in parallel planes."

The Court will start with the claim itself. Claim 1 specifies that the "cutting disks" are "spaced apart," have "at least two circumferentially spaced teeth and a spacer," and are "displaced in the longitudinal direction of the cutting cylinder." '780 Patent, cols. 3-4, lines 46-48, 1-4. As stated above, Claim 12 provides:

A cross-cutting cylinder comprising:

a. a plurality of cutting disks with each disk having at least two circumferentially spaced teeth, with the disks arranged in a longitudinal direction of the cutting cylinder to provide a helix; and

b. a spacer located between each adjacent disk, wherein the surface of the spacer has a linear measure greater than the distance between each adjacent disk.

Id. at col. 4, lines 39-47. Claim 12 expressly limits the "cutting disk" to having "at least two circumferentially spaced teeth" and being "arranged in a longitudinal direction of the cutting cylinder to provide a helix." Id. at col. 4, lines 39-43. None of the limiting adjectives proposed by the defendants-"parallel," "unitary" or "flat"-appear, either expressly or inferentially, in Claims 1 or 12.

Moreover, the '780 Patent specifications do not support the view that the "cutting disks" are necessarily "flat" or "parallel." The specifications provide that the "cutting the[sic] disks" may have the construction and shape shown in U.S. Pat. Nos. 5,676,321 ["the '321 Patent"] and 5,295,633 ["the '633 Patent"], each of which is incorporated by reference." Id. at col. 2, lines 43-45. The Court has reviewed the '321 Patent and the '633 Patent, both of which involve "cutting disks" used in shredders, and nowhere in either patent did it find that the "cutting disks" must be "parallel" or "flat." Id. at FE 000366-71; id. at FE 000383-93. Intek correctly points out that the embodiment of the "cutting disk" shown as 14 in Figures 1, 2, and 3 of the '780 Patent appears to be "flat" and has "side surfaces" or "end surfaces" which, at least arguably, "lie in parallel

planes" insofar as they were drawn using straight lines. Id. at figs. 1, 2, 3. The Court refuses to rely upon the specifications, however, in order to limit the definition of "cutting disks." *See* Electro Med. Sys., 34 F.3d at 1054 ("[C]laims are not to be interpreted by adding limitations appearing only in the specification.").

Michilin and Intek argue that the phrase " *the* distance between each adjacent disk" (emphasis added) in Claims 1 and 12 means that there must be only a single distance between the "cutting disks," and therefore the disks must be "flat" and "parallel." Markman Hr'g Tr. 141-145; Intek Br. 17. Although the word "the" in the phrase "the distance between two adjacent disks" could reasonably be read as meaning that the distances between two adjacent disks are identical at all points of the disks, this one word does not compel such a construction, and is not, in the Court's view, enough to justify limiting the "cutting disks" to being "flat" or "parallel." Although the Court may rely on dictionary definitions to construe claim terms, *Phillips,* 415 F.3d at 317, any reliance on dictionaries must accord with the intrinsic evidence in the patent. *Id*. In any event, dictionaries consulted by the Court do not resolve whether a "disk" or "disc" is flat. *See* WEBSTER'S THIRD NEW INT'L DICTIONARY 651 (3d ed.1981) ("a thin circular object"); THE RANDOM HOUSE COLL. DICTIONARYY 381 (4th ed.1973) ("any thin, flat, circular plate or object" and "any surface that is flat and round, or seemingly so"); Michilin Ex. 3009 (Google.com definition of "disk" as, *inter alia,* "something with a round shape like a flat circular plate" and "a general term that is used to describe flattened circular objects").

An additional issue is whether, as Intek contends, the "cutting disk" is a "unitary" structure, or whether, as Fellowes argues, it can be either a single piece or comprised of multiple pieces. During prosecution of the '780 Patent, the USPTO rejected Claim 1, among others, as anticipated by Patent No. 5,988,542 ("Henreckson" or "'542 Patent"). '780 Patent, FE 000424. The invention disclosed in Henreckson relates to "document shredding devices mountable on various waste receptacles for shredding paper." Id. at FE 000431 ('542 Patent). The USPTO rejected Claim 1 pursuant to 35 U.S.C. 102(e), stating, "Henreckson et al discloses the apparatus as can be best understood in view of the 35 USC 112, second paragraph rejection set forth above. Note Fig. 8, V-shaped spacers between cutting disks '38' on shredding rollers '30' and '36'." FN6 Id. at FE 000427. In an effort to overcome the USPTO's rejection, the patentees filed a July 21, 2000, response in which they argued:

FN6. 35 U.S.C. s. 112 para. 2 provides: "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

Henreckson et al. disclose a conventional straight cut shredder. The shredder of Henreckson et al. cuts the paper into strips. Henreckson et al. do not disclose the crosscut shredder of the present invention. In a cross-cut shredder and according to the present invention, the cutting disks of the present invention are somewhat displaced in the longitudinal direction of the cutting cylinder so that a large pitch helix is formed.
It is respectfully submitted that Henreckson et al. do not disclose a separate spacer between cutting disks where the linear measure of the spacer along its surface is greater than the distance between two adjacent disks. It is respectfully submitted that Henreckson et al. teach the abutment of *two cutting disks* against each other to form a *single cutting unit* separated from other cutting units by spacers 30 and 36. The linear measure of the spacer of Henreckson et al. is equal to the distance between adjacent disks.

Id. at FE 000507 (emphasis added). According to Intek, the patentees' effort in the quoted text to distinguish between "cutting disk" and "cutting unit" (the latter being a combination of abutting "cutting disks") limits

the term "cutting disk" in the '780 Patent to mean "one unitary cutting disk, not a combination of pieces." Intek Br. 12. The Court disagrees with Intek. The term "cutting units" appears nowhere in the '780 Patent itself. Moreover, neither the '321 Patent nor the '633 Patent, which are "incorporated by reference" into the '780 Patent on the question of the "construction and shape" of the "cutting disks," specify that the "cutting disk" is comprised of a single part or multiple parts. Consequently, the Court refuses to construe the "cutting disk" as being "unitary" and refuses to construe it as being comprised of multiple pieces. The Court **FINDS** that "cutting disks" are "generally round or ring-shaped elements that are designed for cutting paper."

2. "Spaced Apart"

The term "spaced apart" in Claim 1 describes the juxtaposition of the "cutting disks." '780 Patent, col. 3, lines 46-48. Fellowes defines "spaced apart," element 1(f), to mean "there is a space between two cutting disks." Michilin reads it to mean "there is a space between the two cutting disks such that the two cutting disks do not touch." Intek proposes that it means "there is a space between the two cutting disks such that no part of the two cutting disks touch, including the central portions thereof."

Intek correctly points out that the "cutting disks" depicted in Figure 1 "do not touch each other" and that the specification describes the "spacers" as being located between each disk, from which one would infer that the disks do not touch. *See* '780 Patent, col. 2, lines 57-58 ("Disposed between adjacent disks 14 is a spacer 20 located adjacent to each disk."). There is nothing in the claim or the specification, however, to the effect that "spaced apart" means the "cutting disks" "do not touch." The defendants again turn to the prosecution history in an effort to limit the construction of "spaced apart." As noted above, the '780 Patent's applicants, in urging that the USPTO withdraw its rejection of Claim 1, described the Henreckson patent as teaching "the abutment of two cutting disks against each other to form a single cutting unit ...." Id. at FE 000453. The defendants' argument appears to be that the patentees' remarks to the USPTO, by implication, meant that the '780 Patent' s "cutting disks" do *not* abut against each other. Two "cutting disks," however, could be spaced apart at the shaft and touch at one point or another at the cutting edge. The Court refuses to add "do not touch" onto its construction of "spaced apart" and accordingly **FINDS** that "spaced apart" means "there is a space between two cutting disks."

3. "Each Having At Least Two Circumferentially Spaced Teeth" and "Each Disk Having At Least Two Circumferentially Spaced Teeth"

Claim 1's reference to the "cutting disks" "each having at least two circumferentially spaced teeth" is nearly identical to Claim 12's phrase "each disk having at least two circumferentially spaced teeth" and thus the two phrases will be construed together. The three parties agree that elements 1(h) and 12(e) mean, at a minimum, that "each cutting disk has at least two teeth for cutting that are spaced apart in the direction of rotation." They disagree, however, as to the function of the "spaced teeth." Fellowes submits that the "spaced teeth mean the disks are used to cross-cut paper." Michilin argues that the "spaced teeth with the additional transverse cutting edge allow for a cross-cut of the paper to occur." According to Intek, the "spaced teeth with additional cutting edges provide a cross-cut that produces a number of small, rectangular pieces."

Whatever the merit of Michilin's position that "cross-cutting" is impossible unless the "spaced teeth" have a "transverse cutting edge," *see* Hearing 147, FN7 the patent itself was unambiguously intended to apply to shredders that allow for "cross-cutting," as opposed to "strip cut" shredders. *See* ' 780 Patent, col. 1, line 4-5 ("The present invention relates to a cross cutting cylinder for shredding paper."); id. at col. 1 lines 11-14 ("Typically, the cutting is achieved by a pair of rotating cutting cylinders having a series of circular cutters or blades along the axis of a solid shaft."); id. at col. 1, lines 35-37 ("A cross cut shredder generally

comprises a pair of parallel cutting cylinders that contain a series of offset cutting disks arranged along the axis of the cylinders."). Whatever the consequences in this litigation of the patentees' failure to include the word "transverse" in the ' 780 Patent, the Court finds it significant for the purposes of claim construction that the patent was approved even though the word "transverse" appears nowhere therein. Indeed, the specifications provide that "[t]he particular construction and shape of the teeth is not important to the practice of the present invention so long as they provide a cross cut (i.e. chips of material)." Id. at col. 2, lines 39-42. Consequently, the Court will not add "transverse" to its construction of elements 1(h) and 12(e). For similar reasons, the Court does not see the need to specify, as Intek urges, that the "spaced teeth" have "additional cutting edges." Moreover, for reasons made clear in the Court's analysis of the "cross-cut cutting cylinder," the Court refuses to limit the ' 780 Patent to shredders that produce "rectangular pieces" and therefore rejects Intek's construction. *See* infra element 12(a). Accordingly, the Court **FINDS** that elements 1(h) and 12(e) both mean that "each cutting disk has at least two teeth for cutting that are spaced apart in the direction of rotation" and further that the "spaced teeth mean the disks are used to cross-cut paper." FN8

FN7. The Court finds puzzling the apparent inconsistency between Michilin's definition of Claim elements 1(h) and 12(e), both of which concede that the '780 Patent relates to "cross-cut shredders," and the position taken by Michilin's counsel at the Markman hearing that the ' 780 Patent failed to cover a "cross-cut" shredder because it lacked a "transverse edge." *See* Markman Hr'g Tr. 147 ("[I]f you're going to say that their claim covers cross-cutting, you have to have that [transverse] edge.").

FN8. The Court notes that its use of the word "paper" in this construction is consistent with its construction of a "cross-cutting cylinder," element 12(a), and "cutting disks," element 12(d).

4. "Spacer"

Closely related to "spaced apart" is the term "spacer" as it appears in Claims 1 and 12. Fellowes defines a "spacer," elements 1(i) and 12(g), as "a device that creates a space between two cutting disks on the cutting cylinder, the space having a width just slightly greater than an interleaving cutting disk from a mating cutting cylinder. The spacer may be separate from or integral with the cutting disk(s)." Michilin argues that "spacer" means "an element that fills a space between two adjacent cutting disks on the cutting cylinder, the space having a width that is constant circumferentially and just slightly greater than an interleaving cutting disk from a mating cutting cylinder" and further that the "spacer" is "separate from the two cutting disks." Intek argues that the "spacer" in Claim 1 is "an element that creates a space between two adjacent cutting disks on the cutting cylinder, the space having a width that is constant circumferentially, wherein the spacer is separate from the two cutting disks, and each spacer has at least two different circumferences." FN9

FN9. For reasons that are unclear, Intek's definition of the word "spacer" in element 12(g) in the Claim Construction Chart appearing in its brief differs from its definition of "spacer" in Claim 1(i), the former having the italicized language as follows: "An element that creates a space between two adjacent cutting disks on the cutting cylinder, the space having a width that is constant circumferentially *and just slightly greater than an interleaving cutting disk from a mating cutting cylinder,* wherein the spacer is separate from the two cutting disks, and each spacer has at least two different circumferences." Intek Br., Ex. 1. The italicized language appears in the chart but does not appear in either of the definitions of "spacer" in Intek's brief. In any event, this difference poses no challenge because Fellowes and Michilin have, appropriately in the Court's view, included the italicized language in their definitions of elements 1(i) and 12(g).

A comparison of these competing constructions reveals that the issues are whether the "spacer" must be separate from the "cutting disks," whether its width is "constant circumferentially," and whether "each spacer has at least two different circumferences." As to the first issue, Michilin and Intek both argue that the prosecution history requires the Court to construe the "spacer" as being "separate from the two cutting disks." As noted above, during the prosecution of the '780 Patent, the USPTO rejected Claim 1 on grounds that it was anticipated by Henreckson and Patent No. 1,825,223 ("the Deck patent" or "Deck"). '780 Patent, FE 000424-429; id. at FE 000394. The patentee urged that the rejection be withdrawn on grounds that, *inter alia,* the Henreckson patent did "not disclose a separate spacer between cutting disks where the linear measure of the spacer along its surface is greater than the distance between two adjacent disks." Id. at FE 000507. The patentees further argued that "Henreckson et al. teach the abutment of two cutting disks against each other to form a single cutting unit separated from other cutting units by spacers 30 and 36." Id. Intek and Michilin argue that in making these remarks, the patentee relinquished the interpretation that Fellowes now proposes, i.e. that the "spacer" may be either separate from, or integral to, the "cutting disk." The patentee's statement that Henreckson taught "a single cutting unit separated from other cutting units," while *implying* that the patentee's patent does *not* teach a "single cutting unit separated from other cutting units," is too vague to lead one to conclude that the patentees were necessarily disclaiming a "spacer" that is integral with the "cutting disk." The Court does not find the patentee's remarks to be sufficiently "clear and unmistakable" for prosecution disclaimer to arise. *See* Omega, Eng'g, 334 F.3d at 1325-26; Purdue Pharma L.P., 438 F.3d at 1136. In addition, the defendants overlook that the specifications in the '780 Patent make clear that the "spacer" may be separate or integral with the "cutting disk." *See* ' 780 Patent, col. 2-3, lines 65-67, 1-4 ("Preferably, the spacer 20 is integral with the body of the disk. Alternately, the spacer 20 may be a separate component that provides distance between individual disks 14 on the cutting cylinder 10. In yet another embodiment, the entire cutting cylinder may be machined as a single piece so that the shaft, disks and spacers are formed from and are a single piece."). The Court refuses to construe "spacer" as necessarily being separate from the "cutting disk." FN10

FN10. *See* infra claim construction 1(n) on the issue of whether the "spacer" width is "constant circumferentially."

Although the claims do not expressly provide, as Intek contends, that each "spacer" has "at least two different circumferences," such a construction is compelled by a plain reading of the claims, specifications and drawings, and prosecution history. It logically follows from Claim 1's requirement that the "surface of the spacer has a linear measure greater than the distance between the two adjacent disks" that the "spacer" has "at least two different circumferences." Id. at col. 4, lines 2-4. The same logic applies to Claim 12, which requires that the "surface of the spacer has a linear measure greater than the distance between each adjacent disk." Id. at col. 4, lines 44-47. Morever, as Intek points out, the drawings show a "cutting cylinder" in which each spacer has at least two different circumferences, Intek Br. 15, and the specifications refer to the "spacer" as having more than one circumference. *See* id., col. 3, lines 13-15 ("It will be appreciated that the circumference of the spacer 20 at at least one point a is greater than the circumference of the spacer 20 at at least another different point b."). Additionally, the patentee used the phrase "at least two difference circumferences" in connection with the "spacer" in the prosecution history. In its July 21, 2000, response to the USPTO's rejection of Claim 1 and other claims, the patentee argued to the USPTO that Deck, among other things, "does not disclose a cross-cut shredder having displaced cutting disks separated by [a] spacer where the linear measure of the spacer along its surface is greater than the distance between

two adjacent disks *and where each spacer has at least two different circumferences*. " Id. at FE 000507 (emphasis added). Fellowes contends that the defendants' construction runs afoul of the doctrine of claim differentiation. Fellowes Br. 29 (citing Clearstream Wastewater Sys., Inc. v. Hydro-Action, Inc., 206 F.3d 1440, 1446 (Fed.Cir.2000) ("Under the doctrine of claim differentiation, it is presumed that different words used in different claims result in a difference in meaning and scope for each of the claims. This doctrine cannot be used to make a claim broader than what is contained in the written description ... but it prevents the narrowing of broad claims by reading into them the limitations of narrower claims."). Fellowes urges the Court to reject Intek's proposed "at least two different circumferences" language on grounds that doing so is necessary to differentiate Claim 1 from dependent Claim 5, which refers to the "circumference of the spacer at at least one point" as being "greater than the circumference of the spacer at at least one other point." '780 Patent, col. 4, lines 17-19. The doctrine of claim differentiation is inapplicable, however, because an interpretation of the "spacer" in Claims 1 and 12 as having "at least two different circumferences" is supported by the plain language of Claims 1 and 12 and is not narrowed in any material way.

The Court **FINDS** that "spacer" as used in Claims 1 and 12 means "a device that creates a space between two cutting disks on the cutting cylinder, the space having a width just slightly greater than an interleaving cutting disk from a mating cutting cylinder," and "each spacer has at least two different circumferences," and the "spacer" "may be separate from or integral with the cutting disk(s)."

5. "Located Between Two Adjacent Disks"

The next issue is the meaning of "located between two adjacent disks," element 1(j), as that term refers to the "spacer." Fellowes reads this language to mean that "the spacer is positioned between *two* adjacent cutting disks." Michilin and Intek contend that "the spacer is positioned between *each set of* adjacent cutting disks," not just two of them. To resolve this dispute, the Court need look no further than the claims themselves. Unlike dependent Claim 9, which twice uses the phrase " *each* adjacent disk," Claim 1 uses the phrase " *two* adjacent disks," and does not use the word "each." '780 Patent, cols. 3-4, lines 47-49, 1-4, 30-33 (emphasis added). Also in contrast to Claim 1, Claim 12 refers to "the distance between *each* adjacent disk." id. at col. 4, 44-47 (emphasis added). Accordingly, the Court **FINDS** that "located between two adjacent disks," element 1(n), means "the spacer is positioned between two adjacent cutting disks."

6. "The Distance Between the Two Adjacent Disks" and "The Distance Between Each Adjacent Disk"

The next issue in Claim 1, element 1(n), is the meaning of the italicized portion of the following language: "[T]he surface of the spacer has a linear measure greater than *the distance between the two adjacent disks*." Because Claim 12, element 12(k), is nearly identical-it refers to "the distance between each adjacent disk"-the Court will presently consider both.FN11 Fellowes argues that "the distance between the two adjacent disks" in Claim 1 means "the linear distance of the space between the two cutting disks measured parallel to the shaft." Michilin proposes that it means "the linear distance of the space having the width that is constant circumferentially and between each set of adjacent cutting disks measured parallel to the longitudinal axis of the shaft." Intek's construction is identical to Michilin's except without the word "circumferentially."

FN11. Fellowes' definition of Claim 12, element 12(k), is identical to its definition of Claim 1, element 1(n) except that it swaps the words "the two" with the word "adjacent" in element 12(k) as follows: "the linear distance of the space between *adjacent* cutting disks measured parallel to the shaft." Michilin and Intek, by contrast, both define elements 1(n) and 12(k) to be identical. Finding the word "adjacent" to make no material difference in this context, the Court will construe 1(n) and 12(k) identically.

The only material difference between the parties' constructions of elements 1(n) and 12(k) is that the defendants use the term "constant" or "constant circumferentially" to describe the distance between the "cutting disks," while the plaintiff imposes no such limiting language. The defendants' construction is simply another effort to get the Court to construe the "cutting disks" as "flat" and lying in "parallel planes." Although the diagrams in the '780 Patent depict "spacers" whose widths appear to be "constant," Claim 1 does not limit the width of the "spacers" as such. Having already rejected the defendants' arguments on this point, and concluding that Fellowes' construction gives the phrase "the distance between the two adjacent disks" its plain and ordinary meaning, the Court **FINDS** that "the distance between the two adjacent disks" in Claim 1, and "the distance between each adjacent disk" in Claim 12, both mean "the linear distance of the space between the two cutting disks measured parallel to the shaft." The Court sees no need to add defendants' proposal that the "cutting disks" are "measured parallel to the *longitudinal axis* of the shaft," as the word "longitudinal" is missing in the patent and including it would seem to be redundant.

7. Wherein the Circumference of the Spacer at at Least One Point is Greater Than the Circumference of the Spacer at at Least One Other Point

At issue here is the meaning in dependent Claim 5 of the italicized portion of the following phrase: "The cutting cylinder of claim 1 *wherein the circumference of the spacer at at least one point is greater than the circumference of the spacer at at least one other point*." '780 Patent, col. 4, lines 17-19 (emphasis added). Fellowes argues that this phrase, element 5(b), means "the circumference of the spacer is different at at least two different points." Michilin proposes that it means "the spacer's circumference, which extends completely around the shaft, is different at at least two different points, and each spacer has at least two different circumferences." Intek's proposed construction is identical to the claim language itself.

All three parties' constructions recognize, as the specifications and Figures 2 and 3 make clear, that the circumference of the "spacer" differs at different points of the "spacer" depending upon the embodiment, of which more than are within the scope of the patent. *See* id. at col. 3, lines 13-25 ("It will be appreciated that the circumference of the spacer 20 at at least one point a is greater than the circumference of the spacer 20 at at least another different point b .... It should be understood that the spacer 20 described above can be changed in many ways yet still remain within the scope of the invention."). The parties' constructions also recognize the need to read the phrase at issue in Claim 5, which is dependent upon Claim 1, consistently with Claims 6, 7 and 8, each of which are dependent upon Claim 5 and teach specific variations of Claim 5 by offering ways in which the circumference of the "spacer" at one point differs from the circumference of the "spacer" at another point. *See e.g.* id. at col. 4, lines 20-23 (Claim 6 teaches "the cutting cylinder of Claim 5 wherein the circumference of the spacer at its center is greater than the circumference of the spacer at at least one of its edges").

It appears that the only issues for construction are whether, for purposes of Claim 5, the circumference of the "spacer" "extends completely around the shaft," and whether "each spacer has at least two different circumferences."

The observation that the "spacer's" circumference "extends completely around the shaft" appears to be redundant in light of the plain and ordinary meaning of the word "circumference," a word that the specifications do not define. *See* WEBSTER'S THIRD NEW INT'L DICTIONARY 409 (defining "circumference" as "the surface or outer limits of a sphere or rounded body [and] the measure of the perimeter of a great circle or sphere"). Michilin's view that "each spacer has at least two different

circumferences" is compelled by the plain terms of Claim 5, which refers to two different circumferences: one "at one point" and one at "one other point." '780 Patent, col. 4, lines 17-19. Michilin's construction also finds support in the file wrapper, in particular the patentee's remarks requesting that the USPTO withdraw its rejection of Claim 5, among other claims which, the USPTO found, were anticipated by Deck. To distinguish Deck, the patentee stated, "Deck does not disclose a cross-cut shredder having displaced cutting disks separated by spacer where the linear measure of the spacer along is surface is greater than the distance between two adjacent disks and where *each spacer has at least two different circumferences*.") (emphasis added). *See* id. at FE 000507.

For these reasons, the Court **FINDS** that "wherein the circumference of the spacer at at least one point is greater than the circumference of the spacer at at least one other point" in Claim 5 means "the spacer's circumference is different at at least two different points," and further that "each spacer has at least two different circumferences."

8. "Wherein the Circumference of the Spacer at its Center is Less Than the Circumference of the Spacer at at Least One of its Edges

Claim 7 of the '780 Patent, which is dependent upon Claim 5, reads in its entirety: "The cutting cylinder of claim 1 *wherein the circumference of the spacer at at least one point is greater than the circumference at at least one other point*." '780 Patent, col. 4, lines 17-19 (emphasis added). Fellowes and Michilin construe the italicized phrase, element 7(b), to mean "the circumference of the spacer is smaller at its center than at one or both of its edges" and further that "for a separate spacer, the edge would be the end of the surface, and for an integral spacer the edge would be where the surface meets the disk." Intek defines element 7(b) to mean that "the circumference of the spacer, which is separate from the two cutting disks, is smaller at its center than at one or both of its edges."

The parties all agree that the circumference of the "spacer," for purposes of Claim 7, is "smaller at its center than at one or both of its edges." In addition, the Court has already dealt with the issue of whether the "spacer" is "separate from the two cutting disks." *See supra* elements 1(i) and 12(g). The only issue with respect to element 7(b), then, is whether to add the sentence proposed by Fellowes and Michilin in which a distinction is drawn between the "edge" of "a separate spacer" and the "edge" of "an integral spacer." The Court sees no need to embellish the claim and therefore refuses to adopt it in this particular claim construction. Accordingly, the Court **FINDS** that "wherein the circumference of the spacer at its center is less than the circumference of the spacer at at least one of its edges" means "the circumference of the spacer is smaller at its center than at one or both of its edges."

9. "Wherein the Surface of Each Spacer Has a Linear Measure Greater Than the Distance Between Each Adjacent Disk"

At issue in Claim 9, which is dependent upon Claim 1, is the italicized portion, element 9(c), as follows: "The cutting cylinder of claim 1 wherein a spacer is located between each adjacent disk and *wherein the surface of each spacer has a linear measure greater than the distance between each adjacent disk*." '780 Patent, col. 4, 30-33.

Fellowes construes the disputed language to mean "the linear measure of the surface of each spacer follows the surface of the spacer and is greater than the linear distance of the space between the two adjacent cutting disks measured parallel to the shaft." Michilin reads it to mean "the linear measure of the surface of each spacer follows the surface of the spacer between the two adjacent cutting disks, and is greater than the linear

distance of the space *having a constant circumferential width* between the two adjacent cutting disks measured parallel to the longitudinal axis of the shaft" (emphasis added). Intek's construction is identical to Michilin's except without the word "circumferential."

The dispute over this phrase is largely the same as before, i.e. whether the width between adjacent "cutting disks" is "constant." The defendants' construction is yet another attempt to read the width of the "cutting disks" as being "constant"-which the Court once again rejects. Claim 9 includes no such limitation, on its face or by inference. *See* '780 Patent, col. 4, lines 30-34. Accordingly, the Court adopts Fellowes' construction and **FINDS** that "wherein the surface of each spacer has a linear measure greater than the distance between adjacent disk" in Claim 9 means "the linear measure of the surface of each spacer follows the surface of the spacer and is greater than the linear distance of the space between the two adjacent cutting disks measured parallel to the shaft."

10. "A Cross-Cutting Cylinder"

As noted above, Claim 12, an independent claim, teaches:

A cross-cutting cylinder comprising:

a. a plurality of cutting disks with each disk having at least two circumferentially spaced teeth, with the disks arranged in a longitudinal direction of the cutting cylinder to provide a helix; and

b. a spacer located between each adjacent disk, wherein a surface of the spacer has a linear measure greater than the distance between each adjacent disk.

'780 Patent, col. 4, lines 39-47. The Court having construed most of the disputed language in Claim 12, the only part requiring construction is the term "a cross-cutting cylinder," element 12(a).

Fellowes and Michilin agree that a "cross-cutting cylinder" is a "device for cutting paper that has a generally cylindrical overall shape and cuts materials into a number of small pieces both lengthwise and widthwise." Intek submits that a "cross-cutting cylinder" is a "device for cutting that has a generally cylindrical overall shape and cuts materials into a number of small rectangular pieces." The only differences between Intek's construction and the other parties' is that Intek removes the word "paper" from its definition of what the "cutting cylinder" cuts, and substitutes the words "small rectangular pieces" for "small pieces both lengthwise and widthwise."

Fellowes correctly notes that the specifications refer to the shredder being used to shred paper. *See* '780 Patent, title "(" *PAPER* SHREDDER SHAFT") (emphasis added); id. at col. 3, lines 36-38 ("The shredder cylinder of the present invention ... creates small *paper* chips."); id. at col. 1, lines 4-5 ("The present invention relates to a cross cutting cylinder for shredding *paper* ") (emphasis added). In addition, the Court finds it significant that both Fellowes and Michilin agree that a "cross-cutting cylinder" cuts paper; it is Intek, which is represented by the same counsel as Michilin, that is at odds with the other parties. As sophistry becomes a science, it is wonderful if a party can position itself on both sides of an issue at the same time. It is hard to lose that way-but in this case, lose someone must. Although the ' 780 Patent could be read as applying to a "cross-cut" shredder that shreds non-paper items, the Court will add the word "paper" to its construction of "cutting cylinder" because such a reading is supported by the patent language and is agreed to by Fellowes and Michilin.

Finally, although the difference between "small rectangular pieces" and "small pieces [which are cut] both lengthwise and widthwise" may be immaterial, the Court finds the latter definition to be more in line with the somewhat more ambiguous word "chips" used in the patent. *See* '780 Patent, col. 1, line 55 ("paper chips"); id. at col. 2, line 43 ("chips of material"); id. at col. 3, lines 37 ("small paper chips"). The Court adopts the construction proposed by Fellowes and Michilin and **FINDS** that a "cross-cutting cylinder" in Claim 12 is a "device for cutting paper that has a generally cylindrical overall shape and cuts materials into a number of small pieces both lengthwise and widthwise."

III. Conclusion

The claim terms shall be construed in accordance with this order. Constructions agreed upon by the parties shall be construed as agreed upon by the parties.

The Clerk of the Court is **DIRECTED** to transmit a copy of this Order to all counsel of record by mail.

IT IS SO ORDERED.

E.D.Va.,2006.
Fellowes, Inc. v. Michilin Prosperity Co., Ltd..

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