In the United States Court of Federal Claims

No. 08-537C
Filed: April 28, 2011
TO BE PUBLISHED

USHIP INTELLECTUAL PROPERTIES, LLC,	*	
Plaintiff,	*	Claim Construction; Corresponding Structure; Function; Extrinsic Evidence; Indefinite; Intrinsic Evidence; Invalidity; Third Party Defendant, RCFC 14(b); Means-Plus-Function Limitation, 35 U.S.C. § 112, ¶ 6; Patents; 41 U.S.C. § 114(b).
v.	*	
THE UNITED STATES,	*	
Defendant,	*	
and	*	
INTERNATIONAL BUSINESS MACHINES CORPORATION,	*	
Third-Party Defendant.	*	

Vincent J. Colatriano, Cooper & Kirk, PLLC, Washington, D.C., Counsel for Plaintiff.

Scott David Bolden, United States Department of Justice, Civil Division, Washington, D.C., Counsel for Defendant.

Steven Cherny, Kirkland & Ellis, LLP, New York, New York, Counsel for Third-Party Defendant.

MEMORANDUM OPINION AND ORDER CONSTRUING CERTAIN CLAIMS OF UNITED STATES PATENT NO. 5,481,464, UNITED STATES PATENT NO. 5,831,220, AND UNITED STATES PATENT NO. 6,105,014.

BRADEN, *Judge*.

To facilitate review of this Memorandum Opinion and Order construing certain claims of United States Patent No. 5,481,464, United States Patent No. 5,831,220, and United States Patent No. 6,105,041, the court has provided the following outline:

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A. United States Patent No. 5,481,464.

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i) The Parties' Proposed Constructions.

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i) The Parties' Proposed Constructions.

ii) The Court's Construction.

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i) The Parties' Proposed Constructions.

ii) The Court's Construction.

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i) The Parties' Proposed Constructions.

ii) The Court's Construction.

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i) The Parties' Proposed Constructions.

ii) The Court's Construction.

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i) The Parties' Proposed Constructions.

ii) The Court's Construction.

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a. The Parties' Arguments.

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a. The Parties' Arguments.

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b. The Court's Construction.

B. United States Patent No. 5,831,220 And United States Patent No. 6,105,014.

1. The Preambles.

a. The Effect Of The Preambles.

i) The Parties' Proposed Constructions.

ii) The Court's Construction.

b. "A method of mailing parcels and envelopes using an automated shipping machine."

i) The Parties' Proposed Constructions.

ii) The Court's Construction.

2. Claim 1.

a. "Destination."

i) The Parties' Proposed Constructions.

ii) The Court's Construction.

b. "Delivery Date."

i) The Parties' Proposed Constructions.

ii) The Court's Construction.

c. "Validation."

i) The Parties' Proposed Constructions.

ii) The Court's Construction.

d. "Storing A Validated Parcel."

i) The Parties' Proposed Constructions.

ii) The Court's Construction.

V. CONCLUSION.

COURT APPENDIX:
THE TERMS OF CERTAIN PATENT CLAIMS AGREED BY THE PARTIES

* * *

I. THE PATENTS AT ISSUE.[1]

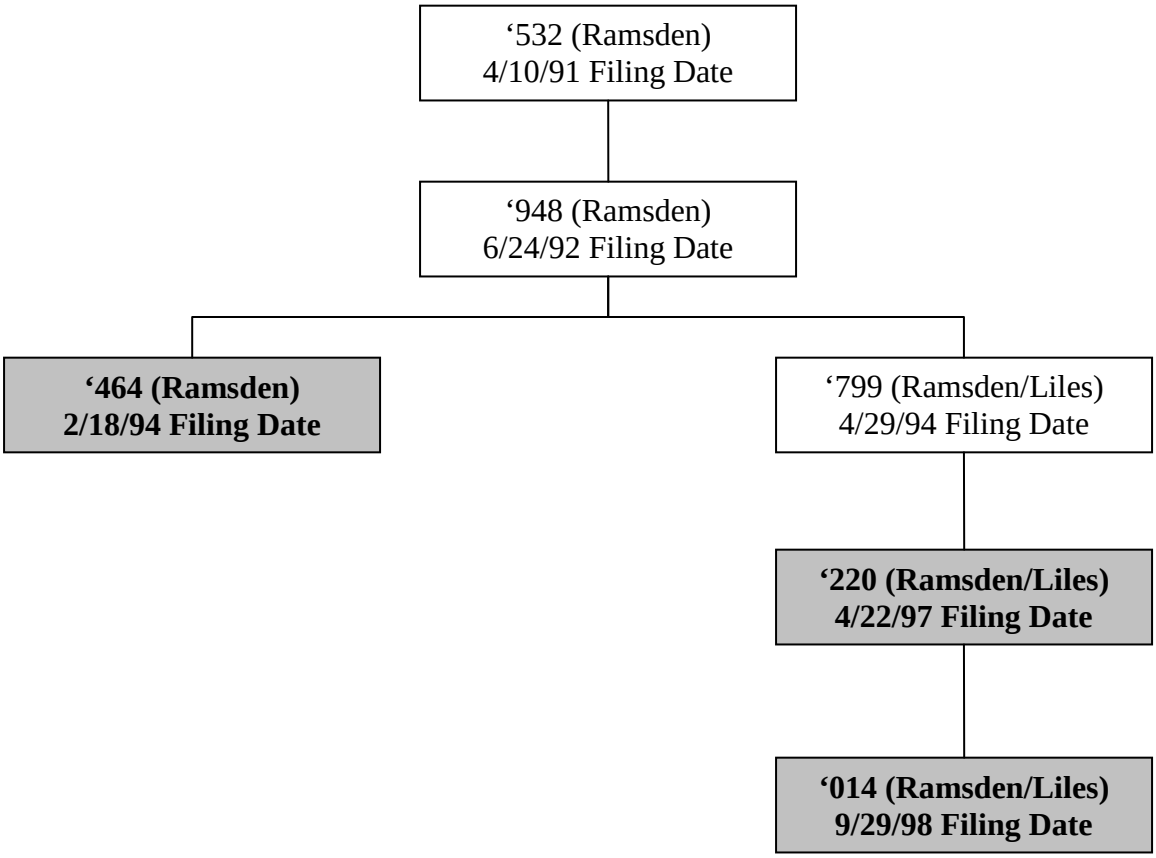
On April 10, 1991, Gary W. Ramsden filed an application for a patent on a "System for Mailing Collecting Items," that issued on August 3, 1993 as U.S. Patent No. 5,233,532 ("the '532 patent"). A110-22. On June 24, 1992, Mr. Ramsden also filed a continuation-in-part application for the '532 patent, also titled "System for Mailing Collecting Items," that issued on August 23, 1994 as U.S. Patent No. 5,340,948 ("the '948 patent"). A240-58. Two other continuation-in-part applications for the '948 patent followed. A1-20, A188-202. On February 18, 1994, Mr. Ramsden filed an application for a patent, titled "System of Collecting and Shipping Items," that issued on January 2, 1996 as U.S. Patent No. 5,481,464 ("the '464 patent"). A1-20. On April 29, 1994, Mr. Ramsden and Mr. Kenneth W. Liles, as co-inventors, filed an application for a patent, "Automated Package Shipping Machine," that issued on August 12, 1997 as U.S. Patent No. 5,656,799 ("the '799 patent"). A188-202.

From the '799 patent, two additional patents also followed. A21-65, A66-109. On April 22, 1997, Messrs. Ramsden and Liles, as co-inventors, filed for a continuation-in-part of the application for the '799 patent, "Automated Package Shipping Machine," that issued on November 3, 1998, as U.S. Patent No. 5,831,220 ("the '220 patent"). A21-65. On September 29, 1998, Messrs. Ramsden and Liles, as co-inventors, filed a continuation-in-part for the application for the '220 patent, "Automated Package Shipping Machine," that issued on August 15, 2000, as U.S. Patent No. 6,105,014 ("the '014 patent"). A66-109.

On July 23, 2008, the date Uship Intellectual Properties, Inc. ("USHIP"), filed a Complaint in the United States Court of Federal Claims, the company owned the aforementioned seven patents.

[1] The facts cited and discussed herein were derived from exhibits admitted by the court as relevant evidence for the purposes of claim construction. *See* A1-20 ('464 patent); A21-65 ('220 patent); A66-109 ('014 patent); A110-22 ('532 patent); A188-202 ('799 patent); A240-58 ('948 patent); Joint Exhibits A-L ("JCCXA-JCCXL"); Plaintiff's Exhibits G-U ("PCCXG-PCCXU"); the Government's Exhibits F-M ("DCCXF-DCCXM").

The following diagram shows the chronology and relationship among these patents.[2]



By definition, continuation applications have identical written descriptions as their parent applications. *See* MANUAL OF PATENT EXAMINING PROCEDURE § 201.07 (8th ed., rev. 7, July 2008) (“MPEP”) (explaining continuation application); *see also* MPEP § 201.04 (2008) (defining “parent”). In contrast, continuation-in-part applications comprise all the written description of their parent application, but also include new subject matter. *See* MPEP § 201.08 (2008) (explaining continuation-in-part applications).

Since the ‘948 patent is a continuation-in-part of the ‘532 patent, the latter contains all the subject matter of the ‘532 patent. A251 (‘948 patent, col. 1, ll. 5-6). Likewise, the ‘464 patent and ‘799 patent, as continuations-in-part of the ‘948 patent, contain all the subject matter of the ‘948 patent. A12 (‘464 patent, col. 1, ll. 3-5); A151 (‘799 patent, col. 1, ll. 3-5). As sequential continuations of the ‘799 patent, the ‘220 and ‘014 patents also contain identical subject matter to the ‘799 patent. A50 (‘220 patent, col. 1, ll. 4-5); A95 (‘014 patent, col. 1, ll. 4-7).

[2] The three patents at issue are highlighted: the ‘464 patent; the ‘220 patent; and the ‘014 patent.

II. PROCEDURAL HISTORY.

On July 23, 2008, USHIP filed a Complaint ("Compl.") in the United States Court of Federal Claims alleging that the defendant ("the Government") infringed the '464, '220, and '014 patents. On September 18, 2008, the Government filed a Motion For A Rule 14 Notice to join International Business Machines Corporation ("IBM"). On December 29, 2008, the Government filed an Answer to USHIP's July 23, 2008 Complaint. On January 26, 2009, IBM filed an Answer As A Third Party Defendant, pursuant to RCFC 14(b). On March 27, 2009, this case was transferred to the undersigned judge.

* * *

On April 2, 2009, the court convened a scheduling conference. On May 18, 2009, the court entered a negotiated Scheduling Order For Proceedings Leading To The Claim Construction Hearing, that subsequently was revised on August 4, 2009, at the request of the parties. On October 7, 2009, the court entered a Protective Order negotiated by the parties. On November 2, 2009, pursuant to the August 4, 2009 Revised Scheduling Order For Proceedings Leading To The Claim Construction Hearing, the parties filed a Joint Claim Construction Statement ("Joint CC Statement"). On November 16, 2009, the court entered a revised Scheduling Order regarding claim construction briefing and argument.

On November 18, 2009, USHIP filed an Opening Brief ("Pl. Br."), together with supporting Exhibits. On January 6, 2010, the Government filed a Response ("Gov't Br."), together with supporting Exhibits. On that date, IBM also filed a Response ("IBM Br."), together with supporting Exhibits. On January 22, 2010, USHIP filed a Reply ("Pl. Rep."), together with supporting Exhibits.

On February 16, 17, and 18, 2010, the court conducted a claim construction hearing in Washington, D.C. TR at 1-808.

On April 14, 2010 and May 3, 2010, the court convened telephone conferences to discuss a post-hearing briefing schedule. On May 11, 2010, the court entered a Scheduling Order. On May 28, 2010, USHIP filed a Post Hearing Claim Construction Brief ("Pl. PH Br."), with attached exhibits. On June 7, 2010, USHIP filed a Motion For Leave To File Patent Prosecution Histories for the '532 patent (A171-A187) and the '799 patent (A188-A212). On June 8, 2010, the court granted USHIP's June 7, 2010 Motion. On July 9, 2010, the Government filed a Response to USHIP's May 28, 2010 Brief ("Gov't PH Br."), together with attached exhibits. On July 9, 2010, IBM also filed a Post Hearing Response to USHIP's May 28, 2010 Brief ("IBM PH Br."). On July 28, 2010, USHIP filed a Post-Hearing Claim Construction Reply Brief ("Pl. PH Reply"), together with attached Exhibits.

On October 29, 2010, oral argument was held in Washington, D.C. to address issues the parties considered to be relevant to the court's construction and to respond to questions by the court. 10/29/10 TR at 1-221.

On December 21, 2010, the parties filed a Joint Statement Relating To Claim Construction Issues ("Joint PH Br.") evidencing agreement as to the contents of the record, including the prosecution histories for patents 5,233,532, 5,340,948, 5,481,464, 5,656,799, 5,831,220, and 6,105,014. In addition, the parties submitted a proposed agreed construction of "receiving package type information identifying a parcel or envelope to be mailed" in Claim 1 of the '220 and '014 patents.

On February 25, 2011, USHIP filed a letter to advise the court of a February 18, 2011 decision by the United States Court of Appeals for the Federal Circuit in *In re Katz Interactive Call Processing Patent Litig.*, No. 2009-1450, 2011 WL 607381 (Fed. Cir. Feb. 18, 2011). On March 1, 2011, IBM filed a response by letter. On March 7, 2011, the Government also filed a response by letter.

III. DISCUSSION.

A. Jurisdiction.

The United States Court of Federal Claims has jurisdiction to adjudicate claims that allege "an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same . . . [seeking] recovery of . . . reasonable and entire compensation for such use and manufacture." 28 U.S.C. § 1498(a) (2006).

The July 23, 2008 Complaint properly invokes the court's jurisdiction under 28 U.S.C. § 1498(a), authorizing the United States Court of Federal Claims to adjudicate claims of patent infringement against the Government and award monetary damages, where appropriate.

B. Standing.

1. The Plaintiff Has Standing To Seek An Adjudication Of The Patent Infringement Claims Alleged In The July 23, 2008 Complaint.

Federal trial courts have been advised to "decide standing questions at the outset of a case. That order of decision (first jurisdiction then the merits) helps better to restrict the use of the federal courts to those adversarial disputes that Article III defines as the federal judiciary's business." *Steel Co.* v. *Citizens for a Better Env't*, 523 U.S. 83, 111 (1998) (Breyer, J. concurring). The party invoking federal jurisdiction has the burden of proof and persuasion to satisfy the constitutional requirements of Article III standing. *See FEW/PBS, Inc.* v. *Dallas*, 493 U.S. 215, 231 (1990) (holding that the burden is on the party seeking to exercise jurisdiction to clearly allege facts sufficient to establish jurisdiction).

Section 281 of Title 35 of the United States Code provides that "[a] patentee shall have remedy by civil action for infringement of his patent." 35 U.S.C. § 281; *see also* 35 U.S.C. § 100(d) ("The word 'patentee' includes not only the patentee to whom the patent was issued but also the successors in title to the patentee."); *Paradise Creations, Inc.* v. *UV Sales, Inc.*, 315 F.3d 1304, 1308 (Fed. Cir. 2003) ("[T]his court has determined that in order to assert standing for

patent infringement, the plaintiff must demonstrate that it held enforceable title to the patent *at the inception of the lawsuit*.") (emphasis in original). The standard set forth by the United States Supreme Court over a century ago in *Waterman* v. *MacKenzie*, 138 U.S. 252 (1891) still governs:

> There can be no doubt that he is 'the party interested, either as patentee, assignee, or grantee,' and as such entitled to maintain an action at law to recover damages for an infringement; and it cannot have been the intention of congress that a suit in equity against an infringer to obtain an injunction and an account of profits, in which the court is authorized to award damages, when necessary to fully compensate the plaintiff, and has the same power to treble the damages as in an action at law, should not be brought by the same person.

Id. at 260-61 (internal citations omitted).

The July 23, 2008 Complaint alleges: 1) USHIP owns the '464 patent, the '220 patent, and the '014 patent; 2) the United States Postal Service ("USPS") is part of the executive branch of the United States Government; 3) the USPS has used or manufactured self service postal kiosks and mail centers; and 4) the USPS has done so without a license or lawful right to do so. Compl. ¶¶ 2, 5, 6, 11, 14. These factual allegations, accepted as true, state a claim that is plausible on its face and alleges more than the mere possibility of potential liability. *See Ashcroft* v. *Iqbal*, 129 S. Ct. 1937, 1949 (2009) ("a complaint must contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'").

2. The Third-Party Defendant Has Standing To Seek An Adjudication Of The Patent Infringement Claims Alleged In The July 23, 2008 Complaint.

The United States Court of Federal Claims "may summon any and all persons with legal capacity to be sued to appear as a party . . . in any suit . . . of any nature whatsoever pending in said court to assert and defend their interests." 41 U.S.C. § 114(b); *see also* RCFC 14(b) ("The court, . . . may notify any person with legal capacity to sue and be sued and who is alleged to have an interest in the subject matter of any pending action.").

On September 18, 2008, the Government filed a Motion For A Rule 14 Notice, since IBM "may be obligated to indemnify the [G]overnment" based on an "express patent indemnification clause in its contracts with the Postal Service"; "may be obligated to indemnify the [G]overnment based on an implied warranty of non-infringement under U.S.C. § 2-312(3)"; and may have "commercially reproduced, or may desire to reproduce in the future, the accused devices." 9/18/08 Gov't Mot at 2. On January 26, 2009, IBM filed an Answer, pursuant to RCFC 14(b). As such, IBM is a party with standing to seek an adjudication of the alleged patent infringement claims at issue.

C. Controlling Precedent Concerning Construction of Patent Claims.

1. A Federal Trial Judge Is Required To Construe Patent Claims.

In *Markman* v. *Westview Instruments, Inc.*, 517 U.S. 370 (1996) ("*Markman III*"), the United States Supreme Court unanimously affirmed the *en banc* decision of the United States Court of Appeals for the Federal Circuit in *Markman* v. *Westview Instruments, Inc*., 52 F.3d 967 (Fed. Cir. 1995) (*en banc*) ("*Markman II*"), holding that the meaning and scope of a patent's claims are issues of law to be determined by the federal trial judge. 517 U.S. at 978-79. The significance of *Markman III*, however, was the United States Supreme Court's expressed deference to the appellate court's analysis for conducting claim construction. *See Markman III*, 517 U.S. at 390 ("It was just for the sake of such desirable uniformity that Congress created the Court of Appeals for the Federal Circuit as an exclusive appellate court for patent cases, H.R. Rep. No. 97-312, at 20-23 (1981), observing that increased uniformity would 'strengthen the United States patent system in such a way as to foster technological growth and industrial innovation.' *Id.* at 20."). The court now turns to that analysis.

2. The Federal Trial Judge Should First Examine Intrinsic Evidence.

The United States Court of Appeals for the Federal Circuit has instructed federal trial judges first to examine "intrinsic evidence," because it is the "*most significant source of the legally operative meaning* of disputed claim language." *Vitronics Corp.* v. *Conceptronic Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (emphasis added). Our appellate court has identified intrinsic evidence as the "claim language, the written description, and, if introduced, the prosecution history." *Phonometrics, Inc.* v. *N. Telecom Inc.*, 133 F.3d 1459, 1464 (Fed. Cir. 1998).

a. The Claim Language.

The federal trial judge is required to examine patent claim terms and phrases "through the viewing glass of a person skilled in the art." *Brookhill-Wilk 1, LLC* v. *Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003); *see also Hockerson-Halberstadt, Inc.* v. *Avia Group Int'l, Inc.*, 222 F.3d 951, 955 (Fed. Cir. 2000) (the court gives claim terms "their ordinary and accustomed meaning as understood by one of ordinary skill in the art."). In conducting this examination, the trial judge must determine, as a threshold matter, whether there is ambiguity in any claim term requiring construction. *See Vitronics*, 90 F.3d at 1582 (directing the trial judge to "look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention").

b. The Specification.

As a matter of law, the specification is the "written description of the invention." 35 U.S.C. § 112 at ¶ 1. For this reason, the United States Court of Appeals for the Federal Circuit has required that claims "must be read in view of the specification, of which they are a part." *See Phillips* v. *AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (*en banc*) (internal citations omitted). The specification is "always highly relevant to the claim construction analysis. Usually, it is the single best guide to the meaning of the disputed term." *Id*. (internal citations

omitted). The specification is accorded deference in claim construction, because it is the patentee's statement to the public describing the invention. *See Honeywell, Int'l, Inc.* v. *ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) ("[T]he public is entitled to take the patentee at his word[.]").

The United States Court of Appeals for the Federal Circuit has recognized two circumstances where the specification is of particular importance. The first is where the specification includes a "special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess." *Phillips*, 415 F.3d at 1316; *see also Edwards Lifesciences LLC* v. *Cook, Inc.*, 582 F.3d 1322, 1329 (Fed. Cir. 2009) (stating where two terms are used interchangeably, it "is akin to a definition equating the two"). Specifically, "'a patentee can act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning'[;] the written description in such a case must clearly redefine a claim term 'so as to put a reasonable competitor or one reasonably skilled in the art on notice that the patentee intended to so redefine that claim term.'" *Elekta Instrument S.A.* v. *O.U.R. Scientific Int'l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000), *cert. denied*, 529 U.S. 1066 (2000) (quoting *Process Control Corp*. v. *HydReclaim Corp*., 190 F.3d 1350, 1357 (Fed. Cir. 1999)); *see also Vitronics*, 90 F.3d at 1582 (holding that, in ascertaining the scope of the patent, deference should be afforded claims as defined by their "customary meaning," with the caveat that the law affords patentees the right to serve as a "lexicographer," if a special or unique definition is clearly stated in the specifications or prosecution history.).

The second is where the specification "may reveal an internal disclaimer, or disavowal, of claim scope by the inventor." *Phillips*, 415 F.3d at 1316; *see also Edwards Lifesciences LLC*, 582 F.3d at 1329-30 (holding that where a specification uses a term only in a specific context, that term should not be construed to have a broader scope). The import of these decisions is that the inventor's intent with respect to the claims "must be clear" to overcome their customary meaning. *See Voda* v. *Cordis Corp.*, 536 F.3d 1311, 1320 (Fed. Cir. 2008) (internal citations omitted).

Where the language of a claim is ambiguous, the "specification, including the inventors' statutorily-required written description of the invention-is the primary source for determining claim meaning." *Astrazeneca AB* v. *Mutual Pharm. Co., Inc.*, 384 F.3d 1333, 1336 (Fed. Cir. 2004); *see also id*. at 1337 ("Most courts have simply stated that the specification is to be used to explain the claims; . . . the patent is an integrated document, with the claims 'pointing out and distinctly claiming,' 35 U.S.C. § 112, the invention described in the rest of the specification and the goal of claim construction is to determine what an ordinary artisan would deem the invention claimed by the patent, taking the claims together with the rest of the specification.") (internal quotes and citations omitted). Of course, the utility of the specification still depends on whether the "written description of the invention [is] . . . clear and complete enough to enable those of ordinary skill in the art to make and use it." *Vitronics*, 90 F.3d at 1582.

Three additional rules of construction must be considered. First, federal trial judges have been advised not to construe a claim to exclude the preferred and only embodiment disclosed in a specification, because "such an interpretation is rarely, if ever, correct." *Vitronics*, 90 F.3d at 1583. Second, when more than one embodiment is present, as a matter of law, the court "do[es]

not interpret claim terms in a way that excludes disclosed examples in the specification." *Verizon Servs. Corp*. v. *Vonage Holding Corp*., 503 F.3d 1295, 1305 (Fed. Cir. 2007); *see also Phillips*, 415 F.3d at 1323 (recognizing that the embodiments in a patent often are examples meant to teach a person of ordinary skill in the art how to make and use the invention, but should not be construed to limit the invention only to a specific embodiment). Where an interpretation of a term is required to cover all embodiments, contradictory to the ordinary meaning and there was no evidence that the applicant was acting as his own lexicographer, the United States Court of Appeals for the Federal Circuit held that such language can be interpreted to claim less than all the embodiments. *See Helmsderfer* v. *Bobrick Washroom Equip., Inc*., 527 F.3d 1379, 1383 (Fed. Cir. 2008) (holding that, even if "totally" would have covered all embodiments, "partially" could not include "totally" unless the applicant had acted as his own lexicographer); *see also Baran* v. *Med. Device Tech., Inc.*, 616 F.3d 1309, 1315-16 (Fed. Cir. 2010) (holding that if a term is used in the specification to differentiate two different embodiments and it is used in the claims to describe the invention, it is proper to construe the claims to cover only one of the two embodiments, because the differentiation concedes coverage of one of the embodiments).

Third, federal trial judges must not "import" or graft limitations from the specification into the claim. *See American Piledriving Equipment, Inc.* v. *Geoquip, Inc.*, No. 2010-1283, 2011 WL 1045360, *3 (Fed. Cir. Mar. 21, 2011) (reaffirming that "the role of a [federal trial judge] in construing claims is not to redefine claim recitations or to read limitations into the claim to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims, informed by the written description, the prosecution history[,] if in evidence, and any relevant extrinsic evidence."); *see also Kara Tech. Inc.* v. *Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) ("The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims."); *SciMed Life Sys. Inc.* v. *Advanced Cardiovascular Sys. Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001) (reading a limitation from the specification into a claim is "one of the cardinal sins of patent law."); *Intervet Am., Inc.* v. *Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1053 (Fed. Cir. 1989) (holding that "[federal trial judges] cannot alter what the patentee has chosen to claim as his invention, that limitations appearing in the specification will not be read into claims, and that interpreting what is meant by a word in a claim is not to be confused with adding an extraneous limitation appearing in the specification, which is improper") (quotation marks omitted).

c. The Prosecution History.

In addition, federal trial judges have been advised that "the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Phillips*, 415 F.3d at 1317; *see also Digital Biometrics, Inc.* v. *Identix, Inc*., 149 F.3d 1335, 1344 (Fed. Cir. 1998) (observing that the prosecution history "may contain contemporaneous exchanges between the patent applicant and the [USPTO] about what the claim means").

Under certain circumstances, however, prosecution history can even trump the specification. *See Graham* v. *John Deere Co. of Kansas City*, 383 U.S. 1, 22 (1966) (holding

that claims narrowed to obtain issuance over prior art during prosecution may not subsequently be interpreted by the specification to cover what was disclaimed before the U.S. Patent Office); *see also Festo Corp.* v. *Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.* 535 U.S. 722, 733-34 (2002) ("When . . . the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory compromised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent."). Therefore, prosecution history may preclude "a patentee from regaining, through litigation, coverage of subject matter relinquished during prosecution of the application of the patent." *Wang Labs* v. *Mitsubishi Elecs. Am., Inc*., 103 F.3d 1571, 1577-78 (Fed. Cir. 1997), *cert. denied*, 522 U.S. 818 (1997). In sum, regardless of whether an examiner agreed or disagreed with an applicant's statements during prosecution, any argument made "may lead to a disavowal of the claim scope[.]" *Seachange Int'l, Inc.* v. *C-Cor Inc.*, 413 F.3d 1361, 1374 (Fed. Cir. 2005); *see also Microsoft Corp.* v. *Multi-Tech Sys.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (same).

3. The Federal Trial Judge May Examine Extrinsic Evidence, But Only In Limited Circumstances.

If a federal trial judge's consideration of the intrinsic evidence resolves any ambiguity about the meaning of a patent claim, as a matter of law, it is improper for the judge to rely on extrinsic evidence, *i.e.*, evidence outside of the patent record, such as expert and inventor testimony, dictionaries, learned treatises, and articles. *See Vitronics*, 90 F.3d at 1584 (allowing extrinsic evidence "to help the court come to the proper understanding of the claims," but not to contradict intrinsic evidence or vary the scope of the claims). The United States Court of Appeals for the Federal Circuit, however, subsequently clarified in *Key Pharm.* v. *Hercon Lab. Corp*, 161 F.3d 709 (Fed. Cir. 1998):

> This court has made strong cautionary statements on the proper *use* of extrinsic evidence, which might be misread by some members of the bar as restricting a trial court's ability to *hear* such evidence. We intend no such thing. To the contrary, trial courts generally can hear expert testimony for background and education on the technology implicated by the presented claim construction issues, and trial courts have broad discretion in this regard.
>
> Furthermore, a trial court is quite correct in hearing and relying on expert testimony on an ultimate claim construction question in cases in which the intrinsic evidence (*i.e.*, the patent and its file history -- the "patent record") does not answer the question.
>
> What is disapproved of is an attempt to use extrinsic evidence to arrive at a claim construction that is clearly at odds with the claim construction mandated by the

> claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.

Id. at 716 (citations omitted); *see also Zodiac Pool Care, Inc.* v. *Hoffinger Indus., Inc.*, 206 F.3d 1408, 1414 (Fed. Cir. 2000) (cautioning federal trial judges "to turn[] to extrinsic evidence only when the intrinsic evidence is insufficient to establish the clear meaning of the asserted claim").

IV. THE COURT'S CONSTRUCTION OF CERTAIN PATENT CLAIMS REQUESTED BY THE PARTIES.

A. United States Patent No. 5,481,464.

The parties have requested that the court construe certain terms in claims 7, 9, 10, 15, 28, 30, and 34 of the '464 patent. All of these asserted claims are apparatus claims;[3] claims 7, 28, and 34 also are independent claims.[4] Gov't PH Br. at 13. Claims 9, 10, and 15 depend from claim 7. A19 ('464 patent, col. 15, ll. 7, 11, 18, 28-29). Claim 30 depends from claim 28. A20 ('464 patent, col. 17, ll. 44-45).

1. The Preambles.

Because the analysis of the preambles[5] is applicable to all of the claims of the '464 patent, a few preliminary observations are required. First, the '464 patent preambles recite "essential structure" to define the subject matter of the claim invention when it "expressly or by necessary implication give[s] the effect of a limitation." *Kropa* v. *Robie*, 187 F.2d 150, 152 (CCPA 1951); *see also Pitney Bowes, Inc.* v. *Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) (stating that if a preamble recites a limitation or is "necessary to give life, meaning, and vitality" to the claim then the preamble should be read as part of the claim); *see also id*. (where there is no "meaningful distinction to be drawn between the claim preamble and the rest of the claim, for only together do they comprise the 'claim' . . . the preamble is . . . said to constitute or explain a claim limitation."). "No litmus test defines when a preamble limits claim scope," but "[i]n general, a preamble limits the claimed invention if it recites essential structure or steps," or if the preamble is used during prosecution history to limit the scope of the claim. *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1347 (Fed. Cir. 2002).

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[3] "Apparatus" claims "cover what a device *is*, not what a device *does*." *Hewlett-Packard Co.* v. *Bausch & Lomb Inc*., 909 F.2d 1464, 1468 (Fed. Cir. 1990) (emphasis in original).

[4] An "independent claim" is "a claim that does not refer back to or depend on another claim." *USPTO Glossary*, http://www.uspto.gov/main/glossary/index.html (last viewed Mar. 21, 2011). In contrast, a "dependent claim" incorporates by reference a previous claim and includes all of the limitations of the claims on which they depend. *See* MPEP § 608.01(n).

[5] The preambles of claims 7, 28, and 34 of the '464 patent are identical. A18 ('464 patent, col. 14, ll. 51-53); A20 ('464 patent, col. 17, ll. 19-21); A20 ('464 patent, col. 18, ll. 28-30) (all reciting "an integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services").

Whether the preamble is a claim limitation is determined "on the facts of each case in light of the claim as a whole and the invention described in the patent." *Storage Tech. Corp.* v. *Cisco Sys., Inc.*, 329 F.3d 823, 831 (Fed. Cir. 2003); *see also Bell Commc'n Research, Inc.* v. *Vitalink Commc'n Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995) ("[W]hen the claim drafter chooses to use *both* the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.") (emphasis in the original); *Corning Glass Works* v. *Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) (stating that, because there is no test to show when the preamble is a claim limitation, the determination must be made on a case by case basis, "on review of the entirety of the patent").

The preamble, however, does not always limit a claim. For example, where the patent "describes a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." *Am. Med. Sys., Inc.* v. *Biolitic, Inc.*, 618 F.3d 1354, 1358-59 (Fed. Cir. 2010) (internal citations omitted). In addition, if the preamble is "reasonably susceptible to being construed to be merely duplicative of the limitations in the body of the claim." *Symantec Corp.* v. *Computer Associates Intern., Inc.*, 522 F.3d 1279, 1288-89 (Fed. Cir. 2008). And, the preamble is not limiting if it is "simply an introduction to the general field of the claim." *Hearing Components, Inc.* v. *Shure Inc.*, 600 F.3d 1357, 1366 (Fed. Cir. 2010).

In *Catalina Mktg. Int'l, Inc.* v. *Coolsavings.com, Inc.*, 289 F.3d 801 (Fed. Cir. 2002), the United States Court of Appeals for the Federal Circuit described several ways in which the preamble can be limiting, including four relevant to this case, *i.e.*, when the claim body depends on the preamble for antecedent basis; when the preamble is essential to understanding the claim body; when the preamble recites steps or structures identified as important by the specification; or when the preamble is relied upon during patent prosecution. *Id*. at 808-09. Another indicator that a preamble is limiting is where it does not duplicate other language in the claims. *See Hearing Components*, 600 F.3d at 1366 (concluding that the 'readily installed' phrase in the preamble was a claim limitation, because it was not duplicative of other language in the claim and the patentee relied on the phrase during prosecution to distinguish prior art).

The preamble of each asserted independent claim in the '464 patent describes the subject matter of this invention as an "integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services[.]" A18 ('464 patent, col. 14, ll. 51-53); A20 ('464 patent, col. 17, ll. 19-21); A20 ('464 patent, col. 18, ll. 28-30);[6] *see also* A1 ('464 patent, Abstract) ("[d]isclosed is an integrated, automated, unattended unit"). "Integrated . . . unit" in the preamble is also a claim term that the specification identifies as the

[6] *Compare* A12 ('464 patent, col. 1, ll. 13-14) ("this invention relates to an automated, unattended unit"), *and* A1 ('464 patent, Abstract) ("Disclosed is an integrated, automated, unattended unit"), *with* A18-20 ('464 patent, col. 14, l. 51 (independent claim 7); '464 patent, col. 15, ll., 5, 7, 11, 15, 18, 21, 26, 28, 34, 38, 41 (claims 8-18, dependent on claim 7); '464 patent, col. 17. ll. 19 (independent claim 28); '464 patent, col. 17, ll. 39, 43 (claims 29-30, dependent on claim 28); '464 patent, col. 18, l. 28 (independent claim 34)) (claiming "an integrated, automated, unattended unit").

purpose of the invention. *See Corning Glass Works*, 868 F.2d at 1257 (holding that a preamble limits the scope of the claims where the specification uses the words of the preamble to define the purpose of the invention); *see also* A1 ('464 patent, Abstract) (describing the invention as "an integrated, automated, unattended unit"); A12 ('464 patent, col. 1, ll. 13-14) (stating that "this invention relates to an automated, unattended unit").

In addition, the '464 patent claim preambles provide antecedent basis for elements in the bodies of the asserted claims. *See Catalina Mktg.*, 289 F.3d at 808 (holding that "dependence on a particular disputed preamble phrase for antecedent basis may limit claim scope[,] because it indicates a reliance on both the preamble and claim body to define the claimed invention"); *see also* A18-A20 (('464 patent, col. 14, ll. 51-52, 55, 65) (Claim 7); ('464 patent, col. 17, ll. 19-21, 23, 34) (Claim 28); ('464 patent, col. 18, ll. 29-31, 33, 41) (Claim 34)) (the bodies of independent Claims 7, 28, and 34 using their respective preambles as antecedent basis for "the item" and "said commercial delivery service" because "items" and "commercial delivery services" are first introduced in each preamble).

The terms of the '464 patent preamble also duplicate those in the body of the '464 patent claims. *Compare* A18 ('464 patent, col. 14, ll. 51-54) (the preamble of claim 7) *with* A18-19 ('464 patent, col. 14, l. 55 – col. 15, l. 4) (the body of claim 7) *with id*. at 811 (discussing the use of claim language when it appears in both the preamble and the body). Therefore, since there is no meaningful distinction between the preambles and the elements of the asserted claims of the '464 patent, the claim preambles limit the inventions claimed therein. *See* 2/17/10 TR at 266-318 (the parties agreeing that the preamble is limiting, but differing as to what these terms mean).

a. "Integrated . . . Unit."

The parties propose the following competing constructions of the preamble term "Integrated . . . unit" for the court's consideration:

Preamble: An integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services: said automated unit comprising		
USHIP Construction	**Government Construction**	**IBM Construction**
An apparatus, machine, or system of machines for collecting and securely holding items for collection and shipment by commercial delivery service (including the USPS), which apparatus, machine, or system of machines is (1) incorporated into a unified or interrelated whole; (2) automatically controlled by mechanical or electronic devices; and (3) capable of being used by a customer when no attendant is present	**integrated:** incorporated into a unified whole **automated:** automatically controlled by mechanical or electronic devices **unattended**: no attendant is present **unit:** a single apparatus	An integrated, automated, and unattended single apparatus for automatically collecting and securely holding items for collection and shipment by commercial delivery services, the automated single apparatus including:

Pl. PH Br. at 49; Gov't PH Br. at 14; IBM PH Br. at 57-58 (bold added by the parties).

The parties disagree whether "integrated . . . unit" requires the invention to be in a single physical container or functionally integrated.

i) The Parties' Proposed Constructions.

USHIP argues that "integrated" means "incorporated into a unified or interrelated whole;" that "unit" means an "apparatus, machine, or system of machines;" and that dictionaries can be used "to begin to understand the meaning of a term, before reviewing the remainder of the patent to determine how the patentee has used the term." Pl. PH Br. at 49-50 (citing *Phillips*, 415 F.3d at 1324).

Relying on a dictionary meaning, USHIP contends that the scope of the term "unit" can range from "a single thing" to "a machine, part, or system of machines having a specified purpose." Pl. PH Br. at 50 (quoting RANDOM HOUSE UNABRIDGED DICTIONARY 2074 (2d ed. 1993) ("RANDOM HOUSE")); *see also Paragon Solutions, LLC* v. *Timex Corp.*, 566 F.3d 1075, 1083-87 (Fed. Cir. 2009) (holding that a "unit" encompasses "separate physical structures"). The applicant intended "unit" to incorporate this entire range of meanings, because the specification uses the terms "system" and "unit" interchangeably, and the second embodiment shows that the invention is housed in separate physical containers. Pl. PH Br. at 50-51. Therefore, USHIP concludes that "integrated" means "organized or structured so that constituent units function cooperatively." *Id*. at 50 (quoting RANDOM HOUSE at 990 and referring to preferred embodiments to show that the patent encompasses the full range of the dictionary definitions for "unit" and "integrated").

USHIP also contends that the specification supports this definition by "portray[ing] the invention as having a myriad of components and functions all working harmoniously." Pl. PH Br. at 50 (citing A12 ('464 patent, col. 2, ll. 7, 10, 16, 21, 26, 31, 51); A13 ('464 patent, col. 3, l. 40 - col. 4, l. 3); A16-17 ('464 patent, col. 10, l. 55- col. 11, l. 18); A2-11 ('464 patent, Figures 1-10)). Again, USHIP looks to the second embodiment for context, because it shows that the elements of the invention need to "be physically and functionally coordinated – the adjunct unit sits next to the rest of the invention and provides 'packaging materials.'" Pl. PH Br. at 51 (citing A16 ('464 patent, col. 10, ll. 46-47) ("In this embodiment, an adjunct packing supply unit 120 is positioned to one side of the system 10")); *see also* 2/17/10 TR at 269-70 (USHIP's Counsel: "[the] adjunct packaging supply unit . . . is separate from the main device. It's functionally integrated with the primary part, it's complementary to it, but it's in a separate container.").

The Government responds that the "dictionary first" approach was rejected by the United States Court of Appeals for the Federal Circuit. Gov't PH Br. at 16-17 (citing *Phillips*, 415 F.3d at 1320 (explicitly rejecting defining a term to include all meanings given it in a dictionary)). The Government also criticizes USHIP's proposed construction as "improperly seek[ing] to resurrect the rejected and abandoned 'aggregation of parts' concept." Gov't PH Br. at 18. The Government points out that when the examiner initially rejected the '532 patent, parent to the '464 patent, as an indefinite "aggregation of parts," the applicant amended the claim to create an integrated system. Gov't PH Br. at 18. Accordingly, the applicant cannot now regain subject matter that was surrendered during prosecution. Gov't PH Br. at 18. Instead, the Government defines "integrated" as "incorporated into a unified whole," because the Abstract defines the invention as incorporating the scale, the computer, the card reader, and the secured storage into the unit. Gov't PH Br. at 15 (citing A1 ('464 patent, Abstract)).

IBM agrees that "integrated . . . unit" means "one unit, not a 'system of machines.'" IBM PH Br. at 58. Citing to the specification and specifically the "Summary of the Invention," IBM argues that the '464 patent repeatedly defines the invention as "a single integrated machine achieving 'the object of the invention.'" IBM PH Br. at 59-60 (citing A12 ('464 patent, col. 2, ll. 30-50)). The prosecution history confirms that in order to overcome a rejection that the patent described "an aggregation of parts," the applicant represented that the "claims were directed to an integrated system." IBM PH Br. at 61 (citing G0001137). Therefore, "the asserted claims cannot be construed to cover a mere 'system,'" but must cover a physically integrated single machine. IBM PH Br. at 61.

In rejecting USHIP's construction, IBM agrees with the Government that the "system" and "unit" are all single apparatuses. IBM PH Br. at 61-62. For example, Embodiment Two specifically states that the physically separate part of the figure is an "adjunct unit" and not part of the claimed invention. IBM PH Br. at 63-64. In addition, the specification would need to indicate clearly that "unit" included separate physical structures for the scope of "integrated . . . unit" to extend that far. IBM PH Br. at 63-64 & n.15 (citing *Paragon Solutions*, 566 F.3d at 1083-87 (defining "unit" to include separate physical structures where the specification *explicitly* stated that the claimed invention "may even comprise multiple structures") (emphasis added)).

ii) The Court's Construction.

As a threshold matter, the court rejects the Government and IBM's assertion of prosecution history estoppel, because the cited exchanges between the examiner and USHIP were ambiguous. The prosecution history certainly shows that the examiner initially rejected claims 1 and 6-18 of the '532 patent for lacking "interconnections or the disclosed structural relationships." G0001015. To overcome this rejection, however, the applicant added some connections and argued that the patent was an "integrated system, not an 'aggregation of parts' any longer." G0001137; G0001144-45. After further review, the examiner accepted the applicant's argument that, because two of the means were "in communication" with each other, the basis of the rejection could be overcome, without requiring the invention to be in a single physical container. G0001150; *see* 2/17/10 TR at 277-279 (USHIP's Counsel explaining that the examiner's initial rejection was improper as it focused on the lack of "interconnections and structural relationships" and not on the presence of "a single container."). Although these statements were made with respect to an ancestor of the '464 patent, nevertheless they inform the court about what these terms mean. *See Omega Eng'g, Inc.* v. *Raytek Corp.*, 334 F.3d 1314, 1333 (Fed. Cir. 2003) (holding that prosecution disclaimer or prosecution history estoppel "may arise from disavowals made during the prosecution of ancestor patent applications."); *see also MBO Labs., Inc*. v. *Becton, Dickinson & Co*, 602 F.3d 1306, 1313 (Fed. Cir. 2010) (holding that prosecution history estoppel and the rule against recapture prevent a patentee from broadening the scope of a claim to cover what previously had been surrendered to the public). In this case, however, the court has determined that the aforementioned statements in the prosecution history are not sufficiently clear to warrant invocation of prosecution history estoppel. *See Omega Eng'g*, 334 F.3d at 1325-26 (holding that "for prosecution disclaimer to attach our precedent requires that alleged disavowing actions or statements made during prosecution be both clear and unmistakable.").

Turning to claim construction, the terms "system" and "unit" are used interchangeably in the '464 patent specification to describe the invention. *Compare* A12-13 ('464 patent, col. 2, l. 6 – col. 3, l. 3) (describing the invention in the "Summary of the Invention" as a "system"), *with* A18 ('464 patent, col. 14, l. 51) (claiming the invention as a "unit"). Although these terms are used throughout the specification, when used in reference to the invention, they do not explicitly limit the terms to "single apparatuses." For example, the Abstract and description of the invention list four elements that must be "included" in the "integrated . . . unit," but do not require that all elements must be in the same physical container. A1 ('464 patent, Abstract); A12 ('464 patent, col. 2, ll. 30-50). In addition, Embodiment Two describes the invention as having a packaging supply unit positioned to one side of the system to be used in conjunction with the system. A7 ('464 patent, Figure 6); A16 ('464 patent, col. 10, ll. 45-55) (describing Embodiment Two where the main system may control and coordinate the dispensing of materials).

Therefore, the court has determined that a person of ordinary skill in the art,[7] relying on the specification, as well as the Figures would understand that "integrated . . . unit" is a "system"

[7] USHIP and IBM declined to address what is the relevant "art" or what educational qualifications and/or practical experience "a person of skill in the art" would possess at the time of the issuance of the '464 patent, *i.e.*, January 2, 1996. 10/29/10 TR 18-20 (USHIP's Counsel);

that is functionally integrated, but not housed in a single physical container. *See Phillips*, 415 F.3d at 1313 (stating that it is advisable to begin by looking at how a person of ordinary skill in the art reads the claim in the context of the intrinsic evidence, to gain an "objective baseline" of the meaning of the disputed terms); *see also Georgia-Pacific Corp.* v. *U.S. Gypsum Co.*, 195 F.3d 1322, 1332 (Fed. Cir. 1999) (advising that the "specification of the patent in suit is the best guide to the meaning of a disputed term.") (citations omitted).

10/29/10 TR 23-24 (IBM's Counsel). The Government took no position on this issue. USHIP's Counsel, however took the position that *Phillips* did not require the plaintiff "to define the person who's skilled in the art." 10/29/10 TR 19.

To the contrary, *Phillips* observed: "In some cases the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction is such cases involves little more than the application of the widely accepted meaning of commonly understood words." 415 F.3d at 1314. *Phillips*, however, recognized that "the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the [trial] court looks to those sources available to the public that show what a person of skill in the art would have understood disputed language to mean." *Id*. (internal quotation marks omitted). Therefore, *Phillips* reiterated: "We have also held that extrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue [*i.e.*, the relevant art], to explain how an invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person skilled in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id*. at 1318.

In this case, the mechanical nature of the '464 and related patents therein, the lack of "idiosyncratic" terms and phrases, and the court's general familiarity with the purpose of the postal kiosk do not require expert testimony as to the "relevant art" or an informed description of the "persons of skill" in that art. *See Phillips*, 415 F.3d at 1314. Nevertheless, counsel should heed the lesson of *Centricut LLC* v. *Esab Grp., Inc.*, 390 F.3d 1361, 1370 (Fed. Cir. 2004) (declining to adopt a *per se* rule, that expert testimony is required to prove infringement when the art is complex, but "in a case involving complex technology, where the accused infringer offers expert testimony negating infringement, the patentee cannot satisfy its burden of proof of relying only on testimony from those admittedly not expert in the field"). To date, our appellate court has not defined what it generally considers "complex technology" to be. Nor has this court determined whether the technology at issue in this case is complex. Today, the court rules only that, based on the parties agreement, extrinsic expert testimony was not required for this claim construction.

b. "Unattended."

The parties propose the following competing constructions of the term "unattended" for the court's consideration:

Preamble: An integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services: said automated unit comprising		
USHIP Construction	**Government Construction**	**IBM Construction**
An apparatus, machine, or system of machines for collecting and securely holding items for collection and shipment by commercial delivery service (including the USPS), which apparatus, machine, or system of machines is (1) incorporated into a unified or interrelated whole; (2) automatically controlled by mechanical or electronic devices; and *(3) capable of being used by a customer when no attendant is present*	**integrated:** incorporated into a unified whole **automated:** automatically controlled by mechanical or electronic devices ***unattended****: no attendant is present* **unit:** a single apparatus	An integrated, automated, and unattended single apparatus for automatically collecting and securely holding items for collection and shipment by commercial delivery services, the automated single apparatus including:

Pl. PH Br. at 49; Gov't PH Br. at 14; IBM PH Br. at 57-58 (bold added by the parties; italics added by the court).

The parties disagree whether "unattended" means "no attendant is present" or merely that the invention is "capable of being used when no attendant is present." Pl. PH Br. at 49; Gov't PH Br. at 18.[8]

i) The Parties' Proposed Constructions.

USHIP proposes that "unattended" means "capable of being used by a customer when no attendant is present." Pl. PH Br. at 49. USHIP argues that the specification only mentions an attendant when discussing the faults of unattended drop-boxes. Pl. PH Br. at 52 (citing A12 ('464 patent, col. 1, ll. 37-40)). In addition, although drop-boxes can be used without an attendant being present, it is improper to import such a limitation as it would "absurdly ascribe" a claim construction, allowing infringement to be avoided merely by hiring an attendant to stand next to the invention whether or not the attendant was necessary for operation. Pl. PH Br at 52.

The Government counters that "'unattended' means "no attendant is present." and takes issue with USHIP's qualification that "unattended" means "*capable of being used by a customer when* no attendant is present." Gov't PH Br. at 19. USHIP's inclusion of this introductory phrase should be rejected, because it eliminates a claim term, seeks to expand the claim construction, and is unsupported by the evidence. Gov't PH Br. at 19-20. Accordingly, the court should construe "unattended" to mean that "no attendant is present." *Id*.

[8] IBM does not contest USHIP's proposed construction of "unattended." IBM PH Br. at 57-67.

ii) The Court's Construction.

The court has determined that the term "unattended" in the '464 patent is not ambiguous. *See Vitronics Corp.*, 90 F.3d at 1583 (holding that when claim terms are unambiguous after looking at the intrinsic evidence it is improper to rely on extrinsic evidence during claim construction). The specification only mentions "unattended" with respect to "unattended drop-boxes" in the description of the invention. A12 ('464 patent, col. 1, ll. 31-49). The specification also discusses the use and disadvantages of unattended drop-boxes. A12 ('464 patent, col. 1, ll. 31-49). Therefore, the court has determined that, after reading the entire specification and the preamble of Claim 7, a person of ordinary skill in the art would understand that unattended means that "no attendant is present" for the "collecting and holding" functions.

2. Claim 7.

Claim 7 of the '464 patent describes:

> An integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services: said automated unit comprising,
>
> > means for weighing the item to be shipped;
> >
> > means for inputting information relating to the destination to which the item is to be shipped;
> >
> > control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including means for receiving credit card information and means for communicating and assessing the shipment fee to the account of the person owning the credit card, said means for communicating the shipment fee being by telephone lines;
> >
> > means for securely storing said item until the item is collected by said commercial delivery service;
> >
> > means for storing the inputted information once said item is disposed in said secured storage means, said information storage means including means for displaying a manifest.

A18-19 ('464 patent, col. 14, l. 51 - col. 15, l. 4).

a. "Means For Inputting Information Relating To The Destination To Which The Item Is To Be Shipped."

The parties propose the following competing constructions of the phrase "means for inputting information relating to the destination to which the item is to be shipped" (A18 ('464 patent, col. 14, ll. 57-58)) for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: inputting information relating to the destination to which the item is to be shipped **Corresponding Structure:** keypad (28) or keyboard (226) or voice-recognition mechanism; and equivalents	**[Means-Plus-Function] Function:** to input information relating to the place to which the item is to be shipped **Corresponding Structure:** keypad (28) or keyboard (226)	**Function:** inputting information relating to the destination to which the item is to be shipped **Corresponding Structure:** keypad (28) or keyboard (226)

Pl. PH Br. at 53; Gov't PH Br. at 22; IBM PH Br. at 65 (bold added by the parties).

The parties disagree about whether the corresponding structure for this means-plus-function claim includes a "voice-recognition mechanism."

i) The Parties' Proposed Constructions.

The parties agree that the phrase "means for inputting" is a means-plus-function limitation, subject to 35 U.S.C. § 112 ¶ 6, the function of which is "inputting information relating to the destination to which the item is to be shipped." Pl. PH Br. at 53; Gov't PH Br. at 22; IBM PH Br. at 65. The parties also agree that the corresponding structure includes a keypad (28) and a keyboard (226). Pl. PH Br. at 54; Gov't PH Br. at 23; IBM PH Br. at 66 (citing *e.g.*, A2 (Figure 1), A3 (Figure 2), A8 (Figure 7)).

USHIP also would include as a "third alternative" corresponding structure a "mechanism that recognizes voices and is adapted to be controlled by the spoken words." Pl. PH Br. at 54 (citing A14 ('464 patent, col. 5, ll. 50-56)). USHIP further contends that the specification provides a link between the voice-recognition mechanism and the destination. *See* A14 ('464 patent, col. 5, ll. 55-56) ("the Name and address of the recipient may be inputted by vocalizing the name and address of the recipient."). As such, 35 U.S.C. § 112, ¶ 6, statutorily mandates including such equivalent structures. Pl. PH Br. at 54, n.37 (35 U.S.C. § 112, ¶ 6 requires including "corresponding structure . . . described in the specification *and equivalents thereof*") (emphasis in the original).

The Government responds that the specification only recites two structures that correspond to the related functions, *i.e.* the keypad and keyboard, and contests including "voice-recognition mechanism" in the corresponding structure of this limitation. Gov't PH Br. at 23. There is only "a single ambiguous reference" to the voice recognition mechanism, and this

reference "provides only a vague function without providing any actual structure." Gov't PH Br. at 23; A14 ('464 patent, col. 5, ll. 52-56). Therefore, "the corresponding structure should be limited to keypad (28) and keyboard (226)." Gov't PH Br. at 23. IBM lodges a similar argument to that of the Government. IBM PH Br. at 66.

ii) The Court's Construction.

The United States Court of Appeals for the Federal Circuit has held that the "use of the word 'means' creates a presumption that 35 U.S.C. § 112, ¶ 6[9] applies." *Personalized Media Commc'ns, LLC* v. *Int'l Trade Comm'n*, 161 F.3d 696, 703 (Fed. Cir. 1998). This presumption, however, may be overcome if "the claim . . . recites sufficiently definite structure" to a person of ordinary skill in the art. *See Personalized Media*, 161 F.3d at 704; *see Phillips*, 415 F.3d at 1311 (although the term "baffles" perform a function, they recite sufficient structure to "refer to particular physical apparatus").

When using functional language, *i.e.* means-plus-function language, to claim an invention, the court must define the function of the claim and "identify the corresponding structure . . . that performs the particular function." *Asyst Techs., Inc*., v. *Empak, Inc*., 268 F.3d 1364, 1369 (Fed. Cir. 2001). The function comes directly from the claims. *Id*. ("The first step in construing a means-plus-function limitation is to identify the function explicitly recited in the claim.").

Therefore, the phrase "means for inputting information relating to the destination to which the item is to be shipped" is a means-plus-function limitation requiring the court to determine the function and the corresponding structure. *See Asyst Techs.*, 268 F.3d at 1369-70. In this case, the court has determined that the function is "inputting information related to the destination to which the item is to be shipped" and that the corresponding structure includes a keypad (28) or keyboard (226), but not a voice recognition mechanism. A15 ('464 patent, col. 7, ll. 21-28) (describing how keypad (28) is used to enter the destination zip code); A18 ('464 patent, col. 13, ll. 12-15) ("[T]he customer enters complete addressing information through the keyboard (226).").

In contrast, the corresponding structure is that structure described in the specification "that performs the particular function" and equivalents of that structure. *See Asyst Techs*., 268 F.3d at 1369-70; *see* 35 U.S.C. § 112, ¶ 6 ("[A means-plus-function] claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."); *see also Atmel Corp*. v. *Info. Storage Devices, Inc*., 198 F.3d 1374, 1382 (Fed. Cir.

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[9] Section 112, ¶6 of the Patent Act states:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6 (2006).

1999) ("[I]n order for a claim to meet the particularity requirement of ¶ 2, the corresponding structure(s) of a means-plus-function limitation must be disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation."). Where an applicant elects to use more general means-plus-function claim language, the applicant is obligated to disclose clearly the intended structure to implement that limitation. *See Med. Instrumentation & Diagnostic Corp*. v. *Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003) ("The duty of a patentee to clearly link or associate structure with the claimed function is the *quid pro quo* for allowing the patentee to express the claim in terms of function under section 112, paragraph 6.").

In claim 7 of the '464 parent, the single reference to a "mechanism that recognizes voice," however, fails to identify any structure to carry out this function. A14 ('464 patent, col. 5, ll. 52-56). *See Atmel Corp.*, 198 F.3d at 1382 (explaining that a person of ordinary skill in the art, after reading the entire specification, must understand what is the intended corresponding structure to perform the function). In addition, no party has established that the term "mechanism that recognizes voice" would denote "a type of device with a generally understood meaning" to a person of ordinary skill in the art. *See Mass. Inst. of Tech. and Elecs. For Imaging, Inc.* v. *Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006) (holding that "mechanism" can sometimes add sufficient structure to satisfy § 112, ¶ 6, but only if the modifier has a generally understood meaning to a person of ordinary skill in the art to imply sufficient structure).

Accordingly, the court has determined that, after reading the entire specification and claim 7, a person of ordinary skill in the art, would understand the corresponding structure of "means for inputting information related to the destination to which the item is to be sent" to be limited to a keypad (28) or a keyboard (226).

b. "Control Means For Analyzing The Inputted Information And Calculating The Fee For Shipment Of The Item."

The parties propose the following competing constructions of the phrase "analyzing the inputted information and calculating the fee" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: analyzing the inputted information and calculating the fee for shipment of the item **Corresponding Structure:** control system (100) including: CPU (102) in two-way communication with PLC (104); zone and weight charts and corresponding fee files; and equivalents	**[Means-Plus-Function] Function:** to analyze the inputted information relating to the place to which the item is to be shipped, and to calculate the shipment fee **Corresponding Structure:** control system (100) including: (1) CPU (102) in two-way communication with PLC (104); and connections to scale (22) and keypad (28)/keyboard (226) *The means-plus-function limitation lacks sufficient corresponding structure*	**Function:** analyzing the inputted information relating to the place to which the item is to be shipped, and calculating the fee for shipment of the item **Corresponding Structure:** control system 100 including: (1) CPU 102 in two-way communication with PLC 104; and (2) connections to scale 22 and keypad 28 / keyboard 226 [lacks sufficient structure for analyzing the inputted information and calculating the fee]

Pl. PH Br. at 55; Gov't PH Br. at 23-24; IBM PH Br. at 67 (bold added by parties).

The parties agree that the phrase "control means for analyzing . . ." is a means-plus-function limitation, subject to 35 U.S.C. § 112, ¶ 6, the function of which is "analyzing the inputted information and calculating the fee for shipment of the item." Pl. PH Br. at 55; Gov't PH Br. at 24; IBM PH Br. at 67. The parties also agree that the corresponding structure includes a central processing unit ("CPU") (102) "which is in two-way communication with a program logic controller" ("PLC") (104). Pl. PH Br. at 55 (citing A14 ('464 patent, col. 5, ll. 61-65)); Gov't PH Br. at 24; IBM PH Br. at 67. The parties, however, disagree about whether the structure includes the connections to the scale and keypad/keyboard and whether there has been sufficient disclosure to transform the CPU into a special purpose computer.

i) The Parties' Proposed Constructions.

USHIP asserts that the connections to the electronic scale (22) should not be included in the corresponding structure, because, although the connections may enable the function, they do not perform the function. Pl. PH Br. at 55. USHIP further contends that § 112 requires no more than apprising a person of ordinary skill in the art of the scope of the invention. Pl. PH Br. at 56 (citing *S3 Inc.* v. *nVIDIA Corp.*, 259 F.3d 1364, 1367 (Fed. Cir. 2001) (holding that the requirement for § 112 is met "[i]f the claims when read in light of the specification reasonably apprise those skilled in the art of the scope of the invention")). In this case, the algorithm requirement is satisfied, because the specification only needs to "disclose adequate defining structure to render the bounds of the claim understandable to one of ordinary skill in the art." Pl.

PH Br. 57 (citing *AllVoice Computing PLC* v. *Nuance Commc'ns, Inc.*, 504 F.3d 1236, 1245 (Fed. Cir. 2007) (holding that the "algorithms in the specification need only disclose adequate defining structure to render the bounds of the claim understandable to one of ordinary skill in the art" and an algorithm represented in a figure could give meaning to a claim)). The zone and weight charts and corresponding fee files listed in the specification provide sufficient information to enable a person of ordinary skill in the art to "analyze" and "calculate" the shipping fee using a "table lookup." Pl. PH Br. at 58. Therefore, USHIP concludes that the specification of the '464 patent provides sufficient corresponding structure to define the scope of the invention. Pl. PH Br. at 58-60.

The Government, however, also would include "connections to scale (22) and keypad (28)/keyboard (226) to the corresponding structure," as necessary elements to communicate the "inputted information." Gov't PH Br. at 25.

The Government argues that claim 7 of the '464 patent is indefinite. Gov't PH Br. at 26. The United States Court of Appeals for the Federal Circuit requires that, for a general purpose computer to have corresponding structure, it must be transformed into a "special purpose computer programmed to perform the disclosed algorithm." *Aristocrat Techs. Australia Pty Ltd.* v. *Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) (citation omitted). Here, although zone and weight charts and corresponding fee files have been disclosed, the patent discloses neither a particular equation nor an "extremely detailed disclosure of all information necessary to perform the function." Gov't PH Br. at 28. Therefore, this claim is indefinite. Gov't PH Br. at 28.

IBM also argues that the claim 7 is indefinite because "the '464 patent discloses no equation or algorithm." IBM PH Br. at 68-70.

* * *

Shortly after the United States Court of Appeals for the Federal Circuit issued *In re Katz Interactive Call Processing Patent Litig.*, No. 2009-1450, 2011 WL 607381 (Fed. Cir. Feb. 18, 2011), USHIP submitted a supplemental filing contending that the holding in that case criticized the holdings in *Aristocrat Techs.*, 521 F.3d 1328, and *WMS Gaming Inc.* v. *Int'l Game Tech.*, 184 F.3d 1339 (Fed. Cir. 1999), as construing the functional terms of "processing," "receiving," and "storing" too broadly, so disclosure of more structure than the general purpose process that performs those functions is not required. 2/25/11 USHIP Letter (citing *In Re Katz Interactive*, 2011 WL 607381, at *7). Both IBM and the Government contend that *In re Katz Interactive* did not change the state of the law. 3/1/11 IBM Letter ("[T]he relevant law is the same post-*Katz*[.]"); 3/7/11 Gov't Letter ("[T]he *Katz* decision reinforces the conclusion that the '464 patent fails to identify sufficient structure[.]"). Both the Government and IBM maintain that *In re Katz Interactive* still requires disclosure of an algorithm when a CPU is cited as corresponding structure, as is the case here. 3/7/11 Gov't Letter ("[T]he recitation of a general purpose computer ("GPC"), without more, cannot constitute the means of a means-plus-function limitation under 35 U.S.C. § 112 ¶ 6 unless the recited function is inherent to any GPC."); 3/1/11 IBM Letter ("USHIP cannot credibly contend that the claimed function . . . is a function that any general purpose computer can [perform] without an algorithm[.]").

ii) The Court's Construction.

The general rule is that there is a strong presumption that issued patents are valid. *See Robotic Vision Sys., Inc*. v. *View Eng'g, Inc*., 189 F.3d 1370, 1377 (Fed. Cir. 1999). As such, the burden to establish invalidity requires "facts supported by clear and convincing evidence." *Id*. That evidentiary standard also holds true for means-plus-function limitations. *See Biomedino, LLC* v. *Waters Tech. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007) (holding that there was "nothing to suggest a structure for the claimed control means" limitation and therefore the limitation was indefinite and the claim as a whole invalid); *see also Budde* v. *Harley-Davidson, Inc*., 250 F.3d 1369, 1380-81 (Fed. Cir. 2001) (stating that "a lack of corresponding structure must be proven by clear and convincing evidence, [because it necessarily renders a claim invalid]"). Therefore, "a means-plus-function clause is indefinite if a person of ordinary skill in the art would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim." *AllVoice Computing PLC* v. *Nuance Commc'ns, Inc*., 504 F.3d 1236, 1241 (Fed. Cir. 2007).

In claim 7 of the '464 patent, the phrase "control means for analyzing . . ." is a means-plus-function limitation. *See Asyst Tech.*, 268 F.3d at 1369-70 (in construing a means-plus function limitation, the court must first define the function, and then identify the corresponding structure that performs that function). The court has determined that, after reading the entire specification and claim 7, a person of ordinary skill in the art would understand that the function is "analyzing the inputted information and calculating the fee for shipment of the item." A18 ('464 patent, col. 15, ll. 58-59); s*ee also Lockheed Martin Corp.* v. *Space Sys./Loral, Inc.*, 324 F.3d 1308, 1319 (Fed. Cir. 2003) (holding that the function included all of the language "after the 'means for' clause and before the subsequent 'whereby' clause, because *a whereby clause* that merely states the result of the limitation in the claim *adds nothing to the substance of the claim*") (emphasis added); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted). In addition, because this function is performed by the control system, including the CPU (102) and PLC (104), the connections to the electronic scale (22), keypad (28), and magnetic card reader (30) only enable the function, by collecting and transmitting the information, instead of performing the function, *i.e.*, analyzing and calculating the fee. As such, these components are not corresponding structure. *Asyst Tech. Inc.*, 268 F.3d at 1371 (holding that components that enable but do not perform the function are not part of the corresponding structure).

The '464 patent, however, also discloses that, after a programmer "load[s] the appropriate zone and weight charts" and "the corresponding fee . . . the system is ready to interact with potential customers." A14 ('464 patent, col. 6, ll. 33-38). This information alone, however, does not explain how the invention performs the claimed function, *i.e.*, how the invention will "analyze the inputted information" and "calculate the shipping fee." Without a more detailed explanation, one of ordinary skill in the art could not program the control system. *See Aristocrat Techs.*, 521 F.3d at 1333 ("Because general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to 'the

corresponding structure, material, or acts' that perform the function, as required by section 112, paragraph 6."); *see also In re Katz Interactive*, 2011 WL 607381, at *7 (recognizing that general purpose computers "can be programmed to [perform a specific function] in many ways"). Yet, "[w]ithout any disclosure as to the way [the] invention [performs the claimed function], the public is left to guess." *In re Katz Interactive*, 2011 WL 607381, at *7. In this case, the court has determined that claim 7 of the '464 patent is indefinite, because USHIP has left the public to "guess" as to how the control system "analyzes the inputted information" and "calculates the shipping fee."

None of the parties contest that certain functions may be performed by a general purpose computer without special programming, such as "processing," "receiving," and "storing," and that these basic functions may not require disclosure of an algorithm. *In re Katz Interactive*, 2011 WL 607381, at *7 (recognizing that disclosure of an algorithm is unnecessary when the claimed functions are "coextensive" with a general purpose computer). The functions at issue in this case, however, are not simply "processing," "receiving," or "storing" data. Instead, the claim at issue requires that the control system must use a "program input device" to load the "appropriate zone and weight charts" and then "the programmer" loads "the corresponding fee files" in order to "interact with potential customers." A14 ('464 patent, col. 6, ll. 27-36). In fact, the specification recognizes that the analysis and calculations to be performed exceed the normal functions of a general purpose computer, because they require a "*specialized* programmer person" to load the required data. A14 ('464 patent, col. 6, l. 32) (emphasis added). Therefore, claim 7 informs the public that the control system is a general purpose computer that performs the claimed functions *after receiving special programming*. The United States Court of Appeals for the Federal Circuit has made it clear that when the structure includes a general purpose computer performing functions that can only be achieved with special programming, to satisfy § 112, ¶ 6, the specification must disclose either an algorithm to perform the claimed function or "a detailed explanation of how the claimed device would perform the claimed function." *Aristocrat Techs.*, 521 F.3d at 1336; *see also In re Katz Interactive*, 2011 WL 607381, at *7-8 (holding that disclosure of additional structure is unnecessary when the claimed functions are basic functions that can be achieved by any general purpose computer without special programming).

For these reasons, the court has determined that the Government and IBM have established, by clear and convincing evidence, that this limitation is indefinite and claim 7 is invalid as a matter of law.

* * *

Assuming, *arguendo*, that the court has misconstrued the "control means for analyzing . . ." limitation, in fairness to the parties and to facilitate a resolution of this case, the court has decided to construe the other requested limitations in claim 7.

c. "Said Control Means Further Including . . . Means For Communicating And Assessing The Shipment Fee To The Account Of The Person Owning The Credit Card, Said Means For Communicating The Shipment Fee Being By Telephone Lines."

The parties have proposed the following competing constructions of the phrase "said control means further including . . . means for communicating and assessing the shipment fee to the account of the person owning the credit card, said means for communicating the shipment fee being by telephone lines" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
PRIMARY CONSTRUCTION: Telephone lines used to communicate and assess the shipment fee to the account of the person owning the credit card **ALTERNATIVE CONSTRUCTION:** **Function:** communicating and assessing the shipment fee to the account of the person owning the credit card **Corresponding Structure:** telephones lines connected to control system (100); or telephone lines connected to card reader (30, 230); and equivalents	**Function:** to communicate and assess the shipment fee to the account of the person owning the credit card **Corresponding Structure:** card reader (30) connected to a dedicated telephone line that communicates with a central location for processing charges on the card	**Function:** communicating and assessing the shipment fee to the account of the person owning the credit card **Corresponding Structure:** magnetic card reader 30 or 230 connected to a dedicated telephone line

Pl. PH Br. at 60; Gov't PH Br. at 28; IBM PH Br. at 71 (bold added by parties).

The parties disagree as to whether this is a means-plus-function limitation. If it is, the parties disagree as to whether the telephone lines need to be dedicated.

i) The Parties' Proposed Constructions.

USHIP argues this is not a means-plus-function claim limitation. Pl. PH Br. at 61. The use of "telephone lines" in the claim overcomes the presumption created by the use of "means" and the subsequent functional language. Pl. PH Br. at 61. Therefore, there is no need to look at the specification for disclosed structure. *See TriMed, Inc.* v. *Stryker Corp.*, 514 F.3d 1256, 1259 (Fed. Cir. 2008) ("If, in addition to the word 'means' and the functional language, the claim recites sufficient structure for performing the described functions in their entirety, the presumption of § 112 ¶ 6 is overcome—the limitation is not a means-plus-function limitation.").

First, USHIP argues that the telephone lines perform the described function both by "communicating the charge information to the appropriate processor" and being the "mechanism

by which the invention causes the fee to be assessed to the card owner's account." Pl. PH Br. at 61 (citing A15 ('464 patent, col. 7, ll. 1-4)).

In the alternative, USHIP contends that if the use of "telephone lines" does not overcome the presumption of § 112, ¶ 6, then it is necessary to perform a means-plus-function analysis for each of the means within the claim element, *i.e.*, the means for communicating and the means for assessing. Pl. PH Br. at 62. The "means for communicating" claim is satisfied, because "telephone lines" recites sufficient structure to perform the entirety of the communicating function. Pl. PH Br. at 62-63. As for the "means for assessing" claim, the specification governs, because no part of the claim recites structure to overcome the means-plus-function presumption. Pl. PH Br. at 63. Looking at the specification, the corresponding structure for the "means for assessing" would include, as alternative structures, either the card reader or the control means. Pl. PH Br. at 63.

Second, USHIP argues that the "means for communicating" does not require "dedicated" telephone lines. Pl. PH Br. at 63. Section 112, ¶ 6 does not "permit incorporation of structure from the written description beyond that necessary to perform the claimed function." *Asyst Techs.*, 268 F.3d at 1369-70 (internal citation omitted); *see also Golight, Inc.* v. *Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1334 (Fed. Cir. 2004) (holding that, even though the specification mentioned that it was highly desirable to be free to rotate greater than 360 degrees, rotating through 360 degrees *was not required to perform the claimed function* and therefore was superfluous to the claim construction) (emphasis added). Telephone lines are "capable of communicating (and assessing) shipment fees regardless of whether the lines are dedicated, . . . and Figure 10 of the specification depicts [such] lines without any indication that the lines are 'dedicated.'" Pl. PH Br. at 63. Because "dedicated" telephone lines are not required to perform the communicating and assessing functions, the corresponding structure should include any telephone line, not just dedicated ones. Pl. PH Br. at 63-64. Likewise, the card reader and the control means are corresponding and alternative structures for the "means for assessing." Pl. PH Br. at 63.

The Government frames the dispute as 1) whether the disputed limitation is a means-plus-function limitation; and 2) whether the corresponding structure is limited "to the only structure identified as being capable of performing both the communicating and assessing functions in the specification." Gov't PH Br. at 28-29. The Government argues that there are two functions, *i.e.*, "communicating" and "assessing" the shipment fee. Gov't PH Br. at 29. The Government further argues that the "only means capable of communicating and assessing the shipment fee to the customer's account is *a card reader connected to a dedicated telephone line* that communicates with a central location for processing charges." Gov't PH Br. at 32 (emphasis added). Accordingly, the proper corresponding structure can only be "a card reader (30) connected to a dedicated telephone line that communicates with a central location for processing charges on the card." Gov't PH Br. at 30.

USHIP's alternative construction, where the telephone lines are connected to a control system (100) or to a card reader (30, 230), is also disputed by the Government, because that construction relies completely on the card reader (300) for both functions and misrepresents Figure 10, as depicting the "telephone line being connected directly to the central system."

Gov't PH Br. at 31 (citing Pl. PH Br. at 63); *see also* 2/17/10 TR at 388-89 (Government's Counsel arguing that the specification only discloses a dedicated telephone line). Figure 10, however, shows only a "Remote Service Center" connected directly to the control system and does not link Figure 10 with the "communicating and assessing functions." Gov't PH Br. at 31; *see also* 2/17/10 TR at 387 (Government's Counsel discussing how Figure 10 is related to a different embodiment, does not disclose structure, and is not linked to the "communicating and assessing" function). More specifically, Figure 10 does not show that a telephone line is part of the structure, as the Government contends USHIP's Counsel conceded at the oral argument. Gov't PH Br. at 31-32 (citing 2/17/10 TR at 490, 493).

IBM also contends that USHIP cannot overcome the presumption that this is a "means-plus-function" limitation, because it does not provide sufficient structure. IBM PH Br. at 71-72. The parties agree that the function is both "communicating and assessing," but no corresponding structure is provided for "assessing" a shipment fee. IBM PH Br. at 72. Although USHIP asserts that the telephone lines "'assess' the fee by communicating," the specification provides that the card reader assesses the fee, not the telephone line. IBM PH Br. (citing A1 ('464 patent, Abstract) ("a card reader for receiving . . . and for communicating and assessing the shipment fee")). Accordingly, USHIP cannot overcome the presumption that this is a "means-plus-function" claim. IBM PH Br. at 72. In addition, IBM argues that the corresponding structure is a card reader connected to "a dedicated telephone line that communicates with a central location for processing charges on the bank card." IBM PH Br. at 72-73 (quoting A15 ('464 patent, col. 7, ll. 1-4)). IBM rejects USHIP's alternative argument that the corresponding structure includes "telephone lines" connected to a control system, because the specification does not "clearly link" the proposed structure to this function. IBM PH Br. at 73.

ii) The Court's Construction.

This is a means-plus-function limitation. *See Asyst Techs.*, 268 F.3d at 1369-70. The court has determined that, after reading the entire specification and claim 7, a person of ordinary skill in the art would understand the functions are "communicating" and "assessing" the shipment fee. A18 ('464 patent, col. 14, ll. 62-63). *See Lockheed Martin Corp.*, 324 F.3d at 1319 ("The function is properly identified as the language after the 'means for' clause and before the 'whereby' clause, because a whereby clause that merely states the result of the limitations in the claim adds nothing to the substance of the claim."); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted). For these same reasons, the court construes the term "telephone lines" as the means of "communicating" the shipment fees, but not of "assessing" the shipment fees. Instead, the court construes the corresponding structure for the "assessing" function to be either the card reader (30) or the control system (100). A14-15 ('464 patent, col. 6, l. 62- col. 7, l. 4). The court rejects the Government and IBM's requirements that a dedicated telephone line can perform the "communicating" function. *See Altiris, Inc.* v. *Symantec Corp.*, 318 F.3d 1363, 1376 (Fed. Cir. 2003) (explaining the limitation must only have "sufficient structure to perform the entirety of the claimed function").

Again, for the same reasons, the court has further determined that "said control means. . ." phrase includes two means, *i.e.*, communicating and assessing the shipping fee. Telephone lines are the corresponding structure for "communicating" and either a card reader or control system is the corresponding structure for "assessing."

d. "Means For Securely Storing Said Item Until The Item Is Collected By Said Commercial Delivery Service."

The parties have proposed the following competing constructions of the phrase "securely storing said item until the item is collected by said commercial delivery service" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: securely storing the item **Corresponding Structure:** storage area (14) secured by inner doors (52, 54); or storage area (276) secured by inner door (246); or a collection space (96) secured by dump drop (92); and equivalents **until the item is collected by said commercial delivery service:** *Plain meaning*	**Function:** to securely store said item in a secured area for storage until the item is collected by said commercial delivery service **Corresponding Structure:** storage area (14) defined within outer housing (12), security mechanism (50), a pair of inner doors (52, 54); OR storage area (276) defined within outer housing (211), outer door (234), inner door (246); OR collection space (96) defined within outer housing (12), dump drop (92), access door (86), lock (87)	**Function**: securely storing the item in a secured area for storage until the item is collected by said commercial delivery service; **Corresponding Structure**: outer door 42; inner doors 52 and 54, stepper motor 58, secure zone 14, guide structure 74 OR outer door 234, temporary holding space 240, inner door 246, stepper motor 248, secure zone 276, powered conveyer 242, passive parcel distribution device 264 OR dump drop 92, incline chute 94, collection space 96

Pl. PH Br. at 64; Gov't PH Br. at 33; IBM PH Br. at 73-74 (bold added by parties).

The parties agree that this is a means-plus-function limitation, but disagree about the function and some of the corresponding structure. Pl. PH Br. at 64; Gov't PH Br. at 33; IBM PH Br. at 74.

The parties agree that the corresponding structure includes at least

a storage area (14), secured by either a pair of inner doors (52, 54);
a storage area (276), secured by either a single inner door (246);
or a collection space (96).

Pl. PH Br. at 66; Gov't PH Br. at 34; IBM PH Br. at 76 (collectively citing A2 ('464 patent, Figure 1); A4 ('464 patent, Figure 3); A7-10 ('464 patent, Figures 6-9); A13 ('464 patent, col. 4,

ll. 25-26); A14 ('464 patent, col. 5, ll. 40-46); A17 ('464 patent, col. 11, ll. 12-18, 41-47, 65-68)).

In addition, the parties agree that the collection space is secured by a dump drop (92). Pl. PH Br. at 66 (citing A14 ('464 patent, col. 5, ll. 35-38)); IBM PH Br. at 77.

i) The Parties' Proposed Constructions.

USHIP argues that the function is "means for securely storing," but the phrase "until the item is collected," is not, because it does not add to the "substance of the claim." Pl. PH Br. at 65-66 (citing *BBA Nonwovens Simpsonville, Inc.* v. *Superior Nonwovens, LLC*, 303 F.3d 1332, 1343-44 (Fed. Cir. 2002) (phrase "positioned for electrostatically charging the filaments . . . before they are deposited on said collection surface to form a web" was not part of the function for purposes of § 112, ¶ 6, even though it followed "means" because it described where the means was "located")). Therefore, "*until* the item is collected" only describes the time period or duration in which an item may be securely stored, so that "collection is merely the *consequence of when* the delivery service happens to arrive to collect." Pl. PH Br. at 66 (emphasis added). As such, the phrase "until the item is collected" is not part of the function, even though the phrase follows "means." Pl. PH Br. at 66.

The Government responds that the function of this phrase is to "securely store said item in a secured area for storage until the item is collected by said commercial delivery service" and that USHIP's construction improperly truncates the "until" clause. Gov't PH Br. at 34, 37. The proper way to determine whether a clause is part of the function is to look at what it modifies. Gov't PH Br. at 37. For example, in *BBA Nonwovens*, the United States Court of Appeals for the Federal Circuit determined that the "positioned" phrase was not part of the function, because it modified the word "means." *BBA Nonwovens*, 303 F.3d at 1343-44. By contrast, in *Lockheed Martin Corp*. v. *Space Systems/Loral, Inc*., 324 F.3d 1308, 1319 (Fed. Cir. 2003), the United States Court of Appeals for the Federal Circuit held that an "in accordance" phrase was part of the function, because it modified the "rotating" part of "means for rotating." Gov't PH Br. at 37. In this case, since the "until" phrase modifies "securely storing" part of "means for securely storing," it should be construed as part of the function. Gov't PH Br. at 37.

IBM also criticizes USHIP for truncating the function. IBM PH Br. at 74-76. The United States Court of Appeals for the Federal Circuit has observed that "[t]he phrase 'means for' . . . is typically followed by the recited *function and claim limitation*." *Lockheed Martin Corp.*, 324 F.3d at 1319. Although the "whereby" clause in that case was not construed to be part of the claim, IBM suggests that this clause has special meaning in patent law. IBM PH Br. at 75. The "until" clause, however, has no special meaning in patent law, so that USHIP improperly is reading a limitation out of the claim language. IBM PH Br. at 75-76.

USHIP counters that although the Government and IBM cite several authorities[10] for the proposition that the function includes "all the words after the phrase 'means for,'" these cases

[10] *See* Gov't PH Br. at 38 (citing *In re Donaldson Co., Inc*., 16 F.3d 1189, 1195-97 (Fed. Cir. 1994) (*en banc*) (construing the phrase "responsive to pressure increases in said chamber" to

stand only for two "modest propositions." Pl. PH Br. at 65. First, "'means for' . . . is typically followed by the recited function and claim limitations." Pl. PH Br. at 65 (quoting *Lockheed Martin Corp.*, 324 F.3d at 1319). Second, "in identifying the function of a means-plus-function claim, the claimed function may not be improperly narrowed or limited beyond the scope of the claim language." Pl. PH Br. at 65 (citing *Lockheed Martin Corp.*, 324 F.3d at 1319 (holding that a district court erred by truncating a function)). USHIP's construction does not violate either of these propositions. Pl. PH Br. at 65.

In addition, the Government further contends that three corresponding structures in the specification identify the function of "securely storing said item until the item is collected by said commercial delivery service."

> storage area (14) defined *within* the outer housing (12), security mechanism (50), and a pair of inner doors (52, 54); or
> storage area (276) defined *within* the outer housing (211), outer door (234), and inner door (246); or
> collection space (96) defined *within* the outer housing (12), access door (86), and lock (87).

Gov't PH Br. at 34 (emphasis added).

Each of the embodiments shows a storage area, defined within the outer housing of the unit. A12 ('464 patent, col. 2, ll. 32-34, 52-55); A13 ('464 patent, col. 3, ll. 44-47); A14 ('464 patent, col. 5, ll. 19-24); A17 ('464 patent, col. 11, ll. 39-42). In addition, the Government points out that each structure uses a different mechanism to secure items until the items are collected. Gov't PH Br. at 35. These "security" mechanisms are part of the corresponding structure, as they are necessary to perform the second part of this function, *i.e.* securing the item until collection. Gov't PH Br. at 35-38.

IBM also argues that in addition to (14), (52), (54), (92), (96), (246), and (276), the corresponding structure should include the following to accomplish the "secure storage" function:

> outer door (42); stepper motor (58); and guide structure (74) with the first structure;
> outer door (234); temporary holding space (240); stepper motor (248); powered conveyer (242); and passive parcel distribution device (264) with the second structure; and an incline chute (94) with the third structure.

IBM PH Br. at 76-77.

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be part of the function, and reversing a prior art rejection based on the structure that did not correspond to the "responsive" function)); IBM PH Br. at 74-76 (citing *Generation II Orthotics Inc.* v. *Medical Tech. Inc.*, 263 F.3d 1356, 1363 (Fed. Cir. 2001) ("§ 112 ¶ 6 does not permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim.") (internal quotation marks and brackets omitted)).

USHIP responds that the additional structure identified by the Government and IBM is not necessary to perform the function of this claim limitation. Pl. PH Reply at 63-64. Instead, these structures only enable the delivery service to "access," "convey," and "distribute" the items in storage. Pl. PH Reply at 65.

ii) The Court's Construction.

This is a means-plus-function limitation. *See Asyst Techs.*, 268 F.3d at 1369-70. The court has determined that, after reading the entire specification and claim 7, a person of ordinary skill in the art would understand the function is "securely storing said item." *See Lockheed Martin Corp.*, 324 F.3d at 1319 ("The function is properly identified as the language after the 'means for' clause and before the 'whereby' clause, because a whereby clause that merely states the result of the limitations in the claim adds nothing to the substance of the claim."); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted). The phrase "until . . . ," however, describes the duration of the storage, not the function of storing. *See BBA Nonwovens*, 303 F.3d at 1343-44 (holding that a phrase following "means" was not part of the function for purposes of § 112, ¶ 6, because it only describes where the means was "located"). Instead of modifying the function of "storing," the phrase "until the item is collected" defines an event when the storage function ends.

For the same reasons, the court further has determined that the corresponding structure is accomplished by:

> a storage area (14), secured by a pair of inner doors (52, 54);
> a storage area (276), secured by a single inner door (246); or
> a collection space (96), secured by a dump drop (92) with a lock (87).

A13 ('464 patent, col. 4, ll. 25-29); A14 ('464 patent, col. 5, ll. 40-46); *see* A16-A18 ('464 patent, col. 10, l. 45 – col. 13, l. 67) (describing how the second embodiment works, and specifically how the inner door closes off the storage area from unauthorized access). Although other structures may be added, they serve only to enable the secure storage function, instead of performing it.

e. "Means For Storing The Inputted Information Once Said Item Is Disposed In Said Secured Storage Means."

The parties propose the following competing constructions of the phrase "once said item is disposed in said secured storage means," in claim 7 for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: storing the inputted information **Corresponding Structure:** control system (100) including CPU (102) in two-way communication with PLC (104); and equivalents **once said item is disposed in said secured storage means:** *Plain meaning*	**Function:** to store the inputted information relating to the place to which the item is to be shipped once the item is disposed in said secured storage means **Corresponding Structure:** control system (100) including: (1) CPU (102) with CPU memory in two-way communication with PLC (104); and (2) PLC (104) connected to first sensor (112) or third sensor (116)	**Function**: storing the inputted information relating to the place to which the item is to be shipped once the machine determines that the item was disposed in the secured storage means **Corresponding Structure**: control system 100 including: (1) CPU 102 with memory in two-way communication with PLC 104; and (2) PLC 104 connected to first sensor 112 or third sensor 116

Pl. PH Br. at 68-69; Gov't PH Br. at 38; IBM PH Br. at 77-78 (bold added by parties).

The parties agree that this is a means-plus-function limitation. Pl. PH Br. at 69; Gov't PH Br at 39; IBM PH Br. at 78-79. The parties also agree that the function includes "storing the inputted information" and the corresponding structure includes "control system (100) including CPU (102) in two-way communication with PLC (104); and equivalents." Pl. PH Br. at 68-70; Gov't PH Br. at 39, 41; IBM PH Br. at 79, 81. The parties, however, disagree as to whether the phrase "once said item is disposed in said secured storage means" is part of the function or the means and whether the sensors are part of the corresponding structure.

i) The Parties' Proposed Constructions.

USHIP argues that the phrase after "information" does not add "to the substance of the claim by reciting an actual function." Pl. PH Br. at 69 (citing *Lockheed Martin Corp.*, 324 F.3d at 1319). Therefore, USHIP contends that it is proper to exclude this part of claim 7, because it only identifies the moment when the "storing the inputted information" function takes place. Pl. PH Br. at 69. Therefore, the "once" clause is not a function, but instead designates when the function is "operating." Pl. PH Br. at 69 (citing *BBA Nonwovens*, 303 F.3d at 1343-44 (holding that "positioned" describes where the "means is located and is a separate limitation not subject to section 112, paragraph 6[.]")). Accordingly, USHIP concludes that the "once" clause is not part of the function. Pl. PH Br. at 69.

The Government responds that USHIP's exclusion of the phrase "once said item is disposed in said secure storage means" improperly truncates the function. Gov't PH Br. at 39.

Instead, "inputted information" refers to "information relat[ed] to the place to which the item is to be shipped." Gov't PH Br. at 39. Specifically, the phrase "*once* said item is disposed in" is "function-focused," modifying "storing" so that the "once" phrase must be construed as part of the function. Gov't PH Br. at 39. (emphasis added); 2/17/10 TR at 419-20, 434. In addition, the Government insists that the corresponding structure also must include sensors (112, 116), because the storage of the inputted information is triggered by a sensor's detection of an item being deposited in storage. Gov't PH Br. at 39-40. Because "the specification identifies only one structure capable of performing the function," the first sensor (112) or third sensor (116) must be part of the corresponding structure. Gov't PH Br. at 40-41.

IBM argues that the inputted information cannot be stored "before the item is stored in the unit or if the item is never stored in the unit" otherwise "the word *once* would have no meaning." IBM PH Br. at 78 (emphasis in original). IBM also asserts that stored inputted information is used to prepare a manifest so information storage can "only occur after an item is actually deposited; otherwise the manifest may list a package that is not there." IBM PH Br. at 78-79.

Although IBM concedes that the parties agree that the CPU (102) is a corresponding structure, IBM insists that the information cannot actually be stored in the CPU (102) "until the machine senses that an item has been deposited." IBM PH Br. 82-83. Because storage cannot occur without the sensing, IBM contends that the corresponding structure also must include the first sensor (112) or the third sensor (116), because they are the only structures described for causing the storage of inputted information. IBM PH Br. at 81.

USHIP counters that the exclusion of the "once" phrase is not improper truncation, because it identifies the temporal occasion when the function of "storing the inputted information" takes place. Pl. PH Br. at 69. As discussed above, phrases that do not add to the function of the means are not properly included in the function's definition for § 112, ¶ 6, purposes. Pl. PH Br. at 69 (citing *BBA Nonwovens*, 303 F.3d at 1343-44 ("Rather than reciting the function of the corona means, the expression following the word 'positioned' describes where the corona means is located and is a separate limitation not subject to section 112, paragraph 6. What the 'corona means' is and where it is located are two different things.")). In claim 7, what the "means for storing inputted information" is and when it operates, *i.e.*, "once said item is disposed in said secure storage means," are different. Pl. PH Br. at 69. USHIP contends that the Government's argument that the sensors are "linked" to the function "once said item is disposed in said secured storage means" "in effect construe[s]" that phrase to mean "after and not until said item is disposed in said secured storage means." Pl. PH Br. at 70 (emphasis in original). Pl. PH Br. at 70 (emphasis in original). But USHIP explains that the "once" clause is not part of the function, so that the sensors described in the specification cannot be read into the limitation. Pl. PH Br. at 70 (citing *Asyst Techs.*, 268 F.3d at 1370 ("Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations.")). In the alternative, USHIP argues that even if the "once" phrase was part of the function, the sensors are not a part of the corresponding structure. Pl. PH Br. at 70-72.

ii) The Court's Construction.

This is a means-plus-function limitation. *See Asyst Techs*., 268 F.3d at 1369-70. The court has determined that, after reading the entire specification and claim 7, a person of ordinary skill in the art would understand the function is "to store said inputted information." *See Lockheed Martin Corp.*, 324 F.3d at 1319 ("The function is properly identified as the language after the 'means for' clause and before the 'whereby' clause, because a whereby clause that merely states the result of the limitations in the claim adds nothing to the substance of the claim."); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted). Since the function is construed by the limitations in claim l, neither limiting nor broadening it, the applicable function *is* "to store," but *what is* being stored is "the inputted information." Therefore, "once said item is disposed in said secured storage" describes when storage happens and is not part of the function. A19 ('464 patent, col. 15, ll. 1-2). The adverb "once" describes the temporal occasion when the storage function begins, but does not describe what the means for "storing" is. *See BBA Nonwovens*, 303 F.3d at 1343-44 (holding that means-plus-function claim construction is limited to language that described what the function is and does not extend to other language, such as language describing where the means is located).

Therefore, for the same reasons, the court has determined that the corresponding structure is limited to the control system (100), including the CPU (102) in two-way communication with the PLC (104), both of which are required to perform the identified function, *i.e.*, storing the inputted information. Although the first and third sensors (112,116), trigger the time when the storing of information commences, the sensors do not perform any of the storage function.

3. Claim 9.

Claim 9 of the '464 patent states:

> The integrated, automated, unattended unit of claim 7 wherein said means for storing said information further includes means for communicating said information to a remote location staffed by a human operator.

A19 ('464 patent, col. 15, ll. 7-10).

Since the claim 9 language, "communicating said information to a remote location staffed by a human operator," depends on claim 7, all of the limitations of claim 9 are affected by the same deficiency of indefiniteness as claim 7. Assuming, *arguendo*, that the court misconstrued claim 7, in fairness to the parties and to facilitate a resolution of this case, the court has decided to construe the requested limitations in claim 9.

The parties propose the following competing constructions of the phrase "communicating said information to a remote location staffed by a human operator" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: communicating said information to a remote location	**Function:** to communicate the stored information relating to the place to which the item is to be shipped to a remote location staffed by a human operator	**Function**: communicating said information to a remote location staffed by a human operator
Corresponding Structure: telephone lines connected to control system (100); and equivalents	**Corresponding Structure:** *The means-plus-function limitation lacks sufficient corresponding structure*	**Corresponding Structure**: [lacks sufficient structure for communicating the information to a remote location staffed by a human operator]

Pl. PH Br. at 73; Gov't PH Br. at 43; IBM PH Br. at 83-84 (bold added by parties).

The parties agree that this is a means-plus-function limitation, but disagree as to whether "staffed by a human operator" modifies the function and whether sufficient corresponding structure was disclosed. Pl. PH Br. at 73; Gov't PH Br. at 44-45; IBM PH Br. at 84-85.

a. The Parties' Arguments.

USHIP argues that, because the communicating function will occur "regardless of the particulars of the recipient[,] . . . the phrase 'staffed by a human operator' adds no substance to the claimed function." Pl. PH Br. at 73-74. Therefore, "'staffed by a human operator' is not part of the function for purposes of § 112 ¶ 6"; instead, the "communicating" function must be defined as "communicating said information to a remote location." Pl. PH Br. at 73-74.

The Government responds that "the specification fails to identify any structure" performing the claimed function, *i.e.*, "communicat[ing] the stored inputted destination information to a remote location staffed by a human operator." Gov't PH Br. at 44. The Government also asserts that the specification does require a specific embodiment to "be capable of" performing the invention, so that no structure is identified. A16 ('464 patent, col. 9, ll. 57-60). Therefore, claim 9 is indefinite, because as it fails to identify any corresponding structure. Gov't PH Br. at 44. And, again, the Government argues that USHIP improperly truncated the function of this limitation by reading out "staffed by a human operator." Gov't PH Br. at 45. Accordingly, to the Government, this phrase is necessary, because it is an inseparable part of the prepositional phrase "to a remote location staffed by a human operator." Gov't PH Br. at 45.

IBM agrees with the Government's construction of the function and faults USHIP for failing to cite any authority to support ignoring this claim language. IBM PH Br. at 84-85.

USHIP replies that, as a matter of law, when a part of a claim limitation adds no substance to the claim, it "is not part of the function for purposes of § 112 ¶ 6." Pl. PH Reply at 69 (citing *Lockheed Martin Corp.*, 324 F.3d at 1319). In addition, USHIP argues that a person of ordinary skill in the art would understand that "telephone lines connected to the control system" perform the function of communicating inputted information to a remote location. Pl. PH Br. at 74. In addition, the specification discloses that the corresponding structure is the telephone lines connected to the control system where "said information" is stored. Pl. PH Br. at 74. Moreover, the specification explicitly links the communicating means to the telephone lines in claim 7, because those lines do not necessarily need to be dedicated. Pl. PH Br. at 62-64, 74.

b. The Court's Construction.

This limitation is a means-plus-function limitation. *See Asyst Techs.*, 268 F.3d at 1369-70. The court has determined that, after reading the entire specification and claim 9, a person of ordinary skill in the art would understand the function of claim 9 is "communicating said information to a remote location staffed by a human operator," because the modifying phrase "staffed by" adds substance to the claim by specifying where the information is communicated. *See Lockheed Martin Corp.*, 324 F.3d at 1319 (holding that a phrase that "merely states the result of the limitations in the claim adds nothing to the substance of the claim"); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted).

As to the corresponding structure, however, the court has determined, for the same reasons, that the specification discloses no structure for "communicating said information to a remote location staffed by a human operator." In addition, nothing in the specification describes "a remote location staffed by a human operator," much less any structure that allows the invention to communicate with such a location. *See Med. Instrumentation*, 344 F.3d at 1211 (discussing that the trade-off of using functional language to claim an invention is the requirement for disclosing specific structure within the specification to accomplish the function).

For these reasons, the court has determined that the Government and IBM have established by clear and convincing evidence that, irrespective of the court's determination that claim 7 is indefinite, claim 9 is indefinite and, as a matter of law, invalid.

4. Claim 10.

Claim 10 of the '464 patent provides:

> The integrated, automated, unattended unit of claim 9 wherein said unit includes a pivotable door that serves as a slide when said door is opened, said slide serving to transport the item to a storage area for secure storage.

A19 ('464 patent, col. 15, ll. 11-14).

Claim 10 depends from claim 9, that in turn depends from claim 7, and therefore incorporates all of the limitations of claim 7 and claim 9. Although the court has determined that claims 7 and 9 are indefinite and, as a matter of law, invalid, in fairness to the parties and to facilitate a resolution of this case, the court has decided to construe the following requested terms in claim 10: "a pivotable door that serves as a slide," "a storage area," and "for secure storage."

The parties propose the following competing constructions of the phrase "a pivotable door that serves as a slide," as well as the terms "a storage area" and "for secure storage" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
The integrated, automated, unattended unit includes a **pivotable door** that operates as a chute or a smooth surface on which items can glide or pass smoothly and which door serves to transport the item to a storage area for secure storage **pivotable door** - door for receiving items into the unit that opens and shuts by turning on a pivot	**serves as a slide:** operates as downward-inclined chute with a flat bed **a storage area:** a space for storing items within the outer housing of the unit **for secured storage:** stored in a manner that is inaccessible to unauthorized persons **pivotable door** - door for receiving items into the unit that opens and shuts by turning on a pivot	The integrated, automated, unattended unit has a [**pivotable door**] that has a slide to transport the item to the secured storage area of the unit. a storage area: a space for storing items within the outer housing of the unit for secured storage: stored in a manner that is inaccessible to unauthorized persons **pivotable door** - door for receiving items into the unit that opens and shuts by turning on a pivot

Pl. PH Br. at 75; Gov't PH Br. at 45-46; IBM PH Br. at 85-86 (bold added by parties).

The parties disagree about the construction of three terms "a pivotable door that serves as a slide," "a storage area," and "for secure storage." Pl. PH Br. at 76; Gov't PH Br. at 46-48; IBM PH Br. at 86.

a. The Parties' Arguments.

As to the phrase "a pivotable door that serves as a slide," USHIP argues that the term "slide" does not require the movement to be a downward inclination, since an item can "slide *across* a surface." Pl. PH Br. at 76 n. 54 (emphasis in original).

The Government responds, because the specification clearly associates "slide" with downward inclination, this term must be construed accordingly. Gov't PH Br. at 46 (citing A14 ('464 patent, col. 5, ll. 34-46); A5 ('464 patent, Fig. 4 (94))). The Government also asserts that USHIP's construction is "unduly broad," as it "essentially equat[es] 'slide' with 'a chute or a smooth surface,'" and is unsupported by the intrinsic evidence. Gov't PH Br. at 47.

In addition, similar to the parties' dispute about the term "integrated . . . unit," the parties do not agree as to whether "the storage area must be physically within the same container as the rest of the invention." Pl. PH Br. at 76; Gov't PH Br. at 47-48; IBM PH Br. at 86. The

Government refers to specific portions of the specification that "define the storage area as being within the outer housing of the unit." Gov't PH Br. at 47 (citing A18 ('464 patent, col. 14, l. 28); A12 ('464 patent, col. 2, ll. 34-36, 53-56); A13 ('464 patent, col. 3, ll. 45-47); A17 ('464 patent, col. 11, ll. 40-41)).

The parties appear to agree, however, that access to unauthorized persons is barred. Pl. PH Br. at 76; Gov't PH Br. at 48; IBM PH Br. at 86.

b. The Court's Construction.

The court has determined that, after reading the entire specification and claim 10, a person of ordinary skill in the art would understand the term "slide" to mean a "downward-inclined chute." A14 ('464 patent, col. 5, ll. 41-46) (describing how once the pivotable door is closed, an envelope will slide *down* an inclined chute); A5 ('464 patent, Figure 4 (94)) (showing that the slide is inclined).

In addition, for the same reasons, the court has determined that "storage area" means "a space for storing items within the outer housing." Although the court agrees that the entire invention is not required to be housed within a single physical container, the specification defines the storage area as within an outer housing. A12 ('464 patent, col. 2, ll. 34-36, 53-55) (defining the storage area by the inner surface of the outer housing); A13 ('464 patent, col. 3, ll. 46-47) (describing the first embodiment that "includes an outer housing 12 which defines a storage area 14"); A17 ('464 patent, col. 11, ll. 40-41) (defining where the packages are stored as "within a storage area 276 defined within outer housing 211").

The court also has determined that, after reading the entire specification and claim 10, a person of ordinary skill in the art would understand the term "secure storage" as "a place that is inaccessible to unauthorized persons." Therefore, "secure storage" in claim 10 of the '464 patent means "a place that is inaccessible to unauthorized persons."

5. Claim 15.

Claim 15 of the '464 patent provides:

> The integrated, automated, unattended unit of claim 12 wherein said card reader is adapted to read credit cards issued by any of a plurality of credit card companies and wherein said fee communicating means is adapted to communicate selectively with the credit card company issuing the card being used in the transaction.

A19 ('464 patent, col. 15, ll. 28-33).

Claim 15 depends from claim 12, that depends from claims 7. Therefore, claim 15 incorporates all of the limitations of claim 12 and claim 7.

Assuming, *arguendo*, that the court has misconstrued claim 7, in fairness to the parties and to facilitate a resolution of this case, the court has decided to construe the requested limitation "credit cards issued by any of a plurality of credit card companies."

The parties propose the following competing constructions of the phrase "credit cards issued by any of a plurality of credit card companies" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
the card reader is adapted to read one or more credit card companies' credit cards	*Plain Meaning* – the card reader is adapted to read credit cards issued by more than one credit card company and the fee communicating means is adapted to communicate selectively with the credit card company issuing the card being used in the transaction	*Plain Meaning* – the card reader is adapted to read credit cards issued by more than one credit card company and the fee communicating means is adapted to communicate selectively with the credit card company issuing the card being used in the transaction

Pl. PH Br. at 77; Gov't PH Br. at 48-49; IBM PH Br. at 88 (emphasis added by parties).

The parties disagree as to whether the phrase "credit cards issued by any of a plurality of credit card companies" refers to "one or more credit card companies'" or "credit cards issued by more than one credit card company." Pl. PH Br. at 77; Gov't PH Br. at 49; IBM PH Br. at 88.

a. The Parties' Arguments.

USHIP urges the court not to adopt the latter construction for two reasons. Pl. PH Br. at 77. First, that interpretation implies that the card reader must support at least two types of credit cards, but the term "any" requires only that the card reader support a single credit card. Pl. PH Br. at 77. In addition, such a construction "could be understood to require that the card reader support credit cards that are jointly issued by multiple companies." Pl. PH Br. at 77.

The Government responds that the phrase "credit cards issued by any of a plurality of credit card companies" does not need to be construed, because the meaning is unambiguous and would be understood by a person of ordinary skill in the art. Gov't PH BR. at 49.

IBM supports the Government's construction and additionally argues that "plurality" means more than one and since "companies" is plural, the card reader must be able to read cards from more than one company. IBM PH Br. at 88. The applicant could have left the term "any of a plurality" out of the claim or replaced it with "one or more credit card companies' credit cards," if that was the intended meaning. IBM PH Br. at 89. The rest of the claim, *i.e.*, "communicate selectively," shows that multiple companies were intended. If there was only one company with which to communicate, selective communication would not be needed. IBM PH Br. at 89.

b. The Court's Construction.

The court has determined that, after reading the entire specification and claim 15, a person of ordinary skill in the art would understand the phrase "credit cards issued by any of a plurality of credit card companies" means that the invention would be compatible with at least one commercial bank credit card company, but not necessarily limited to one such company. A14 ('464 patent, col. 6, ll. 59-63) ("System 10 may be compatible with *at least one commercial* bank card such as VISA or Master Card.") (emphasis added).

6. Claim 28.

Claim 28 of the '464 patent provides:

> An integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services: said automated unit comprising,
>
> means for weighing the item to be shipped;
>
> means for inputting information relating to the destination to which the item is to be shipped;
>
> control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including means for communicating and assessing the shipment fee to the account of the person, said means assessing comprising means for printing a hard copy of said account charge for said person;
>
> means for securely storing said item until the item is collected by said commercial delivery service;
>
> means for storing the inputted information once said item is disposed in said secured storage means, said information storage means including means for displaying a manifest.

A20 ('464 patent, col. 17, ll. 19-39).

Claim 28 and claim 7 share an identical preamble and the limitations: "means for inputting," "control means," "means for securely storing," and "means for storing the inputted information." *Compare* A18-19 ('464 patent, col. 14, ll. 51-54; col. 14, ll. 56-57; col. 14, ll. 59-60; col. 14, ll. 66-67; and col. 15, ll. 1-4), *with* A20 ('464 patent, col. 17, ll. 19-22; col. 17, ll. 24-25; col. 17, ll. 27-28; col. 17, ll. 34-35; and col. 17, ll. 36-39).

Claim 7	Claim 28
control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including **means for receiving credit card information and** means for communicating and assessing the shipment fee to the account of **the person owning the credit card, said means for communicating the shipment fee being by telephone lines**;	control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including means for communicating and assessing the shipment fee to the account of **the person, said means assessing comprising means for printing a hard copy of said account charge for said person**;

Compare A18 ('464 patent, col. 14, ll. 59-64), *with* A20 ('464 patent, col. 17, ll. 27-32) (bold added by court).

Unlike claim 7, claim 28 does not include the phrase "means for receiving credit card information and[.]" *Compare* A18 ('464 patent, col. 14, ll. 60-64), *with* A20 ('464 patent, col. 17, ll. 29-32) (see the table above). In addition, claim 28 deletes "the person owning the credit card, said means for communicating the shipment fee being by telephone lines" and replaces it with "the person, said means assessing comprising means for printing a hard copy of said account charge for said person." *Compare* A18 ('464 patent, col. 14, ll. 60-64), *with* A20 ('464 patent, col. 17, ll. 29-32) (see the table above).

The parties have proposed the following competing constructions of the phrase "means for communicating and assessing" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: communicating and assessing the shipment fee to the account of the person **Corresponding Structure**: telephones lines connected to control system (100); or telephone lines connected to card reader (30, 230); and equivalents	**Function:** to communicate and assess the shipment fee to the account of the person **Corresponding Structure:** card reader (30) connected to a dedicated telephone line that communicates with a central location for processing charges	**Function:** communicating and assessing the shipment fee to the account of the person owning the credit card **Corresponding Structure:** magnetic card reader 30 or 230 connected to a dedicated telephone line

Pl. PH Br. at 78; Gov't PH Br. at 49; IBM PH Br. at 90-91 (bold added by parties).

The parties agree that claim 28 is a means-plus-function limitation. Pl. PH Br. at 78; Gov't PH Br. at 50; IBM PH Br. at 91. The parties, however, disagree whether the corresponding structure requires "dedicated telephone lines." Pl. PH Br. at 78; Gov't PH Br. at 50; IBM PH Br. at 91.

a. The Parties' Arguments.

The parties request that the court refer to their arguments on "dedicated telephone lines" regarding claim 7 to construe claim 28. Pl. PH Br. at 78 (referring the court to Pl. PH Br. at 60-62); Gov't PH Br. at 52 (referring the court to Gov't PH Br. at 28-32); IBM PH Br. at 91 (referring the court to IBM PH Br. at 71-73).

USHIP argues that the corresponding structure includes telephone lines "which need not be 'dedicated,' and which are (alternatively) connected to the card reader or the control system." Pl. PH Br. at 78. For claim 28, USHIP asserts that it is necessary to perform a means-plus-function analysis for both means, *i.e.*, the means for communicating and the means for assessing. Pl. PH Br. at 62. As for the "means for communicating," "telephone lines" provides sufficient structure to perform the entirety of the communicating function. Pl. PH Br. at 62-63. As for the "means for assessing," the specification governs, because no part of the claim provides sufficient structure to overcome the means-plus-function presumption. Pl. PH Br. at 63. Looking at the specification, the corresponding structure for the "means for assessing" would include, as alternative structures, the card reader and/or control means. Pl. PH Br. at 63.

USHIP also argues that "means for communicating" does not require "dedicated" telephone lines. Pl. PH Br. at 63. Section 112, ¶ 6 does not "permit incorporation of structure from the written description beyond that necessary to perform the claimed function." *Asyst Techs.*, 268 F.3d at 1369-70 (internal citation omitted); *see also Golight, Inc.*, 355 F.3d at 1334 (holding that, even though the specification mentioned that it was highly desirable to be free to rotate greater than 360 degrees, the ability to rotate greater than 360 degrees *was not required to perform the claimed function* and therefore was superfluous to the claim construction). Telephone lines are "capable of communicating (and assessing) shipment fees regardless of whether the lines are dedicated." Pl. PH Br. at 63. Because "dedicated" telephone lines are not required to perform the communicating and assessing functions, the corresponding structure should include any telephone line. Pl. PH Br. at 63-64. Likewise, the card reader and the control means are corresponding and alternative structures for the "means for assessing." Pl. PH Br. at 63.

The Government responds that "the patent identifies only one structure as being capable of performing <u>both</u> of the communicating and assessing functions in the specification." Gov't PH Br. at 50 (emphasis in original). The only structure discussed in the specification is "a dedicated telephone line that communicates with a central location for processing charges on the bank card." Gov't PH Br. at 50 (quoting A14 ('464 patent, col. 7, ll. 2-3)). As such, there is no other corresponding structure for communicating and assessing the shipping fee. Gov't PH Br. at 50.

IBM agrees with the Government that there is "nothing in the specification that links such structure to the claimed function." IBM PH Br. at 73. IBM also argues that USHIP's "[m]ere depiction" of the telephone line being connected directly to the control system is insufficient. IBM PH Br. at 73 (citing A11 ('464 patent, Fig. 10)). As to USHIP's argument that "dedicated telephone lines" are not necessary, IBM argues that "where '[n]othing in the specification suggests any other structure for' performing the claimed function, it would be erroneous to

construe the corresponding structure to include anything other than a card reader connected to a dedicated telephone line." IBM PH Br. at 73 (quoting *Welker Bearing Co.*, 550 F.3d at 1098).

b. The Court's Construction.

The phrase "means for communicating and assessing" is a means-plus-function limitation. *See Asyst Techs.*, 268 F.3d at 1369-70. The court has determined that, after reading the entire specification and claim 28, a person of ordinary skill in the art would understand the functions of claim 28 are "communicating" and "assessing." A18 ('464 patent, col. 14, ll. 62-63). *See Lockheed Martin Corp.*, 324 F.3d at 1319 (holding that a phrase that "merely states the result of the limitations in the claim adds nothing to the substance of the claims"); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted). For the same reasons, the court also has determined that "telephone lines" are the corresponding structure for "communicating" shipment fees, but not for "assessing" the shipment fees. The court rejects the Government's and IBM's proposed construction that a dedicated telephone line is required or "clearly linked" to these functions. Instead, the court has determined that, after reading the entire specification and claim 28, a person of ordinary skill in the art would understand that the corresponding structure for the "assessing function" is either the card reader (30) or the control system (100). A15 ('464 patent, col. 7, ll. 1-4); A14 ('464 patent, col. 6, ll. 62-66).

7. Claim 30.

Claim 30 of the '464 patent provides:

> The integrated, automated, unattended unit of claim 28 including means for communicating said account charge to a remote location.

A20 ('464 patent, col. 17, ll. 44-46).

Claim 30 depends from claim 28 and, as such, incorporates all the limitations of claim 28. Since claim 28 and claim 7 share an identical preamble and certain limitations, assuming, *arguendo*, that the court has misconstrued claims 7 and 28, in fairness to the parties and to facilitate the resolution of this case, the court has decided to construe the requested limitation in claim 30.

The parties have proposed the following competing constructions of "communicating . . . to a remote location" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: communicating said account charge to a remote location **Corresponding Structure:** telephone lines connected to control system (100); or telephone lines connected to card reader (30, 230); and equivalents	**Function:** to communicate the account charge to a remote location **Corresponding Structure:** card reader (30) connected to a dedicated telephone line that communicates with a central location for processing charges	**Function:** communicating the account charge to a remote location **Corresponding Structure:** magnetic card reader 30 or 230 connected to a dedicated telephone line

Pl. PH Br. at 79; Gov't PH Br. at 51; IBM PH Br. at 92 (bold added by parties).

The parties disagree as to whether the corresponding structure includes dedicated telephone lines. Pl. PH Br. at 79; Gov't PH Br. at 51; IBM PH Br. at 92.

a. The Parties' Arguments.

USHIP argues that the corresponding structure is telephone lines connected either to the control system or the card reader. Pl PH Br. at 79.

The Government responds that the corresponding structure requires a dedicated telephone line between the card reader and the central location. Gov't PH Br. at 52. IBM agrees that the corresponding structure requires a dedicated telephone line connected to the card reader. IBM PH Br. at 92.

b. The Court's Construction.

This is a means-plus-function limitation. *See Asyst Techs.*, 268 F.3d at 1369-70. The court has determined that, after reading the entire specification and claim 30, a person of ordinary skill in the art would understand the function as "communicating said information to a remote location." A20 ('464 patent, col. 17, ll. 45-46). *See Lockheed Martin Corp.*, 324 F.3d at 1319 (holding that a phrase that "merely states the result of the limitations in the claim adds nothing to the substance of the claims"); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted).

As to the corresponding structure, the specification discloses a card reader that "may be connected to a dedicated telephone line that communicates with a central location for processing charges on the bank card." A15 ('464 patent, col. 7, ll. 2-4). In addition, Figure 10 discloses a telephone line connected to the remote service center and the control system, without requiring those lines to be dedicated. A11 ('464 patent, Figure 10). Therefore, the court has determined that, after reading the entire specification and claim 30, a person of ordinary skill in the art would

understand that the corresponding structure for communicating information to a remote location requires "telephone lines," but not necessarily "dedicated telephone lines."

8. Claim 34.

Claim 34 of the '464 patent provides:

> An integrated, automated, unattended unit for collecting and securely holding items for collection and shipment by commercial delivery services: said automated unit comprising,
>
> > means for inputting information relating to the destination to which the item is to be shipped;
> >
> > control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including means for communicating and assessing the shipment fee to the account of the person, said means for communicating the shipment fee being by telephone lines;
> >
> > means for securely storing said item until the item is collected by said commercial delivery service;
> >
> > means for storing the inputted information once said item is disposed in said secured storage means, said information storage means including means for transmitting information that may be used to prepare a manifest to a remote location.

A20 ('464 patent, col. 18, ll. 29-48).

Claim 34 has many of the same limitations as claim 7. Both claims share an identical preamble and the limitations "means for inputting," "control means," and "means for securely storing." *Compare* A18 ('464 patent, col. 14, ll. 51-54; col. 14, ll. 56-57; col. 14, ll. 59-60; and col. 14, ll. 66-67), *with* A20 ('464 patent, col. 18, ll. 29-32; col. 18, ll. 33-34; col. 18, ll. 35-36; and col. 18, ll. 42-43).

Claim 7	Claim 34
control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including **means for receiving credit card information and** means for communicating and assessing the shipment fee to the account of the person **owning the credit card**, said means for communicating the shipment fee being by telephone lines; . . . means for storing the inputted information once said item is disposed in said secured storage means, said information storage means including **means for displaying a manifest**.	control means for analyzing the inputted information and calculating the fee for shipment of the item; said control means further including means for communicating and assessing the shipment fee to the account of the person, said means for communicating the shipment fee being by telephone lines; . . . means for storing the inputted information once said item is disposed in said secured storage means, said information storage means including **means for transmitting information that may be used to prepare a manifest to a remote location**.

Compare A18 ('464 patent, col. 14, ll. 58-65, col. 15, ll. 1-7), *with* A20 ('464 patent, col. 18, ll. 36-42, 44-48) (bold added by court).

Unlike claim 7, however, claim 34 does not include the limitations "means for receiving credit card information" and "owning the credit card." *Compare* A18 ('464 patent, col. 14, ll. 60-64), *with* A20 ('464 patent, col. 18, ll. 38-41). Claim 34 replaces "means for displaying a manifest" with "means for transmitting information that may be used to prepare a manifest to a remote location." *Compare* A19 ('464 patent, col. 15, ll. 3-4), *with* A20 ('464 patent, col. 18, ll. 46-48).

The parties have proposed the following competing constructions of the phrase "transmitting information that may be used to prepare a manifest" for the court's consideration:

'464 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
Function: Transmitting information that may be used to prepare a listing of all transactions that pertain to a particular commercial delivery service to a remote location **Corresponding Structure:** telephone lines connected to control system (100); and equivalents	**Function:** to transmit information that may be used to prepare a listing of all transactions which pertain to the particular commercial delivery service to a remote location **Corresponding Structure:** *The means-plus-function limitation lacks sufficient corresponding structure*	**Function:** transmitting information that may be used to prepare a manifest to a remote location. **Corresponding Structure:** [lacks sufficient structure for transmitting information for preparing a manifest to a remote location]

Pl. PH Br. at 80; Gov't PH Br. at 53-54; IBM PH Br. at 93 (bold added by parties).

The parties agree that the function of this limitation is "transmitting information that may be used to prepare a manifest to a remote location," but disagree whether the specification

requires the corresponding structure to transmit information to a remote location. Pl. PH Br. at 80; Gov't PH Br. at 54; IBM PH Br. at 93.

a. The Parties' Arguments.

USHIP argues that the corresponding structures are telephone lines connected either to the control system or a CPU. Pl. PH Br. at 80.

The Government counters that a sole reference to transmitting the manifest to a remote location "is incapable of providing structure." Gov't PH Br. at 54. IBM agrees that no corresponding structure has been linked to the function for transmitting information and argues that claim 34 is indefinite. IBM PH Br. at 93-94.

b. The Court's Construction.

The specification states only that this invention "may be capable of transmitting the manifest," but describes no corresponding structure to carry out that function. A16 ('464 patent, col. 9, ll. 57-59). Because the applicant used the more general means-plus-function language and did not disclose any corresponding structure to implement this function, the court has determined that this limitation and claim 34 is indefinite, and, as a matter of law, invalid. *See Medical Instrumentation,* 344 F.3d at 1211 (holding when an applicant elects to use means-plus-function claim language, the claim must clearly disclose the intended structure to implement that limitation).

B. United States Patent No. 5,831,220 And United States Patent No. 6,105,014.

The parties have also requested that the court construe the preambles of claim 1 of the '220 and '014 patents and certain terms therein.

1. The Preambles.

The preambles of the '220 and '014 patents are identical and describe the invention as "[a] method of mailing parcels and envelopes using an automated shipping machine." A64 ('220 patent, col. 30, ll. 2-3); A109 ('014 patent, col. 30, ll. 2-3).

The parties have proposed the following competing constructions of the preamble for the court's consideration:

'220 and '014 Patents		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
A method of mailing parcels and envelopes, through the USPS and/or other commercial delivery services, using a shipping apparatus or device consisting of interrelated parts with separate functions and employing a technique, method or system of operating and controlling the mailing task by highly automatic means, comprising the steps of	**A method . . . using an automated shipping machine:** Each step of the method requires use of a shipping machine automatically controlled by mechanical or electronic devices, unless the step explicitly states otherwise	A series of steps for mailing parcels and envelopes, wherein each step of the method requires use of a shipping machine automatically controlled by mechanical or electronic devices, unless the step explicitly states otherwise

Pl. PH Br. at 13; Gov't PH Br. at 55-56; IBM PH Br. at 18, 50 (bold added by parties).

a. The Effect Of The Preambles.

i) The Parties' Proposed Constructions.

USHIP argues that the preambles do not need to be separately construed, because "the elements of the '220 and '014 method claims fully and intrinsically capture all of the limitations of the claimed invention, and the preambles merely encapsulate the main limitations found in the claims and describe the invention's purpose and principal use." Pl. PH Br. at 13.

The Government relies on the prosecution history of the '799 patent, the parent of the '220 patent, to evidence that the applicants intended the preamble to limit the claims. Gov't PH Br. at 57. The Government also points out that the applicant represented to the patent examiner that the invention cannot be performed by hand, and therefore must use "an automated shipping machine." Gov't PH Br. at 58.

IBM argues that the common specification to the '220 and '014 patent clearly states that "this invention relates to an automated unit." IBM PH Br. at 19 (citing A50 ('220 patent, col. 1, ll. 16-17); A95 ('014 patent, col. 1, ll. 16-17)). The prosecution history also confirms that the applicant considered the preamble as a claim limitation. G002342, 46-47, 52. For this reason, the applicant amended the title of the '220 patent to clarify that the invention was defined as an automated shipping machine. G002704-05 (the title was changed from "Improved System for Mailing and Collecting Items" to "Automated Package Shipping Machine"). Therefore, the invention is limited to an automated machine.

ii) The Court's Construction.

The operative preamble language of the '220 and '014 patents is "[a] method of mailing parcels and envelopes using an automated shipping machine." A64 ('220 patent, col. 30, ll. 2-3);

A109 (‘014 patent, col. 30, ll. 2-3). The court’s inquiry, however, does not end here, because the applicant relied on the preamble language during prosecution of the ‘799 patent to overcome the examiner’s restriction requirement under 35 U.S.C. § 121. G002341-42. Specifically, the preamble for the ‘799 patent is identical to the preamble of the ‘220 patent and the ‘014 patent describing: “A method of mailing parcels and envelopes using an automated shipping machine[.]” A165 (‘799 patent, col. 30, ll. 2-3). Therefore, the prosecution history of the ‘799 patent is relevant to understanding the predecessor ‘220 and ‘014 patents. *See Microsoft Corp.* v. *Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1346, 1349-50 (Fed. Cir. 2004) (holding that the “prosecution history . . . [is] relevant to an understanding of the other two patents, which stem from the same parent application and share a common specification”); *see also Jonsson* v. *Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990) (applying the prosecution history of a parent application to the construction of terms in descendent patents).

Because the preamble of the ‘220 and ‘014 patents is necessary to understand these patent and the applicant relied on the preamble to describe the invention to the examiner during prosecution, the court has determined that, after reading the entire specification and the preamble to the ‘220 and ‘014 patents, a person of ordinary skill in the art would understand that the preamble language “A method of mailing parcels and envelopes using an automated shipping machine” is a limitation to the ‘220 and ‘014 patents. *See Computer Docking Stations Corp*. v. *Dell, Inc*., 519 F.3d 1366, 1375 (Fed. Cir. 2008) (holding that a preamble may be limiting where it provides “a necessary and defining aspect of the invention”)

b. “A method of mailing parcels and envelopes using an automated shipping machine.”

i) The Parties’ Proposed Constructions.

USHIP argues that the specification in the ‘220 and ‘014 patents describes an invention that relies on both machine and human involvement. Pl. PH Br. at 15 n.16 (citing A61-62 (‘220 patent, col. 24, ll. 58-60; col. 25, ll. 8-12, 46-51); A106-07 (‘014 patent, col. 24, ll. 58-60; col. 25, ll. 8-12, 46-51)). The specification of both aforementioned patents “describe[s] [the] system of [E]mbodiment [Four] as being ‘operated by the customer.’” Pl. PH Br. at 15 & n.16 (citing A61 (‘220 patent, col. 24, ll. 58-60); A106 (‘014 patent, col. 24, ll. 58-60)). This embodiment “differs from the previous embodiments in that it is semi-attended, *i.e.*, a clerk is needed to take the parcel or envelope from the customer, to store the parcel or envelope in a secure storage area, and to validate receipt of the parcel or envelope.” Pl. PH Br. at 15 n.16 (citing A62 (‘220 patent, col. 25, ll. 46-51); A107 (‘014 patent, col. 25, ll. 46-51)). Therefore, USHIP concludes that the preamble allows humans to perform any steps that do not explicitly exclude human involvement. Pl. PH Br. at 15-16 (citing A62 (‘220 patent, col. 25, ll. 2-12); A107 (‘014 patent, col. 25, ll. 2-12)). For example, “[v]irtually any machine or function one might commonly refer to as ‘automated’- *e.g.*, automated check-out at the supermarket, automated deposit at a bank ATM . . . will entail varied, ongoing interplay between the human being and the machine[.]” Pl. PH Br. at 17.[11]

[11] USHIP further suggests that this construction is aligned with dictionary definitions of the words in the preamble. Pl. PH Br. at 16. Specifically, “automated” should be defined as “the

The Government observes that "USHIP's construction of 'automated' in the '220 patent is at odds with [USHIP's] construction of 'automated' in the '464 patent, despite the fact that the specification from the '464 patent was largely incorporated into the '220 patent." Gov't PH Br. at 57. The Government attaches particular significance to the fact that USHIP was "willing to adopt the Government's construction [of "automated" in the '464 patent], 'automatically controlled by mechanical or electronic devices.'" Gov't PH Br. at 57 n. 27 (citing Pl. Br. at 51). Therefore, in construing the '220 patent, the Government challenges USHIP's change in position, *i.e.*, USHIP urging that in the '220 and '014 patents "automated" now means "highly automated means." Gov't PH Br. at 56.

In contrast, the Government insists that the proper construction of the phrase "[a] method using an automated shipping machine" in the '220 patent is that

> [e]ach step of the method requires use of a shipping machine automatically controlled by mechanical or electronic devices, unless the step explicitly states otherwise.

Gov't PH Br. at 56; *see also* 2/18/10 TR at 626 (Government's Counsel explaining that the Government's construction allows a person to perform a step only when the step explicitly says so).

The Government further emphasizes that the amendments to claims in both in the '220 patent and its parent, the '799 patent, show that where the applicants wanted a step to be performed by a human, the language explicitly was amended to say so:

> Applicant disagrees with the Examiner's suggestion that the process claimed in independent method claims 1 and 72 can be performed by hand. *Both of these claims specifically recite in the preamble* a method of mailing parcels and envelopes "using an automated shipping machine" *rather than specifically reciting at each step that the step is performed by the automated shipping machine*. Applicant submits that if the method were performed by hand as the Examiner suggests, then it would not use an automated shipping machine as set forth in the preamble.

G002346 (emphasis added).

Therefore, USHIP's "unambiguous declarations by the applicant during prosecution" confirm that the applicants believed that these steps were to be completed by the automated shipping machine, unless explicitly stated otherwise. Gov't PH Br. at 61; *see also* Gov't PH Br.

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technique, method, or system of operating or controlling a process by highly automatic means, as by electronic devices, reducing human intervention to a minimum." RANDOM HOUSE WEBSTER'S COLLEGE DICTIONARY 90 (1997). Likewise, "machine" should be defined as "an apparatus consisting of interrelated parts with separate functions, used in the performance of some kind of work." *Id*. at 787.

at 57-58 (citing *Ormco Corp.* v. *Align Tech., Inc.*, 498 F.3d 1307, 1314 (Fed. Cir. 2007) ("When the application of prosecution disclaimer involves statements from prosecution of a familial patent relating to the same subject matter as the claim language at issue in the patent being construed, those statements in the familial application are relevant in construing the claims at issue.")).

According to IBM, the phrase, "an automated . . . machine," provides insight into the meaning of the claim. IBM PH Br. at 23. First, it shows that the claim is to a single machine, not a system of machines. IBM PH Br. at 23. Second, it shows that a machine, and not a human, must perform each step, unless otherwise noted. IBM PH Br. at 23. Third, the specification characterizes the invention as "an automated unit," where the "method" is "implemented by the automated shipping machine." *Id.* at 23-24 (citing A50 ('220 patent, col. 2, ll. 39-40); A51 ('220 patent, col. 3, ll. 5-36); A95 ('014 patent, col. 2, ll. 39-40); A96 ('014 patent, col. 3, ll. 5-36)). Fourth, the prosecution history of the '799 patent shows that when the applicants wanted steps to be performed by humans, the patent was amended to say so explicitly. IBM PH Br. at 24-25.

USHIP counters that the specification does not require that a machine perform each step, unless "the step explicitly states otherwise." Pl. PH Br. at 15; *see* 2/18/10 TR at 595-96 (USHIP's Counsel explaining that the weighing step requires the customer to begin the step, even though the claim does not explicitly call for a human to perform the step). For example, the specification shows "that, for at least some embodiments of the invention, the 'validation' step is performed by a person such as a retail clerk, . . . even though the validation step of the claim does not 'explicitly' call for such human involvement." Pl. PH Br. at 16 (citing A62 ('220 patent, col. 25, ll. 2-12); A107 ('014 patent, col. 25, ll. 2-12)); *see also* 2/18/10 TR at 590, 595-96, 598-600 (USHIP's Counsel arguing that the claims and the specification never exclude human interaction, that certain steps require human interaction (even when not explicitly called for in the claims), and that certain embodiments are not as automated as others).

USHIP discounts the prosecution history of the '799 patent, because the applicant was responding to an office action that did not deal with patentability. Pl. PH Br. at 17.[12] Therefore, these statements, in the context they were given, cannot "override the incredibly clear statements in the specification." 2/18/10 TR at 608. Moreover, the prosecution history of the '799 patent was ambiguous and cannot "constitute grounds for finding a clear disavowal of claim scope." Pl. PH Br. at 18; *see also* 2/18/10 TR at 608 (USHIP's Counsel arguing that the '799 patent

[12] As USHIP's Counsel explained at the claim construction hearing, the context of the cited prosecution history was a request by the examiner for the claims of the parent patent of the '220 patent be separated, because there were two distinct inventions being claimed – an apparatus for shipping items and an independent method for shipping items. 2/18/10 TR at 602-03. The applicant responded that the examiner misunderstood that the method was not performed entirely by hand but "contemplate[d] [the] use of an automated shipping machine." 2/18/10 TR at 606. The applicant further explained that while limitations in the preamble can sometimes be ignored, it is improper to do so regarding the limitation "using an automated shipping machine," when such a reading would "change the claim's classification status." 2/18/10 TR at 607.

prosecution history does not put the public on notice that the patents are claiming an invention "in which the machine completely controls every step no matter what the spec says").

ii) The Court's Construction.

The preamble of the '220 and '014 patents provides that the invented method uses an automated shipping machine, but does not require the method to be performed exclusively by a machine. A64 ('220 patent, col. 30, ll. 2-3); A109 ('014 patent, col. 30, ll. 2-3). For example, the specification describes different embodiments with different degrees of automation.[13] In addition, the prosecution history shows that the examiner initially believed that the claim as drafted (together with a second independent claim) could be performed by hand, but accepted the applicant's argument that that the method could not be entirely performed by hand, because the preamble states that the method must include "using an automated shipping machine." G002342; G002346.[14]

For these reasons, the court has determined that, after reading the entire specification and the preamble language of the '220 and '014 patents, a person of ordinary skill in the art would understand that "[a] method of mailing parcels and envelopes using an automated shipping machine" means "a method to ship parcels and envelopes which includes the use of an

[13] *Compare* A54 ('220 patent, col. 9, ll. 37-45) (describing an embodiment where the customer writes the shipping address), *with* A56 ('220 patent, col. 14, ll. 41-45) (describing an embodiment where the machine prints a shipping label with the complete address); *compare also* A54 ('220 patent, col. 9, ll. 2-5) (describing an embodiment where the customer measures the package), *with* A57-58 ('220 patent, col. 16, l. 12 – col. 17, l. 25) (describing an embodiment which dimensions packages using sonic, light, or holographic mechanisms); *compare also* A62 ('220 patent, col. 25, ll. 43-45) (describing an embodiment where an attendant stores the package), *with* A56 ('220 patent, col. 13, ll. 21-60) (describing an embodiment where the machine stores the packages); *compare also* A62 ('220 patent, col. 25, ll. 37-45) (describing an embodiment where an attendant performs the validation) *with* A60 ('220 patent, col. 21, ll. 43-64) (describing an embodiment where the machine does the validation). Although this footnote does not include parallel citations to the '014 patent, they are identical to those cited in the '220 patent.

[14] The original application for the '799 patent had two similar method claims, claim 1 and claim 72. G001829-30; G001845. Therefore, the examiner issued a restriction requirement requesting that the applicant elect either the method or separate apparatus claims, as the methods could be performed by hand and were distinct from the apparatus claims. G002341-42. The applicant responded that, if the method were performed entirely by hand, it would no longer "use an automated shipping machine." G002345-46. Nevertheless, the applicant amended claim 72, but not claim 1. G002345-46. The examiner agreed that the restriction requirement was overcome and allowed claims 1 and 72 to remain in the patent application. G002352. Subsequently, without prejudice, the applicant removed claim 72 to permit the patent to continue to allowance. G002713-14. The exact same claim as the original claim 72, with a preliminary amendment matching the original amendment, was filed as a new application. G004000-06. This application was allowed as the '220 patent.

automated shipping machine for at least some of the steps." *See Lockheed Martin Corp.*, 324 F.3d at 1319 ("The function is properly identified as the language after the 'means for' clause and before the 'whereby' clause, because a whereby clause that merely states the result of the limitations in the claim adds nothing to the substance of the claim."); *see also Creo Prods., Inc.* v. *Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002) (holding that "the function of a means-plus-function limitation . . . must come from the claim language itself") (internal citation omitted).

2. Claim 1.

Claim 1 of the ‘220 and ‘014 patents is substantially the same.

5,831,220 Patent	**6,105,014 Patent**
1. A method of mailing parcels and envelopes using an automated shipping machine, comprising the steps of:	1. A method of mailing parcels and envelopes using an automated shipping machine, comprising the steps of:
Receiving payment information from a customer;	Receiving payment information from a customer;
Receiving package type information identifying a parcel or envelope to be mailed;	Receiving package type information identifying a parcel or envelope to be mailed;
Weighing said parcel or envelope to be mailed	Weighing said parcel or envelope to be mailed
Receiving shipping information from said customer including at least a destination of said parcel or envelope to be mailed;	Receiving shipping information from said customer including at least a destination of said parcel or envelope to be mailed;
Computing from said package type information, shipping information, and weight information, a delivery date and cost for delivery of said parcel or envelope to said destination via **each** delivery service option available to said customer;	Computing from said package type information, shipping information, and weight information, a delivery date and cost for delivery of said parcel or envelope to said destination via **at least two** delivery service options available to said customer;
Receiving an indication of the delivery service option desired by the customer;	Receiving an indication of the delivery service option desired by the customer;
Printing a **shipping label including** at least said destination **printed thereon**;	Printing a **tracking bar code label identifying** at least said destination;
Printing a shipping receipt for an amount including at least the cost of delivering said parcel or envelope to said destination via the delivery service chosen by said customer	Printing a shipping receipt for an amount including at least the cost of delivering said parcel or envelope to said destination via the delivery service chosen by said customer
Validating receipt of said parcel or envelope as the parcel or envelope for which said **shipping** label was printed; and	Validating receipt of said parcel or envelope as the parcel or envelope for which said **tracking bar code** label was printed; and
An attendant of said customer storing a validated parcel or envelope in a secure storage area until said parcel or envelope is subsequently picked up by a commercial delivery person.	**Storing a validated parcel or envelope in a secure storage area until said parcel or envelope is subsequently picked up by a commercial delivery person**.

A64 (‘220 patent, col. 30, ll. 2-39); A109 (‘014 patent, col. 30, ll. 2-33) (bold added by court to highlight differences).

a. "Destination."

The parties have proposed the following competing constructions of "destination" for the court's consideration:

USHIP's Proposed Construction	Government's Proposed Construction	IBM's Proposed Construction
destination - data relating to the location to which the item to be mailed is to be mailed, as required by applicable policies and standards of the delivery service being used, such as the zip code for that location	**destination of the parcel or envelope to be mailed** – the place to which the parcel or envelope is to be mailed; including at least the name, street address, and zip code of the place	**destination –** the place to which the parcel or envelope is to be mailed; including at least the name, street address, and zip code of the place

Pl. PH Brief at 20; Gov't PH Br. at 63; IBM PH Br. at 32 (bold added by parties).

The parties disagree as to whether specific information is required to be part of the term "destination." Pl. PH Br. at 20; Gov't PH Br. at 63; IBM PH Br. at 32.

i) The Parties' Proposed Constructions.

USHIP asserts that "destination" does not require any specific information "with the possible exception of the zip code data," because the zip code is required to be printed on the shipping label to calculate the cost of shipping. Pl. PH Br. at 20-21; *see also* 2/18/10 TR at 657-60. Although certain embodiments require the customer to enter more information, including the recipient's name and complete mailing address, the specification is clear that not all embodiments require any more information than the zip code. Pl. PH Br. at 21-23. For example, in Embodiment One the customer only enters the zip code and writes the rest of the mailing address on the shipping label. Pl. PH Br. at 21-23 (citing A53 ('220 patent, col. 8, l. 54); A54 ('220 patent, col. 9, l. 41); A98 ('014 patent, col. 8, l. 54); A99 ('014 patent, col. 9, l. 41)).

USHIP also argues that the definition of "destination" is dependent on the context, *e.g.*, "destination" for booking an airline flight, "destination" does not always require a full mailing address. Pl. PH Br. at 22. The relevant context is calculating the cost of shipping an item, therefore, no other information is required but a zip code. Pl. PH Br. at 22. Although "destination" may require more information for delivering the item to a recipient, in the context of claim 1, "destination" only requires the zip code. Pl. PH Br. at 23.

The Government responds that destination means "the place or location to which the item is to be mailed; including at least the name, street address, and zip code of the place." Gov't PH Br. at 63; *see also* 2/18/10 TR at 677-79. The specification discusses "the zip code of the destination," "destination city and state," "destination name," "destination street address," and "destination zip code." Gov't PH Br. at 64-65 (citing A59 ('220 patent, col. 20, ll. 36-65); A53 ('220 patent, col. 8, ll. 55-58)); A104 ('014 patent, col. 20, ll. 30-58); A98 ('014 patent, col. 8, ll.

55-58); *see also* 2/18/10 TR at 680-81. Although the city and state are not necessary, because they can be ascertained from the zip code, other information is necessary. Gov't PH Br. at 65.

The Government posits that there are two additional reasons why the Embodiment One was not intended to be part of the '220 or the '014 patents. Gov't PH Br. at 65-66. First, "destination" is a broader term than "destination zip code," so that the use of "destination zip code" "signal[s] that the zip code embodiment function[s] with less than a full destination." Gov't PH Br. at 65-66. Second, Embodiment One, where only the zip code is entered by the customer, previously was claimed in the '948 patent[15] and was not meant to be claimed again in the '220 or '014 patents. Gov't PH Br. at 66.

IBM takes a slightly different tack from the Government, arguing that "destination" is the address and zip code of a specific group or organization. IBM PH Br. at 33. Because the applicant used "information related to the destination" in the '464 patent, a continuation resulted in the '220 patent, demonstrating that the applicant knew how to claim a more generic set of information. IBM PH Br. at 33. In the '220 patent, however, the applicant chose the more specific term "destination." IBM PH Br. at 33. Therefore, IBM concludes from the specification "that the 'amount of time that it takes a commercial delivery service to deliver an item to its destination is critical.'" IBM PH Br. at 33-34 (citing A50 ('220 patent, col. 1, ll. 28-30)); A95 ('014 patent, col. 1, ll. 28-30); *see also* 2/18/10 TR at 669 (IBM's Counsel arguing that the destination in the claims is used for more than just calculating the shipping fee). Because the zip code, name, and specific address are required to determine the specific delivery time, all of this information is essential to defining destination. IBM PH Br. at 33-34. IBM also criticizes USHIP's definition of "destination" as not comporting with the claim language that requires the invention to print the destination on the shipping label. IBM PH Br. at 35. Moreover, USHIP's use of "any information" improperly broadens "destination" to include extraneous information, *e.g.*, "west of the river" or "the blue house." IBM PH Br. at 36-37. Finally, IBM insists that Embodiment One requires that the customer only input the zip code for the "destination" and that other information is excluded from the scope of this invention. IBM PH Br. at 35. Claim 1 of the '464 patent, however, requires the entry of "information relating to the destination." IBM PH Br. at 35; *see* 2/18/10 TR at 664-65, 669-71 (IBM's Counsel arguing that in the '464 patent "information relating to the destination" is used to calculate the shipping fee, while in the '220 patent the "destination" is printed on the shipping label).

USHIP counters that the Government and IBM proposed constructions read the Embodiment One out of the '220 patent, but then improperly includes it in the '464 invention. 2/18/10 TR at 661. USHIP emphasizes that Embodiment One should not be excluded from the scope of this invention for several reasons. Pl. PH Br. at 24. First, the '220 and '464 patents had different inventors: Ramsden was an inventor of the '220 patent and the '464 patent; however, Liles was a co-inventor on the '220 patent, but not on the '464 patent. Pl. PH Br. at 24. Second,

[15] U.S. Patent No. 5,340,948 is a direct ancestor to both the '220 and '014 patents. The specification of the '948 patent contains the description of the zip code embodiment. A254 ('948 patent, col. 7, ll. 22-34). In addition, the '948 patent shows an embodiment with a zip code to illustrate a "means for inputting information relating to the destination of the parcel from the customer." A257 ('948 patent, col. 14, ll. 39-40).

the ‘220 patent specification is “very different” than the ‘464 patent specification, as it did not incorporate the entire ‘464 patent specification. Pl. PH Br. at 24. USHIP explains that “it is sometimes the case that an inventor will employ slightly different wording to refer to the same concept,” as was done here: the ‘220 patent uses the term “destination,” but the ‘464 patent uses the phrase “information relating to the destination.” Pl. PH Br. at 25. This difference in word choice, however, does not evidence a clear and unambiguous intent to exclude Embodiment One from claim 1. Pl. PH Br. at 25.

ii) The Court’s Construction.

Claim 1 of the ‘220 and ‘014 patents recites the term “destination” four times: “receiving shipping information . . . including at least a *destination* of said parcel or envelope to be mailed”; “computing . . . cost for delivery . . . to said *destination*”; “printing a shipping label including at least said *destination*”; and “printing a shipping receipt . . . including at least the cost of delivering . . . to said *destination*.” A64 (‘220 patent, col. 30, ll. 10, 15, 19, 23); A109 (‘014 patent, col. 30, ll. 10, 15, 20, 23) (emphasis added). Therefore, the court must examine this term in each context that it is used.

The court has determined that, after reading the entire specification and claim 1 of the ‘220 and ‘014 patents, a person of ordinary skill in the art would understand that “destination” includes at least the zip code, but also could include other information. The argument that the inventors did not intend Embodiment One to be covered by the claimed invention in the ‘220 patent, because it was covered by claim 1 of the ‘464 patent is unpersuasive.[16] An interpretation that covers all embodiments does not contradict the plain meaning of the term. In addition, nothing in the specification or prosecution history shows a clear disavowal of any embodiment disclosed.

Since the claim must be construed by looking at all of the disclosed embodiments in a way that does not contradict the plain meaning of the terms, the court has determined that, after reading the entire specification and claim 1, a person of ordinary skill in the art would understand that “destination” means “the place to which the parcel or envelope is to be mailed, including at least the zip code of the place.” Construing “destination” to be “the place to which

[16] Embodiment One describes the broadest use of this term, since it limits the shipping information required to ascertain the destination and information is printed on the shipping label, *i.e.*, the zip code. A53-54 (‘220 patent, col. 8, ll. 52-58; col. 9, ll. 30-43); A98-99 (‘014 patent, col. 8, ll. 52-58; col. 9, ll. 30-43). The other embodiments request more information. A56 (‘220 patent, col. 14, ll. 38-40); A59 (‘220 patent, col. 20, ll. 34-50); A63 (‘220 patent, col. 27, l. 53 – col. 28, l. 8); A101 (‘014 patent, col. 14, ll. 35-37); A104 (‘014 patent, col. 20, ll. 27-44); A108 (‘014 patent, col. 27, l. 51 – col. 28, l. 5).

Embodiment One also shows that the inventor believed that the zip code was the only destination information required to compute the cost for delivery and print the cost on the shipping label. A54 (‘220 patent, col. 9, ll. 18-22); A99 (‘014 patent, col. 9, ll. 18-22). For printing the label, nothing in the specification suggests that the invention requires more information than the zip code. A54 (‘220 patent, col. 9, ll. 31-43); A99 (‘014 patent, col. 9, ll. 30-43).

the parcel or envelope is to be mailed, including at least the zip code of the place," also covers all embodiments and does not contradict the ordinary meaning of the term.

b. "Delivery Date."

Claim 1 in both the '220 patent and the '014 patent includes the term "delivery date." A64 ('220 patent, col. 30, l. 13); A109 ('014 patent, col. 30, l. 13).

The parties have proposed the following competing constructions of "delivery date" for the court's consideration:

USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
the automated shipping machine determines the expected **delivery date** and cost for delivery of the parcel or envelope to said destination for each available delivery service option, as a function of the package type information, shipping information, and weight information **delivery date –** the date on which the parcel or envelope is to be received, expressed either as the specific month, day, and year when the parcel or envelope is expected to be received or the number of days it is estimated to take for parcel or envelope to be delivered	the automated shipping machine calculates [a delivery date] and cost for delivery [of said parcel or envelope to said destination] for each available delivery service option, as a function of [the package type information], shipping information, and weight information **a delivery date . . . of said parcel or envelope to said destination:** the expected calendar date of delivery of the parcel or envelope	the automated shipping machine determines an expected delivery date, including the day of the week, and associated cost for each delivery service based on the package type information, shipping information, and weight information

Pl. PH Br. at 25-26; Gov't PH Br. at 67-68; IBM PH Br. at 37-38 (bold added by parties).

The parties disagree whether "delivery date" must be displayed as the calendar date on which the delivery will be made or, in the alternative, whether "delivery date" includes the total number of days until delivery is made; and whether "delivery date" must include the day of the week that the delivery will be made.

i) The Parties' Proposed Constructions.

USHIP argues that "delivery date" means "the projected or estimated date on which the item to be mailed is to be delivered, expressed *either* as a specific calendar date *or* as the number of days it is estimated to take for the items to be delivered." Pl. PH Br. at 26. In the prosecution history of the '799 patent, the parent of the '220 patent, the examiner noted: "the two options were available from the U.S. Post Office and therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to program a shipping machine to

include these two well known standard options." G002352; *see also* 2/18/10 TR at 685-87 (USHIP Counsel arguing that when the examiner rejected the patent as obvious, he took official notice that the delivery date could be calculated and often was expressed either as the calendar date of the delivery or the number of days that it would take to accomplish the delivery).

In contrast, the Government's proposed construction limits "delivery date" to "the expected calendar date of delivery of the parcel or envelope." Gov't PH Br. at 69. Relying on the specification, the Government argues that, because calculation of the delivery date "take[s] into account [specific days such as] weekends, holidays, and other days" in which no delivery service is available, "delivery date" must be a calendar date. Gov't PH Br. at 69 (citing A60 ('220 patent, col. 21, ll. 4-26)); A104-05 ('014 patent, col. 20, l. 65 – col. 21, l. 15); *see also* 2/18/10 TR at 698-700 (Government Counsel arguing that the specification talks about displaying the expected delivery date, together with the day of the week and the cost of shipping, but never discusses displaying the number of days; that is mentioned only in the extrinsic evidence).

The Government posits three additional reasons why USHIP's construction of "delivery date" to include the number of days until delivery is incorrect. Gov't PH Br. at 69-71. First, USHIP inappropriately relied on prosecution history of an ancestor patent to expand and not limit its construction. Gov't PH Br. at 70. Second, USHIP relied on documents that did not exist at the time the patent was filed. Gov't PH Br. at 70. Third, USHIP relied on documents that do not equate "delivery date" with USHIP's proposed construction and, in fact, do not even use the word "date." Gov't PH Br. at 70-71.

IBM's proposed construction, however, requires "delivery date" to include both the expected delivery date and the day of the week. IBM PH Br. at 37; *see also* 2/18/10 TR at 692-94 (IBM Counsel arguing that the specification for system (700) displays the calendar date and the day of the week, but never mentions displaying the number of days). Looking at the claim language, the invention uses information, like package type and weight, to calculate an exact delivery calendar date. A60 ('220 patent, col. 21, ll. 4-21); A109 ('014 patent, col. 30, ll. 12-14). The specification confirms this construction. IBM PH Br. at 38-39; *see also* 2/18/10 TR at 694-95 (IBM Counsel citing '220 patent, col. 21, ll. 4-21 to show that the inventors expected that their invention would display the calendar date that the item was to be delivered so that the customer could make an informed decision). Because "the delivery date is computed from such information as 'second day air,'" "delivery date" cannot have the same meaning. IBM PH Br. at 39. And, as the Government identified, the number of days may not account for days when the mail is not delivered. IBM PH Br. at 38-39 (citing A60 ('220 patent, col. 21, ll. 4-21)); A104-05 ('014 patent, col. 20, l. 65 – col. 21, l. 15). In addition, the prosecution history of the '799 patent is inapplicable, because it does not describe "*how* the USPS calculated a delivery date." IBM PH Br. at 39-40 (citing G002352).

USHIP counters that the Government and IBM claim constructions are based on the specification's description of particular embodiments. Pl. PH Br. at 28; *see also* 2/18/10 TR at 687-88 (USHIP Counsel arguing that the Government and IBM combine the claims with the discussion of the embodiments in the specification). Accordingly, their proposed constructions impermissibly import limitations from the specification into claim 1. Pl. PH Br. at 28.

ii) The Court's Construction.

At the claim construction hearing, USHIP Counsel conceded that the construction of this limitation was a close question, but argued that "delivery date" can be expressed as the calendar date or as the number of days it will take to deliver the item. 2/18/10 TR at 683-84; *see also* A64 ('220 patent, col. 30, ll. 12-16); A109 ('014 patent, col. 30, ll. 12-16). In other words, if the invention only states the number of days for delivery, it would not be clear if this took "into account holidays, weekends, and other days in which there is no delivery service." A60 ('220 patent, col. 21, ll. 4-17); A104-05 ('014 patent, col. 20, l. 65 – col. 21, l. 11). For example, if a package is posted on Thursday July 3rd, and the machine stated delivery would take place in 5 days, it would be unclear if this accounted for July 4th, Saturday, or Sunday. In contrast, if delivery was to take place on July 11th there would be no uncertainty. A60 ('220 patent, col. 21, ll. 4-17); A104-05 ('014 patent, col. 20, l. 65 – col. 21, l. 11) (describing how the invention presents the date the item is to be delivered for different delivery options, taking "into account holidays, weekends, and other days in which no delivery service is available").

The court has determined that, after reading the entire specification and claim 1 of the '220 and '014 patents, a person of ordinary skill in the art would understand that "delivery date" means "the expected calendar date for the delivery of the parcel or envelope."

c. "Validation."

Claim 1 in both the '220 patent and the '014 patent describe slightly different versions of the validation step. *Compare* A64 ('220 patent, col. 30, ll. 26-27) (claiming "validating receipt of said parcel or envelope as the parcel or envelope for which said *shipping label* was printed") (emphasis added), *with* A109 ('014 patent, col. 30, ll. 27-29) (claiming "validating receipt of said parcel or envelope as the parcel or envelope for which said *tracking bar code label* was printed") (emphasis added).

The parties have proposed the following competing constructions of "validation" for the court's consideration:

'220 and '014 Patents		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
the automated shipping machine or an attendant determines or confirms that the parcel or envelope being received for storage and/or shipment is the package for which the [shipping/tracking bar code] label was printed	the automated shipping machine confirms that the parcel or envelope received for storage is the same parcel or envelope for which the [shipping/tracking bar code] label was printed	the automated shipping machine confirms that the parcel or envelope received for storage is the same parcel or envelope for which the shipping label was printed

Pl. PH Br. at 31; Gov't PH Br. at 72; IBM PH Br. at 41.

The parties disagree as to whether validation requires making certain that the package is the correct package for a label or whether validation entails only making certain that the package has a shipping label. The parties also disagree as to whether validation must be accomplished by the automated shipping machine or by a human.

i) The Parties' Proposed Constructions.

USHIP argues that "validation" requires "only a determination that the item being received for storage or shipment is the item for which a shipping label (or, in the case of the '014 patent, a tracking bar code label) has been printed." Pl. PH Br. at 31. Although "the specification, and certain drawings, indicate that, for some embodiments of the invention, the shipping machine may utilize sensors and other devices to confirm that the same package for which a label was printed is received," the specification does not say that the invention must do so. Pl. PH Br. at 32. USHIP emphasizes that the specification is clear that "validation of receipt may be 'accomplished in several different ways,' and . . . that it is not necessary for the shipping machine itself to confirm that the exact same package has been received." Pl. PH Br. at 32 (citing A60 ('220 patent, col. 21, ll. 43-64)); A105 ('014 patent, col. 21, ll. 38-50); *see* 2/18/10 TR at 702-05 (USHIP's Counsel arguing that the patentee believed validation could be done in several different ways). For example, in Embodiment Three, "it is sufficient that the machine determine that 'any' package be received, in which case it will be 'presumed' that the package is the appropriate one." Pl. PH Br. at 32. Therefore, the invention does not require "the machine to verify that the exact same package has been received." Pl. PH Br. at 32.

USHIP also argues that validation can be performed by the automated shipping machine, or "through means other than the shipping machine itself." Pl. PH Br. at 33. USHIP contends that, "[w]hile it is . . . possible for the same term to have different meanings depending on the context used in the patent," in this case, "the applicant used 'validation' consistently throughout the written description." Pl. PH Br. at 36. USHIP further emphasizes that the specification makes clear "that the 'validation' step described in Embodiment Four is the same 'validation' step claimed as part of the invention." Pl. PH Br. at 35. For example, Embodiment Four states: "The parcel, package or envelope with the label is then provided to a retail clerk who *validates receipt* of the package." Pl. PH Br. at 35 (citing A62 ('220 patent, col. 25, ll. 2-4)); A107 ('014 patent, col. 25, ll. 1-3). The Fourth Embodiment "thus differs from the previous embodiments in that it is semi-attended, *i.e.*, a clerk is needed . . . to *validate receipt* of the parcel or envelope. *This embodiment is otherwise quite similar to the third embodiment*." Pl. PH Br. at 36 (citing A62 ('220 patent, col. 25, ll. 8-14)); A107 ('014 patent, col. 25, ll. 7-13) (emphasis added). Another example that the specification discusses is found in Embodiment Four: "*The attendant then stamps and initials the receipt to validate the shipment and receipt of the parcel or envelope 708 from the customer*. . . . Obviously, this system is substantially simplified from the embodiments described above since the storage and *validation process* is performed by an attendant." Pl. PH Br. at 36 (citing A62 ('220 patent, col. 25, ll. 42-49)); A107 ('014 patent, col. 25, ll. 40-47) (emphasis added).

Because the '799 patent was amended during prosecution and was an ancestor to the '220 and '014 patents, USHIP posits three reasons why the doctrine of prosecution disclaimer is nevertheless inapplicable. Pl. PH Br. at 41. First, "because the applicant was not making 'clear and unmistakable prosecution arguments limiting the meaning of a claim term *in order to overcome a rejection'* or to otherwise support patentability, prosecution history disclaimer does not apply." Pl. PH Br. at 43 (emphasis added) (quoting *SanDisk Corp.* v. *Memorex Products, Inc*., 415 F.3d 1278, 1286 (Fed. Cir. 2005)). The applicant of the '799 patent was not trying "to overcome a rejection or to address patentability concerns raised by the examiner." Pl. PH Br. at 42. Instead, the applicant was responding to a 35 U.S.C. § 121 restriction requirement. Pl. PH Br. at 42. USHIP emphasizes that a restriction requirement does not affect patentability, relying on the language in § 121 that provides: "validity of a patent shall not be questioned for failure of the Director to require the application to be restricted to one invention." 35 U.S.C. § 121.

Second, the prosecution history of the '799 patent is ambiguous and does not speak to any step that is being construed here. Pl. PH Br. at 42-44.

Third, assuming prosecution history estoppel applies, the outermost logical reach of the Government and IBM's argument is that "validation would not be performed entirely 'by hand,'" which would only mean "that the machine was to play *some* role in validation, not the *exclusive* role." Pl. PH Br. at 44-45 (emphasis in original). USHIP adds that Embodiment Three "makes clear that validation 'may be accomplished in several different ways in accordance with the invention.'" Pl. PH Br. at 37 (citing A60 ('220 patent, col. 21, ll. 49-50)); A105 ('014 patent, col. 21, ll. 44-45). In addition, USHIP insists that the specification describes "a 'simple embodiment' in which, after a shipping label is printed, the machine may 'simply detect whether *any* package has been placed on the conveyor belt 340.'" Pl. PH Br. at 37 (citing A60 ('220 patent, col. 21, ll. 50-53)) (emphasis in original); A105 ('014 patent, col. 21, ll. 45-48). In this embodiment, the machine "does not validate by verifying that the package at issue is the exact same package for which the label was printed." Pl. PH Br. at 37. Instead, the machine presumes it is the correct package because it was placed on the conveyor belt after the shipping label was printed. Pl. PH Br. at 37. USHIP points out that the specification's discussion in Embodiment Three is very similar to the specification's discussion of the fourth embodiment, where "the machine prepares a shipping label. . . . 'The parcel, package or envelope *with the label is then provided to a retail clerk who validates receipt of the package*.'" Pl. PH Br. at 38 (citing A62 ('220 patent, col. 24, l. 66 - col. 24, l. 5)); A107 ('014 patent, col. 25, ll. 1-4). Therefore, USHIP concludes that there is no meaningful or dispositive difference "between machine-performed validation and attendant-performed validation, as contemplated by the patent." Pl. PH Br. at 38.

The Government responds that the specification uses the word "validation" to describe only two functions: 1) the item received is the same item for which the label was printed; and 2) the item has been received for storage. Gov't PH Br. at 74 (citing A60 ('220 patent, col. 21, l. 38 - col. 22, l. 10) (first function); A62 ('220 patent, col. 25, ll. 37-46) (second function); A64 ('220 patent, col. 29, ll. 8-22) (second function)); A105 ('014 patent, col. 21, l. 33 - col. 22, l. 7) (first function); A107 ('014 patent, col. 25, ll. 36-44) (second function); A109 ('014 patent, col. 29, ll. 4-19) (second function). Both patents describe the first of these functions as a critical step for the automated shipping machine. Gov't PH Br. at 74 (citing A60 ('220 patent, col. 21, l. 38 - col. 22, l. 10)); A105 ('014 patent, col. 21, l. 33 - col. 22, l. 7). By failing to recognize that the

specification uses the term validation in two distinct ways, USHIP misconstrues this claim term. Gov't PH Br. at 75-77.

The Government further insists that only the automated shipping machine can perform validation. Gov't PH Br. at 72. The prosecution history of the '799 patent (the ancestor of both the '220 and '014 patents) evidences that the applicant understood that the invention required that only a machine perform the validation step. G002346. The prosecution history confirms that the applicant specifically stated that each step was performed by a machine, unless otherwise stated. Gov't PH Br. at 78-79. For this reason, the applicant amended the storing step of the '799 patent to clarify that validation was performed by "an attendant or said customer." Gov't PH Br. at 79. Although the Government agrees that this was a restriction requirement, the applicant's actions or statements can still limit the scope of a claim. Gov't PH Br. at 80-81 (citing *Microsoft Corp*. v. *Multi-Tech Sys., Inc*., 357 F.3d 1340, 1349 (Fed. Cir. 2004) (holding that statements made by the applicant can limit the scope of a claim, because the courts cannot interpret a patent "to cover subject matter broader than that which the patentee itself regarded" as its invention)); *see also Acco Brands, Inc*. v. *Micro Sec. Devices, Inc*., 346 F.3d 1075 (Fed. Cir. 2003) (holding that when an applicant, in response to a restriction requirement, elects a specific embodiment, the applicant cannot later use other embodiments to broaden the scope of the patent).

IBM agrees that the Government's construction gives meaning to all of the claim language, including "of *said* parcel or envelope *as the parcel or envelope for which said shipping label was printed*." IBM PH Br. at 41. In particular, the specification makes clear that the purpose of the validation step is "to determine whether the correct package has been received and prevent a package switch or the failure to replace a package for which the label has been printed." IBM PH Br. at 42 (citing A60 ('220 patent, col. 21, ll. 38-49)); A105 ('014 patent, col. 21, ll. 33-44). IBM also adds that, because claim 1 requires validating receipt of the item "for which said shipping label was printed," validation under Embodiment Three accomplishes this task, but attendant-performed validation under Embodiment Four does not. IBM PH Br. at 43-44.

ii) The Court's Construction.

The term validation describes two functions in claim 1 of the '220 and '014 patents: validating receipt of the package or envelope; and validating that the package or envelope is the one for which a label was printed. The second of these functions is described in the specification as "important" or "critical." A60 ('220 patent, col. 21, ll. 43-49); A105 ('014 patent, col. 21, ll. 38-41). The prosecution history further shows that the applicant of the '799 patent, parent of the '014 and '220 patents, intended that each step was to be performed by a machine, unless otherwise stated.[17] During prosecution, USHIP argued that claim 1 "specifically recite[s] in the

[17] Earlier in this Memorandum Opinion and Order, the court considered the prosecution history and determined that the "automated shipping machine" language in the preamble of the '220 and '014 patents did not require that the method be performed *exclusively* by a machine, but the court did not determine whether the prosecution history estopped or clearly disavowed the claim that some of the steps could be done by hand. The prosecution history indicates that the

preamble . . . 'using an automated shipping machine' *rather than specifically reciting at each step* that the step is performed by the automated shipping machine." G002346 (emphasis added). That statement required USHIP specifically to indicate in the claim any step that could be performed by hand, *i.e.*, any step where the machine did not have the exclusive role. *See Ventana Med. Sys., Inc*. v. *Biogenex Labs., Inc*., 473 F.3d 1173, 1182 (Fed. Cir. 2006) ("[W]e examine the patent's prosecution history, when placed in evidence, to determine whether the inventor disclaimed a particular interpretation of a claim term during the prosecution of a patent in suit or during the prosecution of an ancestor application."). Therefore, USHIP's response to an election requirement for the '799 patent gave rise to patent prosecution history estoppel of the '220 patent.

Claim 1 in the '220 patent indicates a "by hand" method by claiming "an attendant of said customer storing a validated parcel." A64 ('220 patent, col. 30, l. 30); *see also* G002345 (When prosecuting the '799 patent, USHIP amended independent claim 72, which was later canceled, (G002713) and added "an attendant or said customer" before the "storing" step.). This amendment replaced the application of the preamble phrase "automated shipping machine." The other steps of claim 1 in the '220 patent, however, do not reference "an attendant" or any similar "by hand" terminology. A64 ('220 patent, col. 30, ll. 2-31).

Although USHIP is correct that one of the four embodiments in the '220 specification indicates that a "clerk" may play some role in "validation," (A62 ('220 patent, col. 25, ll. 8-12)), in light of the clear intent of the applicant in claiming the invention, these embodiments do not define the scope of the claim. *See Phillips*, 415 F.3d at 1323 (explaining that "although the specification often describes very specific embodiments of the invention, [the court] ha[s] repeatedly warned against confining the claims to those embodiments"); *see also Nazomi Communications, Inc.* v. *ARM Holdings, PLC*, 403 F.3d 1364, 1369 (Fed. Cir. 2005) (explaining that when looking at possible embodiments to conduct claim construction "the court may conclude that the scope of the various claims may differ, some embracing different subject matter than is illustrated in the specific embodiments in the specification").

For these reasons, the court has determined that, after reviewing the entire specification and claim 1 of the '220 and '014 patents, a person of ordinary skill in the art would understand that "validation" means "determining that the item being received for storage or shipment is the item for which a label has been printed," and that only an automated machine can perform this function.

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applicant intended for each specific step to be performed by a machine, unless otherwise indicated. Because some of the steps indicate that they are performed by "an attendant," however, the applicant clearly did not intend that every step be performed by a machine. In contrast, where the applicant did not indicate a "by hand" method, such as "validation," the prosecution history shows that the applicant intended for that specific step to be performed exclusively by a machine.

d. "Storing A Validated Parcel."

The parties have proposed the following competing constructions of "storing a validated parcel or envelope in a secure storage area until said parcel or envelope is subsequently picked up by a commercial delivery person" for the court's consideration for the '014 patent:

'014 Patent		
USHIP's Proposed Construction	**Government's Proposed Construction**	**IBM's Proposed Construction**
storing a validated parcel or envelope in a secure storage area until a commercial delivery person picks up the parcel or envelope	the automated shipping machine stores the validated parcel or envelope in a secure storage area until a commercial delivery person picks up the parcel or envelope	the automated shipping machine stores the validated parcel or envelope in a secure storage area until a commercial delivery person picks up the parcel or envelope

Pl. PH Br. at 46; Gov't PH Br. at 87; IBM PH Br. at 51-52.

The parties have agreed on a joint proposed construction of this limitation for the '220 patent, however, they do not agree on the construction of this limitation as to the '014 patent.

The parties do not agree whether the "storing" step must be performed by a machine or whether it may be performed by an attendant.

i) The Parties' Proposed Constructions.

USHIP argues that the shipping machine in the '014 patent does not always perform the storage step. Pl. PH Br. at 46. USHIP refers to Embodiment Four, wherein either a "retail clerk" or "attendant" performs the storage step, because that embodiment does not have a storage unit. Pl. PH Br. at 46-47 (citing A107 ('014 patent, col. 25, ll. 4-6, 40-47)). *Compare* A78 ('014 patent, Figure 12) (illustrating an outer door 330 that leads to a storage unit within the shipping machine), *with* A90 ('014 patent, Figure 20) (illustrating a storage unit with no outer door 330 that would lead to a storage area). USHIP reminds the court that a construction excluding an embodiment is disfavored, without "highly persuasive evidence." Pl. PH Br. at 47. Likewise, USHIP requests that the court determine that the prosecution history is "unreliable." Pl. PH Br. at 47-48.

The Government argues that the prosecution history establishes that the applicant intended each step of the "storing a validated parcel" must be performed by a machine, unless otherwise stated, and that neither the claim language nor the specification explicitly require that a human must perform "storing a validated parcel" or that storing must be performed by an automated machine. Gov't PH Br. at 88-89. IBM also argues that the "storing of a validated parcel" claim, when read with the preamble and in light of the prosecution history, must be performed by the automated shipping machine. IBM PH Br. at 52-54. As the differences

between the ‘220 patent and the ‘014 patent show, when the applicant wanted to allow a person to perform the storage step, the claim language specifically stated so. IBM PH Br. at 53. In addition, the specification describes “a method . . . implemented by an automated shipping machine including . . . a secure storage area.” IBM PH Br. at 53 (citing A96 (‘014 patent, col. 3, ll. 5-36)).

ii) The Court’s Construction.

Again, the court’s analysis begins with the language of the claim and any clear assertions made during prosecution history to determine what the applicant intended to claim, instead of limiting the inquiry to the embodiments. *See Phillips,* 415 F.3d at 1323 (warning against confining claims to the embodiments); *see also Nazomi Communications*, 403 F.3d at 1369 (explaining that the scope of the claims may “embrac[e] different subject matter than is illustrated in the specific embodiments in the specification”); *Southwall Tech.* v. *Cardinal IG Co.*, 54 F.3d 1570, 1583 (Fed. Cir. 1995) (“Clear assertions made during prosecution in support of patentability, whether or not actually required to secure allowance of the claim, may also create an estoppel.”).

Claim 1 of the ‘014 patent recites the term “storing a validated parcel” only once. A109 (‘014 patent, col. 30, l. 28). The prosecution history requires that the “storing a validated parcel” step be performed by the automated shipping machine, unless otherwise indicated. In the ‘220 patent, the patentee added language to signify that the storing was done by hand, *i.e.*, “an attendant of said customer storing,” but in the ‘014 patent the patentee *chose* not to add such language. As such, the inclusion of “using an automated shipping machine” in the preamble and the decision not to include “an attendant” in the claim, coupled with the patentee’s statements during prosecution, establish a clear intent to limit the claims of the ‘014 patent to those embodiments in which the “storing” function is performed by the automated shipping machine.

For these reasons, the court has determined that, after reading the entire specification and claim 1 of the ‘220 and ‘014 patents, a person of ordinary skill in the art would understand that “storing a validated parcel” is a function to be performed by the automated shipping machine, not a human.

V. CONCLUSION.

For the reasons discussed herein, the court has determined that the disputed claims are to be construed, pursuant to this Memorandum Opinion and Order Construing Certain Claims of United States Patent No. 5,481,464, United States Patent No. 5,831,220, and United States Patent No. 6,105,014.

IT IS SO ORDERED.

s/ Susan G. Braden
SUSAN G. BRADEN
Judge

COURT APPENDIX:
THE TERMS OF CERTAIN PATENT CLAIMS AGREED BY THE PARTIES

I. Claims In The '464 Patent.

A. Claim 7, Claim 28, Claim 34 (Preamble): "Automated"

The parties have agreed that "automated" means "automatically controlled by mechanical or electronic devices." Pl. PH Br. at 51; Gov't PH Br. at 18; IBM PH Br. at 18.

B. Claim 7: "Means for receiving credit card information"

The parties have agreed that "means for receiving credit card information" is a means-plus-function limitation, where the function is "to receive credit card information" and the corresponding structure is a "card reader (30, 230)." Pl. PH Br. at 60; Gov't PH Br. at 28; IBM PH Br. at 70.

C. Claim 7, Claim 28: "Means for weighing the item to be shipped"

The parties have agreed that "means for weighing the item to be shipped" is a means-plus-function limitation, where the function is "weighing the item to be shipped" and the corresponding structure is the "electronic scale 22 or 222." Pl. PH Br. at 53; Gov't PH Br. at 22; IBM PH Br. at 65.

D. Claim 7, Claim 28: "Said information storage means including means for displaying a manifest"

The parties have agreed that "said information storage means including means for displaying a manifest" is a means-plus-function limitation, where the function is "displaying a listing of all transactions which pertain to the particular commercial delivery service" and the corresponding structure is a "manifest printer (90, 280)." Pl. PH Br. at 73; Gov't PH Br. at 43; IBM PH Br. at 83.

E. Claim 10: "The integrated, automated, unattended unit of claim 9 wherein said unit includes a pivotable door that serves as a slide when said door is opened, said slide serving to transport the item to a storage area for secure storage."

The parties have agreed that "a pivotable door" means "door for receiving items into the unit that opens and shuts by turning on a pivot." Joint CC Statement at 9; Pl. PH Br. at 75-76; IBM PH Br. at 85.

F. Claim 11: "The integrated, automated, unattended unit of claim 10 wherein said door serves to secure said storage area when said door is opened"

The parties have agreed that "serves to secure said storage area when said door is opened" means "operates to bar access to the storage area through the door opening." Pl. PH Br. at 76; Gov't PH Br. at 48; IBM PH Br. at 87.

G. Claim 12: "The integrated, automated, unattended unit of claim 7 wherein said means for receiving said credit card information comprises a magnetic card reader"

The parties have agreed that "comprises a magnetic card reader" should be construed with its plain meaning "comprises a magnetic card reader." Pl. PH Br. at 76; Gov't PH Br. at 48; IBM PH Br. at 87.

H. Claim 28: "Said means assessing comprising means for printing a hard copy of said account charge for said person"

The parties have agreed that "said means assessing comprising means for printing a hard copy of said account charge for said person" is a means-plus-function limitation, where the function is "printing a hard copy of the account charge for the person" and the corresponding structure is a "printer (26)." Pl. PH Br. at 79; Gov't PH Br. at 51; IBM PH Br. at 90.

II. Claims In The '220 And '014 Patent.

A. Claim 1: "Receiving payment information from a customer"

The parties have agreed that "receiving payment information from a customer" means: "the automated shipping machine obtains data relating to the customer's chosen method of payment." Joint CC Statement at 27-28, 38; Pl. PH Br. 18; Gov't PH Br. at 61; IBM PH Br. at 30, 50.

B. Claim 1: "Receiving package type information identifying a parcel or envelope to be mailed"

The parties have agreed that "receiving package type information identifying a parcel or envelope to be mailed" means: "the automated shipping machine obtains data from the customer indicating the type of parcel or envelope to be shipped, such as a letter, pak, package, or any other package type which may be accepted by the delivery service." Joint PH Br. at 3.

C. Claim 1: "Weighing said parcel or envelope to be mailed"

The parties have agreed that "weighing said parcel or envelope to be mailed" means "the automated shipping machine obtains the weight of the parcel or envelope to be mailed by use of a scale." Pl. PH Br. at 20; Gov't PH Br. at 62; IBM PH Br. at 32, 50.

D. Claim 1: "Receiving shipping information from said customer including at least a destination of said parcel or envelope to be mailed"

The parties have agreed that "receiving shipping information from said customer including at least a destination of said parcel or envelope to be mailed" means: "the automated shipping machine obtains data relating to shipping from the customer including at least the destination of said parcel or envelope to be mailed." Pl. PH Br. at 20; Gov't PH Br. at 63; IBM PH Br. at 32, 50. The parties ***do not*** agree to the definition of "destination." Pl. PH Br. at 20; Gov't PH Br. at 63; IBM PH Br. at 32, 51; *see also* Opinion 56-60.

E. Claim 1: "Receiving an indication of the delivery service option desired by the customer"

The parties have agreed that "receiving an indication of the delivery service option desired by the customer" means: "the automated shipping machine obtains the customer's chosen method of delivery." Pl. PH Br. at 29; Gov't PH Br. at 71; IBM PH Br. at 40, 51.

F. Claim 1: "Printing a shipping receipt for an amount including at least the cost of delivering said parcel or envelope to said destination via the delivery service chosen by said customer"

The parties have agreed that "printing a shipping receipt for an amount including at least the cost of delivering said parcel or envelope to said destination via the delivery service chosen by said customer" means: "the automated shipping machine prints at least the cost of delivering the parcel or envelope to said destination with the customer's chosen method of delivery." Pl. PH Br. at 30; Gov't PH Br. at 72; IBM PH Br. at 41, 51.

III. Claims In The '220 Patent.

A. Claim 1: "An attendant of said customer storing a validated parcel or envelope in a secure storage area until said parcel or envelope is subsequently picked up by a commercial delivery person"

The parties have agreed that "an attendant of said customer storing a validated parcel or envelope in a secure storage area until said parcel or envelope is subsequently picked up by a commercial delivery person" means: "a person assisting the customer stores the validated parcel or envelope in a secure storage area until a commercial delivery person picks up the parcel or envelope." Joint CC Statement at 31; Pl. PH Br. at 46; IBM PH Br. at 50.

B. Claim 1: "Printing a shipping label including at least said destination printed thereon"

The parties have agreed that "printing a shipping label including at least said destination printed thereon" means: "the automated shipping machine prints at least said destination on a shipping label." Pl. PH Br. at 29; Gov't PH Br. at 71; IBM PH Br. at 40. The parties ***do not***

agree on the definition of destination. Pl. PH Br. at 30; Gov't PH Br. at 72; IBM PH Br. at 41; *see also* Opinion at 56-60.

IV. Claims In The '014 Patent.

A. Claim 1: "Printing a tracking bar code label identifying at least said destination"

The parties have agreed that "printing a tracking bar code label identifying at least said destination" means: "the automated shipping machine prints a label including a bar code enabling a delivery service to keep track of a parcel or envelope, the bar code identifying at least said destination." Pl. PH Br. at 30; Gov't PH Br. at 71-72; IBM PH Br. at 51. The parties ***do not*** agree on the definition of destination. Pl. PH Br. at 30; Gov't PH Br. at 72; IBM PH Br. at 51; *see also* Opinion at 56-60.