IN THE UNITED STATES PATENT TRIAL AND APPEAL BOARD

In re *Post-Grant Review* of:	)	
	)	
U.S. Patent No. 6,826,548	)	U.S. Class: 705/401
	)	
Issued: Nov. 30, 2004	)	
	)	
Inventors: Ralph M. HUNGERPILLER Ronald C. CAGLE	)	
	)	
Application No.: 10/057,608	)	
	)	
Filed: Jan. 24, 2002	)	
	)	FILED ELECTRONICALLY
For: SYSTEM AND METHOD FOR PROCESSING RETURN MAIL	)	PER 37 C.F.R. § 42.6(b)(1)
	)	

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Patent Trial and Appeal Board
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PETITION FOR POST-GRANT REVIEW UNDER 35 U.S.C. § 321 AND § 18 OF THE LEAHY-SMITH AMERICA INVENTS ACT

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PETITION FOR POST-GRANT REVIEW UNDER 35 U.S.C. § 321 AND § 18 OF THE LEAHY-SMITH AMERICA INVENTS ACT

Under 35 U.S.C. § 321, § 18 of the Leahy-Smith America Invents Act (AIA), and 37 C.F.R. § 4.300, the United States Postal Service (Petitioner or USPS) requests covered business method patent post-grant review of claims 39-44 of U.S. Patent No. 6,826,548 (the '548 patent, attached as Exhibit 1001), issued to Ralph Mitchell Hungerpiller and Ronald C. Cagle on November 30, 2004, as amended by *Ex parte* Reexamination Certificate No. 7964 (attached as Exhibit 1002) on January 4, 2011, assigned on its face to Return Mail, Inc. (Patent Owner).

I. PRELIMINARY STATEMENT

The '548 patent—which in the applicant's words merely automates the "very labor intensive task of manually updating individual mailing address records"—is the very type of Class 705 business-method patent Congress had in mind when it created covered business method (CBM) post-grant review. The broad relaying data claims are non-statutory (35 U.S.C. § 101), anticipated (35 U.S.C. § 102), and obvious (35 U.S.C. § 103), and were impermissibly broadened during reexamination (35 U.S.C. § 305). Petitioner challenges claims 39–44 of the reexamined '548 on all four of these grounds.

Under the Supreme Court's recent decisions in *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), claims 39-44 recite only non-statutory subject matter. The *Bilski* plurality made

clear that the spread of computers into traditionally non-technological fields of human endeavor is a reason to be vigilant in enforcing the traditional limits of patent-eligibility. 130 S. Ct. at 3229. The plurality further stated that the abstract-ideas exception to Section 101 provides a "useful tool" with which to enforce such limits. *Id.* And in *Mayo*, the Court explained that the elements of a claim must add more than routine, well-understood steps to an unpatentable natural law or abstract idea. 132 S. Ct. at 1298.

Here, the patent applicant stated in the specification that the claimed subject matter was designed merely to avoid human error and reduce the need for manual labor. The claims invoke no specific computer technology and add no meaningful limitations to general computer technology, and preempt using a computer merely to relay data—specifically, mailing address records. Indeed, beyond this abstract concept, the claims merely recite data, electronic transmission, a processor, and a detector, none of which imposes a limitation on the claims' scope sufficient to render them statutory under 35 U.S.C. § 101.

Similarly and for many of the same reasons, the claims are anticipated under 35 U.S.C. § 102 by many preexisting systems, including *Park, 1997 ACS,* and *Uhl*, discussed below. They are likewise obvious under 35 U.S.C. § 103 as merely using commonplace electronic technology, for example, as described by *Uhl*, discussed below, to, in the Patent Owner's own words, make more efficient the long-existing manual update of mailing address records. Finally, the claims that emerged from the

reexamination were impermissibly broader than those of the original claims, and should not have issued. For at least these reasons, claims 39-44 of the '548 patent are unpatentable and should be cancelled.

II. BACKGROUND

A. The '548 Patent

The patent takes a self-admitted preexisting method of updating mail data and adds "conventional," widely known technological expedients, such as telephone lines or software programming on a general-purpose computer. The Patent Owner argues the claimed invention "eliminates the very labor intensive task of manually updating individual mailing address records." Ex. 1015 at 250. It does so using "conventional," widely known preexisting technological expedients, such as electronic data lines—like telephones, communications circuits, or dial-up modems. Ex. 1001 at 3:52-58 (the system "is preferably electronically linked by a data line, which may be any conventional telecommunications data line"). The patent recites contacting a "dial-up server" for data retrieval. Ex. 1001 at Fig. 3. And the specification indicates the disclosed system requires no hardware, and a user may implement the method using software alone. The specification explains: "the present invention can be realized *in software* or a combination of hardware and software." Ex. 1001 at 7:5-10 (emphasis added). The invention may "be embedded in a computer program product" that, "when loaded and executed," i.e., "loaded in a computer system," will "carry out these methods." *Id.* at 7:13-18.

B. Prosecution History

The applicant filed a provisional application, No. 60/263,788, on January 24, 2001. Ex. 1013 at 1. On January 24, 2002, the applicant filed a corresponding non-provisional application, adding substantial subject matter, including figure 3 and the associated detailed description. *See* Ex. 1015 at 1, 3-25. After examination, including a number of amendments, the patent issued on November 30, 2004, Ex. 1001 at 1.

In 2006, the Patent Owner applied for reissue, cancelling the original claims and proposing new claims. Ex. 1016 (Reissue Application 11/605,488, filed Nov. 26, 2006). In 2007, the USPS also requested an *ex parte* reexamination of the patent based on five prior art references, Ex. 1009 at 3-4 (filed Jan. 31, 2007), the most notable reference being the Address Change Service, "Publication 8" (United States Postal Service (USPS), July 1997) (the *1997 ACS* reference). Ex. 1009 at 4. The PTO granted the reexamination request, *id.* at 78, and merged the two proceedings, *id.* at 102 (merged on June 1, 2007), but later dissolved the merger, Ex. 1016 at 13-16. The Office eventually allowed the reexamined claims on October 27, 2010, and the Reexamination Certificate issued on January 4, 2011. *See* Ex. 1009 at 748, 754. The Patent Owner expressly abandoned the reissue application on April 18, 2011. Ex. 1016 at 3.

III. GROUNDS FOR STANDING

A. At Least One Challenged Claim Is Unpatentable

As further detailed below, claims 39-44 of the '548 patent are unpatentable under one or more of 35 U.S.C. §§ 101, 102, and 103, and should not have been issued during the reexamination under 35 U.S.C. § 305. As set forth below, it is more likely than not that at least one of these claims is unpatentable. 35 U.S.C. § 324(a).

B. The '548 Patent Is a Covered Business Method Patent

1. Claims 39 Recites Covered Business Method

The AIA defines a CBM patent as "a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions." AIA § 18(d)(1); *see also* 37 C.F.R. § 42.301. "[F]inancial product or service" "should be interpreted broadly" to include services complementary to banks, businesses, and sales. Covered Business Method and Technological Invention Definitions Final Rules, 77 Fed. Reg. 48,734, 48,735 (Aug. 14, 2012). The legislative history of Section 18 further confirms that the '548 patent is a CBM patent. According to Senator Schumer, one of the bill's proponents:

> In addition to patents covering a financial product or service, the 'practice, administration and management' language is intended to cover any ancillary activities related to a financial product or service, including . . . *marketing*, *customer interfaces*, Web site management and functionality,

> *transmission or management of data*, servicing, underwriting, *customer communications*, and *back office operations* . . . ."

157 Cong. Rec. S5432 (daily ed. Mar. 8, 2011) (emphases added).

The PTO classified the '548 patent in Class 705, strongly suggesting that it is a CBM patent. *See* Ex. at 1 (U.S. Cl. 705/401). According to the PTO's rules governing CBM, "patents subject to covered business method review are anticipated to be typically classifiable in Class 705." 77 Fed. Reg. at 48,739. The patent specification points to the broad-based nature of the business method at issue here, stating the method refers to "business mail" and is useful to "high volume mail users" including "insurance companies, mortgage and financial companies, and bulk mail advertisers, and credit card companies." *Id.* at 1:20-41.

At a minimum, method claim 39 covers the "practice, administration, and management" of financial services. And the Board consistently institutes CBM review on patented methods and systems *ancillary* to financial services. These include fulfillment software that schools use to schedule substitute teachers,[1] transmitting a

[1] *CRS Advanced Tech. Inc., v. Frontline Tech. Inc.*, CBM2012-00005, Paper 66 (PTAB Jan. 23, 2014).

desired digital video or digital audio signal,[2] and peer-to-peer advertising in mobile communications.[3]

Method claim 39 is broad, abstract, and invalid. It reads:

> 39. A method for processing *returned mail items* sent by *a sender* to *an intended recipient*, the method comprising:
>
> **decoding**, subsequent to mailing of the *returned mail items*, information indicating whether *the sender* wants a corrected address to be provided for the *intended recipient*, on at least one of the *returned mail items*;
>
> **obtaining** an updated address of the *intended recipient* subsequent to determining that *the sender* wants a corrected address to be provided for *the intended recipient*; and
>
> **electronically transmitting** an updated address of the *intended recipient* to a *transferee*, wherein the transferee is *a return mail service provider*.

In *Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co.*, CBM2012-00002, Paper 66 (Jan. 23, 2014), the PTAB affirmed that where *at least one* claim of a patent is directed to a covered business method ("CBM"), the PTAB has statutory authority to institute a CBM review as to *any* claim of that patent. Claim 39 provides a method for easing the administrative burden of finance companies, mortgage companies, and credit card companies by making relaying updated mailing address

[2] *Apple Inc. v. SignSound Tech. LLC*, CBM2013-00020, Paper 14 (PTAB Oct. 15, 2013).

[3] *Groupon, Inc. v. Blue Calypso, LLC*, CBM2013-00033, Paper 9 (PTAB Dec. 19, 2013).

data more cost effective. *See id.*, 1:25-38. The Patent Owner argued "[i]n the present invention, the processing of undeliverable mail items . . . enables the sender to resend items such as bills to its customers . . . ." Ex. 1015 at 250. The specification likewise discusses credit card companies, and indicates that the claimed service can apply across businesses. Indeed, in one particular preferred embodiment described in the patent specification, "the process…is particularly applicable to high volume (bulk) mail users such as credit card companies," but "is also applicable to any mail user who experienced and must deal with quantities of returned mail each month." Ex. 1001 at 2:60-65. Thus, the specification does not limit the field-of-use, and the service is applicable across financial businesses and services, such as credit cards or mortgage services.

2. Claims 39-44 Do Not Claim Any Novel or Unobvious "Technological Invention"

The AIA excludes "patents for technological inventions" from CBM. AIA § 18(d)(1). To determine whether a patent is a technological invention, "the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution." 37 C.F.R. § 42.301.

To institute a CBM post-grant review, a patent need only have *one* claim directed to a CBM, and not a technological invention, even if the patent includes additional claims. 77 Fed. Reg. at 48,736. Because the claims of the '548 patent fail to

define a novel and unobvious technological feature *and* fail to recite a technical solution to a technical problem, the patent is not for a technological invention.

Here, as the prosecution history notes, the claimed invention merely "eliminates the very labor intensive task of manually updating individual mailing address records." Ex. 1015 at 250. Moreover, claims 39-44 recite methods and related systems employing no specific technology, much less any that is novel or unobvious over the prior art. They recite only nominal, generic, long-existing technologies, such as the common telephone, any computer, or any Internet or intranet address or location—none novel or unobvious technological features; all well-known many years before the claimed priority date of the patent.

And none of the patent's six challenged claims recite any specialized technological feature—and some of the claims do not recite any. Claim 39 recites "electronically transmitting," but recites no clear technological feature, and the specification discloses the "obtaining an updated address" step may be accomplished over any "conventional telecommunications data line" linking return mail application server to the address service that provides the updated information. *See* Ex. 1001 at 3:51-57. Claim 40 recites a generic "computer readable medium" in the preamble of the claim—but again, no clear, specialized technological feature. Claim 41 recites a "detector" and "processor" that uses a "computer program," none of which the specification shows are specialized (or in the case of detector and processor, even defined). Claim 42 recites two alternatives—one which involves "electronically

transferring" data and another which involves posting to a "network." Neither alternative is explicitly defined in the specification beyond that any "conventional telecommunications data line" can be used. *See* Ex. 1001 at 3:35–55. Dependent claims 43 and 44 do not recite anything technological to add to claim 42.

Claims 39-44 fail to recite a technical problem solved by a technical solution. According to the patent's Background, one of the problems faced by applicant is "the cost of maintaining a staff to handle return mail, to update company address databases, and the postage expense . . . is substantial," a financial problem, not a technical problem. Ex. 1001 at 1:51-54. Instead, the patent merely makes more cost efficient the process of relaying mailing address data by using conventional telecommunications technology. *See id.* at 3:35-55; Ex. 1015 at 250.

C. Patent Owner Sued Petitioner for Infringement of the '548 Patent

Patent Owner charged Petitioner with infringement of the '548 patent and sued Petitioner's real party-in-interest, the United States, as represented by the Postmaster General for patent infringement. *Return Mail, Inc. (RMI) v. United States*, No. 11-00130 (Fed. Cl. filed Feb. 28, 2011). *See* 35 U.S.C. § 18(a)(1)(B); 37 C.F.R. § 42.302. Neither Petitioner nor Petitioner's real party-in-interest are estopped from challenging the claims on the grounds identified in the petition.

D. Fees Under 37 C.F.R. § 42.15(b)

The required fees are submitted herewith in accordance with 35 U.S.C. § 321(a)(1) and 37 C.F.R. §§ 42.15(b)(1)-(4) and 42.203(a). If any additional fees are

due at any time during this proceeding, Petitioner authorizes the PTO to charge them to Deposit Account No. 06-0916.

IV. MANDATORY NOTICES

A. Real Party-In-Interest

The real parties-in-interest are: (i) Petitioner, the United States Postal Service (USPS), an independent establishment of the executive branch of the Government of the United States; and (ii) the United States of America, as represented by the Postmaster General.

Agencies and branches of the U.S. government are eligible to participate in Board review, have so participated, and the Board has instituted trial on government-related petitions. *See, e.g.*, *Int'l Flavors & Fragrances Inc. v. U.S. Dep't of Agriculture*, IPR2013-00124, Paper 6 (June 27, 2013). Moreover, the Board has instituted on claims related to litigants before the Court of Federal Claims. *See, e.g.*, *BAE Sys. v. Cheetah Omni, LLC*, IPR2013-00175, Paper 15 (July 3, 2013) (related to *Cheetah Omni, LLC v. United States*, No. 1:11-cv-00255-FMA (Fed. Cl. stayed June 7, 2013)).

B. Related Matters

The Patent Owner has sued real-party-in-interest the United States, as represented by the Postmaster General, alleging infringement of the '548 patent. *Return Mail, Inc. v. USA*, No. 11-00130 (Fed. Cl. filed Feb. 28, 2011).

C. Lead and Back-up Counsel Service Information

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Petitioner consents to electronic service.

V. STATEMENT OF PRECISE RELIEF REQUESTED FOR EACH CLAIM CHALLENGED

A. Claims on Which Petitioner Requests Review

Petitioner requests review of claims 39-44 of the reexamined '548 patent. Ex. 1001; Ex. 1002.

B. Grounds of Challenge Under 35 U.S.C. § 282(b)(2), (3) & 35 U.S.C. § 324(b)

All of the claims, claims 39-44, of the reexamined '548 patent are challenged under 35 U.S.C. §§ 101, 102, and 103 based on 35 U.S.C. § 282(b)(2) and (3).

All of the claims, claims 39-44, of the reexamined '548 patent are challenged under 35 U.S.C. § 305 based on 35 U.S.C. § 324(b). Under section 324(b), the Board may institute when there is a showing that the petition raises a novel or unsettled legal question that is important to other patents or patent applications. *See also* 37 C.F.R. § 42.208(d). Whether claims that were issued in contravention of § 305 can be

challenged during a Covered Business Method Post Grant review presents such a novel or unsettled legal question.

C. Claim Construction

The Board gives unexpired claims the broadest reasonable construction in light of the specification. 37 C.F.R. § 42.300(b); *see In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984). Even where a district court has previously construed the claims using a different standard, the Board will nevertheless apply the "broadest reasonable interpretation (BRI)." 37 C.F.R. § 42.300(b). The '548 patent has not expired, and thus the Board should give the claims the BRI in light of the specification—and thus, a broader construction than the Court of Federal Claims applied.[4]

The challenged '548 claims require no computer hardware. Claim 39 recites only an "electronically transmitting" step, but no specific machine or transformation. Indeed, the specification confirms that the "system of the present invention can be realized *in software* or a combination of hardware and software." Ex. 1001 7:5-10 (emphasis added). It may "be embedded in a computer program product" that, "when loaded and executed," i.e., "loaded in a computer system," will "carry out these

[4] Petitioner attaches copies of the claim construction order and opinion from the Court of Federal Claims as Exhibit 1011. This petition deserves institution even if the Board applies the court's narrower claim construction.

methods." *Id.* at 7:15-18. Thus, the Board should construe the terms in the claims as requiring no hardware.

The following terms require construction:

1. "decode", "decoding", "decoded information", and "decoded data"

The BRI of "decode" and "decoding" is "to convert into intelligible form." *See* Ex. 1010 at 299 (dictionary definition of "decode" as "to convert (as a coded message) into intelligible form"). Ex. 1008 at ¶ 75 (postal carriers converting endorsements into laymen terms).

The BRI of "decoded information" and "decoded data" is "information" that is "converted into intelligible form." *Id.* In the specification, "data" and "information" are interchangeable. *See* Ex. 1001 at 2:7-11 ("The return mail provider service provider captures the *data* from the returned items and apply its special expertise in obtaining corrected address *information*") (emphases added). Based on his experience, Dr. Lubenow agrees with this construction. Ex. 1008 at ¶ 70.

2. "encode", "encoding", "encoded information", and "encoded data"

The BRI of "encode" and "encoding" is to "convert information from one system of communication into another." *See* Ex. 1010 at 380 (dictionary defining encode as "to convert (as information) from one system of communication into another").

The BRI of "encode information" and "encoded data" is "information" that is "converted from one system of communication into another." *Id.* For instance, ZIP

codes and address numbers are encoded. Dr. Lubenow agrees with this definition, because mailers place encoded information on their mailpieces to indicate information to postal carriers. Ex. 1008 at ¶ 67.

3. "returned mail items" and "mail items returned"

The BRI of "returned mail items" and "mail items returned" is "mail subject to being sent back." *See* Ex. 1010 at 999 (defining "return" as "a means for conveying something . . . back to its starting point" and "the act of returning something to a former place, condition, or ownership"). And this interpretation is consistent with the specification, which describes that "a certain percentage of the items that are mailed each month by these businesses are returned to the sender . . ." due to "incomplete addresses," "local changes in addresses" and "changes [of] names through marriage or otherwise". *See, e.g.*, Ex. 1001 at 1:29-38;

4. "return mail service provider"

The BRI of "return mail service provider" is any mail-processing organization or individual that process return mail items. The specification supports this construction. *See, e.g.,* Ex. 1001 at 1:38-43 ("Many businesses mail thousands or even millions of pieces of mail each month . . . . It is not uncommon for such high volume users to retain staff of several employees whose job it is to receive return mail, manually research the reasons for the unsuccessful delivery, obtain, where possible, the corrected addressing information for the intended recipient.").

5. "detector", "processor", and "network"

The BRI of "detector" is "one that detects." *See* Ex. 1010 at 314 (defining "detection" as "the act of detecting" and "detect" as "to discover or determine the existence, presence, or fact of"). The specification does not define "detector" or "detect" but does note that the mail is "optically scanned." Ex. 1001 at 2:18-20. As Dr. Lubenow explains, postal workers and others regularly act as detectors and have "since long before this patent was filed." Ex. 1008 at ¶¶ 19, 40.

The BRI of "processor" is a "one that processes." *See* Ex. 1010 at 927; Ex. 1001 at cl. 32 (in the only use of the word in the specification, claiming a "processor for operation of a computer program"). As Dr. Lubenow states, nothing in the field or in his experience suggests this means anything but a general-purpose processor, and could even be performed without a computer—i.e., an employee manually processing data. *See* Ex. 1008 at ¶ 19 ("a processor is something that can process data, such as the preexisting mail-processing centers and employees described."); *id.* at ¶ 69 ("people and organizations were often called 'processors' as were computers and computer programs (such as 'word processors')").

The BRI of "network" is "an interconnected system." *See* Ex. 1010 at 778 ("an interconnected or interrelated chain, group, or system"); Ex. 1001 at 6:25-28 (in the only use of the word in the original specification, using it as the adjective "network accessible" for "data processing operations."). In this context of the art, Dr. Lubenow confirms that "posting to a network or transmitting data across a network, whether a

phone, internet, telegraph, or mail-center network, was well-known in the mail industry before January 24, 2001." Ex. 1008 at ¶ 16.

6. "posting"

The BRI of "posting" is "making available." Ex. 1010 at 907 (defining post as "to publish, announce, or advertise by or as if by use of a placard"); Ex. 1008 at ¶ 75 ("posting to a network or transmitting data across a network" was known at the time in the industry).

"Posting" does not require any physical transformation, but rather represents steps of manipulating data. The Patent Owner, during prosecution, specifically disclaimed requiring any physical transformation, arguing none was needed to survive the *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* decision, 149 F.3d 1368 (Fed. Cir. 1998). Ex. 1009 at 250.

VI. CLAIMS 39-44 OF THE '548 PATENT RECITE ONLY NON-STATUTORY SUBJECT MATTER

The Supreme Court has held that laws of nature, abstract ideas, and natural phenomena cannot be patented. *Mayo*, 132 S. Ct. at 1293. When a patent attempts to claim an abstract idea, like the idea of relaying mailing address data at the core of the '548 patent, it must add "significantly more" to be patent-eligible. *Id.* at 1294; *Parker v. Flook*, 437 U.S. 584, 593-94 (1978). It is not sufficient to limit the claim to "a particular technological environment" or to add "insignificant postsolution activity." *Bilski*, 130 S.Ct. at 3230; *Mayo*, 132 S. Ct. at 1294. Instead, a claim to an abstract method must

contain "other elements or a combination of elements, sometimes referred to as the 'inventive concept,'" sufficient to prevent the patenting of the underlying concept itself. *Mayo*, 132 S. Ct. at 1294; *see also Flook*, 437 U.S. at 594. Another way a claim may recite "significantly more" than an abstract idea is to be "tied to a particular machine or apparatus" or "transform a particular article into a different state or thing." *Bilski*, 130 S. Ct. at 3225-27. Claim 39, for example, is broad, abstract, and invalid requiring only three steps: decoding data, obtaining data, and electronically transmitting data. As explained herein, claims 39-44 fail to satisfy 35 U.S.C. § 101.

During prosecution of the original patent, the Patent Owner relied heavily on *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), arguing that *State Street* removed the requirements "for a physical transformation" and "that claims describe some sort of physical limitations" and thus the claimed "electrically transmitting" data step overcame any § 101 problem. Ex. 1015 at 250. The original and the reexamination claims of the '548 patent issued before the Supreme Court decided *Bilski* and before CBM review.

Since then, as indicated during Senate debate of the CBM provision:

> In its [*State Street Bank*] decision, the Federal Circuit greatly broadened the patenting of business methods. Recent court decisions . . . have sharply pulled back on the patenting of business methods, emphasizing that these "inventions" are too abstract to be patentable. In the intervening years, however, PTO was forced to issue a large number of business-method

> patents, many or possibly all of which are no longer valid. [CBM review] offers a relatively cheap alternative to civil litigation for challenging these patents, and will reduce the burden on the courts of dealing with the backwash of invalid business-method patents.

157 Cong. Rec. S1367 (Mar. 8, 2011) (statement of Sen. Kyl). This patent exemplifies the type of patent Senator John Kyl described that day—one perhaps patent-eligible under an earlier application of *State Street*, but now unpatentable in light of more recent Supreme Court decisions.

A. Claim 39 Is Unpatentable Under 35 U.S.C. § 101

1. Claim 39 Recites an Abstract Idea with Only Insignificant Extra-Solution Technology

Claim 39 recites the abstract idea of relaying mailing address data. The electronic transmission step of claim 39 uses conventional existing telecommunications data lines—a phone, communications circuits, or dial-up modems—to relay this mailing address data. Since *Bilski*, over a dozen precedential § 101 cases have issued. *See, e.g., Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333-34 (Fed. Cir. 2012) (holding the use of a method with a "computer-aided" preamble for "receiving," "forwarding," and "sending" credit application data invalid, as it merely "cover[ed] a clearinghouse process using any existing or future-devised machinery."); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011)(invalidating a patented "method and system for detecting fraud in a credit card transaction between [a] consumer and a merchant over the Internet" because it only

used the Internet as an expedient). "Electronically transmitting" by conventional existing telecommunications data lines adds nothing integral, meaningful, or patentable to the abstract idea of relaying mailing address data. Ex. 1001 at 3:50-55 (the system "is preferably electronically linked by a data line, which may be any conventional telecommunications data line"); Ex. 1008 at ¶ 15. The claims of the '548 patent are no different from those in *Dealertrack* and *CyberSource*. Thus, the claims are unpatentable under § 101.

The Board has held that if the addition of generic technology only increases efficiency and reduces error, the claims are ineligible under § 101. *See CRS Adv. Techs.* CBM2012-00005, Paper 66 at 14. Here, the claimed subject matter is admittedly to avoid "[t]he likelihood of human error in researching and updating addresses." Ex. 1001 at 7:1-4. The method thus makes it "more reliable" and maintainable. *Id.* at 7:5-10.

Accordingly, the generic language "electronic transmission" in the challenged claim does not impart patentability. Claim 39 recites only an abstract idea—a method of relaying mailing address data—with routine conventional generic technology added. The Supreme Court has said it is not enough to satisfy § 101. *Mayo*, 132 S. Ct. at 1293-94.

2. Claim 39 Fails the Machine-or-Transformation Test

Method claim 39 is also invalid under § 101 because it is not tied to any particular machine and does not transform any article into a different state or thing.

Claim 39 recites only an abstract idea, generically "decoding" the customer's wishes coupled with "obtaining" the mailing address data, and relaying the mailing address data by "electronically transmitting" the mailing address data. The specification states that this transmitting may occur over "conventional telecommunications data line," but provides no further details. *See* Ex. 1001 at 3:51-57. *See* Ex. 1008 at ¶ 12, 13.

As the Board recently noted, adding a step of electronic transmission, specifically "receiving via *at least one communication link* absentee information," adds only generic computer technology. *CRS Adv. Techs,* CBM2012-00005, Paper 66, at 13 (PTAB 2014). In *CRS v. Frontline*, the Patent Owner argued that a specifically claimed "Internet communication link" and "website" were sufficiently detailed to save the claim under § 101. Disagreeing, the Board found "these additions of generic computer technology to be more akin to the addition of 'computer-aided' claim limitations covering electronic networks in *Dealertrack*, and the additions of 'transaction database' and 'transmitting information' to the claims of *Accenture*." *Id.*; *Dealertrack*, 674 F.3d 1315. Claim 39's "electronically transmitting" by "conventional telecommunications data line" is akin to the step of "receiving via *at least one communication link* absentee information" in *CRS* and therefore not integral to the claimed subject matter.

Moreover, claim 39 also does not transform any article into a different state or thing. No article is transformed by the steps recited in this claim. In particular, claim 39 determines if the sender wants a corrected address, obtains that address, and relays

it to the sender. Manipulating information fails to satisfy the transformation prong of the machine-or-transformation test. *See Bancorp,* 687 F.3d at 1273. In similar situations, the Federal Circuit not only invalidated claims to "processing information through a clearinghouse" but also invalidated claims to "mere collection and organization of data." *Dealertrack,* 674 F.3d at 1333; *see also CyberSource*, 654 F.3d at 1370. In sum, claim 39 deals with, at best, generic computer technology and does not transform any article, and thus it fails to pass muster under § 101. Ex. 1008 at ¶ 14, 15.

B. Computer-Readable Medium Claim 40 Embodies Claim 39 and Is Thus Likewise Unpatentable

The Federal Circuit has held that *Beauregard* claiming will not save otherwise unpatentable abstract methods. For example, in *CyberSource*, the Federal Circuit found that CyberSource had not demonstrated the claim in question was "truly drawn to a specific" computer readable medium, rather than "to the underlying method of credit card fraud detection." *Id.* Similarly, in *Dealertrack*, the Federal Circuit held that apparatus claims directed to a "computer readable medium" that simply transcribed, applied, or embodied an abstract method claim would not render the claim patentable. *Dealertrack*, 674 F.3d 1315.

At the core of claim 40 is the same abstract idea—relaying address data—as claim 39. Here, claim 40 differs from claim 39 in substance only in that it includes a "storing" step for storing information. And the Federal Circuit found similar computer-readable medium claims with storing steps invalid in *Bancorp*. 687 F.3d

1266, 1277 (Fed. Cir. 2012) ("Claim 9 includes 'storing the policy unit value,' whereas claim 1 includes 'digital storage for storing the policy unit value.' And so on. The only difference between the claims is the form in which they were drafted. The district court correctly treated the system and method claims at issue in this case as equivalent for purposes of patent eligibility under § 101.").

Thus the Board should find claim 40 also fails to meet § 101.

C. System Claim 41 Parrots Claim 39 and Is Thus Likewise Invalid

Claim 41 recites a two-element system claim comprising a detector and a processor, where the processor's recited "instructions" perform the same method of claim 39, with the addition of an "encoding" step. Ex. 1001, cl. 41.

In *Accenture*, the Federal Circuit reiterated: "system claims that closely track method claims and are grounded by the same meaningful limitations will generally rise and fall together." 728 F.3d at 1341. Likewise, in *Bancorp*, the Federal Circuit reiterated the irrelevancy of the claim's form—system, apparatus, and method claims stand or fall on the same patent-eligibility analysis. The court found that "the format of the various method, system, and media claims asserted [] 'd[id] not change the patent eligibility analysis under § 101.'" *Bancorp,* 687 F.3d at 1276-77 (citation omitted). "[A] machine, system, medium, or the like may in some cases be equivalent to an abstract mental process for the purposes of patent ineligibility." *Id.* at 1277.

The same is true here. The claim requires a detector and processor only. Including a detector or processor will not, without more, save the claims. *See* Ex. 1008

at ¶¶ 12-20. The claims require only a generic detector or processor capable of performing the steps of method claim 39. Masking the abstract method in a system claims will not suffice—the form does not change the analysis under § 101. Thus, claim 41 is likewise unpatentable.

As noted above, the term "detector" here is broad enough to encompass all forms of optical scanning, including by a person. "Detector" is clearly broader than "scanner," Ex. 1008 at ¶ 18, and the claim limits it only to detecting encoded information, such as a ZIP code. As noted here and elsewhere, postal employees have been encoding and decoding ZIP codes since 1963, as well as deciphering hard-to-read or close-but-inaccurate addresses as long as there has been mail. Ex. 1008 at ¶ 29. Thus, a "processor" and a "detector" add nothing conferring subject-matter eligibility and claim 41 must rise and fall with method claims 39 and 42. Yet, even if the patent requires the inclusion of a particular detector, decoder, or computer, the claim remains nonstatutory. In other words, claim 41, even with the recitation of technology components, "recite technology components that are simply examples of well-known, generic computing technology being asked to do their generic function without any specified constraints, and without being a part of any technological advance used to implement an abstract idea unrelated to that technology." *CRS Adv. Techs,* CBM2012-00005, Paper 66, at 15 (PTAB 2014).

The Board has held decoding technology nonstatutory as well. *Ex parte Ramanujam*, No. 2009-002483, 2010 WL 3214559, at 4 (BPAI Aug. 12, 2010) (rejecting

claims under § 101 to an apparatus comprising "a destination storage location," a "functional unit" consisting of packets, a "decoder" and an "architectural register."). Thus, a detector (or even a scanner) or a decoding step add nothing to the claim; it remains nonstatutory.

D. Claim 42 Adds Only Conventional Non-Technological Steps

Method claim 42 tracks claim 39, but adds in the alternative "posting" step, as well as a creating output data step. Ex. 1001, cl. 42. These steps are alternative, conventional, non-technological steps that simply ensnare the abstract business process of relaying mailing address data.

Consider a situation in which a volunteer is acting as a return-mail-service provider for a small business, which sends a monthly newsletter. The volunteer would be in charge of processing returned mail items. The volunteer could practice the "creating output data" step by simply writing down or remembering the address of a particular customer who has moved. Ex. 1008 at ¶ 24.

Further, claim 42 (1) adds an alternative method to either posting or electronically transferring the information, and (2) mirrors the analysis above for claim 39. Nonetheless, Petitioner analyzes the addition of a "posting" claim for completeness.

Here, the added alternative method step of "posting" does not save claim 42 from the analysis applied to claim 39. Indeed, the Board recently invalidated claims in *CRS Advanced Technologies* directed to "posting," as in "generating and posting by one

or more computers," stating: "This particular technology is employed only for the purposes of creating more efficient communication and data storage—basic functions of those components." *See* CBM2012-00005, Paper 66 at 14. The claimed subject matter of claim 42 is admittedly to avoid "[t]he likelihood of human error in researching and updating addresses." Ex. 1001 7:1-4. It "eliminates the very labor intensive task of manually updating individual mailing address records." Ex. 1015 at 250. The method thus makes it "more reliable" and maintainable. Ex. 1001 7:5-10. It is similar to the claims invalidated in CRS.

And referencing a "network" alone is not sufficient. See *Dealertrack*, 674 F.3d at 1317 (invalidating patent claims sending information over a "network"); *Ex parte Harris*, No. 2007-0325 (BPAI Jan. 13, 2009) (holding a method of conducting an auction over a network nonstatutory). Here, posting mail address data to a network is also unpatentable.

Thus, claiming an abstract method with a "posting" step and a "network" adds nothing to the claims. Method claim 42 is unpatentable under § 101 as claiming nothing more than an abstract idea.

E. Dependent Claims 43 and 44 Add Nothing Patent-Eligible

The remaining claims—claims 43 and 44—depend from the independent claims addressed above. Claims 43 adds "further comprising transmitting the name and address of the intended recipients to a mailing address service provider, subsequent to the determining step, in order to obtain an updated address for each

intended recipient of an undeliverable mail item." Ex. 1001, cl. 43. Claim 44 merely adds "wherein the encoded data further indicates a name and address of the intended recipient." *Id.* at cl. 44.

Neither of these claims adds non-generic technological limitations—they add merely a "transmitting" step transferring data and a generic definition of "encoded data" to include "a name and address of the intended recipient." See also *Ex parte Rigoutsos*, No. 2009-010520 (BPAI Feb. 7, 2012) (invalidating patent under § 101 of "method for annotating a query sequence" including "accessing," "assigning," and "using" the data "to analyze" a problem); *Ex parte Edelson*, No. 2011-004285 (B.P.A.I. Feb 6, 2012) (invalidating a patent under § 101 to a "computer implemented method" for creating asset-backed derivatives).

As above, both add nothing patentable to an otherwise-abstract method patent.

VII. CLAIMS 39-44 ARE UNPATENTABLE UNDER § 102 AND § 103

A. Claims 39-44 Are Not Entitled to any Priority Date Earlier Than January 24, 2002

The priority date of the claims is important because Korean Patent No. 2000-003860 ("*Park*"), filed January 27, 2000, and U.S. Patent No. 7,778,840 ("*Krause*"), filed April 23, 2001, claiming priority to a provisional application filed April 21, 2000, anticipate or render obvious claims 39-44 if they are not entitled to any priority date earlier than the January 24, 2002, filing date of the nonprovisional application leading to the '548 patent.

The Board has the authority to determine whether a patent is entitled to an earlier priority date in post-grant proceedings. *See In re NTP, Inc.,* 654 F.3d 1268, 1277 (Fed. Cir. 2011). A claim of priority under 35 U.S.C. § 119(e) requires that the provisional application "provide written description support for the claimed invention" as defined in 35 U.S.C. § 112 ¶ 1. *In re Giacomini*, 612 F.3d 1380, 1383 (Fed. Cir. 2010). The applicant does not possess what might have been obvious in view of the specification. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). "A showing of 'possession' is ancillary to the *statutory* mandate that '[t]he specification shall contain a written description of the invention,' and that requirement is not met if, despite a showing of possession, the specification does not adequately describe the claimed invention." *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 696 (Fed. Cir. 2002).

Here, the provisional application fails to disclose or support at least:

- "*determining that the sender wants a corrected address* to be provided for the intended recipient," as recited in claim 39;
- "a processor that uses a computer program comprising instructions that cause the system to . . . *determin[e] from the decoded data that the customer wants a corrected address* to be provided for at least one of the plurality of undeliverable mail items," as recited in claim 40;

- "*determining if the sender wants a corrected address to be provided*," as recited in claim 41; and
- "*determining if the sender wants a corrected address provided* for the intended recipients based on the decoded data," as recited in claim 42 (emphases added).

The Patent Owner states that support for these elements can be found at "column 4, line 34-column 5, line 13 and Figures 2 and 3" of the non-provisional application. Ex. 1009 at 594 (Response to Office Action, Feb. 17, 2010, at 38). But the provisional application is silent on this subject matter. Ex. 1017. Further, none of the other documents that make up the provisional application disclose or support the above elements. The Patent Owner added support for the "determining" steps when filing the nonprovisional application. *See* Ex. 1001. Figure 3 and the accompanying description are not disclosed in the provisional application. Ex. 1017. The provisional application only discloses that "[o]nce the corrected up-to-date data base is created for the returned mail of a subscriber . . . the updated files are then transferred electronically to the subscriber's computer." Ex. 1013 at p. 6; *see also* Ex. 1008 at ¶¶ 32-35. The disclosed "transmitting" is not done after a determination that the sender wants a corrected address; in fact, the transmitting is not done after any determination. No support exists for determining whether a sender wants or does not

want a corrected address provided. Therefore, claims 39-42 cannot claim benefit to the priority date of the provisional application.

Moreover, the provisional application does not provide support for at least "if the sender does not want a corrected address provided, *posting return mail data records on a network that is accessible to the sender to enable the sender to access the records*," as recited in claim 42 (emphasis added). The provisional application is silent with respect to this "posting" step. As a result, claim 42 cannot properly claim benefit to the priority date of the provisional application. Likewise, dependent claims 43 and 44 do not find support in the provisional application.

Because features of claims 39-44 are not supported by the provisional application, the proper priority date of claims 39-44 is no earlier than the filing date of the nonprovisional application, January 24, 2002. As a result, *Park*, filed January 27, 2000, and *Krause*, filed April 23, 2001, are § 102(a) prior art.

B. The Patent Owner Admits that Many Features of Claims 39-44 Were Known in the Prior Art

The Patent Owner admits that many features of claims 39-44 were well known in the prior art. For example, the '548 patent background discloses "processing of mail that is returned" and "manually research[ing] the reasons for the unsuccessful delivery". Ex. 1001 at 1:39-47. Further, the '548 patent background discloses "obtain[ing], where possible, the correct addressing information for the intended recipient". *Id.* "Even with the availability of address updating services to aid in

researching for the correct address, the process is substantially a manual one . . . ." *Id.* at 1:47-50. The '548 patent discusses merely automating the manual process. The Patent Owner acknowledges the claimed "obtaining an updated address of the intended recipient" and the claimed "electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider" are part of the then-existing USPS system. Ex. 1001 at 4:63-5:2. "If a determination is made in decision block 302 that the sender wants to have a corrected addresses provided for the intended recipients, then the return mail application server then sends the returned mail data records to an address update service bureau, such as the USPS [National Change of Address] correction databases[.]" *Id.*

Thus, "processing returned mail items sent by a sender to an intended recipient", "obtaining an updated address of the intended recipient", and "electronically transmitting an updated address of the intended recipient to a transferee" are all well-known techniques in the prior art.

C. Level of Ordinary Skill in the Art

A person having ordinary skill in the relevant art in January of 2001 (i.e., when the provisional application leading to the '548 patent was filed) would have either a Bachelor of Science in systems management, or at least two years of work experience in the mail-data-sorting-systems field. *See* Ex. 1008 at ¶ 28. The person having ordinary skill in the relevant art in January of 2001 would find claims 39-44 obvious/anticipated and thus a person having ordinary skill in the relevant art in

January of 2002 (i.e., when the nonprovisional application was filed) would also find the claims 39-44 obvious/anticipated because, if anything they have access to later prior art.

D. *Park* Anticipates Claims 39-44

As discussed in Section VII.A, the '548 patent attempts to claim priority to a provisional application filed on January 24, 2001, but it is not entitled to a priority date any earlier than the January 24, 2002, filing date of the nonprovisional application. As a result, *Park*, filed January 27, 2000, is prior art under U.S.C. § 102(a). As explained below, claims 39-44 are unpatentable under U.S.C. § 102 over *Park*.

Park discloses a postal processing system and method. Ex. 1003 at 3. "If mail is returned due to incorrect recipient information, [the return mail processing system] reads the customer barcode information and generates the sender's postal information . . . ." *Id.* at 4. "[A]t the same time [the return mail processing system] provides information to prevent re-shipping by notifying the sender of the return information" and "electronically transmitting an updated address" *Id.* at 4. Diagram 2 of *Park* discloses a label and postal envelope including at least the "postal address, company name, person's name, postal code, and barcode printing information." *Id.* at p. 12. The barcode includes, for example, a service category code, postal code, delivery priority code, customer ID, mail ID, recipient name, and parity bits. *Id.*

1. *Park* Anticipates Claim 39

Claim 39	Korean Patent No. 2000-003860 ("*Park*")

39. [39.0] A method for processing returned mail items sent by a sender to an intended recipient, the method comprising:	As discussed in section VII.C, the BRI of "returned mail items" is "mail subject to being sent back." *Park* discloses processing returned mail items by disclosing "[t]his invention as described provides a method of . . . processing returned mail efficiently, allowing productivity improvement of postal processing . . . ." Ex. 1003 at 2. See also *id.* at Diagram 1 item 150. *Park* discloses that "in the case of bulk mail, which is sent to multiple recipients by a single sender" (the claimed "sent by a sender to an intended recipient"). *Id.* at 3.
[39.1] decoding, subsequent to mailing of the returned mail items, information indicating whether the sender wants a corrected address to be provided for the intended recipient, on at least one of the returned mail items;	As discussed in section VII.C, the BRI of "decoding" is "to convert into intelligible form." *Park* discloses "a barcode reader and sorter (123) reads the customer barcode." Ex. 1003 at 6. In doing so, the barcode reader converts the customer barcode into intelligible form, thereby performing the claimed "decoding."[5] Ex. 1008 at ¶ 97. *Park* "uses the outcome of reading postal code, delivery priority code, recipient name among barcode information to search the customer information/postal information database, to check to see if the corresponding recipient is included in the return mail list," (the claimed "information indicating whether the sender wants a corrected address"). Ex. 1003 at 6. The customer information/postal information database indicates the sender wants corrected address provided for the intended recipients. Ex. 1008 at ¶ 97. *Park* discloses the decoding step is done after mailing. *See* Ex. 1003 at Diagram 1 (return mail (132) feeding into return mail processing system (140)).
[39.2] obtaining an updated address of the intended recipient subsequent to	*Park* discloses "in order to notify the sender of the fact that the mail has not been delivered" certain information is stored in the "delivery information database (143)" and "the notification server (146) sends [the] return mail's

[5] Petitioner notes that by "read[ing] the customer barcode," the reader and sorter also "decipher[s] information into useable form", so *Park* also discloses the claimed "decoding" under the Court's construction of "decoding." Ex. 1011 at 23.

determining that the sender wants a corrected address to be provided for the intended recipient; and	information to the postal service server." Ex. 1003 at 6. "[T]he postal service server (126) and the notification server (146) add or change the return mail's information" (the claimed "obtaining an updated address of the intended recipient"). *Id.* The obtaining is done following the "determining" step. *See* [39.1]. *Park* discloses "[t]his invention enables recording of correct postal information when a customer barcode is printed on the mail by the postal customer . . . ." *Id.* at 1. *Park* discloses "in the case of incorrect recipient information, [the invention] updates and delivers to the correct postal information" (the claimed "updated address"). *Id.* at 3.
[39.3] electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider.	*Park* discloses "return status information" (the claimed "updated address of the intended recipient") that "is sent to senders" (the claimed "transferee, wherein the transferee is a return mail service provider"), "so that subsequent shipping of mail to incorrect addresses and recipients is prevented." Ex. 1003 at 4. See Ex. 1008 at ¶ 50 (senders can be their own return mail service provider). *See also* Ex. 1008 Fig. B; *see also* Ex. 1001 at 1:39-55. *Park* discloses "[t]he postal service server (126) searches for the postal customer ID's e-mail address and sends" (the claimed "electronically transmitting"), "the mail's return status information" (e.g., updated address). *Id.* at 6.

2. *Park* Anticipates Claim 40

Claim 40	Korean Patent No. 2000-003860 ("Park")
40. [40.0] A computer program product residing on a computer readable medium comprising instructions for causing a computer to:	The system in *Park* describes storing the process outcome information on the delivery information database. Ex. 1003 at 6. Further, the "postal service server" (the claimed "computer readable medium comprising instructions"), may directly send processing outcome information to the e-mail address of the bulk mailer's customer server. *Id.* In addition, the system uses barcode scanners and communicates with external customer servers. *Id. See also* Diagram 1 (barcode

	reader/sorter (145) and postal service server (126) connected with customer server (111)). *Id.* at 11. *See* Ex. 1008 at ¶¶ 106-107 (barcode scanners have processors that run computer programs).
[40.1] store decoded information indicating whether a sender wants a corrected address to be provided and a customer number, each associated with at least one of a plurality of mail items returned subsequent to mailing as being undeliverable;	As discussed in section VII.C, the BRI of "decoded information" is "information" that is "recognized and interpreted." *Park* discloses that "a barcode reader and sorter (123) *reads* the customer barcode and uses the *outcome* of reading postal code, delivery priority code, recipient name among barcode information." Ex. 1003 at 6. In doing so, the barcode reader recognizes and interprets the customer barcode, storing the information for further processing (the claimed "store decoded information").[6] The outcome is used "to *search the customer information/postal information database* (124) to check to see if the corresponding recipient is included in the return mail list" (the claimed "information indicating whether the sender wants a corrected address"). *Id.* (emphases added). *Park* discloses "a barcode reader (141) reads the customer barcode of the returned mail" (the claimed, "one of a plurality of mail items returned subsequent to mailing as being undeliverable") and "obtains postal code and delivery priority code corresponding to the *customer ID*" (the claimed "customer number"). *Id.* at 6 (emphasis added).
[40.2] determining from the decoded data	*Park* discloses "us[ing] the outcome" (the claimed "determining"), "of reading postal code, delivery priority

[6] Petitioner notes that by "read[ing] the customer barcode," the reader and sorter also creates "deciphered useable information", so *Park* also discloses the claimed "decoded information" under the Court's construction of "decoded information." Ex. 1011 at 23.

that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items;	code, recipient name among barcode information"[7] (the claimed "decoded data"), "to *search the customer information/postal information database to check to see if the corresponding recipient is included in the return mail list,*" (the claimed "the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items"). Ex. 1003 at 6 (emphases added).
[40.3] receive an updated address of an intended recipient for at least one of the plurality of undeliverable mail items, subsequent to and based upon the determining step; and	*Park* discloses "[w]hen a delivery man inserts returned mail into a delivery center's return mail processing system (140)" certain returned information is obtained (the claimed "at least one of the plurality of undeliverable mail items") and "[w]hen returned information is stored on the delivery information database . . . the notification server (146) sends that returned mail's information to the postal service server" (the claimed "subsequent to and based upon the determining step"), after step [40.2] "the postal service server (126) and the notification server (146) add or change the return mail's information on the customer/postal information database (124) at regular intervals" (the claimed "receive an updated address of an intended recipient"). Ex. 1003 at 6. Further, *Park* discloses "in the case of incorrect recipient information, [the invention] *updates* and delivers to the correct postal information." *Id.* at 3 (emphasis added).
[40.4] transmit the updated address to a transferee, wherein the transferee is a return	As discussed in section VII.C the BRI of "return mail service provider" is "all mail-processing organizations and individuals." *Park* discloses "return status information is sent to senders." In doing so, "return status information is sent

[7] Petitioner notes that "us[ing] the outcome of reading postal code, delivery priority code, recipient name among barcode information" the reader and sorter also creates "deciphered, usable data" under the Court's construction of "decoded data." Ex. 1011 at 23.

mail service provider.	to senders"[8] (the claimed "transmit the updated address to a transferee, wherein the transferee is a return mail service provider"). Ex. 1003 at 4. *See also Lubenow Decl.* Ex. 1008 ¶ 50 (senders can be return mail service providers). *Park* further discloses "the postal service server (126) and the notification server (146) add or change the return mail's information on the customer information/postal information database (124)" (the claimed "updated address"), and "[t]he postal service server (126) searches for the postal customer ID's e-mail address and sends" (the claimed "computer" "transmit[ting]"), "the mail's return status information" (the claimed "updated address"). *Id.* at 6.

3. *Park* Anticipates Claim 41

Claim 41	Korean Patent No. 2000-003860 ("*Park*")
41. [41.0] A system for processing a plurality of undeliverable mail items comprising:	*Park* discloses a system for processing a plurality of undeliverable mail items. *See* Ex. 1003 at Diagram 1 (140).
[41.1] a first detector, wherein the first detector detects, subsequent to mailing the undeliverable mail items, encoded information on at least one of the plurality of undeliverable mail items indicating	As discussed in section VII.C the BRI of "detector" is "one that detects" and "encoded information" is to "convert information from one system of communication into another." *Park* discloses the claimed "one that detects" "encoded information" by "a barcode reader and sorter (123) [that] reads the customer barcode." Ex. 1003 at 6. *Park* discloses "[d]uring process of transporting and delivering mail to its recipient (131), returned mail (132) that needs to be returned due to an unidentified recipient is processed" (the claimed "subsequent to mailing the undeliverable mail

[8] Petitioner notes that the system in *Park* uses "the postal customer ID's e-mail address and sends the mail's return status information" thus is an "entity that performs electronic return mail processing" under the Court's construction of "return mail service provider." Ex. 1011 at 18.

whether a sender wants a corrected address to be provided for at least one of the undeliverable mail items; and	items"). *Id. Park* discloses "us[ing] the outcome of reading postal code, delivery priority code, recipient name among barcode information to search customer/postal information database to check to see if the corresponding recipient is included in the return mail list" (the claimed "indicating whether a sender wants a corrected address to be provided for at least one of the undeliverable mail items"). *Id.* at 6. *See also* Ex. 1008 at ¶¶ 132-38. (the customer/postal information database includes among other things information indicating whether a sender wants a corrected address). *Park* further discloses "delivery men recognize incorrect addresses and return mails." *Id.* at 3.
[41.2] a processor that uses a computer program comprising instructions that cause the system to: i) decode the information indicating whether the sender wants a corrected address to be provided ii) encode and decode intended recipient identification information; and iii) enable an updated address of an intended recipient to be sent to a transferee, wherein the transferee is a return mail service provider.	As discussed in section VII.C the BRI of "processor" is "one that processes." *Park* discloses a system consisting of a "notification server", "postal service server" and a "barcode reader/sorter". Ex. 1003 at 2. Each of these components would contain "a processor that uses a computer program comprising instructions that cause the system to" perform functions." Ex. 1008 at ¶¶ 132-38. The BRI of "decode" is "to recognize and interpret" and "encode" is to "convert information from one system of communication into another." *Park* discloses "a barcode reader and sorter (123) reads the customer barcode." Ex. 1003 at 6. In doing so, the barcode reader recognizes and interprets the customer barcode, thereby performing the claimed "decode."[9] *Park* discloses "[i]f the sender's postal code and delivery priority code are obtained, this [intended recipient identification] information is printed in a barcode (S511) and this is read." *Id.* at 8. In doing so, the barcode printer "convert[s] [intended recipient identification] information from one system of communication into another" and then "recognize and interpret[s]" the barcode. The BRI of "return mail service provider" is "all mail-processing organizations and

[9] Petitioner notes that by "read[ing] the customer barcode," the reader and sorter also "decipher[s] information into useable form", so *Park* also discloses the claimed "decode" under the Court's construction of "decode." Ex. 1011 at 23.

	individuals." *Park* discloses "the postal service server (126) and the notification server (146) add or change the return mail's information on the customer information/postal information database . . . " and "[t]he postal service server (126) searches for the postal customer ID's e-mail address." *Id.* at 6. In doing so, the system "enable[s] an updated address of an intended recipient to be sent" to "all mail-processing organizations and individuals."[10] *Park* discloses "us[ing] the outcome of reading postal code, delivery priority code, recipient name among barcode information to search the customer information/postal information database to check to see if the corresponding recipient is included in the return mail list" (the claimed "information indicating whether the sender wants a corrected address"). *Id.* at 6.

4. *Park* Anticipates Claim 42

Claim 42	Korean Patent No. 2000-003860 ("*Park*")
42. [42.0] A method for processing a plurality of undeliverable mail items, comprising:	*Park* discloses processing a plurality of undeliverable mail items. *See* Ex. 1003 at 3 ("Three billion or more pieces of domestic mail are processed annually").
[42.1] receiving from a sender a plurality of mail items, each including i) a written addressee, and ii) encoded data	*Park* discloses the step of receiving from a sender a plurality of mail items, each including a written addressee, and encoded data indicating whether the sender wants a corrected address to be provided for the addressee. *See* Ex. 1003 at Diagram 2 (Displaying the label and envelope detailing information on the envelope "Postal address,

[10] Petitioner notes that the system in *Park* uses "the postal customer ID's e-mail address and sends the mail's return status information" thus is an "entity that performs electronic return mail processing" under the Court's construction of "return mail service provider." Ex. 1011 at 18.

indicating whether the sender wants a corrected address to be provided for the addressee;	company name, person's name" and information encoded on the barcode indicating whether the sender wants a corrected address to be provided for the addressee).
[42.2] identifying as undeliverable mail items, mail items of the plurality of the plurality mail items that are returned subsequent to mailing as undeliverable;	*Park* discloses that mail may be "returned due to absence of recipient (for example, address change)." Ex. 1003 at 5. Further, *Park* discloses that "a delivery man inserts returned mail item into a delivery center's return mail processing system (140)". *Id.* at 6. (the claimed "identifying as undeliverable mail items, mail items of the plurality of the plurality mail items that are returned subsequent to mailing as undeliverable").
[42.3] decoding the encoded data incorporated in at least one of the undeliverable mail items;	*Park* discloses "a barcode reader and sorter (123) reads the customer barcode" (the claimed "decoding encoded data incorporated in at least one of the undeliverable mail items"). Ex. 1003 at 6.
[42.4] creating output data that includes a customer number of the sender and at least a portion of the decoded data;	*Park* discloses "[s]uch processed mail's information (processed date, time, customer ID, mail queue order, processed location's ID, and return status information) is stored on the delivery information database." Ex. 1003 at 7.
[42.5] determining if the sender wants a corrected address provided for intended recipients based on the decoded data;	*Park* discloses "a barcode reader and sorter (123) reads the customer barcode" (the claimed "decoded data"), and "uses the outcome of reading postal code, delivery priority code, recipient name among barcode information to search the customer information/postal information database (124) to check to see if the corresponding recipient is included in the return mail list" (the claimed "determining if sender wants a corrected address provided for intended recipient based on the decoded data"). Ex. 1003 at 6.
[42.6] if the sender wants a corrected address provided, electronically transferring to the sender information for	*Park* discloses "return status information is sent to senders so that subsequent shipping of mail to incorrect addresses and recipients is prevented" (the claimed "if the sender wants a corrected address provided, electronically transferring to the sender information for the identified intended recipients that enable the sender to update the

the identified intended recipients that enable the sender to update the sender's mailing address files; and	sender's mailing address files"). Ex. 1003 at 4. *Park* further discloses this step is done electronically "the postal service server (126) and the notification server (146) add or change the return mail's information on the customer information/postal information database (124) at regular intervals. The postal service server (126) searches for the postal customer ID's e-mail address and sends the mail's return status information." (e.g., "electronically transmitting" "updated address") *Id.* at 6.
[42.7] if the sender does not want a corrected address provided, posting return mail data records on a network that is accessible to the sender to enable the sender to access the records.	As discussed in section VII.C, the BRI of "posting" is "making available." *Park* discloses "[t]he postal service server . . . allows postal customers to access the postal service server through customer servers to search for and confirm mail's return status information" by doing so, *Park* makes available the return status information. Ex. 1003 at 6. The system in *Park* "search[es] the customer information/postal information database to check to see if the corresponding recipient is included in the return mail list" (the claimed "if sender does not want a corrected address provided"). *Id.* at 6; *see also* Ex. 1008 at ¶ 161 (if the recipient is absent this indicates that the sender does not want a corrected address provided).

5. *Park* Anticipates Claim 43

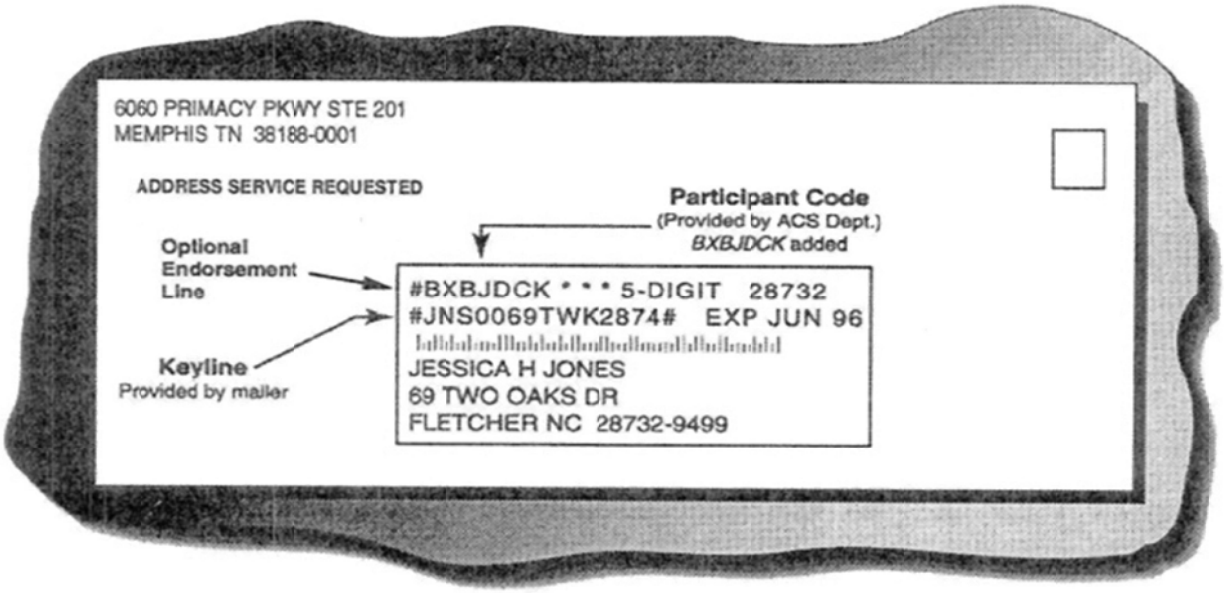
Claim 42	Korean Patent No. 2000-003860 ("*Park*")
43. [43.0] The method of claim 42,	*See* [42.0] to [42.7].
further comprising transmitting the name and address of the intended recipients to a mail service provider, subsequent to the determining step, in order to obtain an updated address for each intended recipient	*Park* discloses a method for "sending return mail information" (the claimed "name" and "address" of the "intended recipient") to the "postal service server" (the claimed "mail service provider") after "a barcode reader (141) reads the customer barcode of the returned mail and obtains postal code and delivery priority code corresponding to the customer ID" (the claimed "subsequent to determining step"). Ex. 1003 at 6; *see also* [42.6].

of an undeliverable mail item.	

6. *Park* Anticipates Claim 44

Claim 44	Korean Patent No. 2000-003860 ("*Park*")
44. [44.0] The method of claim 42,	*See* [42.0] to [42.7].
wherein the encoded data further indicates a name and address of the intended recipient.	*Park* discloses "[t]he barcode reader/sorter reads the customer barcode in a barcode reading function, and obtains the postal number, delivery priority code, and recipient name information" (the claimed "encoded data further indicates a name and address of the intended recipient"). Ex. 1003 at 7.

E. Address Change Service System ("*1997 ACS*") Anticipates Claims 39-44



Even if the '548 patent is entitled to the priority date of the provisional application, as explained below, claims 39-44 are unpatentable under U.S.C. § 102 in view of *1997 ACS*. In the Order granting the request for ex parte reexamination, the Central Reexamination Unit concluded:

> Publication 8 [referred to here as *1997 ACS*], teaches a method and system for encoding data (e.g., via barcodes and 'keylines') including the intended recipient identification information on mail, receiving mail items returned as undeliverable at the USPS Computerized Forwarding System (CFS), reading the name and address (e.g., processing the encoded data) to identify the intended recipients having an incorrect address, and electronically transferring to the sender (e.g., the ACS-participating mailer) information for the intended recipients for the sender to update their records (see Publication 8 pages 4-10).

See Ex. 1009 at 84.

1997 ACS discloses an automated electronic process for providing address corrections to mail senders. *See* Ex. 1004 at 5. Senders place an intended recipient (e.g., "Jessica H Jones" in Fig. 1 above) on the mail piece and encode an ACS participant code (e.g., "#BXBJDCK" in Fig. 1 above) on the mail piece for which they would like a corrected address. *Id.* at 9. The ACS participant code consists of seven alpha characters preceded by a pound sign ("#"). *Id.*

A properly coded ACS participant code informs a decoder which additional service (known as an "ancillary service") or set of services the mailer is requesting (e.g., corrected address requested or destroy mail piece subsequent to mailing). In

addition, as Dr. Lubenow explains, mailers can encode an ancillary service endorsement on the envelope (e.g., "ADDRESS SERVICE REQUESTED" in Fig. 1 above), which is encoded information indicating to a postal carrier instructions on how to process the mail after determining the mail piece is undeliverable-as-addressed. Ex. 1008 at ¶¶ 75, 171-74. USPS receives a plurality of mailpieces bearing an ACS participant code from the sender. Ex. 1004 at 4. Then, a carrier attempts delivery of the mail to the intended recipient.

When the mail is undeliverable-as-addressed (e.g., intended recipient moved and did not file a change of address), the postal carrier decodes the ancillary service endorsement information. *Id.* at 5. From Fig. 1 above "ADDRESS SERVICE REQUESTED" indicates to the carrier that the sender wants a corrected address provided for the intended recipient. *Id.* at 13 ("Address Service Requested" indicates that "an electronic ACS [change of address] COA notification is generated."). Ex. 1008 at ¶¶ 75, 171-74. The carrier sends the mail to the Computerized Forwarding System (CFS). The CFS decodes the ACS participant code and determines how to process the returned piece of mail. Ex. 1004 at 5.

The ACS participant code is deciphered into a usable format by a human or computer, where the ACS participant code indicates to the ACS system the sender wants a corrected address for the at least one piece of mail bearing the ACS participant code corresponding to address correction. The ACS system obtains an updated address of the intended recipient by matching the name and address to a

Change of Address (COA) record on file at the CFS. *Id.* ACS electronically transmits the updated address for the intended recipient to a mail service provider (e.g., National Customer Service Center), which provides updated addresses to ACS-participating mailers. *Id.* at 5-8. Returned mail without an ancillary service endorsement or ACS participant code indicates corrected address service is not wanted for this mail piece. Irrespective of the particular mail piece endorsements, however, senders may access the National Change of Address (NCOA) database, which posts updated address records. Ex. 1008 at ¶¶ 75, 171-74.

1. *1997 ACS* Anticipates Claim 39

Claim 39	1997 USPS Address Change Service ("*1997 ACS*")
39. [39.0] A method for processing returned mail items sent by a sender to an intended recipient, the method comprising:	As discussed in section VII.C, the BRI of "returned mail items" is "mail subject to being sent back." *1997 ACS* discloses "[w]hen a carrier receives a mailpiece and it is undeliverable-as-addressed at the old address . . . the mailpiece . . . is sent by the postal employee to the CFS unit responsible for forwarding mail . . . ." Ex. 1004 at 5.
[39.1] decoding, subsequent to mailing of the returned mail items, information indicating whether the sender wants a corrected address to be provided for the intended recipient, on	As discussed in section VII.C, the BRI of "decoding" is "to convert into intelligible form." *1997 ACS* discloses "when a carrier receives a mailpiece and it is undeliverable-as-addressed at the old address due to customer relocation, the mailpiece (*depending on its . . . endorsements*) is sent by the postal employee to the CFS unit . . . ." Ex. 1004 at 5. In doing so, the carrier converts into intelligible form the participant code and endorsement thereby performing the claimed "decoding."[11] *1997 ACS* discloses "participant code consists

[11] Petitioner notes that the carrier attempting delivery of a mailpiece bearing a participant code or endorsement "deciphers into useable form" the participant code

at least one of the returned mail items;	of seven alpha characters . . . preceded by a single pound sign (#)." *Id.* at 9. *1997 ACS* discloses "[t]o use [Address Change Service], [the sender] must add to [the] mailpiece address block the ACS participant code" (the claimed "information indicating whether the sender wants a corrected address to be provided for the intended recipient, on at least one of the returned mail items"). *Id. 1997 ACS* further discloses "[t]he endorsement printed . . . determines the disposition of the mailpiece and the type of [change of address] notification provided." *Id.* at 14.
[39.2] obtaining an updated address of the intended recipient subsequent to determining that the sender wants a corrected address to be provided for the intended recipient; and	Following step [39.1], *1997 ACS* discloses "[a]n attempt is then made, to match the name and address to a [Change of Address] on file at the CFS unit" (the claimed "obtaining an updated address of the intended recipient subsequent to determining that the sender wants a corrected address to be provided for the intended recipient"). Ex. 1004 at 5.
[39.3] electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider.	As discussed in section VII.C, the BRI of "return mail service provider" is "any entity mail-processing organizations and individuals." *1997 ACS* discloses "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted daily" (the claimed "electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider"), "to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers." Ex. 1004 at 6. *See* "ACS Fulfillment File COA Record Format" (containing the participant code, old address, and new address (e.g., updated address) among other things). *Id.* at 19-28.

or endorsement so, *1997 ACS* also discloses the claimed "decoding" under the Court's construction of "decoding." Ex. 1011 at 23.

	1997 ACS further discloses "[a]ny mailer . . . may choose to receive ACS notifications via regularly scheduled telecommunications transmissions" (e.g., electronically transmitting by electronic bulletin board). *Id.* at 7.

2. *1997 ACS* Anticipates Claim 40

Claim 40	1997 USPS Address Change Service ("*1997 ACS*")
40. [40.0] A computer program product residing on a computer readable medium comprising instructions for causing a computer to:	*1997 ACS* discloses "Address Change Service (ACS) is an automated electronic enhancement to our traditional manual process for providing address corrections to mailers . . . The delivery unit sends the Form 3575 [change of address form] to the Computerized Forwarding System (CFS) unit, where it is entered into a database." Ex. 1004 at 5. *1997 ACS* uses a computer program stored on a computer readable medium for controlling a computer system that includes ACS. Ex. 1008 at ¶ 187. Such computer programs include program instructions. *Id.*
[40.1] store decoded information indicating whether a sender wants a corrected address to be provided and a customer number, each associated with at least one of a plurality of mail items returned subsequent to mailing as being undeliverable;	As discussed in section VII.C, the BRI of "decoded information" is "information" that is "converted into intelligible form." *1997 ACS* discloses "fulfillment files contain a header record followed by records reflecting three types of notifications" (the claimed "store decoded information"). Ex. 1004 at 19. The header for an ACS fulfillment file contains a customer-ID (the claimed "customer number"). *Id.* at 20. "[Sender] must place the participant code on each mailpiece for which an electronic notification is requested." *Id.* at 10. ACS fulfillment files also contain the participant code. *Id.* at 22.
[40.2] determining from the decoded data that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail	*See* [40.1] above reading BRI of "decoded information". *1997 ACS* discloses: "If a match is attained from the CFS database and the mailpiece bears an active ACS participant code," (the claimed "determining from the decoded data that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items"), "the opportunity exists for an electronic notification to be generated." Ex. 1004 at 5.

items;	Senders who choose to be members of ACS elect to have address corrected by placing an ACS participant code on the mail piece, which identifies senders who want a corrected address. The postal carrier and then the CFS units decode the information displayed on the mail piece to determine if the sender is an ACS participant and thus want address corrected information. Ex. 1008 at ¶ 193.
[40.3] receive an updated address of an intended recipient for at least one of the plurality of undeliverable mail items, subsequent to and based upon the determining step; and	*1997 ACS* discloses "[a]n attempt is then made to match the name and address to a Change of Address (COA) on file at the CFS unit" after the carrier sends the undeliverable mailpiece to CFS (the claimed "receive an updated address of an intended recipient for at least one of the plurality of undeliverable mail items, subsequent to and based upon the determining step"). Ex. 1004 at 5.
[40.4] transmit the updated address to a transferee, wherein the transferee is a return mail service provider.	As discussed in section VII.C, the BRI of "return mail service provider" is "any entity mail-processing organizations and individuals." 1*997 ACS* discloses "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted daily to the National Customer Support Center, where they are consolidated and provided to ACS-participating mailers" (the claimed "transmit the updated address to a transferee, wherein the transferee is a return mail service provider). Ex. 1004 at 6.

3. *1997 ACS* Anticipates Claim 41

Claim 41	1997 USPS Address Change Service ("*1997 ACS*")
41. [41.0] A system for processing a plurality of undeliverable mail items comprising:	*1997 ACS* discloses "[w]hen a carrier receives a mailpiece and it is undeliverable-as-addressed at the old address . . . the mailpiece is sent by the postal employee to the Computerized Forwarding System (CFS) unit responsible for forwarding mail." Ex. 1004 at 5.
[41.1] a first detector, wherein the first detector detects, subsequent to mailing	*1997 ACS* discloses "[i]f a match is attained from the CFS database and the mailpiece *bears an active ACS participant code*, the opportunity exists for an electronic notification to be generated" (the claimed "encoded information on at least

the undeliverable mail items, encoded information on at least one of the plurality of undeliverable mail items indicating whether a sender wants a corrected address to be provided for at least one of the undeliverable mail items; and	one of the plurality of undeliverable mail items indicating whether a sender wants a corrected address to be provided for at least one of the undeliverable mail items"). Ex. 1004 at 5 (emphasis added). "[Sender] must place the participant code on each mailpiece for which an electronic notification is requested." *Id.* at 10. The CFS units decode the information displayed on the mailpiece (the claimed "first detector, wherein the first detector detects"), to determine if the sender is an ACS participant and thus want corrected address information. Ex. 1008 at ¶ 198-199.
[41.2] a processor that uses a computer program comprising instructions that cause the system to: i) decode the information indicating whether the sender wants a corrected address to be provided ii) encode and decode intended recipient identification information; and iii) enable an updated address of an intended recipient to be sent to a transferee, wherein the transferee is a return mail service provider.	*1997 ACS* disclose "[i]f a match is attained from the CFS database and the mailpiece *bears an active ACS participant code*," (the claimed "decode the information indicating whether the sender wants a corrected address to be provided"). Ex. 1004 at 5 (emphasis added). *1997 ACS* discloses "us[ing] the keyline option, which provides an effective means of matching ACS notifications with the appropriate records in their address files . . . content of the individual keylines must be unique to ensure identification of a particular customer within a mailer's address file" (the claimed "encode and decode intended recipient identification information"). *Id.* at 10. *1997 ACS* discloses "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted daily to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers" (the claimed "enable an updated address of an intended recipient to be sent to a transferee, wherein the transferee is a return mail service provider"). *Id.* at 6.

4. *1997 ACS* Anticipates Claim 42

Claim 42	1997 USPS Address Change Service ("*1997 ACS*")
42. [42.0] A method for processing a	The Address Change Service system anticipates claim 40 of the '548 patent as detailed below. *1997 ACS* discloses

plurality of undeliverable mail items, comprising:	"[w]hen a carrier receives a mailpiece and it is undeliverable-as-addressed at the old address . . . the mailpiece is sent by the postal employee to the Computerized Forwarding System (CFS) unit responsible for forwarding mail." Ex. 1004 at 5.
[42.1] receiving from a sender a plurality of mail items, each including i) a written addressee, and ii) encoded data indicating whether the sender wants a corrected address to be provided for the addressee;	*1997 ACS* discloses "[w]hen a carrier receives a mailpiece and it is undeliverable-as-addressed at the old address" (the claimed "receiving from a sender a plurality of mail items"). Ex. 1004 at 5. *1997 ACS* discloses "Jessica H Jones" (the claimed "written addressee") on the mail piece and an ACS participant code "#BXBJDCK" (the claimed "encoded data indicating whether the sender wants a corrected address to be provided for the addressee"). *See* Figure 1 above. Ex. 1004 at 9.
[42.2] identifying as undeliverable mail items, mail items of the plurality of the plurality mail items that are returned subsequent to mailing as undeliverable;	*1997 ACS* discloses "a customer's postal carrier discovers that the customer no longer receives mail at a particular address. The delivery unit sends the Form 3575 [change of address form] on behalf of the intended recipient to the CFS unit, where it is entered in the database" (the claimed "identifying as undeliverable mail items, mail items of the plurality of the plurality mail items that are returned subsequent to mailing as undeliverable"). Ex. 1004 at 5.
[42.3] decoding the encoded data incorporated in at least one of the undeliverable mail items;	*1997 ACS* discloses "[a]n attempt is then made to match the name and address to a Change of Address (COA) on file at the CFS unit. If a match is attained from the CFS database and the mailpiece *bears an active ACS participant code*, the opportunity exists for an electronic notification to be generated" (the claimed "decoding the encoded data incorporated in at least one of the undeliverable mail items"). Ex. 1004 at 5. *1997 ACS* discloses an ancillary endorsement "ADDRESS SERVICE REQUESTED". *See* Figure 1 above. Ex. 1004 at 9. Postal carrier decodes the ancillary endorsement and/or the participant code, which tells the postal carrier how to handle the undeliverable mailpiece.
[42.4] creating output	*1997 ACS discloses* "fulfillment files contain a header record

data that includes a customer number of the sender and at least a portion of the decoded data;	followed by records reflecting three types of notification" (the claimed "creating output data"). Ex. 1004 at 19. The header for an ACS fulfillment file contains a customer-ID (the claimed "customer number"). *Id.* at 20. "[Sender] must place the participant code on each mailpiece for which an electronic notification is requested" (the claimed "at least a portion of the decoded data"). *Id.* at 10. ACS fulfillment files also contain the participant code. *Id.* at 22.
[42.5] determining if the sender wants a corrected address provided for intended recipients based on the decoded data;	*1997 ACS* discloses "[t]o use [Address Change Service], [the sender] must add to [the] mailpiece address block the ACS participant code." Ex. 1004 at 9. *1997 ACS* further discloses "[t]he endorsement printed . . . determines the disposition of the mailpiece and the type of [change of address] notification provided." *Id.* at 14.
[42.6] if the sender wants a corrected address provided, electronically transferring to the sender information for the identified intended recipients that enable the sender to update the sender's mailing address files; and	*1997 ACS* discloses "Electronic ACS fulfillment notifications generated by the CFS units are transmitted daily to the National Customer Support Center (NCSC), where they are consolidated and provided to ACS-participating mailers" (the claimed "if the sender wants a corrected address provided, electronically transferring to the sender information for the identified intended recipients that enable the sender to update the sender's mailing address files"). *See* Ex. 1004 at 6. The sender places an endorsement on the envelope and/or encodes a code in the participant id that is matched to the type of address service the sender wants, or if the sender does not place a code, then no ACS information is provided.
[42.7] if the sender does not want a corrected address provided, posting return mail data records on a network that is accessible to the sender to enable the sender to access the records.	*1997 ACS* discloses "[t]he telecommunication option requires that ACS participants regularly dial into the NCSC's computer system or bulletin board system to receive their files" (the claimed "posting return mail data records on a network that is accessible to the sender to enable the sender to access the records"). *See* Ex. 1004 at 7. Participants can use one of several telecommunication options to access the ACS information on the network. ACS participants can login into the bulletin board system and/or login into the centralized computer network to download posted files from the network. *Id.*

	1997 ACS discloses "[a]ddress change information can be retrieved electronically by large-volume mailers via a telecommunication network" (the claimed "posting return mail data records on a network that is accessible to the sender to enable the sender to access the records"). *Id.* at 5.

5. *1997 ACS* Anticipates Claim 43

Claim 43	1997 USPS Address Change Service ("*1997 ACS*")
43. [43.0] The method of claim 42,	*See* [42.0] to [42.7].
further comprising transmitting the name and address of the intended recipients to a mailing address service provider, subsequent to the determining step, in order to obtain an updated address for each intended recipient of an undeliverable mail item.	*1997 ACS* discloses "[w]hen a carrier receives a mailpiece and it is undeliverable-as-addressed at the old address due to customer relocation, the mailpiece is sent by the postal employee to the CFS unit . . . " (the claimed "transmitting the name and address of the intended recipient to a mailing address service provider"), "[a]n attempt is mailed to match the name and address to a [change of address] on file at the CFS unit" (the claimed "in order to obtain an updated address for each intended recipient of an undeliverable mail item.") Ex. 1004 at 5. *1997 ACS* discloses "[t]o use [Address Change Service], [the sender] must add to [the] mailpiece address block the ACS participant code." Ex. 1004 at 9. *1997 ACS* further discloses "[t]he endorsement printed . . . determines the disposition of the mailpiece and the type of [change of address] notification provided," (the claimed "subsequent to the determining step"). *Id.* at 14.

6. *1997 ACS* Anticipates Claim 44

Claim 44	1997 USPS Address Change Service ("*1997 ACS*")
44. [44.0] The method of claim 42,	*See* [42.0] to [42.7].
wherein the encoded data further indicates a name and address of the intended recipient.	*1997 ACS* discloses "use the keyline option, which provides an effective means of matching ACS notifications with the appropriate records in their address files . . . [C]ontent of the individual keylines must be unique to ensure

	identification of a particular customer within a mailer's address file" (the claimed "encoded data further indicates a name and address of the intended recipient"). Ex. 1004 at 10. *1997 ACS* discloses "Jessica H Jones" "69 Two Oaks Dr Fletcher NC 28732-9499". Further, ACS mailers might want to place their ZIP+4 barcodes or delivery point barcodes in the address block. *Id.* at 9. *See* Figure 1 above.

F. *Uhl* Anticipates Claims 39-41

As shown in the below charts, *Uhl* discloses all of the features of claims 39-41. *Uhl* was filed as a PCT on October 10, 1997, and awarded a 102(e) date of July 21, 1999, and thus is prior art under pre-AIA § 102(a). *Uhl* "relates to a method and a device for the online processing of mail items to be forwarded." Ex. 1005 Abstract. "A delivery instruction system detects the imprints of the return stamps used by the delivery person and transmits a signal if such a stamp is recognized. A device for detecting advance instructions detects such advance instructions as 'please return to sender recipient has moved,' and sends a signal to the address change system if an advance instruction is detected." Ex. 1005 4:63-5:3.

1. *Uhl* Anticipates Claim 39

Claim 39	*Uhl*
39. [39.0] A method for processing returned mail items sent by a sender to an intended recipient, the method comprising:	*Uhl* discloses a "mail item has been identified as return mail" (the claimed "processing returned mails"). Ex. 1005 at 6:41. *Uhl* further discloses the claimed "mail items sent by a sender to an intended recipient." *See id.* at Fig. 8 ("sender of the mail item is 'Sender' to the intended recipient 'Recipient'").
[39.1] decoding,	*Uhl* discloses "[i]f a mail item has been *identified*" (the claimed

subsequent to mailing of the returned mail items, information indicating whether the sender wants a corrected address to be provided for the intended recipient, on at least one of the returned mail items;	"decoding") "as return mail" (the claimed "subsequent to mailing"), "through *recognition of an advance instruction or delivery notation*," (the claimed "information indicating whether the sender wants a corrected address to be provided for the intended recipient"), "the sender address must be read." Ex. 1005 at 6:41-43 (emphases added).
[39.2] obtaining an updated address of the intended recipient subsequent to determining that the sender wants a corrected address to be provided for the intended recipient; and	*Uhl* discloses "the new, as well as the old recipient address 140 of each return mail" (the claimed "obtaining an updated address of the intended recipient). *See* Ex. 1005 at 6:53-54.
[39.3] electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider.	*Uhl* discloses "[a]ddress change reports are regularly compiled and sent to the customer if the customer (sender) desires this . . . thus allowing the sender to cultivate his/her address list" (the claimed "transmitting an updated address of the intended recipient"). Ex. 1005 at 6:55-58. *Uhl* does not explicitly state that the information identified for the intended recipients is transferred to the sender electronically. When considering this limitation under the BRI, *Uhl* teaches the corrected addresses are compiled into a data bank and provided to the sender. Therefore, a person of ordinary skill in the art would recognize this transferring to be done electronically. Ex. 1008 at ¶ 243-44.

2. Claim 39 Is Obvious over *Uhl* in View of *Krause*

Further, claim 39 is invalid over *Uhl* in view of *Krause*. To the extent the Board finds that the transmitting in *Uhl* is not "electronically transmitting" *Krause* discloses "systems consistent with the present invention provide *change of address services*, such as

change of address notification, to the customer *via the electronic network*" (the claimed "electronically transmitting"). *See* Ex. 1005 at 1:51-53 (emphases added). *Krause* claims the benefit to its provisional application date April 21, 2000.

It would have been routine for one of ordinary skill in the art to combine the features of *Uhl* with the features of *Krause*, to extend and improve the methods and systems disclosed in *Uhl*. Ex. 1008 at ¶¶ 244, 248. For example, "electronically transmitting" was a well-known advantage to save time and money from transmitting via a mail service. Ex. 1008 at ¶¶ 11-21. The combination of *Uhl* and *Krause* teaches "provid[ing] change of address services, such as change of address notification, to the customer via the electronic network" (the claimed "electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider"). Ex. 1006 at 1:51-53. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

3. Claim 39 Is Obvious over *Uhl* in View of *1997 ACS*

Claim 39 is also invalid over *Uhl* in view of *1997 ACS*. To the extent the Board finds that the transmitting disclosed in *Uhl* is not "electronically transmitting," it would have been routine for one of ordinary skill in the art to combine the features of *Uhl* with the features of *1997 ACS*, to extend and improve the methods and systems disclosed in *Uhl*. For example, the combination of *Uhl* and *1997 ACS* teaches "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted

daily to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers" (the claimed "electronically transmitting an updated address of the intended recipient to a transferee, wherein the transferee is a return mail service provider"). Ex. 1004 at 6. It would have been routine for one of ordinary skill in the art to combine the "electronically transmitting" in *1997 ACS* with the transmitting in *Uhl* to extend and improve the methods and systems. "Electronically transmitting" the address updates saves time and money over mailing address updates. *See KSR Int'l Co.,* 550 U.S. at 416.

4. *Uhl* Anticipates Claim 40

Claim 40	*Uhl*
40. [40.0] A computer program product residing on a computer readable medium comprising instructions for causing a computer to:	Uhl discloses an online processing system. *See* Ex. 1005 at Fig. 1.
[40.1] store decoded information indicating whether a sender wants a corrected address to be provided and a customer number, each associated with at least one of a plurality of mail items returned subsequent to mailing as being undeliverable;	*Uhl* discloses "[i]f a mail item has been *identified* as return mail through *recognition of an advance instruction or delivery notation*," (the claimed "store decoded information indicating whether a sender wants a corrected address to be provided . . . each associated with at least one of a plurality of mail items returned subsequent to mailing as being undeliverable"). Ex. 1005 at 6:41-43 (emphases added). *Uhl* discloses "only the customer number of the sender is read as the top line in the address field" (the claimed "customer number"). *Id.* 8:48-50. *See also* Ex. 1008 at ¶ 254 (the process of decoding the mail piece inherently stores the information for further processing of the mail piece).
[40.2] determining from the decoded data that the customer	*Uhl* discloses "detecting advance instructions . . . sends signal 310 to the address change system 214 if an advance instruction is detected" (the claimed "determining from the

wants a corrected address to be provided for at least one of the plurality of undeliverable mail items;	decoded data that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items"). Ex. 1005 4:66-5:3. *Uhl* further discloses "[a]ddress change reports are regularly compiled and sent to the customer if the customer (sender) desires this" (the claimed "determining from the decoded data that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items"). *Id.* at 6:55-57.
[40.3] receive and updated address of an intended recipient for at least one of the plurality of undeliverable mail items, subsequent to and based upon the determining step; and	*Uhl* discloses "[i]n addition, the sender address and *the new*, as well as *the old recipient address* of *each return mail* are entered into the data bank" (the claimed "receive an updated address of an intended recipient for at least one of the plurality of undeliverable mail items, subsequent to and based upon the determining step"). Ex. 1005 at 6:53-54.
[40.4] transmit the updated address to a transferee, wherein the transferee is a return mail service provider.	*Uhl* discloses "the sender address and the new, as well as the old recipient address of each return mail are entered into the data bank. Address change reports are regularly compiled and sent to the customer if the customer (sender) desires this . . . thus allowing the sender to cultivate his/her address list." Ex. 1005 at 6:55-58. Uhl does not explicitly state that the information identified for the intended recipients is transferred by a computer.

5. Claim 40 Is Obvious over *Uhl* in view of *Krause*

Claim 40 is obvious over *Uhl* in view of *Krause*. To the extent the Board finds that the transmitting in *Uhl* is not "electronically transmitting," *Krause* discloses "systems consistent with the present invention provide change of address services, such as change of address notification, to the customer via the electronic network" (the claimed "electronically transmitting"). *See* Ex. 1006 at 1:51-53. *See also id.* at Fig. 6.

Further, *Krause* discloses "provid[ing] change of address services, such as change of address notification, to the customer via the electronic network." *Id.*

It would have been routine for one of ordinary skill in the art to combine the features of *Uhl* with the features of *Krause*, to extend and improve the methods and systems disclosed in *Uhl*. Ex. 1008 at ¶¶ 262-65 For example, "electronically transmitting" was a well-known advantage to save time and money from transmitting via a mail service. Ex. 1008 at ¶¶ 11-21. The combination of *Uhl* and *Krause* teaches "provid[ing] change of address services, such as change of address notification, to the customer via the electronic network" (the claimed "transmit the updated address to a transferee, wherein the transferee is a return mail service provider" by a computer). *Id.* *See KSR Int'l Co.,* 550 U.S. at 416.

6. Claim 40 Is Obvious Over *Uhl* in View of *1997 ACS*

Claim 40 is also obvious over *Uhl* in view of *1997 ACS*. To the extent the Board finds that the transmitting in *Uhl* is not "electronically transmitting" it would have been routine for one of ordinary skill in the art to combine the features of *Uhl* with the features of *1997 ACS* to extend and improve the methods and systems disclosed in *Uhl*. Ex. 1008 at ¶¶ 266-68. For example, the combination of *Uhl* and *1997 ACS* teaches "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted daily to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers" (the claimed "transmit

the updated address to a transferee, wherein the transferee is a return mail service provider" by a computer). Ex. 1004 at 6.

It would have been routine for one of ordinary skill in the art to combine the "electronically transmitting" in *1997 ACS* with the transmitting in *Uhl* to extend and improve the methods and systems. Ex. 1008 at ¶ 268. Transmitting the address updates by a computer saves time and money over mailing address updates. *See KSR Int'l Co.,* 550 U.S. at 416.

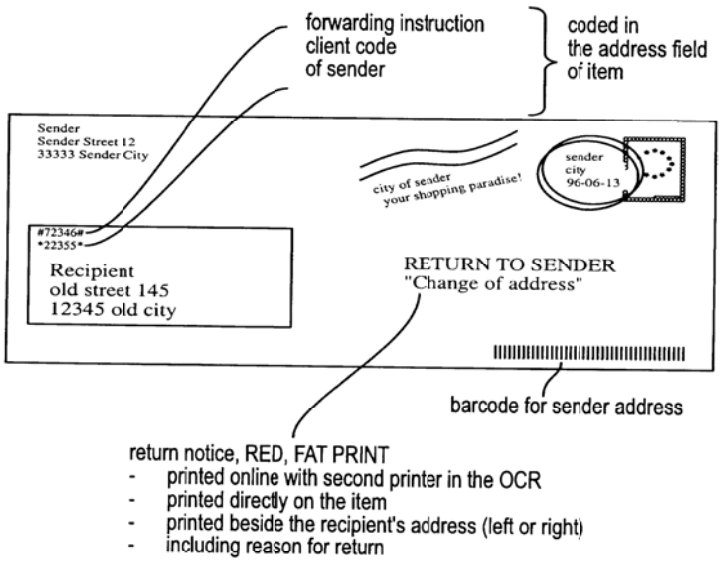
7. *Uhl* Anticipates Claim 41

Claim 41	*Uhl*
41. [41.0] A system for processing a plurality of undeliverable mail items comprising:	*Uhl* discloses "[i]f a mail item has been identified as return mail" (the claimed "system for processing a plurality of undeliverable mail items"). *See also* Ex. 1005 at Fig. 1.
[41.1] a first detector, wherein the first detector detects, subsequent to mailing the undeliverable mail items, encoded information on at least one of the plurality of undeliverable mail items indicating whether a sender wants a corrected address to be provided for at least one of the undeliverable mail items; and	Uhl discloses "a detector for advance instructions 213" (the claimed "a first detector, wherein the first detector detects"). Ex. 1005 at 4:4. *Uhl* discloses "[i]f a mail item has been identified as return mail through recognition of an advance instruction" (the claimed "encoded information on at least one of the plurality of mail items indicating whether a sender wants a corrected address to be provided for at least one of the undeliverable mail items"). Ex. 1005 at 6:41-42. *See* [41.0] disclosing the mail item being identified as return mail" (the claimed "subsequent to mailing the undeliverable mail items").
[41.2] a processor that uses a computer program comprising instructions that cause	*Uhl*: "The recognition of these advance instructions takes place parallel to the other processes," and "parallel processing of [] advance instructions," (the claimed "a processor that uses a computer program comprising

the system to: i) decode the information indicating whether the sender wants a corrected address to be provided ii) encode and decode intended recipient identification information; and iii) enable an updated address of an intended recipient to be sent to a transferee, wherein the transferee is a return mail service provider.	instructions that cause the system to"). Ex. 1005 at 6:10-11 and 8:51. *Uhl* further discloses "[i]f a mail item has been identified as return mail through recognition of" (the claimed "decode"), "an advance instruction" (the claimed "information indicating whether the sender wants a corrected address to be provided"). *Id.* at 5:6-9. *Uhl* discloses "target address 303" (the claimed "intended recipient identification information"), "is affixed with a barcode printer 203 to the mail" (the claimed "encode" step). *Id.* at 5:11-12. *Uhl* further discloses "[a] gray-key scanner optically scans the envelope surface and pre-parses the scanned image for the subsequent steps of 'optical code recognition' (OCR)" (the claimed "decode" step). *Id.* at 3:65-4:1. *Uhl* discloses "[a]ddress change reports are regularly compiled and sent to the customer if the customer (sender) desires this, thus allowing the sender to cultivate his/her address list" (the claimed "enable an updated address of an intended recipient to be sent to a transferee, wherein the transferee is a return mail service provider"). *Id.* at 6:55-58.

G. Claim 42 Is Obvious Over *Uhl* in View of *Jatkowski*

Claim 42	*Uhl* in view of *Jatkowski*
42. [42.0] A method for processing a plurality of undeliverable mail items, comprising:	*Uhl* discloses "[i]f a mail item has been identified as return mail" (the claimed "system for processing a plurality of undeliverable mail items"). *See* Ex. 1005 at Fig. 1.
[42.1] receiving from a sender a plurality of mail items, each including i) a written addressee, and ii) encoded data indicating whether the	*Uhl* discloses "[a] letter to be returned to the sender where the sender has printed his/her postal customer number and advance instruction encoded into the address field for the recipient" (the claimed "receiving from a sender a plurality of mail items, each including encoded data indicating whether the sender wants a corrected address to be provided for the addressee"). Ex. 1005 at 3:46-49. *Uhl* discloses the

sender wants a corrected address to be provided for the addressee;	claimed "written addressee". *See id.* at Figs. 7-12. Fig. 9 reproduced below.  FIG. 9
[42.2] identifying as undeliverable mail items, mail items of the plurality of the mail items that are returned subsequent to mailing as undeliverable;	*Uhl* discloses "[i]f a mail item has been identified as return mail through recognition" (the claimed "identifying as undeliverable mail items, mail items of the plurality of mail items that are returned subsequent to mailing as undeliverable"). Ex. 1005 at 6:41.
[42.3] decoding the encoded data incorporated in at least one of the undeliverable mail items;	*Uhl* discloses "if a mail item has been identified as return mail through recognition of" (the claimed "decoding"), "an advance instruction" (the claimed "encoded data incorporated in at least one of the undeliverable mail items"). Ex. 1005 at 6:41-42.
[42.4] creating output data that includes a customer number of the sender and at least a portion of the decoded data;	*Uhl* discloses "[a]ddress change reports are regularly compiled" (the claimed "creating output data"), "the sender address, and the new, as well as the old recipient address of each return mail are entered into the data bank" (the claimed "at least a portion of the decoded data"). Ex. 1005 at 6:53-56. *Uhl* discloses "[a] letter to be returned to the sender" (the

	claimed "creating output data"), "where the sender has printed his/her postal customer number and advance instruction encoded into the address field for the recipient" (the claimed "includes a customer number of the sender and at least a portion of the decoded data"). *Id.* at 3:46-49.
[42.5] determining if the sender wants a corrected address provided for intended recipients based on the decoded data;	*Uhl* discloses "detecting advance instructions . . . sends signal 310 to the address change system 214 if an advance instruction is detected" (the claimed "determining from the decoded data that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items"). Ex. 1005 at 4:66-5:3. *Uhl* further discloses "[a]ddress change reports are regularly compiled and sent to the customer if the customer (sender) desires this" (the claimed "determining from the decoded data that the customer wants a corrected address to be provided for at least one of the plurality of undeliverable mail items"). *Id.* at 6:55-57.
[42.6] if the sender wants a corrected address provided, electronically transferring to the sender information for the identified intended recipients that enable the sender to update the sender's mailing address files; and	*Uhl* discloses "the sender address and the new, as well as the old recipient address of each return mail are entered into the data bank. Address change reports are regularly compiled and sent to the customer if the customer (sender) desires this . . . thus allowing the sender to cultivate his/her address list" (the claimed "if the sender wants a corrected address provided, electronically transferring to the sender information for the identified intended recipients that enable the sender to update the sender's mailing address files"). Ex. 1005 at 6:53-58.
[42.7] if the sender does not want a corrected address provided, posting return mail data records on a network that is accessible to the sender to enable the sender to access the records.	The absence of an "advance instruction" (e.g., indication the sender wants a corrected address provided), indicates the sender not wanting a corrected address for the intended recipient. Ex. 1008 at ¶ 293. *Uhl* does not disclose posting return mail data records on a network that is accessible to the sender to enable the sender to access the records. *Jatkowski* discloses "a method and system of updating address data representative of a changed address. Updates are accomplished by initiating an address data request at a client system" (the claimed "posting return mail data records

	on a network that is accessible to the sender to enable the sender to access the records"). Ex. 1007 *Jatkowski* Abstract. *See also id.* at Fig. 1.

H. Claim 42 Is Obvious Over *Uhl in* View *Jatkowski* and Further in View of *1997 ACS*

Claim 42 is also invalid under *Uhl* in view of Jatkowski in view of *1997 ACS*. To the extent the Board finds that the transmitting in *Uhl* is not "electronically transmitting," it would have been routine for one of ordinary skill in the art to combine the features of *Uhl* and *Jatkowski* with the features of *1997 ACS*, to extend and improve the methods and systems disclosed in *Uhl* and *Jatkowski*. Ex. 1008 at ¶¶ 294-97..For example, the combination of *Uhl, Jatkowski*, and *1997 ACS* teaches "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted daily to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers" (the claimed "electronically transferring to the sender information"). Ex. 1004 at 6.

It would have been routine for one of ordinary skill in the art to combine the "electronically transmitting" in *1997 ACS* with the transmitting in *Uhl* and the "posting" in *Jatkowski* to extend and improve the methods and systems in *Uhl*. Ex. 1008 at ¶¶ 296-97. "Electronically transmitting" the address updates saves time and money over mailing address updates. *See KSR Int'l Co.,* 550 U.S. at 416.

I. Claim 43 Is Obvious

1. Claim 43 Is Obvious Over *Uhl* in View of *Jatkowski*

Claim 43	*Uhl* in view of *Jatkowski*
43. [43.0] The method of claim 42,	*See* [42.0] to [42.7].
further comprising transmitting the name and address of the intended recipients to a mailing address service provider, subsequent to the determining step, in order to obtain an updated address for each intended recipient of an undeliverable mail item.	*Uhl* discloses a "device for detecting advance instructions . . . and sends a signal to the address change system 214 if an advance instruction is detected. For a return of the mail it is also necessary to read the sender address" (the claimed "transmitting to a mailing address service provider, subsequent to the determining step, in order to obtain an updated address for each intended recipient of an undeliverable mail item"). Ex. 1005 at 4:66-5:4. *Uhl* discloses "[a] mail item is scanned . . . [t]he scanned image is transmitted to the device for detecting advance instructions" (the claimed "subsequent to the determining step"), "[t]he complete address information, including the delivery location and receiver name, are detected" (the claimed "the name and address of the intended recipients"). *Id.* at 5:40-49.

2. Claim 43 Is Obvious Over *Uhl* in View of *Jatkowski* and Further in View of *1997 ACS*

Claim 43 is also invalid under *Uhl* in view of Jatkowski in view of *1997 ACS*. To the extent the Board finds that the "transmitting" in *Uhl* is not "electronically transmitting," it would have been routine for one of ordinary skill in the art to combine the features of *Uhl* and *Jatkowski* with the features of *1997 ACS*, to extend and improve the methods and systems disclosed in *Uhl* and *Jatkowski*. Ex. 1008 at ¶¶ 298-302. For example, the combination of *Uhl, Jatkowski*, and *1997 ACS* teaches "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted

daily to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers" (the claimed "electronically transferring to the sender information"). Ex. 1004 at 6.

It would have been routine for one of ordinary skill in the art to combine the "electronically transmitting" in *1997 ACS* with the "transmitting" in *Uhl* and the "posting" in *Jatkowski* to extend and improve the methods and systems in *Uhl*. Ex. 1008 at ¶ 302. "Electronically transmitting" the address updates saves time and money over mailing address updates. *See KSR Int'l Co.,* 550 U.S. at 416.

J. Claim 44 Is Obvious

1. Claim 44 Is Obvious Over *Uhl* in View of *Jatkowski*

Claim 44	*Uhl* in view of *Jatkowski*
44. [44.0] The method of claim 42,	*See* [42.0] to [42.7].
wherein encoded data further indicates a name and address of the intended recipient.	*Uhl* discloses "[a] letter to be returned to the sender where the sender has printed his/her customer number and advance instruction encoded into the address field for the recipient" (the claimed "encoded data further indicates a name and address of the intended recipient"). Ex. 1005 at 3:46-49.

2. Claim 44 Is Obvious Over *Uhl* in View of *Jatkowski* and Further in View of *1997 ACS*

Claim 44 is also invalid under *Uhl* in view of Jatkowski in view of *1997 ACS*. To the extent the Board finds that the transmitting in *Uhl* is not "electronically transmitting," it would have been routine for one of ordinary skill in the art to combine the features of *Uhl* and *Jatkowski* with the features of *1997 ACS*, to extend

and improve the methods and systems disclosed in *Uhl* and *Jatkowski*. Ex. 1008 at ¶¶ 303-05. For example, the combination of *Uhl, Jatkowski*, and *1997 ACS* teaches "[e]lectronic ACS fulfillment notifications generated by the CFS units are transmitted daily to the National Customer Support Center . . . where they are consolidated and provided to ACS-participating mailers" (the claimed "electronically transferring to the sender information"). Ex. 1004 at 6.

It would have been routine for one of ordinary skill in the art to combine the "electronically transmitting" in *1997 ACS* with the transmitting in *Uhl* and the "posting" in *Jatkowski* to extend and improve the methods and systems in *Uhl*. Ex. 1008 at ¶¶ 294-97. "Electronically transmitting" the address updates saves time and money over mailing address updates. Ex. 1008 at ¶¶ 293. *See KSR Int'l Co.,* 550 U.S. at 416.

VIII. Amendments During the Reexamination Impermissibly Broadened Claims 39-44

In PTO reexaminations, a patent owner may propose any amendment to his patent or add new claims, but "[n]o proposed amended or new claim enlarging the scope of a claim of the patent will be permitted in a reexamination proceeding under this chapter." *See* 35 U.S.C. § 305. To see if added claims expand the scope of the original claims of the patent, each added claim is compared with the claims of the original patent to determine if the added claim "includes within its scope any subject matter that would not have infringed the original patent." *In re Freeman,* 30 F.3d 1459,

1464 (Fed. Cir. 1994). A claim that is broader in *any* respect is deemed "broader" than the original claims, even if the amended claim is narrower in other respects. *Id.* Put another way, "[a] claim is enlarged if it includes within its scope any subject matter that would not have infringed the original patent." *Id.* (quoting *Ex parte Neuwirth,* 229 USPQ 71 (BPAI 1985). In *Neuwirth*, the Board found that adding "substantially" during a reexamination to claim term "rounded" (as found in the original claim) broadened the claim, contravening 35 U.S.C. § 305. *Id.*; *see also Total Containment, Inc. v. Environ Products, Inc.,* 921 F. Supp. 1355, 1379 (E.D. Pa. 1995), *aff'd in part, vacated in part*, 106 F.3d 427 (Fed. Cir. 1997). In *Total Containment*, the original claim language was "upper surface" and the reexamination claim language was "exterior surface." The district court concluded that the reexamination claim was impermissibly broader in violation of § 305, because the amended claim could encompass a surface that was an "exterior surface," but not an "upper surface." *Id.* at 1381. Thus, the amended claim language had broader scope than the original language.

Here, during the reexamination, the Patent Owner cancelled all of the original claims and added new claims 39-44, among others. *See* Ex. 1009 at 3, 239. As explained in detail below, claims 39-44 (as they finally emerged from the reexamination) impermissibly expanded the scope of the original claims, reading on users, processes, and systems that the original claims did not. Thus, the Board should cancel claims 39-44 for being in violation of § 305. *In re Freeman*, 30 F.3d at 1464.

The following charts compare the original and reexamination claims, highlighting the impermissible broadening of claims 39-44.

A. Impermissible Broadening of Method Claim 39

Reexamined method claim 39 is broader than both original method claims 1 and 14. For instance, claim 39 omits the encoding step in claim 1 and the requirement that the updated address of intended recipient be sent back "to the sender" as set forth in claim 1:

Original Claim	Reexamination claim
1. A method for processing a plurality of undeliverable mail items comprising the steps of:	39. A method for processing returned mail items sent by a sender to an intended recipient, the method comprising: . . .
encoding data including intended recipient identification information on each of a plurality of mail items prior to mailing;	**[encoding step omitted]**
* * * *	* * * *
and electronically transferring ***to the sender*** information for the identified intended recipients for the sender to update the sender's mailing address files.	electronically transmitting an updated address of the intended recipient ***to a transferee, wherein the transferee is a return mail service provider***.

A party that did not perform the encoding step might infringe the reexamined claim 39, but not the original claim 1. Dr. Lubenow explains that claim 39 would cover organizations that do not have to "encode" the mail themselves. Ex. 1008 at ¶ 43. Thus, the reexamined claim 39 is broader than the original method claim 1, which contained this requirement.

Likewise, in an instance where the "return mail service provider" is not the "sender," a party that transmitted the updated address information only as far as the "return mail service provider" but not all the way to the "sender" could meet the third step of claim 39, but not the similar step in claim 1. As Dr. Lubenow explains, those with ordinary skill in the art would understand that, in some circumstances, transmitting updated address information to a "return mail service provider" will be broader than to the "sender." Ex. 1008 at ¶¶ 44-54.

Over original method claim 14, the reexamined claim 39 further does not include a collecting step:

14. A method for processing returned mail items sent by a subscriber to a recipient, the returned mail items incorporating encoded intended recipient identification information, the method comprising the steps of:	39. A method for processing returned mail items sent by a sender to an intended recipient, the method comprising:
collecting the returned mail items at a	[**collecting step omitted**]

processing location;	
* * * *	* * * *
and electronically transmitting updated recipient identification ***information to the subscriber*** for updating of a subscriber's address database.	electronically transmitting an updated address of the intended recipient ***to a transferee, wherein the transferee is a return mail service provider***.

If a party is only decoding the information, but does not handle the physical mail items, they may perform this limitation of claim 39, but not original claim 14. Dr. Lubenow agrees. Ex. 1008 at ¶¶ 37, 42, and 43.

Over both claims 1 and 14, claim 39 omits key steps and is, therefore, broader than either original claim. These broadening amendments to claim 39 should not have been permitted under 35 U.S.C. § 305 and the Board should cancel claim 39.

B. Impermissible Broadening of the Computer-Readable-Medium Claim 40

Reexamined claim 40 is also broader than the original computer-readable-medium claim 25. Claim 40 omits the requirement for program instructions for encoded data to be captured via optical scanning and, like claim 39, only requires that updated address information be transmitted back to the "return mail service provider" rather than back to the "subscriber":

Original Claim	**Reexam claim**

25. A computer readable medium containing a computer program product comprising instructions for controlling a computer system to process a plurality of undeliverable mail items, the computer program product comprising:	40. A computer program product residing on a computer readable medium comprising instructions for causing a computer to:
program instructions that capture optically scanned encoded data including intended recipient identification information on each item of undeliverable mail and identify intended recipients having incorrect addresses;	[**omitting program instructions for the encoded data to be captured via optical scanning**]
* * * *	* * * *
transmit the updated intended recipient address information to a subscriber electronically to update the address files ***of the subscriber***.	transmit the updated address ***to a transferee, wherein the transferee is a return mail service provider.***

Reexamined claim 40 reads on computer-readable-mediums capable of capturing data via non-optical scanning and also transmissions only to a return mail service provider, but not all the way back to the subscriber. Seeing no difference between "subscriber" and "sender" in this context, Dr. Lubenow concurs. Ex. 1008 at

¶¶ 58; 44-54. These broadening amendments to claim 40 should not have been permitted under 35 U.S.C. § 305 and claim 40 should be cancelled.

C. Impermissible Broadening of the System Claim 41

Similarly, reexamined system claim 41 is broader than the original system claim 32 in at least two respects:

Original Claim	Reexam claim
32. A system for processing a plurality of undeliverable mail items comprising:	41. A system for processing a plurality of undeliverable mail items comprising:
* * * *	* * * *
a processor for operation of a computer program for . . . writing the identified recipient identification information into a data file, and transferring ***to a sender*** information for the identified intended recipient for the sender to update the sender's mailing address files; and	a processor that uses a computer program comprising instruction that cause the system to: . . . (iii) enable an updated address of an intended recipient ***to be sent to a transferee, wherein the transferee is a return mail service provider***.
a database for storing the data file containing identified recipient identification information.	**[omitting the database]**

First, like claims 39 and 40, claim 41 requires that the updated address of the intended recipient to be sent to the "return mail service provider" but not all the way

back to the "sender". As with claim 39, Dr. Lubenow agrees. Ex. 1008 ¶¶ 44-54 Claim 41 also omits the requirement for a "database for storing the data file containing identified recipient identification information." In this additional respect, Dr. Lubenow agrees that claim 41 is broader than claim 32. *Id.* at ¶ 62. These broadening amendments to claim 41 should not have been permitted under 35 U.S.C. § 305, and claim 41 should be cancelled.

D. Impermissible Broadening of the Method Claim 42

Reexamined method claim 42 is broader than both original method claims 1 and 14. Notably, claim 42 omits the "electronically gathering" step of claim 14:

Original Claim	Reexam Claim
14. A method for processing returned mail items sent by a subscriber to a recipient, the returned mail items incorporating encoded intended recipient identification information, the method comprising the steps of:	42. A method for processing a plurality of undeliverable mail items, comprising:
* * * *	* * * *
electronically gathering updated recipient identification information including ~~a different~~[12] an updated address of the intended recipient ;	**[electronically gathering step omitted]**

[12] This claim language was removed by a Certificate of Correction, filed April 26, 2005.

Reexamination claim 42 eliminated the requirement for the party practicing the method to electronically gather the updated address of the intended recipient. Thus, as Dr. Lubenow explains, a party could resend updated addresses already in its possession and potentially read on this limitation of claim 42, whereas claim 14 specifically required "gathering" of the updated information. Ex. 1008 at ¶ 66. Thus, claim 42 is impermissibly broader in scope than claim 14, in violation of 35 U.S.C. § 305 and should be cancelled.

E. Impermissible Broadening of Dependent Claims 43 and 44

Claims 43 and 44 each add a single limitation to the independent claim 42. But neither limitation "cures" the problems described above with claim 42, in at least that neither dependent claim adds back in the "electronically gathering" step missing from the original claim 14. Ex. 1008 at ¶ 67. Thus, these claims should also be cancelled for violating 35 U.S.C. § 305.

IX. CONCLUSION

In sum, Petitioner challenges claims 39-44 as ripe for CBM review, and as more likely than not invalid under §§ 101, 102, 103, and 305. Under the broadest reasonable interpretation, the claims here fail to claim anything more than abstract, unpatentable subject matter. Prior art anticipates the claims or renders them obvious. Further, the claims were impermissibly broadened in reexamination, and should not have issued.

Petitioner asks the Board to institute CBM post-grant review of the '548 patent because this Petition demonstrates that it is more likely than not that at least one of

the claims challenged in this Petition is unpatentable. Petitioner respectfully requests cancellation of claims 39-44 of the '548 patent.

Petitioner reserves the right to submit additional evidence and arguments, depending on what arguments and/or amendments Patent Owner presents. Petitioner welcomes a telephone call should the Office have any requests or questions. Petitioner authorizes the Director to charge any fee deficiency to Deposit Account No. 06-0916.

Respectfully submitted,

Dated: April 15, 2014 By: 

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Petition for Post Grant Review under 35 U.S.C. § 321 and § 18 of the Leahy-Smith America Invents Act was served on April 15, 2014, by Express Mail at the following addresses of record for the subject patent. The associated Exhibits 1001 through 1019 and Power of Attorney were served on April 15, 2014.

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