



ORIGINAL

1 BRETT J. WILLIAMSON (S.B. #145235)  
2 bwilliamson@omm.com  
3 O'MELVENY & MYERS LLP  
4 610 Newport Center Drive, 17<sup>th</sup> Floor  
5 Newport Beach, California 92660-6429  
6 Telephone: (949) 760-9600  
7 Facsimile: (949) 823-6994

8 RYAN K. YAGURA (S.B. #197619)  
9 ryagura@omm.com  
10 VISION L. WINTER (S.B. #234172 )  
11 vwinter@omm.com  
12 O'MELVENY & MYERS LLP  
13 400 South Hope Street  
14 Los Angeles, CA 90071-2899  
15 Telephone: (213) 430-6000  
16 Facsimile: (213) 430-6407

17 Attorneys for Plaintiff Secured Mail Solutions, LLC

BY LRL

CLERK U.S. DISTRICT COURT  
CENTRAL DIST. OF CALIF.  
SANTA ANA

2012 OCT 29 PM 3:54

FILED

18 UNITED STATES DISTRICT COURT  
19 CENTRAL DISTRICT OF CALIFORNIA (SOUTHERN DIVISION)

20 SECURED MAIL SOLUTIONS, LLC,  
21 Plaintiff,

22 v.

23 ADVANCED IMAGE DIRECT, LLC,  
24 VERTIS HOLDINGS, INC., VERTIS, INC.,  
25 ENVELOPES UNLIMITED, INC., HARTE-  
26 HANKS, INC., HARTE-HANKS DIRECT,  
27 INC., HARTE-HANKS DIRECT  
28 MARKETING/BALTIMORE, INC.,  
HARTE-HANKS DIRECT  
MARKETING/CINCINNATI, INC.,  
HARTE-HANKS DIRECT MARKETING  
/DALLAS, INC., HARTE-HANKS DIRECT  
MARKETING/FULLERTON, INC.,  
HARTE-HANKS DIRECT  
MARKETING/JACKSONVILLE, LLC,  
HARTE-HANKS DIRECT  
MARKETING/KANSAS CITY, LLC,  
HARTE-HANKS PRINT, INC., R. R.  
DONNELLEY & SONS COMPANY,  
MICRODYNAMICS CORPORATION,  
MICRODYAMICS, INC. and  
MICRODYNAMICS GROUP, INC.

Defendants.

Case No. SA-CV 12-01090 DOC (MLGx)

(Consolidated for pretrial purposes with Case  
No. SA-CV 12-01118 and Case No. SA-CV 12-  
01119)

**SECOND AMENDED COMPLAINT FOR  
PATENT INFRINGEMENT**

**JURY DEMAND**

**By Fax**

1                                    **SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

2            Plaintiff Secured Mail Solutions, LLC (“SMS”) files this second amended complaint for  
3    patent infringement against Defendants Advanced Image Direct, LLC, Vertis Holdings, Inc.,  
4    Vertis, Inc., Envelopes Unlimited, Inc., Harte-Hanks, Inc., Harte-Hanks Direct, Inc., Harte-Hanks  
5    Direct Marketing/Baltimore, Inc., Harte-Hanks Direct Marketing/Cincinnati, Inc., Harte-Hanks  
6    Direct Marketing/Dallas, Inc., Harte-Hanks Direct Marketing/Fullerton Inc., Harte-Hanks Direct  
7    Marketing/Jacksonville, LLC, Harte-Hanks Direct Marketing./Kansas City, LLC, Harte-Hanks  
8    Print, Inc., R. R. Donnelley & Sons Company, Microdynamics Corporation, Microdynamics, Inc.  
9    and Microdynamic Group, Inc. SMS alleges:

10                                    **THE PARTIES**

11            1.        SMS is a limited liability company duly organized under the laws of the state of  
12    Nevada, with its principal place of business at 9550 S. Eastern Ave., Suite 253, Las Vegas, NV  
13    89123.

14            2.        SMS is informed and believes, and on that basis alleges that Defendant Advanced  
15    Image Direct, LLC (“AID”) is a corporation duly organized and existing under the laws of the  
16    state of California, with its principal place of business at 1415 S. Acacia Avenue, Fullerton, CA  
17    92831.

18            3.        SMS is informed and believes, and on that basis alleges that Defendant Vertis  
19    Holdings, Inc. is a corporation duly organized and existing under the laws of the state of  
20    Delaware, with its principal place of business at 250 West Pratt Street, Suite 1800, Baltimore,  
21    MD 21201.

22            4.        SMS is informed and believes, and on that basis alleges that Defendant Vertis, Inc.  
23    is a corporation duly organized and existing under the laws of the state of Delaware, with its  
24    principal place of business at 250 West Pratt Street, Suite 1800, Baltimore, MD 21201.

25            5.        SMS is informed and believes, and on that basis alleges that Defendant Envelopes  
26    Unlimited, Inc. (“EU Services”) is a corporation duly organized and existing under the laws of the  
27    state of Maryland, with its principal place of business at 649 North Horners Lane, Rockville, MD  
28    20850.

1           6.       SMS is informed and believes, and on that basis alleges that Defendant Harte-  
2 Hanks, Inc. is a corporation duly organized and existing under the laws of the state of Delaware,  
3 with its principal place of business at 9601 McAllister Freeway, Suite 610 San Antonio, TX  
4 78216.

5           7.       SMS is informed and believes, and on that basis alleges that Defendant Harte-  
6 Hanks Direct, Inc. is a corporation duly organized and existing under the laws of the state of New  
7 York, with its principal place of business at 777 Township Line Road, Suite 300, Yardley,  
8 Pennsylvania 19067.

9           8.       SMS is informed and believes, and on that basis alleges that Defendant Harte-  
10 Hanks Direct Marketing/Baltimore, Inc. is a corporation duly organized and existing under the  
11 laws of the state of Maryland, with its principal place of business at 4545 Annapolis Road,  
12 Baltimore, MD 21227.

13           9.       SMS is informed and believes, and on that basis alleges that Defendant Harte-  
14 Hanks Direct Marketing/Cincinnati, Inc. is a corporation duly organized and existing under the  
15 laws of the state of Ohio, with its principal place of business at 2950 Robertson Avenue,  
16 Cincinnati, OH, 45209.

17           10.      SMS is informed and believes, and on that basis alleges that Defendant Harte-  
18 Hanks Direct Marketing/Dallas, Inc. is a corporation duly organized and existing under the laws  
19 of the state of Delaware, with its principal place of business at 2750 114th Street, Suite 100,  
20 Grand Prairie, Texas 75050.

21           11.      SMS is informed and believes, and on that basis alleges that Defendant Harte-  
22 Hanks Direct Marketing/Fullerton, Inc. is a corporation duly organized and existing under the  
23 laws of the state of California, with its principal place of business at 2337 West Commonwealth  
24 Avenue, Fullerton, California 92833.

25           12.      SMS is informed and believes, and on that basis alleges that Defendant Harte-  
26 Hanks Direct Marketing/Jacksonville, LLC is a corporation duly organized and existing under the  
27 laws of the state of Delaware, with its principal place of business at 7498 Fullerton Street, Bldg.  
28 600, Jacksonville, Florida 32256.

1           13.    SMS is informed and believes, and on that basis alleges that Defendant Harte-  
2 Hanks Direct Marketing/Kansas City, LLC is a corporation duly organized and existing under the  
3 laws of the state of Delaware, with its principal place of business at 7801 Nieman, Shawnee,  
4 Kansas 66214.

5           14.    SMS is informed and believes, and on that basis alleges that Defendant Harte-  
6 Hanks Print, Inc. is a corporation duly organized and existing under the laws of the state of New  
7 Jersey, with its principal executive offices at 9601 McAllister Freeway, Suite 610, San Antonio,  
8 TX 78216.

9           15.    SMS is informed and believes, and on that basis alleges that Defendant R. R.  
10 Donnelley & Sons (“Donnelley”) is a corporation duly organized and existing under the laws of  
11 the state of Delaware, with its principal place of business at 111 S. Wacker Drive, Chicago, IL  
12 60606.

13           16.    SMS is informed and believes, and on that basis alleges that Defendant  
14 Microdynamics Corporation is a corporation duly organized and existing under the laws of the  
15 state of Illinois, with its principal place of business at 1400 Shore Road, Naperville, IL 60563.

16           17.    SMS is informed and believes, and on that basis alleges that Defendant  
17 Microdynamics, Inc. is a corporation duly organized and existing under the laws of the state of  
18 Illinois, with its principal place of business at 1400 Shore Road, Naperville, IL 60563.

19           18.    SMS is informed and believes, and on that basis alleges that Defendant  
20 Microdynamics Group, Inc. is a corporation duly organized and existing under the laws of the  
21 state of Illinois, with its principal place of business at 1400 Shore Road, Naperville, IL 60563.

22           19.    SMS is informed and believes, and on that basis alleges that the Defendants  
23 identified in Paragraphs 3 and 4 above (collectively “Vertis”) are interrelated companies that  
24 together comprise a leading provider of mail services. These two Defendants operate as a unitary  
25 business venture and are jointly and severally liable for patent infringement related to mail  
26 services provided by any one of them. SMS’s right to relief against each of the Vertis Defendants  
27 arises out of the same transaction, occurrence, or series of transactions or occurrences relating to  
28 making, using, importing into the United States, offering for sale, or selling mail services that are

1 common to each of the two Defendants. Additionally, questions of fact that are common to both  
2 Vertis Defendants will arise in this action, including whether software that is jointly used by both  
3 Defendants infringes the asserted patents. Therefore, joinder of the Defendants identified in  
4 Paragraphs 3 and 4 above is proper under 35 U.S.C. § 299.

5 20. In addition, the software used by Vertis is also used by AID and EU Services to  
6 provide mail services. The software that is commonly used by Vertis, AID and EU Services to  
7 provide mail services infringes the asserted patents. Given that this software is used by all four of  
8 these Defendants (*i.e.*, AID, the two Vertis Defendants, and EU Services), SMS's right to relief  
9 against each of these Defendants arises out of the same transaction, occurrence, or series of  
10 transactions or occurrences relating to making, using, importing into the United States, offering  
11 for sale, or selling mail services that are common to each of these four Defendants. Additionally,  
12 questions of fact that are common to all Defendants will arise in this action, including whether  
13 software that is jointly used by all Defendants either infringes the asserted patents, or results in  
14 products or services that infringe the asserted patents. Therefore, joinder of the four Defendants  
15 identified in Paragraphs 2-5 above is proper under 35 U.S.C. § 299.

16 21. SMS is informed and believes, and on that basis alleges that the Defendants  
17 identified in Paragraphs 6-14 above (collectively "Harte-Hanks") are interrelated companies that  
18 together comprise a leading provider of mail services. These Defendants operate as a unitary  
19 business venture and are jointly and severally liable for patent infringement related to mail  
20 services provided by any one of them. SMS's right to relief against each of these nine  
21 Defendants arises out of the same transaction, occurrence, or series of transactions or occurrences  
22 relating to making, using, importing into the United States, offering for sale, or selling mail  
23 services that are common to each of the nine Defendants. Additionally, questions of fact that are  
24 common to all nine Defendants will arise in this action, including whether software that is jointly  
25 used by all nine Defendants infringes the asserted patents. Therefore, joinder of the nine  
26 Defendants identified in Paragraphs 6-10 above is proper under 35 U.S.C. § 299.

27 22. SMS is informed and believes, and on that basis alleges that the Defendants  
28 identified in Paragraphs 16, 17 and 18 above (collectively "Microdynamics") are interrelated

1 companies that together comprise a leading provider of mail services. These three Defendants  
2 operate as a unitary business venture and are jointly and severally liable for patent infringement  
3 related to mail services provided by any one of them. SMS's right to relief against each of the  
4 Microdynamics Defendants arises out of the same transaction, occurrence, or series of  
5 transactions or occurrences relating to making, using, importing into the United States, offering  
6 for sale, or selling mail services that are common to each of the two Defendants. Additionally,  
7 questions of fact that are common to all three Microdynamics Defendants will arise in this action,  
8 including whether software that is jointly used by all three of these Defendants infringes the  
9 asserted patents. Therefore, joinder of the Defendants identified in Paragraphs 16 and 17 above is  
10 proper under 35 U.S.C. § 299.

11 23. In addition, the software used by Microdynamics is also used by Donnelley to  
12 provide mail services. The software that is commonly used by both Microdynamics and  
13 Donnelley to provide mail services infringes the asserted patents. Given that this software is used  
14 by all four of these Defendants (i.e., the three Microdynamics Defendants and Donnelley), SMS's  
15 right to relief against each of these Defendants arises out of the same transaction, occurrence, or  
16 series of transactions or occurrences relating to making, using, importing into the United States,  
17 offering for sale, or selling mail services that are common to each of the four Defendants.  
18 Additionally, questions of fact that are common to all four of these Defendants will arise in this  
19 action, including whether software that is jointly used by all four of these Defendants either  
20 infringes the asserted patents, or results in products or services that infringe the asserted patents.  
21 Therefore, joinder of the four Defendants identified in Paragraphs 15-18 above is proper under 35  
22 U.S.C. § 299.

23 24. Furthermore, while the different products (or software) used by the seventeen  
24 Defendants include certain differences, they also include certain commonalities. For example, all  
25 of the infringing products (or software) are configured to generate, store, process and acquire a  
26 common barcode (e.g., the Intelligent Mail barcode). Thus, SMS's right to relief against each of  
27 the seventeen Defendants arises out of the same transaction, occurrence, or series of transactions  
28 or occurrences relating to making, using, importing into the United States, offering for sale, or

1 selling mail services that are common to each of the seventeen Defendants. Additionally,  
2 questions of fact that are common to all Defendants will arise in this action, including whether  
3 software that is used by all Defendants, which include the foregoing commonalities, either  
4 infringes the asserted patents, or results in products or services that infringe the asserted patents.  
5 Therefore, joinder of the seventeen Defendants identified in Paragraphs 2-18 above is proper  
6 under 35 U.S.C. § 299.

7         25. SMS is informed and believes, and on that basis alleges that the seventeen  
8 Defendants use certain software to generate and process various barcodes, including the  
9 Intelligent Mail barcode (“IMb”). The IMb is one of several barcodes used by the United States  
10 Postal Service (“USPS”). The IMb is a data-rich barcode that can be applied to a mail object,  
11 includes information on the mail object, and can be used to uniquely identify the mail object.

12         26. While IMb specifications are available from the USPS. SMS is informed and  
13 believes, and on that basis alleges that the seventeen Defendants are performing infringing acts  
14 that are independent of the IMb specifications provided by the USPS. In other words, SMS  
15 alleges that the infringing conduct includes conduct that goes above and beyond the conduct  
16 required to comply with the IMb specifications provided by the USPS. SMS further alleges that  
17 the software used by the seventeen Defendants to generate and process IMbs and IMb related data  
18 is not being used to comply with the IMb specifications provided by the USPS, but is instead  
19 being used to provide certain value-added mail services to their customers that infringe the  
20 asserted patents but are not required to comply with any USPS specification or requirement. For  
21 example. an IMb can be used to unique identify a mail object. Defendants use the “unique  
22 identifier” feature to gather, store, acquire and disseminate information on mail objects (e.g., mail  
23 verification data, verification data, electronic data, etc.), thereby providing value-added mail  
24 services to their customers.

25         27. SMS is informed and believes, and on that basis alleges that the software used by  
26 AID, Vertis, and EU Services in providing the foregoing certain value-added mail services  
27 includes, at least in part, software provided by Grayhair Software, Inc. (“Grayhair software”).  
28 SMS is informed and believes, and on that basis alleges that the Grayhair software operates in

1 conjunction with software developed by, or at the direction of, AID, Vertis and EU Services, and  
2 that this software, together and separately, infringes the asserted patents.

3 28. SMS is informed and believes, and on that basis alleges that the software used by  
4 Donnelley and Microdynamics in providing the foregoing certain value-added mail services  
5 includes, at least in part, software provided by Crawford Technologies (“Crawford software”).  
6 SMS is informed and believes, and on that basis alleges that the Crawford software operations in  
7 conjunction with software developed by, or at the direction of, Donnelley and Microdynamics,  
8 and that this software, together and separately, infringes the asserted patents.

9 29. SMS is informed and believes, and on that basis alleges that certain software is  
10 used by the seventeen Defendants to generate various barcodes, including IMbs, and that  
11 infringing products are used to affix IMbs on mail objects, and store at least portions of the IMbs  
12 (together with related information) in a storage device. The infringing products are then used to  
13 interrogate the stored information, resulting in the production of data (e.g., verification data,  
14 electronic data, etc.) over a network.

15 30. SMS is informed and believes, and on that basis alleges, that evidence of direct  
16 and indirect infringement for AID and EU Services can be found on Grayhair Software’s website  
17 ([www.grayhairsoftware.com](http://www.grayhairsoftware.com)), which provides that AID and EU Services are users of SelectTrak.  
18 According to the website, SelectTrak is software that “offers a user-friendly, online dashboard  
19 that enables end-users a complete view into the life of their mailings. Mail data is updated in real  
20 time and delivered via a reporting engine that includes a wide array of options as well as the  
21 ability to produce ad hoc reports.”

22 31. SMS is informed and believes, and on that basis alleges, that evidence of direct  
23 and indirect infringement for Vertis can be found on Vertis’ websites ([www.vertisinc.com](http://www.vertisinc.com) and  
24 [www.vertismailtrail.com](http://www.vertismailtrail.com)), which provide that Vertis is a user of MailTrail, software that is  
25 powered by Grayhair Software. According to the websites, MailTrail is a client reporting system  
26 that allows a user to “[v]iew multiple reports side-by-side and drill down - all done with an  
27 enterprising level reporting engine.”

28 32. SMS is informed and believes, and on that basis alleges, that evidence of direct



1 and indirect infringement for Harte-Hanks can be found on Harte-Hanks' websites (www.harte-  
2 hanks.com and http://pretrakim.harte-hanks.com). The websites describe a Harte-Hanks product  
3 referred to as PrEtrak, which is software that provides customers with "[w]eb-based reporting,  
4 updated hourly." According to the websites, "PrEtrak provides state-by-state mapping plus  
5 reports on mail delivery by market, store, territory, class, shape, sort level, postal facility and  
6 historical patterns." IMbs can be processed using the PrEtrak software in order to provide value-  
7 added services to Harte-Hanks' customers. According to the websites, the PrEtrak software can  
8 be used "[f]rom front-end strategy to back-end reporting, and everything in between ... to ensure  
9 your mail promotions deliver a great customer experience and measurable results."

10 33. SMS is informed and believes, and on that basis alleges, that evidence of direct  
11 and indirect infringement for Donnelley can be found on Donnelley's websites  
12 (www.rrdonnelley.com and http://onesite.rrd.com), which describe a product referred to as  
13 "OneSite." Donnelley state that IMbs can be used to receive information on "each mail piece,"  
14 and that customers can use OneSite to quickly and easily access this information via "user-ready  
15 reports."

16 34. SMS is informed and believes, and on that basis alleges, that evidence of direct  
17 and indirect infringement for Microdynamics can be found on Microdynamics' website  
18 (www.microdg.com), which provides that third parties have access to an "invaluable tool set,"  
19 and that the IMbs can be used to receive "piece-level" information. Evidence of direct and  
20 indirect infringement can further be found on Crawford Technologies' website  
21 (www.crawfordtech.com), which quotes the Vice President of Sales & Marketing for  
22 Microdynamics, who stated that "[w]e have been able to solve our tactical IMb issues by  
23 leveraging CrawfordTech's approach to their software solutions, we are benefiting from savings  
24 in time and costs." According to Crawford's website, they are a provider of IMb software,  
25 including PRO Unique ID Managers and PRO Mail Tracker.

26 35. SMS is informed and believes, and on that basis alleges that the software used by  
27 the seventeen Defendants has no substantial non-infringing uses, and was especially made or  
28 adapted for use in an infringement of the asserted patents. Specifically, the software only

1 functions to generate and process IMbs and IMb related data, and only does so in a way that  
2 infringes the asserted patents. SMS is informed and believes, and on that basis alleges that the  
3 software cannot be used for any other purpose other than infringement.

4 36. SMS is informed and believes, and on that basis alleges that the seventeen  
5 Defendants have been aware of the asserted patents and the infringement allegations since at least  
6 July 2012, and continue to use their software to infringe the asserted patents. SMS alleges that, to  
7 the extent that Defendants' customers are using the software, or a portion thereof, they are doing  
8 so at the direction of each Defendant.

9 **JURISDICTION AND VENUE**

10 37. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1338(a)  
11 because this action arises under the patent laws of the United States, 35 U.S.C. §§ 1 et seq. Venue  
12 is proper in this district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) in that a substantial part  
13 of the events giving rise to the claims occurred in this district and the Defendants have a regular  
14 and established practice of business in this district and have committed acts of infringement in  
15 this district.

16 **SECURED MAIL SOLUTIONS, LLC**

17 38. SMS is a provider of mail and mail information services and technology, and is the  
18 owner of the three patents-in-suit, U.S. Pat. Nos. 7,814,032, 7,818,268 and 8,073,787.

19 39. The patents-in-suit disclose and claim various systems and methods for processing,  
20 verifying and/or authenticating mail identification data. In one embodiment of the claimed  
21 inventions, mail identification data is affixed to a mail object and includes (or is linked to)  
22 information related to the mail object (*e.g.*, information on the sender of the mail object, the  
23 contents of the mail object, etc.). This information can then be used by various individuals or  
24 entities (*e.g.*, a mail house, a mail carrier, a recipient, etc.) to ensure that the mail object is secure,  
25 and can safely be processed, routed and opened. In fact, during prosecution of U.S. Pat. No.  
26 7,818,268 ("the '268 patent"), the USPTO granted the '268 patent special examination status for  
27 disclosing "counter terrorism" technology. According to the USPTO, the '268 patent discloses  
28 technology that "reduces the risk of [a] terrorist attack." *See* File History for the '268 patent,

1 Decision on Petition to Make Special (Counter Terrorism), dated October 8, 2003. While the  
2 mail identification data claimed in the patents-in-suit can be used to secure mail objects, the data  
3 can also be used by mail houses to more effectively process and route mail objects.

4 **INFRINGEMENT OF U.S. PATENT NO. 7,814,032**

5 40. SMS repeats and realleges the allegations of the preceding paragraphs as if set  
6 forth herein.

7 41. On October 12, 2010, United States Patent No. 7,814,032 (“the ‘032 patent”) was  
8 duly and legally issued for an invention entitled “System and Method for Mail Verification.”  
9 SMS was assigned the ‘032 patent and continues to hold all rights and interest in the ‘032 patent.  
10 A true and correct copy of the ‘032 patent is attached hereto as Exhibit 1.

11 42. AID has infringed and continues to infringe one or more claims of the ‘032 patent.  
12 AID is liable for infringing the ‘032 patent under 35 U.S.C. § 271 by at least generating, storing  
13 and processing mail identification data as claimed in the patent, and/or contributing to or inducing  
14 others in the generation, storage and/or processing of mail identification data as claimed in the  
15 patent. This includes, but is not limited to, use of the software and/or products identified in  
16 Paragraphs 25-27 and 30 above, and/or contributing to or inducing others (*e.g.*, AID’s customers,  
17 recipients of mail objects, etc.) to use at least a portion of the software and/or products identified  
18 in Paragraphs 25-27 and 30 above.

19 43. AID has had actual notice of the ‘032 patent and SMS’s infringement contentions  
20 since at least July 2012, and, notwithstanding such notice, has continued to infringe, induce  
21 infringement of, and contribute to infringement of the ‘032 patent.

22 44. AID’s acts of infringement have caused damage to SMS, and SMS is entitled to  
23 recover from AID the damages sustained by SMS as a result of AID’s wrongful acts in an amount  
24 subject to proof at trial. AID’s infringement of SMS’s exclusive rights under the ‘032 patent will  
25 continue to damage SMS, causing irreparable harm for which there is no adequate remedy at law,  
26 unless enjoined by this Court.

27 45. Vertis has infringed and continues to infringe one or more claims of the ‘032  
28 patent. Vertis is liable for infringing the ‘032 patent under 35 U.S.C. § 271 by at least generating,

1 storing and processing mail identification data as claimed in the patent, and/or contributing to or  
2 inducing others in the generation, storage and/or processing of mail identification data as claimed  
3 in the patent. This includes, but is not limited to, use of the software and/or products identified in  
4 Paragraphs 25-27 and 31 above, and/or contributing to or inducing others (*e.g.*, Vertis' customers,  
5 recipients of mail objects, etc.) to use at least a portion of the software and/or products identified  
6 in Paragraphs 25-27 and 31 above.

7 46. Vertis has had actual notice of the '032 patent and SMS's infringement  
8 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
9 induce infringement of, and contribute to infringement of the '032 patent.

10 47. Vertis' acts of infringement have caused damage to SMS, and SMS is entitled to  
11 recover from Vertis the damages sustained by SMS as a result of Vertis' wrongful acts in an  
12 amount subject to proof at trial. Vertis' infringement of SMS's exclusive rights under the '032  
13 patent will continue to damage SMS, causing irreparable harm for which there is no adequate  
14 remedy at law, unless enjoined by this Court.

15 48. EU Services has infringed and continues to infringe one or more claims of the '032  
16 patent. EU Services is liable for infringing the '032 patent under 35 U.S.C. § 271 by at least  
17 generating, storing and processing mail identification data as claimed in the patent, and/or  
18 contributing to or inducing others in the generation, storage and/or processing of mail  
19 identification data as claimed in the patent. This includes, but is not limited to, use of the  
20 software and/or products identified in Paragraphs 25-27 and 30 above, and/or contributing to or  
21 inducing others (*e.g.*, EU Services' customers, recipients of mail objects, etc.) to use at least a  
22 portion of the software and/or products identified in Paragraphs 25-27 and 30 above.

23 49. EU Services has had actual notice of the '032 patent and SMS's infringement  
24 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
25 induce infringement of, and contribute to infringement of the '032 patent.

26 50. EU Services' acts of infringement have caused damage to SMS, and SMS is  
27 entitled to recover from EU Services the damages sustained by SMS as a result of EU Services'  
28 wrongful acts in an amount subject to proof at trial. EU Services' infringement of SMS's

1 exclusive rights under the '032 patent will continue to damage SMS, causing irreparable harm for  
2 which there is no adequate remedy at law, unless enjoined by this Court.

3 51. Harte-Hanks has infringed and continues to infringe one or more claims of the  
4 '032 patent. Harte-Hanks is liable for infringing the '032 patent under 35 U.S.C. § 271 by at least  
5 generating, storing and processing mail identification data as claimed in the patent, and/or  
6 contributing to or inducing others in the generation, storage and/or processing of mail  
7 identification data as claimed in the patent. This includes, but is not limited to, use of the  
8 software and/or products identified in Paragraphs 25, 26 and 32 above, and/or contributing to or  
9 inducing others (e.g., Harte-Hanks' customers, recipients of mail objects, etc.) to use at least a  
10 portion of the software and/or products identified in Paragraphs 25, 26 and 32 above.

11 52. Harte-Hanks has had actual notice of the '032 patent and SMS's infringement  
12 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
13 induce infringement of, and contribute to infringement of the '032 patent.

14 53. Harte-Hanks' acts of infringement have caused damage to SMS, and SMS is  
15 entitled to recover from Harte-Hanks the damages sustained by SMS as a result of Harte-Hanks'  
16 wrongful acts in an amount subject to proof at trial. Harte-Hanks' infringement of SMS's  
17 exclusive rights under the '032 patent will continue to damage SMS, causing irreparable harm for  
18 which there is no adequate remedy at law, unless enjoined by this Court.

19 54. Donnelley has infringed and continues to infringe one or more claims of the '032  
20 patent. Donnelley is liable for infringing the '032 patent under 35 U.S.C. § 271 by at least  
21 generating, storing and processing mail identification data as claimed in the patent, and/or  
22 contributing to or inducing others in the generation, storage and/or processing of mail  
23 identification data as claimed in the patent. This includes, but is not limited to, use of the  
24 software and/or products identified in Paragraphs 25, 26, 28 and 33 above, and/or contributing or  
25 inducing others (e.g., Donnelley's customers, recipients of mail objects, etc.) to use at least a  
26 portion of the software and/or products identified in Paragraphs 25, 26, 28 and 33 above.

27 55. Donnelley has had actual notice of the '032 patent and SMS's infringement  
28 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,

1 induce infringement of, and contribute to the infringement of the '032 patent.

2 56. Donnelley's acts of infringement have caused damage to SMS, and SMS is entitled  
3 to recover from Donnelley the damages sustained by SMS as a result of Donnelley's wrongful  
4 acts in an amount subject to proof at trial. Donnelley's infringement of SMS's exclusive rights  
5 under the '032 patent will continue to damage SMS, causing irreparable harm for which there is  
6 no adequate remedy at law, unless enjoined by this Court.

7 57. Microdynamics has infringed and continues to infringe one or more claims of the  
8 '032 patent. Microdynamics is liable for infringing the '032 patent under 35 U.S.C. § 271 by at  
9 least generating, storing and processing mail identification data as claimed in the patent, and/or  
10 contributing to or inducing others in the generation, storage and/or processing of mail  
11 identification data as claimed in the patent. This includes, but is not limited to, use of the software  
12 and/or products identified in Paragraphs 25, 26, 28 and 34 above, and/or contributing or inducing  
13 others (e.g., Microdynamics' customers, recipients of mail objects, etc.) to use at least a portion of  
14 the software and/or products identified in Paragraphs 25, 26, 28 and 34 above.

15 58. Microdynamics has had actual notice of the '032 patent and SMS's infringement  
16 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
17 induce infringement of, and contribute to the infringement of the '032 patent.

18 59. Microdynamics' acts of infringement have caused damage to SMS, and SMS is  
19 entitled to recover from Microdynamics the damages sustained by SMS as a result of  
20 Microdynamics' wrongful acts in an amount subject to proof at trial. Microdynamics'  
21 infringement of SMS's exclusive rights under the '032 patent will continue to damage SMS,  
22 causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this  
23 Court.

24 **INFRINGEMENT OF U.S. PATENT NO. 7,818,268**

25 60. SMS repeats and realleges the allegations of the preceding paragraphs as if set  
26 forth herein.

27 61. On October 19, 2010, United States Patent No. 7,818,268 ("the 268 patent") was  
28 duly and legally issued for an invention entitled "System and Method for Mail Verification."

1 SMS was assigned the '268 patent and continues to hold all rights and interest in the '268 patent.  
2 A true and correct copy of the '268 patent is attached hereto as Exhibit 2.

3 62. AID has infringed and continues to infringe one or more claims of the '268 patent.  
4 AID is liable for infringing the '268 patent under 35 U.S.C. § 271 by at least generating, storing  
5 and processing mail identification data as claimed in the patent, and/or contributing to or inducing  
6 others in the generation, storage and/or processing of mail identification data as claimed in the  
7 patent. This includes, but is not limited to, use of the software and/or products identified in  
8 Paragraphs 25-27 and 30 above, and/or contributing to or inducing others (*e.g.*, AID's customers,  
9 recipients of mail objects, etc.) to use at least a portion of the software and/or products identified  
10 in Paragraphs 25-27 and 30 above.

11 63. AID has had actual notice of the '268 patent and SMS's infringement contentions  
12 since at least July 2012, and, notwithstanding such notice, has continued to infringe, induce  
13 infringement of, and contribute to infringement of the '268 patent.

14 64. AID's acts of infringement have caused damage to SMS, and SMS is entitled to  
15 recover from AID the damages sustained by SMS as a result of AID's wrongful acts in an amount  
16 subject to proof at trial. AID's infringement of SMS's exclusive rights under the '268 patent will  
17 continue to damage SMS, causing irreparable harm for which there is no adequate remedy at law,  
18 unless enjoined by this Court.

19 65. Vertis has infringed and continues to infringe one or more claims of the '268  
20 patent. Vertis is liable for infringing the '268 patent under 35 U.S.C. § 271 by at least generating,  
21 storing and processing mail identification data as claimed in the patent, and/or contributing to or  
22 inducing others in the generation, storage and/or processing of mail identification data as claimed  
23 in the patent. This includes, but is not limited to, use of the software and/or products identified in  
24 Paragraphs 25-27 and 31 above, and/or contributing to or inducing others (*e.g.*, Vertis' customers,  
25 recipients of mail objects, etc.) to use at least a portion of the software and/or products identified  
26 in Paragraphs 25-27 and 31 above.

27 66. Vertis has had actual notice of the '268 patent and SMS's infringement  
28 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,

1 induce infringement of, and contribute to infringement of the '268 patent.

2 67. Vertis' acts of infringement have caused damage to SMS, and SMS is entitled to  
3 recover from Vertis the damages sustained by SMS as a result of Vertis' wrongful acts in an  
4 amount subject to proof at trial. Vertis' infringement of SMS's exclusive rights under the '268  
5 patent will continue to damage SMS, causing irreparable harm for which there is no adequate  
6 remedy at law, unless enjoined by this Court.

7 68. EU Services has infringed and continues to infringe one or more claims of the '268  
8 patent. EU Services is liable for infringing the '268 patent under 35 U.S.C. § 271 by at least  
9 generating, storing and processing mail identification data as claimed in the patent, and/or  
10 contributing to or inducing others in the generation, storage and/or processing of mail  
11 identification data as claimed in the patent. This includes, but is not limited to, use of the  
12 software and/or products identified in Paragraphs 25-27 and 30 above, and/or contributing to or  
13 inducing others (e.g., EU Services' customers, recipients of mail objects, etc.) to use at least a  
14 portion of the software and/or products identified in Paragraphs 25-27 and 30 above.

15 69. EU Services has had actual notice of the '268 patent and SMS's infringement  
16 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
17 induce infringement of, and contribute to infringement of the '268 patent.

18 70. EU Services' acts of infringement have caused damage to SMS, and SMS is  
19 entitled to recover from EU Services the damages sustained by SMS as a result of EU Services'  
20 wrongful acts in an amount subject to proof at trial. EU Services' infringement of SMS's  
21 exclusive rights under the '268 patent will continue to damage SMS, causing irreparable harm for  
22 which there is no adequate remedy at law, unless enjoined by this Court.

23 71. Harte-Hanks has infringed and continues to infringe one or more claims of the  
24 '268 patent. Harte-Hanks is liable for infringing the '268 patent under 35 U.S.C. § 271 by at least  
25 generating, storing and processing mail identification data as claimed in the patent, and/or  
26 contributing to or inducing others in the generation, storage and/or processing of mail  
27 identification data as claimed in the patent. This includes, but is not limited to, use of the  
28 software and/or products identified in Paragraphs 25, 26 and 32 above, and/or contributing to or



1 inducing others (e.g., Harte-Hanks' customers, recipients of mail objects, etc.) to use at least a  
2 portion of the software and/or products identified in Paragraphs 25, 26 and 32 above.

3 72. Harte-Hanks has had actual notice of the '268 patent and SMS's infringement  
4 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
5 induce infringement of, and contribute to infringement of the '268 patent.

6 73. Harte-Hanks' acts of infringement have caused damage to SMS, and SMS is  
7 entitled to recover from Harte-Hanks the damages sustained by SMS as a result of Harte-Hanks'  
8 wrongful acts in an amount subject to proof at trial. Harte-Hanks' infringement of SMS's  
9 exclusive rights under the '268 patent will continue to damage SMS, causing irreparable harm for  
10 which there is no adequate remedy at law, unless enjoined by this Court.

11 74. Donnelley has infringed and continues to infringe one or more claims of the '268  
12 patent. Donnelley is liable for infringing the '268 patent under 35 U.S.C. § 271 by at least  
13 generating, storing and processing mail identification data as claimed in the patent, and/or  
14 contributing to or inducing others in the generation, storage and/or processing of mail  
15 identification data as claimed in the patent. This includes, but is not limited to, use of the  
16 software and/or products identified in Paragraphs 25, 26, 28 and 33 above, and/or contributing or  
17 inducing others (e.g., Donnelley's customers, recipients of mail objects, etc.) to use at least a  
18 portion of the software and/or products identified in Paragraphs 25, 26, 28 and 33 above.

19 75. Donnelley has had actual notice of the '268 patent and SMS's infringement  
20 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
21 induce infringement of, and contribute to the infringement of the '268 patent.

22 76. Donnelley's acts of infringement have caused damage to SMS, and SMS is entitled  
23 to recover from Donnelley the damages sustained by SMS as a result of Donnelley's wrongful  
24 acts in an amount subject to proof at trial. Donnelley's infringement of SMS's exclusive rights  
25 under the '268 patent will continue to damage SMS, causing irreparable harm for which there is  
26 no adequate remedy at law, unless enjoined by this Court.

27 77. Microdynamics has infringed and continues to infringe one or more claims of the  
28 '268 patent. Microdynamics is liable for infringing the '268 patent under 35 U.S.C. § 271 by at

1 least generating, storing and processing mail identification data as claimed in the patent, and/or  
2 contributing to or inducing others in the generation, storage and/or processing of mail  
3 identification data as claimed in the patent. This includes, but is not limited to, use of the  
4 software and/or products identified in Paragraphs 25, 26, 28 and 34 above, and/or contributing or  
5 inducing others (e.g., Microdynamics' customers, recipients of mail objects, etc.) to use at least a  
6 portion of the software and/or products identified in Paragraphs 25, 26, 28 and 34 above.

7 78. Microdynamics has had actual notice of the '268 patent and SMS's infringement  
8 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
9 induce infringement of, and contribute to the infringement of the '268 patent.

10 79. Microdynamics' acts of infringement have caused damage to SMS, and SMS is  
11 entitled to recover from Microdynamics the damages sustained by SMS as a result of  
12 Microdynamics' wrongful acts in an amount subject to proof at trial. Microdynamics'  
13 infringement of SMS's exclusive rights under the '268 patent will continue to damage SMS,  
14 causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this  
15 Court.

16 **INFRINGEMENT OF U.S. PATENT NO. 8,073,787**

17 80. SMS repeats and realleges the allegations of the preceding paragraphs as if set  
18 forth herein.

19 81. On December 6, 2011, United States Patent No. 8,073,787 ("the '787 patent") was  
20 duly and legally issued for an invention entitled "System and Method for Mail Verification."  
21 SMS was assigned the '787 patent and continues to hold all rights and interest in the '787 patent.  
22 A true and correct copy of the '787 patent is attached hereto as Exhibit 3.

23 82. AID has infringed and continues to infringe one or more claims of the '787 patent.  
24 AID is liable for infringing the '787 patent under 35 U.S.C. § 271 by at least generating, storing  
25 and processing mail identification data as claimed in the patent, and/or contributing to or inducing  
26 others in the generation, storage and/or processing of mail identification data as claimed in the  
27 patent. This includes, but is not limited to, use of the software and/or products identified in  
28 Paragraphs 25-27 and 30 above, and/or contributing to or inducing others (e.g., AID's customers,

1 recipients of mail objects, etc.) to use at least a portion of the software and/or products identified  
2 in Paragraphs 25-27 and 30 above.

3 83. AID has had actual notice of the '787 patent and SMS's infringement contentions  
4 since at least July 2012, and, notwithstanding such notice, has continued to infringe, induce  
5 infringement of, and contribute to infringement of the '787 patent.

6 84. AID's acts of infringement have caused damage to SMS, and SMS is entitled to  
7 recover from AID the damages sustained by SMS as a result of AID's wrongful acts in an amount  
8 subject to proof at trial. AID's infringement of SMS's exclusive rights under the '787 patent will  
9 continue to damage SMS, causing irreparable harm for which there is no adequate remedy at law,  
10 unless enjoined by this Court.

11 85. Vertis has infringed and continues to infringe one or more claims of the '787  
12 patent. Vertis is liable for infringing the '787 patent under 35 U.S.C. § 271 by at least generating,  
13 storing and processing mail identification data as claimed in the patent, and/or contributing to or  
14 inducing others in the generation, storage and/or processing of mail identification data as claimed  
15 in the patent. This includes, but is not limited to, use of the software and/or products identified in  
16 Paragraphs 25-27 and 31 above, and/or contributing to or inducing others (e.g., Vertis' customers,  
17 recipients of mail objects, etc.) to use at least a portion of the software and/or products identified  
18 in Paragraphs 25-27 and 31 above.

19 86. Vertis has had actual notice of the '787 patent and SMS's infringement  
20 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
21 induce infringement of, and contribute to infringement of the '787 patent.

22 87. Vertis' acts of infringement have caused damage to SMS, and SMS is entitled to  
23 recover from Vertis the damages sustained by SMS as a result of Vertis' wrongful acts in an  
24 amount subject to proof at trial. Vertis' infringement of SMS's exclusive rights under the '787  
25 patent will continue to damage SMS, causing irreparable harm for which there is no adequate  
26 remedy at law, unless enjoined by this Court.

27 88. EU Services has infringed and continues to infringe one or more claims of the '787  
28 patent. EU Services is liable for infringing the '787 patent under 35 U.S.C. § 271 by at least

1 generating, storing and processing mail identification data as claimed in the patent, and/or  
2 contributing to or inducing others in the generation, storage and/or processing of mail  
3 identification data as claimed in the patent. This includes, but is not limited to, use of the  
4 software and/or products identified in Paragraphs 25-27 and 30 above, and/or contributing to or  
5 inducing others (*e.g.*, EU Services' customers, recipients of mail objects, etc.) to use at least a  
6 portion of the software and/or products identified in Paragraphs 25-27 and 30 above.

7 89. EU Services has had actual notice of the '787 patent and SMS's infringement  
8 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
9 induce infringement of, and contribute to infringement of the '787 patent.

10 90. EU Services' acts of infringement have caused damage to SMS, and SMS is  
11 entitled to recover from EU Services the damages sustained by SMS as a result of EU Services'  
12 wrongful acts in an amount subject to proof at trial. EU Services' infringement of SMS's  
13 exclusive rights under the '787 patent will continue to damage SMS, causing irreparable harm for  
14 which there is no adequate remedy at law, unless enjoined by this Court.

15 91. Harte-Hanks has infringed and continues to infringe one or more claims of the  
16 '787 patent. Harte-Hanks is liable for infringing the '787 patent under 35 U.S.C. § 271 by at least  
17 generating, storing and processing mail identification data as claimed in the patent, and/or  
18 contributing to or inducing others in the generation, storage and/or processing of mail  
19 identification data as claimed in the patent. This includes, but is not limited to, use of the  
20 software and/or products identified in Paragraphs 25, 26 and 32 above, and/or contributing to or  
21 inducing others (*e.g.*, Harte-Hanks' customers, recipients of mail objects, etc.) to use at least a  
22 portion of the software and/or products identified in Paragraphs 25, 26 and 32 above.

23 92. Harte-Hanks has had actual notice of the '787 patent and SMS's infringement  
24 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
25 induce infringement of, and contribute to infringement of the '787 patent.

26 93. Harte-Hanks' acts of infringement have caused damage to SMS, and SMS is  
27 entitled to recover from Harte-Hanks the damages sustained by SMS as a result of Harte-Hanks'  
28 wrongful acts in an amount subject to proof at trial. Harte-Hanks' infringement of SMS's

1 exclusive rights under the '787 patent will continue to damage SMS, causing irreparable harm for  
2 which there is no adequate remedy at law, unless enjoined by this Court.

3 94. Donnelley has infringed and continues to infringe one or more claims of the '787  
4 patent. Donnelley is liable for infringing the '787 patent under 35 U.S.C. § 271 by at least  
5 generating, storing and processing mail identification data as claimed in the patent, and/or  
6 contributing to or inducing others in the generation, storage and/or processing of mail  
7 identification data as claimed in the patent. This includes, but is not limited to, use of the  
8 software and/or products identified in Paragraphs 25, 26, 28 and 33 above, and/or contributing or  
9 inducing others (e.g., Donnelley's customers, recipients of mail objects, etc.) to use at least a  
10 portion of the software and/or products identified in Paragraphs 25, 26, 28 and 33 above.

11 95. Donnelley has had actual notice of the '787 patent and SMS's infringement  
12 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,  
13 induce infringement of, and contribute to the infringement of the '787 patent.

14 96. Donnelley's acts of infringement have caused damage to SMS, and SMS is entitled  
15 to recover from Donnelley the damages sustained by SMS as a result of Donnelley's wrongful  
16 acts in an amount subject to proof at trial. Donnelley's infringement of SMS's exclusive rights  
17 under the '787 patent will continue to damage SMS, causing irreparable harm for which there is  
18 no adequate remedy at law, unless enjoined by this Court.

19 97. Microdynamics has infringed and continues to infringe one or more claims of the  
20 '787 patent. Microdynamics is liable for infringing the '787 patent under 35 U.S.C. § 271 by at  
21 least generating, storing and processing mail identification data as claimed in the patent, and/or  
22 contributing to or inducing others in the generation, storage and/or processing of mail  
23 identification data as claimed in the patent. This includes, but is not limited to, use of the  
24 software and/or products identified in Paragraphs 25, 26, 28 and 34 above, and/or contributing or  
25 inducing others (e.g., Donnelley's customers, recipients of mail objects, etc.) to use at least a  
26 portion of the software and/or products identified in Paragraphs 25, 26, 28 and 34 above.

27 98. Microdynamics has had actual notice of the '787 patent and SMS's infringement  
28 contentions since at least July 2012, and, notwithstanding such notice, has continued to infringe,

1 induce infringement of, and contribute to the infringement of the '787 patent.

2 99. Microdynamics' acts of infringement have caused damage to SMS, and SMS is  
3 entitled to recover from Microdynamics the damages sustained by SMS as a result of  
4 Microdynamics' wrongful acts in an amount subject to proof at trial. Microdynamics'  
5 infringement of SMS's exclusive rights under the '787 patent will continue to damage SMS,  
6 causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this  
7 Court.

8 **JURY DEMAND**

9 100. Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, SMS respectfully  
10 requests a trial by jury on all issues properly triable by jury.

11 **PRAYER FOR RELIEF**

12 WHEREFORE, SMS requests entry of judgment in its favor and against Defendants as  
13 follows:

14 a) A declaration that Advanced Image Direct, LLC, Vertis Holdings, Inc., Vertis,  
15 Inc., and Envelopes Unlimited, Inc., Harte-Hanks, Inc., Harte-Hanks Direct, Inc., Harte-Hanks  
16 Direct Marketing/Baltimore, Inc., Harte-Hanks Direct Marketing/Cincinnati, Inc., Harte-Hanks  
17 Direct Marketing/Dallas, Inc., Harte-Hanks Direct Marketing/Fullerton Inc., Harte-Hanks Direct  
18 Marketing/Jacksonville, LLC, Harte-Hanks Direct Marketing./Kansas City, LLC, Harte-Hanks  
19 Print, Inc., R. R. Donnelley & Sons Company, Microdynamics Corporation, Microdynamics, Inc.  
20 and Microdynamic Group, Inc. have infringed, contributed to the infringement of, or induced  
21 infringement of U.S. Patent Nos. 7,814,032, 7,818,268 and 8,073,787.

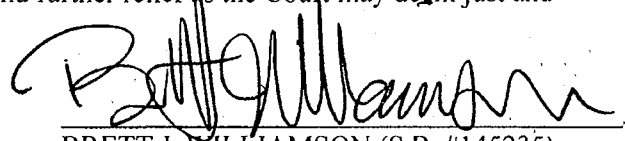
22 b) Awarding the damages arising out of AID's, Vertis', EU Services', Harte-Hanks',  
23 Donnelley's and Microdynamics' infringement of, contribution to the infringement of, or  
24 inducement of infringement of U.S. Patent Nos. 7,814,032, 7,818,268 and 8,073,787 to SMS,  
25 together with prejudgment and post-judgment interest, in an amount according to proof;

26 c) Permanently enjoining AID, Vertis, EU Services, Harte-Hanks, Donnelley and  
27 Microdynamics and their respective officers, agents, employees, and those acting in privity with  
28 them, from further infringement, including contributory infringement and/or inducing

1 infringement, of U.S. Patent Nos. 7,814,032, 7,818,268 and 8,073,787, or in the alternative,  
2 awarding a royalty for post-judgment infringement; and

3 d) Awarding such other costs and further relief as the Court may deem just and  
4 proper.

5 Dated: October 29, 2012



BRETT J. WILLIAMSON (S.B. #145235)

bwilliamson@omm.com

O'MELVENY & MYERS LLP

610 Newport Center Drive, 17th Floor

Newport Beach, CA 92660-6429

Telephone: (949) 760-9600

Facsimile: (949) 823-6994

RYAN K. YAGURA (S.B. #197619)

ryagura@omm.com

VISION L. WINTER (S.B. #234172 )

vwinter@omm.com

O'MELVENY & MYERS LLP

400 South Hope Street

Los Angeles, CA 90071-2899

Telephone: (213) 430-6000

Facsimile: (213) 430-6407

Attorneys for SECURED MAIL SOLUTIONS,  
LLC

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

# **EXHIBIT 1**







US007814032B2

(12) **United States Patent**  
Fitzsimmons

(10) Patent No.: **US 7,814,032 B2**  
(45) Date of Patent: **Oct. 12, 2010**

(54) **SYSTEM AND METHOD FOR MAIL VERIFICATION**

FOREIGN PATENT DOCUMENTS

(76) Inventor: **Todd E. Fitzsimmons**, 237 Lindero Ave., Long Beach, CA (US) 90803

JP 2001275159 A \* 10/2001  
WO WO 01/35348 A1 \* 5/2001

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 644 days.

\* cited by examiner

Primary Examiner—Fadey S Jabr

(21) Appl. No.: **11/519,739**

(57) **ABSTRACT**

(22) Filed: **Sep. 11, 2006**

(65) **Prior Publication Data**

US 2007/0022060 A1 Jan. 25, 2007

**Related U.S. Application Data**

(63) Continuation of application No. 10/271,471, filed on Oct. 15, 2002.

(60) Provisional application No. 60/330,031, filed on Oct. 16, 2001.

(51) **Int. Cl.**

*G06F 17/00* (2006.01)  
*G06Q 10/00* (2006.01)  
*G06Q 20/00* (2006.01)  
*G07B 17/02* (2006.01)  
*G06F 21/00* (2006.01)

(52) **U.S. Cl.** ..... 705/401; 705/1.1; 705/64; 705/402; 705/408; 713/186

(58) **Field of Classification Search** ..... 705/1.1, 705/64, 401, 402, 408; 713/186

See application file for complete search history.

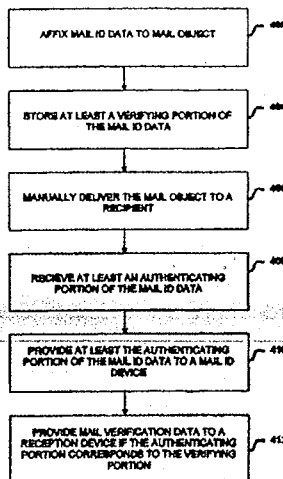
(56) **References Cited**

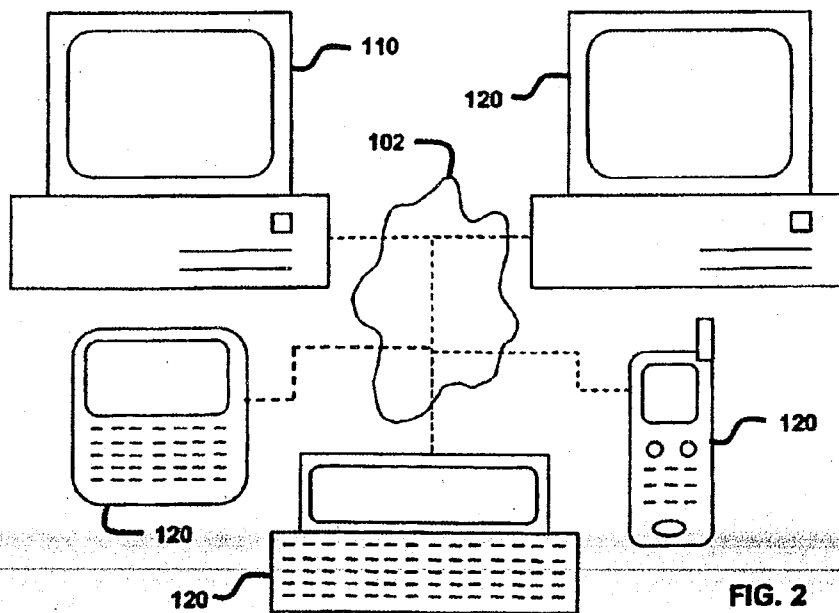
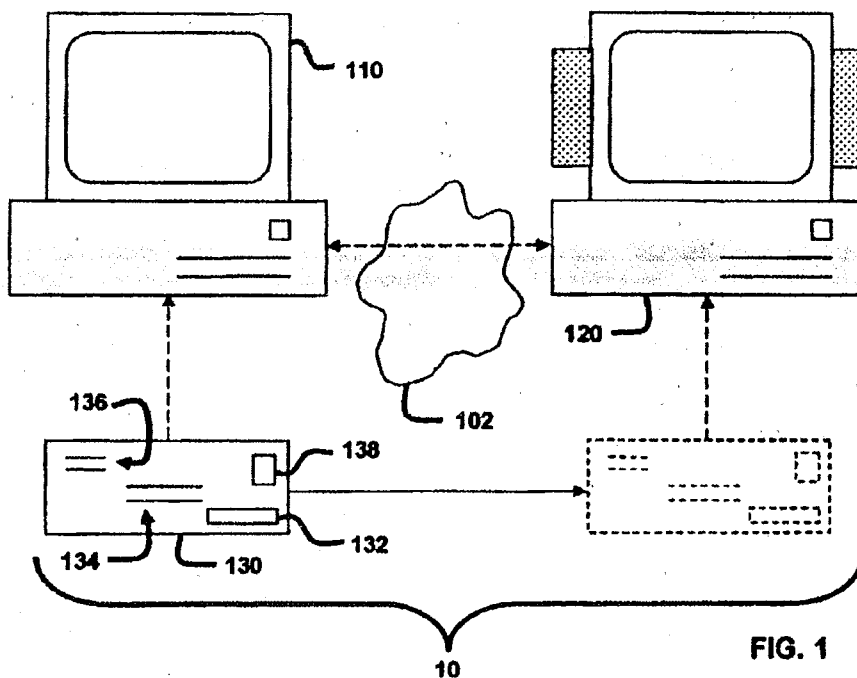
**U.S. PATENT DOCUMENTS**

2002/0029152 A1 \* 3/2002 Lee et al. .... 705/1

A system and method is provided for transmitting mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. In one embodiment of the present invention, a mail verification application is adapted to store at least a verifying portion (e.g., an identifiable code portion, a shipping portion, a recipient portion, etc.) of mail ID data in memory. The mail ID data is then affixed to a mail object. The mail object is then manually delivered to a recipient. At least an authenticating portion of the mail ID data is then provided to a reception device. The reception device, which communicates with the mail ID device over a wide area network, transmits at least the authenticating portion of the mail ID data to the mail verification application operating on the mail ID device. The mail verification application then compares the authenticating portion of the mail ID data with the verifying portion stored in memory. If the authenticating portion of the mail ID data is authenticated, mail verification data is sent to the reception device. In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data, securing data, sender data, recipient data, mail-content data, downloadable-product data, sender-web-page data, and/or third-party-web-page data.

22 Claims, 3 Drawing Sheets





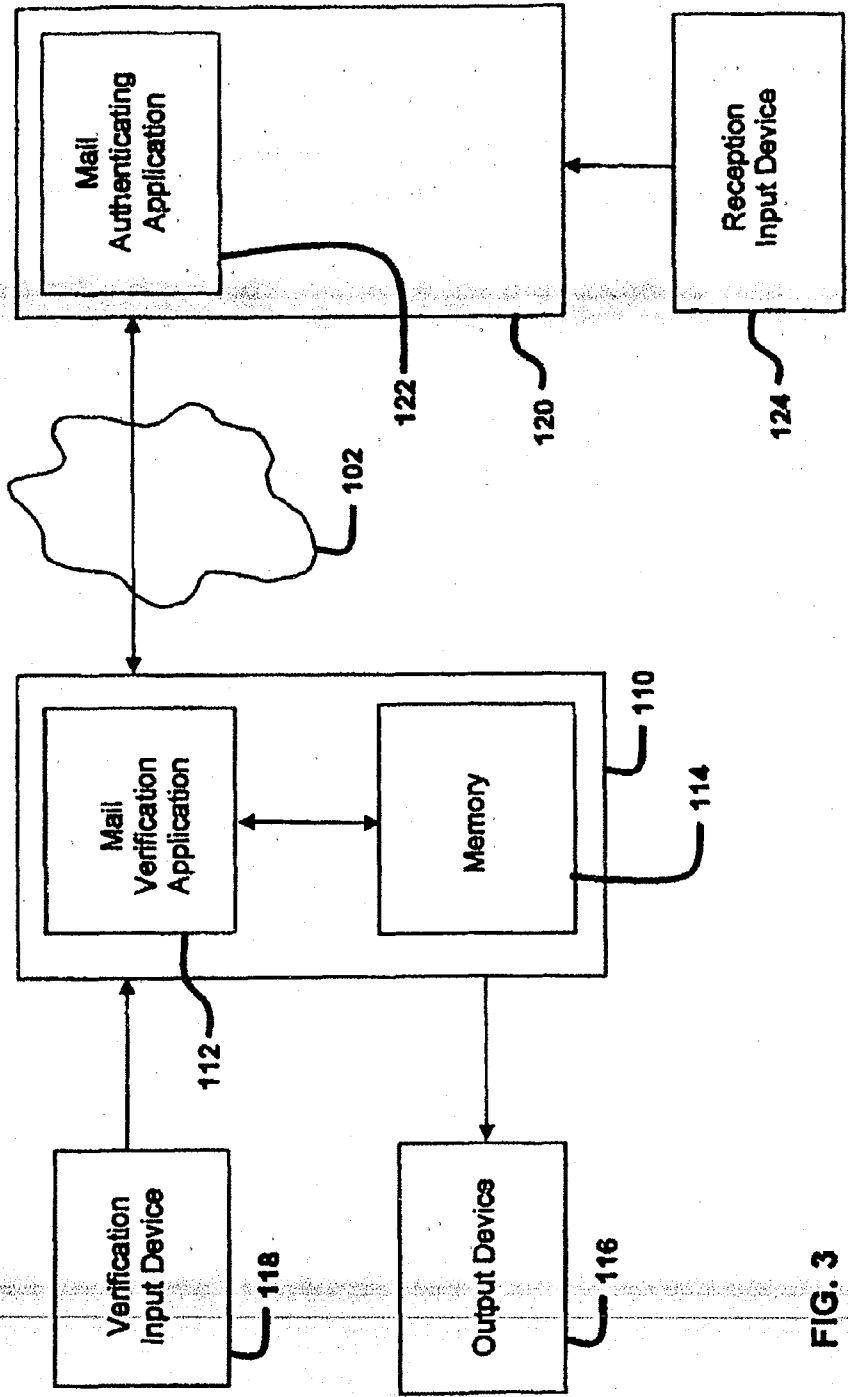


FIG. 3

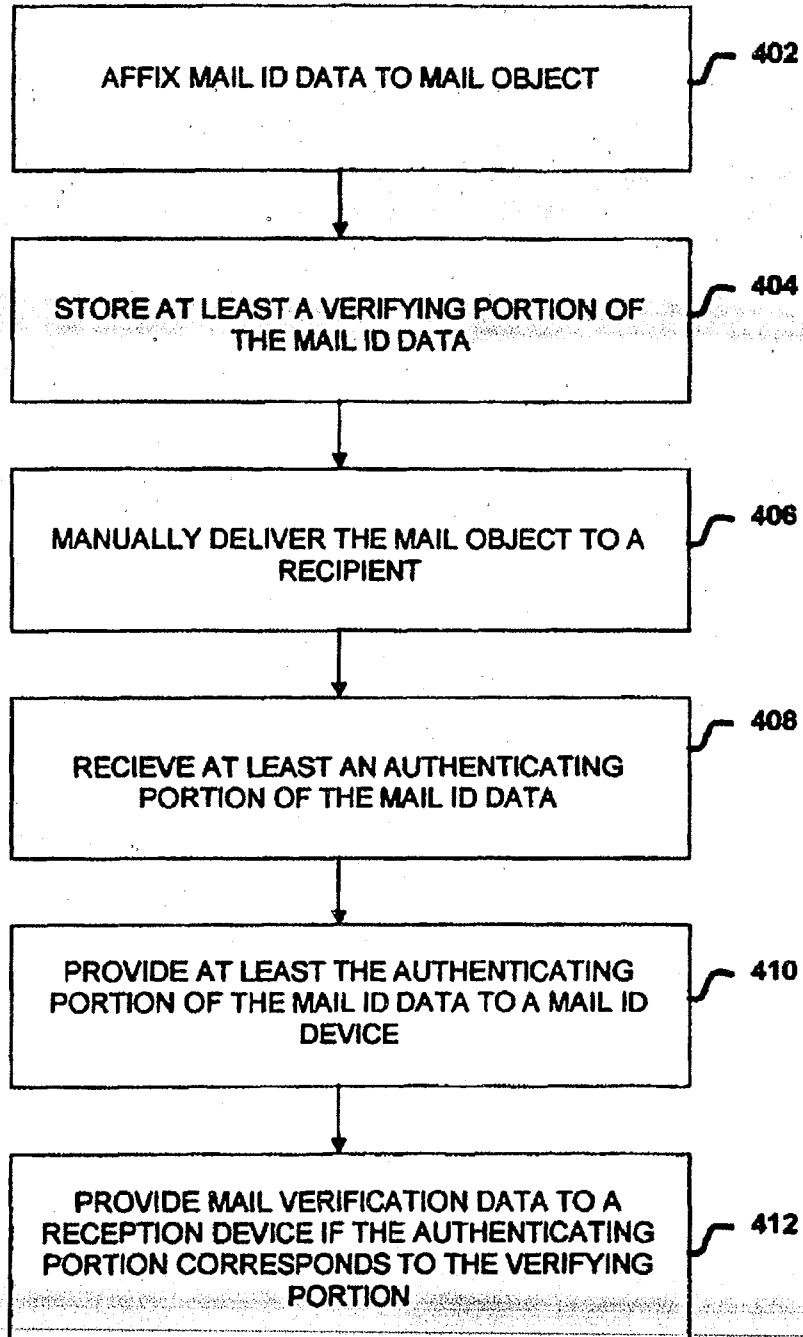


FIG. 4

US 7,814,032 B2

1

## SYSTEM AND METHOD FOR MAIL VERIFICATION

### CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation of U.S. patent application Ser. No. 10/271,471, filed Oct. 15, 2002, which claims the benefit pursuant to 35 U.S.C. §119(e) of U.S. Provisional Patent Application No. 60/330,031 filed Oct. 16, 2001, which applications are specifically incorporated herein, in their entirety, by reference.

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

The present invention relates to mail verification, and more particularly to a system and method of authenticating at least one mail object by providing at least a portion of mail identification data over a wide area network, such as the Internet, in order to receive mail verification data.

#### 2. Description of Related Art

Currently there are two ways to provided mail objects (e.g., letters, documents, packages, etc.) to an end user; that being electronically (e.g., email, etc.) and through traditional mail services (e.g., U.S. Postal Service, Federal Express, UPS, Courier, etc.). However, because certain mail objects cannot be delivered electronically (either because its impossible or impractical), they are delivered using traditional mail services.

There are several problems with delivering mail objects through traditional mail services. First, the mail object is typically secured inside packaging (e.g., envelopes, boxes, etc.) before it is provided to the mail service. Thus, neither the mail service nor the recipient is aware of the contents of the package until such package is opened by the recipient. This creates a problem in that hazardous mail objects (i.e., Anthrax, explosives, etc.) are not detected until they are opened by the recipient, thus exposing the recipient to the hazardous material. It also creates a problem in that mail objects (in general) are not known until they are opened by the recipient, thus making it difficult for the recipient (or his designee) to properly screen, sort or avoid certain mail objects (e.g., offensive mail, annoying mail, etc.).

Second, a manually delivered mail object is limited to a one-way production of a finite set of information and/or products. This becomes problematic when the sender of the mail object is interested in providing or receiving additional information (e.g., product instructions, warranty information, etc.). Finally, contents that can be delivered electronically (e.g., advertisements, software, etc.) are often included in mail objects that are delivered via traditional mail services. The drawback with this is that it increases the cost associated with producing and/or delivering the mail object and increase the size of the mail object. For at least these reasons, a need exists in the industry for a system and method of providing mail verification data in response to receiving mail ID data over a wide area network, such as the Internet.

### SUMMARY OF THE INVENTION

The present invention provides a system and method for providing mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. Preferred embodiments of the present invention operate in accordance with at least one reception device, a mail identification (ID)

2

device, a memory, and a mail verification application adapted to communicate with the reception device over a wide area network, such as the Internet. Specifically, the mail verification application is adapted to store at least a verifying portion of mail ID data in memory. In one embodiment of the present invention, the verifying portion of the mail ID data includes an identifiable code portion (e.g., an alpha code, a numeric code, an alphanumeric code, a symbolic code, a digital code, etc.), a shipping portion (e.g., ship date, shipping location, shipping method, etc.) and/or a recipient portion (e.g., the recipients name, address, email address, IP address, account number, social security number, etc.). The mail ID data is then affixed to a mail object. The mail object, which may further include a mail-to-address, a return-mail-address, and/or postage, is then manually delivered to a recipient. In one embodiment of the present invention, the mail ID data further includes mail-to-address data, return-mail-address data, and/or postage data.

At least an authenticating portion of the mail ID data is then provided to the reception device. The reception device, which communicates with the mail ID device over a wide area network, transmits at least the authenticating portion of the mail ID data to the mail verification application operating on the mail ID device. The mail verification application then compares the authenticating portion of the mail ID data with the verifying portion stored in memory. If the authenticating portion corresponds to the verifying portion (e.g., matches, is reasonably related, etc.), then mail verification data is sent to the reception device. In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data (indicating that the mail ID data has been authenticated), securing data (indicating who secured the mail object), sender data (indicating who sent the mail object), recipient data (indicating the intended recipient of the mail object) and/or additional data (e.g., the contents of the mail object, downloadable product data, sender web-page information, third party advertisements, etc.).

In one embodiment of the present invention, the mail ID device further includes an input device adapted to provide at least a verifying portion of the mail ID data to the mail verification application and/or an output device adapted to affix the mail ID data on the mail object. In another embodiment of the present invention, the reception device includes an input device for receiving at least an authenticating portion of the mail ID data from the mail object and/or a mail authenticating application adapted to receive at least the authenticating portion of the mail ID data from the input device and provide at least the authenticating portion of the mail ID data to the mail ID device. In another embodiment of the present invention, the U.S. Postal Service (or an interim authenticating or screening entity) is the recipient of the mail object, thus interacting with the reception device to receive mail verification data.

A more complete understanding of the system and method for providing mail verification data in response to receiving at least a portion of mail ID data will be afforded to those skilled in the art, as well as a realization of additional advantages and objects thereof, by a consideration of the following detailed description of the preferred embodiment. Reference will be made to the appended sheets of drawings which will first be described briefly.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates one embodiment of the mail verification system.

US 7,814,032 B2

3

FIG. 2 illustrates a mail ID device communicating with a plurality of reception devices over a wide area network, such as the Internet.

FIG. 3 illustrates one embodiment of the mail ID device and the reception device depicted in FIG. 1.

FIG. 4 is a flow chart illustrating one method of providing mail verification data in response to receiving at least a portion of mail ID data.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention provides a system and method for providing mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. In the detailed description that follows, like element numerals are used to describe like elements illustrated in one or more figures.

Preferred embodiments of the present invention operate in accordance with at least one reception device, a mail identification (ID) device, a memory, and a mail verification application adapted to communicate with the reception device over a wide area network, such as the Internet. FIG. 1 illustrates one embodiment of the mail verification system 10, which includes a mail ID device 110 and a reception device 120 communicating through a wide area network 102, such as the Internet. It should be appreciated, as depicted in FIG. 2, that the reception device(s) 120 includes, but is not limited to, personal computers, set top boxes, personal digital assistants (PDAs), mobile phones, land-line phones, televisions, bar code readers, and all other physically and wirelessly connected reception devices generally known to those skilled in the art. It should further be appreciated that the number of reception devices 120 depicted in FIGS. 1 and 2 are merely to illustrate how the present invention operates, and are not intended to further limit the present invention.

As shown in FIG. 3, the mail ID device 110 further includes a mail verification application 112 and a memory 114. The mail verification application 112 is adapted to store at least a portion (i.e., a verifying portion) of mail ID data in the memory 114, receive at least a portion (i.e., an authenticating portion) of mail ID data from the reception device 120, and provide mail verification data if the portion of the mail ID data received from the reception device 120 is authenticated. It should be appreciated that the mail verification application 112 may further be adapted to generate the mail ID data and provide it to an external device (e.g., a printer, etc.) or receive at least a verifying portion of the mail ID data from an external device (e.g., a scanner, etc.). It should also be appreciated that the mail verification application 112 may exist as a single application, or as multiple applications (locally and/or remotely stored) that operate together to perform the verification functions as described herein. It should further be appreciated that the location of the memory device 114 depicted in FIG. 3 is not intended to further limit the present invention. Thus, a memory device that is, for example, external to the mail ID device 110 is within the spirit and scope of the present invention.

Referring back to FIG. 1, where the dashed arrows indicate data transactions and the solid arrow indicates physical movement, mail ID data 132 is affixed to a mail object 130 (as used in its broader sense to encompass the packaging that surrounds the content). It should be appreciated that mail ID data can be encoded/encrypted (e.g., using bar code data, digital data, etc.) to prevent fraudulent usage. It should further be appreciated that affixing the mail ID data 132 on the mail

4

object 130 includes, but is not limited to, printing or attaching mail ID data directly on the outer surface of the mail object 130 or printing/storing the mail ID data 132 on labels, ICs, smart cards, RFID tags, or any other data storage devices (or materials) generally known to those skilled in the art, and attaching them to the outer surface of the mail object 130. It should also be appreciated that the location of the mail ID data 132 on the mail object 130 in FIG. 1 is merely to exemplify how the invention operates, and is not intended to further limit the present invention. Thus, affixing the mail ID data 132 in some other location, such as over the sealing flap of an envelope, is within the spirit and scope of this invention.

At least a portion (i.e., a verifying portion) of the mail ID data 132 (either before or after the mail ID data is affixed) is stored in the mail ID device 110, or more particular (as shown in FIG. 3) in a memory 114 located within the mail ID device 110. Specifically, the mail verification application 112 either receives or generates at least the verifying portion of the mail ID data 132. The verifying portion is then stored in the memory 114. In one embodiment of the present invention, the verifying portion of the mail ID data includes a identifiable code portion (e.g., an alpha code, a numeric code, and alphanumeric code, a symbolic code, a digital code, etc.), a shipping portion (e.g., ship date, shipping location, shipping method, etc.), and/or a recipient portion (e.g., the recipients name, address, email address, IP address, account number, social security number, etc.). The mail object 130, which may further include a mail-to-address 134, a return-mail-address 136, and/or postage 138, can then be manually delivered to a recipient. It should be appreciated that the mail ID data 132 can also be encoded (e.g., in a bar code, etc.) to include mail-to-address data, return-mail-address data, and/or postage data. In other words, for example, mail ID data could be encoded to include both coded data and postage-account data.

Once the recipient (or their designee) receives the mail object 130, at least an authenticating portion of the mail ID data 132 is provided to the reception device 120. The reception device 120, which communicates with the mail ID device 110 over a wide area network 102, transmits at least the authenticating portion of the mail identification data to the mail verification application 112 operating on the mail ID device 110. The mail verification application 112 then compares the authenticating portion of the mail ID data with the verifying portion stored in memory 114. If the received portion is authenticated, or corresponds to the verifying portion (e.g., matches, is reasonably related, etc.), then mail verification data is sent to the reception device 120.

In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data (e.g., image data, audio data, etc.) indicating that the mail ID data has been authenticated. This would allow, for example, the reception device 120 to produce at least one authenticating image on a display and/or perform at least one authenticating sound on a speaker. In another embodiment of the present invention at least a portion of the mail verification data includes securing data (indicating who secured the mail object), sender data (indicating who sent the mail object), recipient data (indicating who is to receive the mail object) and/or additional data (e.g., the contents of the mail object, downloadable product data, sender web-page data, third party advertisements, etc).

In another embodiment of the present invention, the mail ID device and/or the reception device further include an input device (e.g., 118, 124) adapted to receive at least a portion of the mail ID data. It should be appreciated that the input devices depicted and discussed herein (e.g., 118, 124) include, but are not limited to, scanners (e.g., bar code scan-

US 7,814,032 B2

5

ners, etc.), keyboards, RFID readers, smart card readers, IC readers, and all other input devices generally known to those skilled in the art.

In another embodiment of the present invention, the mail ID device further includes an output device 116 adapted to affix (e.g., print, store, etc.) the mail ID data on the mail object. It should be appreciated that affixing the mail ID data on the mail object includes, but is not limited to, printing or attaching mail ID data directly on the outer surface of the mail object or printing/storing the mail ID data on labels, ICs, smart cards, RFID tags, or any other data storage devices (or materials) generally known to those skilled in the art, and attaching them to the outer surface of the mail object. It should further be appreciated that the output device depicted and described herein (e.g., 116) includes, but is not limited to, printers, data storage device (e.g., device capable of storing data on ICs, smart cards, RFID tags, etc.), and all other output devices generally known to those skilled in the art.

In another embodiment of the present invention, as shown in FIG. 3, the reception device 120 further includes a mail authenticating application 122 adapted to receive at least the authenticating portion of the mail ID data from the input device 124 and provide at least the authenticating portion of the mail ID data to the mail ID device. It should be appreciated that the mail authenticating application 122 may exist as a single application, or as: multiple applications (locally and/or remotely stored) that operate together to perform the authenticating functions as described herein.

In one embodiment of the present invention, the mail ID data further includes software-booting data adapted to boot the mail authenticating application, an email application and/or a browser application. Either one of these applications could then be used to provide at least an authenticating portion of said mail ID data to said mail ID device, provide additional information to said mail ID device (or the sender of the mail object), and/or receive additional information from either the mail ID device, the sender of the mail object, or a third-party. In another embodiment, the mail verification data further includes software-booting data adapted to boot an email application and/or a browser application. Either one of these applications could then be used to provide additional information to the mail ID device and/or receive additional information from either the mail ID device, the sender of the mail object, or a third party.

In another embodiment of the invention, the reception device 120, or more particularly the mail authenticating application 122 is adapted to provide a reply email to the mail ID device 130 or the sender of the mail object. This reply email may either be sent automatically, to acknowledge the reception of the mail ID data and/or mail verification data, or manually, to allow the recipient to communicate with the mail ID device and/or sender of the mail object. In another embodiment of the invention the mail verification application 112 is adapted to provide the mail verification data to the reception device 120 via an email.

In another embodiment of the present invention, the U.S. Postal Service (or an interim authenticating or screening entity) is the recipient (as defined by this application) of the mail object 130, thus interacting with the reception device 120 to receive mail verification data. If mail is authenticated (or approved in the case of screening), the mail object 130 is forwarded on to the actual intended recipient.

FIG. 4 is a flow chart illustrating one method of providing mail verification data in response to receiving at least a portion of the mail ID data. Specifically, in step 402 mail ID data is affixed to a mail object. At step 404, a verifying portion of the mail ID data is stored in a memory device. The mail object

6

is then delivered to its recipient (or designee) at step 406. At step 408, a reception device receives at least an authenticating portion of the mail ID data. The reception device then provides at least the authenticating portion to a mail ID device at step 410. If the authenticating portion of the mail ID data corresponds to the verifying portion of the mail ID data, then mail verification data is provided to the reception device at step 412. It should be appreciated that storing the verifying portion of the mail ID data before the mail ID data is affixed to the mail object is within the spirit and scope of the present invention.

Having thus described multiple embodiments of a system and method of providing mail verification data in response to receiving mail ID data, it should be apparent to those skilled in the art that certain advantages of the system have been achieved. It should also be appreciated that various modifications, adaptations, and alternative embodiments thereof may be made within the scope and spirit of the present invention. The invention is further defined by the following claims.

What is claimed is:

1. A method for using a single barcode to verify the authenticity of and identify a sender of a physical mail object that is being sent from said sender to a recipient via a mail carrier, comprising:

a sender of a physical mail object generating a unique identifier, wherein said unique identifier comprises a numeric value, can be used by said sender to identify said physical mail object, and is distinguishable from a second unique identifier that can be used by said sender to identify a second physical mail object that is being sent from said sender to said recipient via said mail carrier;

encoding at least said unique identifier, sender data and recipient data into a single barcode, wherein said sender data identifies said sender of said physical mail object and said recipient data identifies a recipient of said physical mail object;

storing at least a portion of said encoded data in a database, said portion comprising at least said unique identifier, said sender data and said recipient data;

printing said single barcode on said physical mail object; submitting said physical mail object to a postal carrier; scanning by a scanner said single barcode to acquire said encoded data; and

comparing by a computer at least a portion of said encoded data to data stored in said database to verify the authenticity of said physical mail object, wherein said at least a portion of said encoded data comprises at least said unique identifier, said sender data and said recipient data and can be used by said postal carrier to identify said sender of said physical mail object.

2. The method of claim 1, further comprising the step of sending information pertaining to said physical mail object electronically to said sender, wherein at least a portion of said information indicates that said physical mail object has been received by said mail carrier.

3. The method of claim 1, wherein said step of encoding at least said unique identifier, sender data and recipient data into a single barcode further comprises encoding at least said unique identifier, sender data, recipient data and shipping data into a single barcode, wherein said shipping data identifies at least a particular method of shipping said physical mail object from said sender to said recipient.

4. The method of claim 1, wherein said step of storing at least a portion of said encoded data in a database further comprises storing data in said database that can be used to



7

identify at least one shipping location of said physical mail object and at least one ship date of said physical mail object.

5 The method of claim 1, wherein said step of comparing at least a portion of said encoded data with data stored in said database further comprises (1) delivering said physical mail object directly to said recipient if there is correspondence between said at least a portion of said encoded data and data stored in said database and (2) not delivering said physical mail object directly to said recipient if there is no correspondence between said at least a portion of said encoded data and data stored in said database. 10

6. The method of claim 2, wherein said step of sending information pertaining to said physical mail object electronically to said sender further comprises sending an email to said sender, wherein said email includes said information. 15

7. The method of claim 1, wherein said step of storing at least a portion of said encoded data in a database further comprises storing at least a portion of said encoded data in a database that is not maintained by said sender.

8. The method of claim 1, wherein said recipient data identifies said recipient by identifying the destination of said physical mail object. 20

9. The method of claim 1, wherein said sender data identifies said sender by identifying the origin of said physical mail object. 25

10. The method of claim 1, wherein said step of submitting said physical mail object to a postal carrier further comprises submitting said physical mail object to the United States Postal Service.

11. The method of claim 1, wherein said step of comparing at least a portion of said encoded data to data stored in said database to verify the authenticity of said physical mail object further comprises determining if there is correspondence between said at least a portion of said encoded data and said data stored in said database. 30

12. The method of claim 3, wherein said step of comparing at least a portion of said encoded data to data stored in said database further comprising comparing at least said unique identifier, sender data, recipient data and shipping data to data stored in said database. 40

13. A method for using a single barcode to verify the authenticity of and identify of a sender of a physical mail object that is being sent from said sender to a recipient via a mail carrier, comprising: 45

a sender of a physical mail object generating a unique identifier, wherein said unique identifier comprises a numeric value, can be used by said sender to identify said physical mail object, and is distinguishable from a second unique identifier that can be used by said sender to identify a second physical mail object sent from said sender to said recipient via said mail carrier;

encoding at least said unique identifier, sender data, recipient data and shipping method data into a single barcode, wherein said sender data can be used to identify said sender of said physical mail object and said recipient data can be used to identify a recipient of said physical mail object. 50

8

storing at least a portion of said encoded data in a database, said portion comprising at least said unique identifier, said sender data and said shipping method data; printing said single barcode on said physical mail object; submitting said physical mail object to a postal carrier; scanning by a scanner said single barcode to acquire said encoded data; and

comparing by a computer at least a portion of said encoded data to data stored in said database to verify the authenticity of said physical mail object, wherein said at least a portion of said encoded data comprises at least said unique identifier, said sender data and said shipping method data and can be used by said postal carrier to identify said sender of said physical mail object.

14. The method of claim 13, further comprising the step of sending information pertaining to said physical mail object electronically to said sender, wherein at least a portion of said information indicates that said physical mail object has been received by said mail carrier.

15. The method of claim 13, wherein said step of storing at least a portion of said encoded data in a database further comprises storing data in said database that can be used to identify at least one shipping location of said physical mail object and at least one ship date of said physical mail object. 20

16. The method of claim 13, wherein said step of comparing at least a portion of said encoded data with data stored in said database further comprises (1) delivering said physical mail object directly to said recipient if there is correspondence between said at least a portion of said encoded data and data stored in said database and (2) not delivering said physical mail object directly to said recipient if there is no correspondence between said at least a portion of said encoded data and data stored in said database. 30

17. The method of claim 14, wherein said step of sending information pertaining to said physical mail object electronically to said sender further comprises sending an email to said sender, wherein said email includes said information.

18. The method of claim 13, wherein said step of storing at least a portion of said encoded data in a database further comprises storing at least a portion of said encoded data in a database that is not maintained by said sender.

19. The method of claim 13, wherein said recipient data identifies said recipient by identifying the destination of said physical mail object.

20. The method of claim 13, wherein said sender data identifies said sender by identifying the origin of said physical mail object. 45

21. The method of claim 13, wherein said step of submitting said physical mail object to a postal carrier further comprises submitting said physical mail object to the United States Postal Service.

22. The method of claim 13, wherein said step of comparing at least a portion of said encoded data to data stored in said database to verify the authenticity of said physical mail object further comprises determining if there is correspondence between said at least a portion of said encoded data and said data stored in said database. 50

\* \* \* \* \*

# **EXHIBIT 2**





US007818268B2

(12) **United States Patent**  
Fitzsimmons

(10) Patent No.: **US 7,818,268 B2**

(45) Date of Patent: **Oct. 19, 2010**

(54) **SYSTEM AND METHOD FOR MAIL VERIFICATION**

FOREIGN PATENT DOCUMENTS

JP 09-99931 \* 4/1997

(76) Inventor: **Todd E. Fitzsimmons, 237 Lindero Ave., Long Beach, CA (US) 90803**

(Continued)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1290 days.

OTHER PUBLICATIONS

Fales: "Exciting times for new developments in tracking systems. (Automatic Identification)"; Industrial Engineering, May 1992, vol. 24, No. 5, p. 14.\*

(21) Appl. No.: **10/271,471**

(Continued)

(22) Filed: **Oct. 15, 2002**

Primary Examiner - Fadey S Jabr

(65) **Prior Publication Data**

(57) **ABSTRACT**

US 2003/0140014 A1 Jul. 24, 2003

**Related U.S. Application Data**

(60) Provisional application No. 60/330,031, filed on Oct. 16, 2001.

(51) Int. Cl.  
G06F 17/00 (2006.01)  
G06Q 10/00 (2006.01)  
G06Q 20/00 (2006.01)  
G07B 17/02 (2006.01)  
G06F 21/00 (2006.01)

(52) U.S. Cl. .... 705/401; 705/1.1; 705/64; 705/402; 705/408; 713/186

(58) Field of Classification Search ..... 705/1, 705/28, 29, 1.1, 64, 401-402, 408; 713/186  
See application file for complete search history.

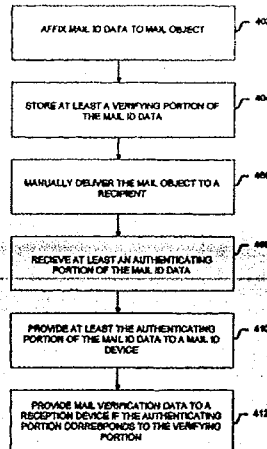
(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,558,318 A \* 12/1985 Katz et al. .... 340/5.86  
5,043,908 A \* 8/1991 Manduley et al. .... 700/227  
5,684,705 A \* 11/1997 Herbert ..... 705/401  
5,963,927 A \* 10/1999 Herbert ..... 705/401  
5,984,366 A \* 11/1999 Priddy ..... 283/72

(Continued)

56 Claims, 3 Drawing Sheets



US 7,818,268 B2

Page 2

U.S. PATENT DOCUMENTS

6,260,029 B1 \* 7/2001 Critelli ..... 705/408  
 6,289,323 B1 \* 9/2001 Gordon et al. .... 705/40  
 6,510,992 B2 \* 1/2003 Wells et al. .... 235/385  
 6,539,360 B1 \* 3/2003 Kadaba ..... 705/28  
 6,810,408 B1 \* 10/2004 Bates et al. .... 709/200  
 7,200,753 B1 \* 4/2007 Shinzaki et al. .... 713/182  
 7,305,104 B2 \* 12/2007 Carr et al. .... 382/100  
 2002/0029152 A1 \* 3/2002 Lee et al. .... 705/1  
 2002/0083022 A1 \* 6/2002 Algazi ..... 705/408  
 2003/0004830 A1 \* 1/2003 Frederick ..... 705/26  
 2003/0101143 A1 \* 5/2003 Montgomery et al. .... 705/62  
 2003/0101148 A1 \* 5/2003 Montgomery et al. .... 705/404  
 2003/0102374 A1 \* 6/2003 Wojdyla et al. .... 235/385  
 2003/0118191 A1 \* 6/2003 Wang et al. .... 380/285  
 2003/0141358 A1 \* 7/2003 Hudson et al. .... 235/375

2003/0177095 A1 \* 9/2003 Zorab et al. .... 705/50

FOREIGN PATENT DOCUMENTS

JP 2001275159 A \* 10/2001  
 JP 2002-284239 \* 10/2002  
 WO WO 96/03286 \* 2/1996  
 WO WO 96/13015 A2 \* 5/1996  
 WO WO 01/35348 A1 \* 5/2001

OTHER PUBLICATIONS

Haskin: "FedEx Ship lets you track packages from your desktop. (Federal Express)(First Looks)(Software Review)(Evaluation)(Brief Article)", PC Magazine, May 16, 1995, vol. 14, No. 9, p. 54.\*  
 Giusti, Christopher, "Mail Center Security", Security Management, Nov. 1998, pp. 1-10.\*

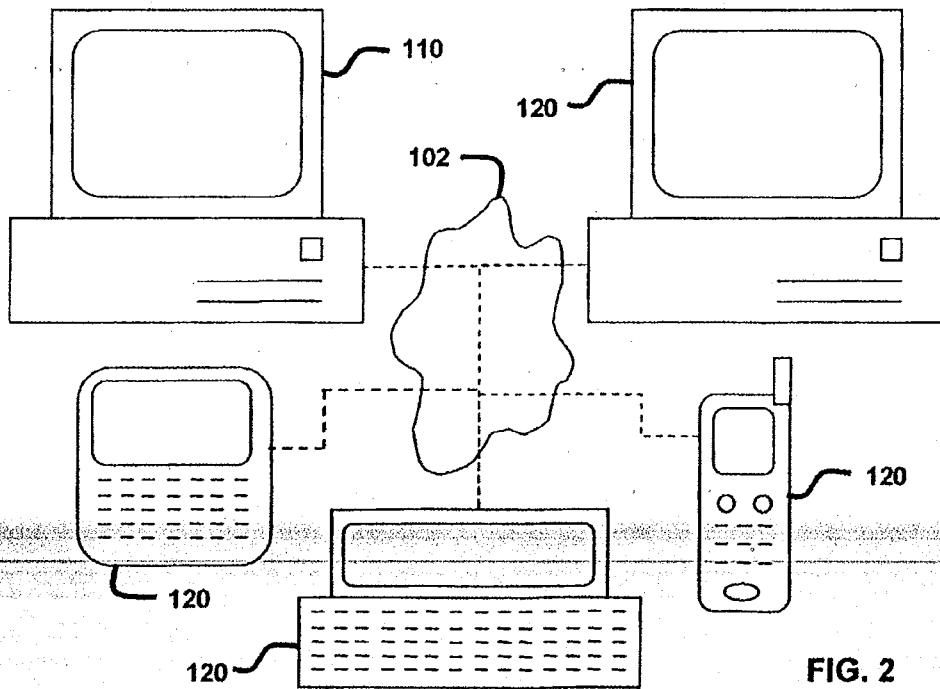
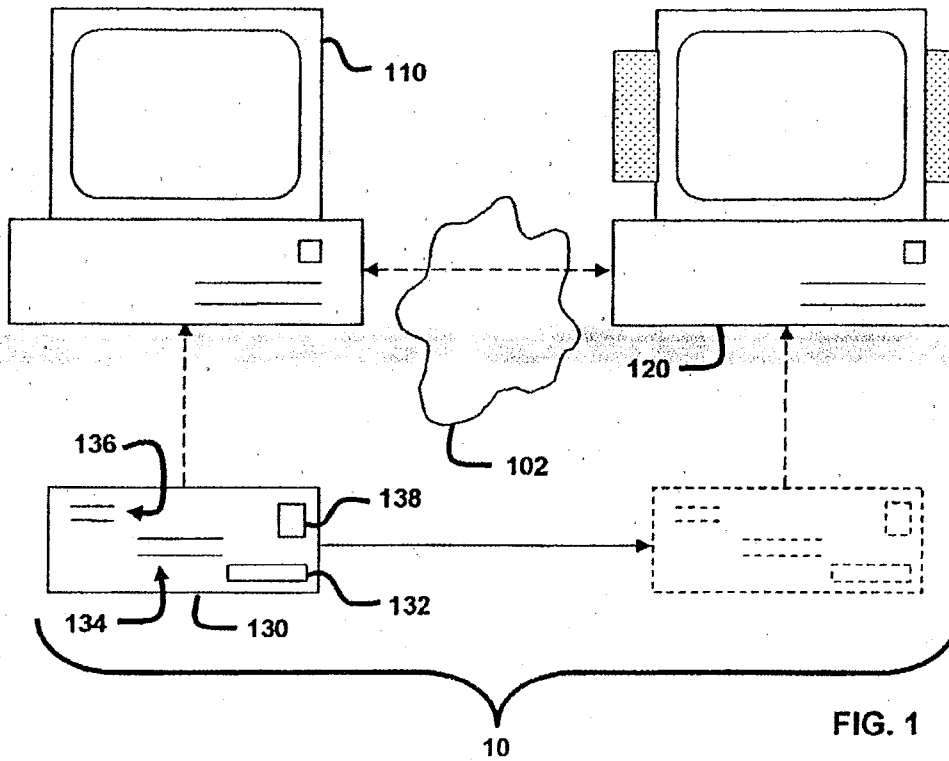
\* cited by examiner

U.S. Patent

Oct. 19, 2010

Sheet 1 of 3

US 7,818,268 B2



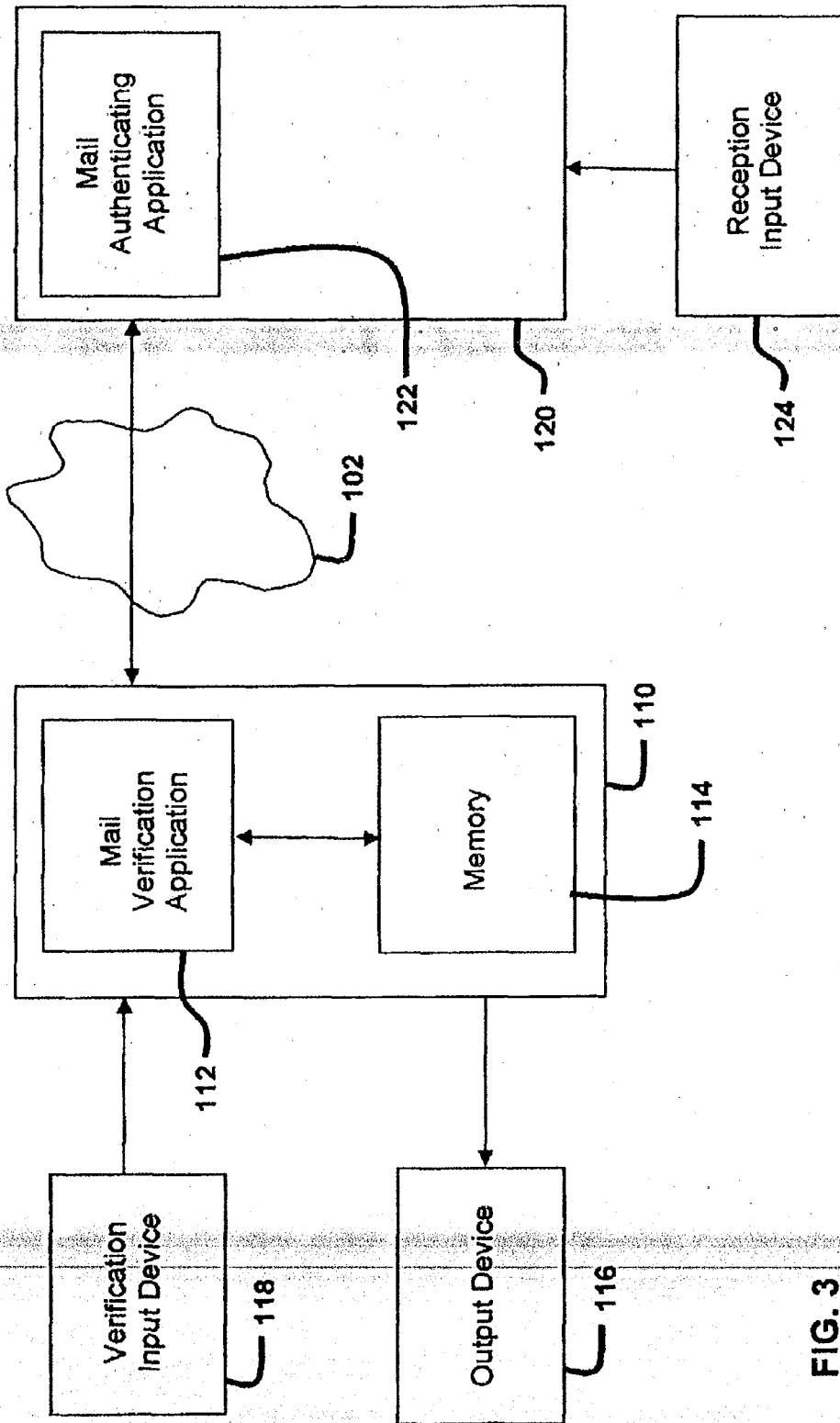


FIG. 3

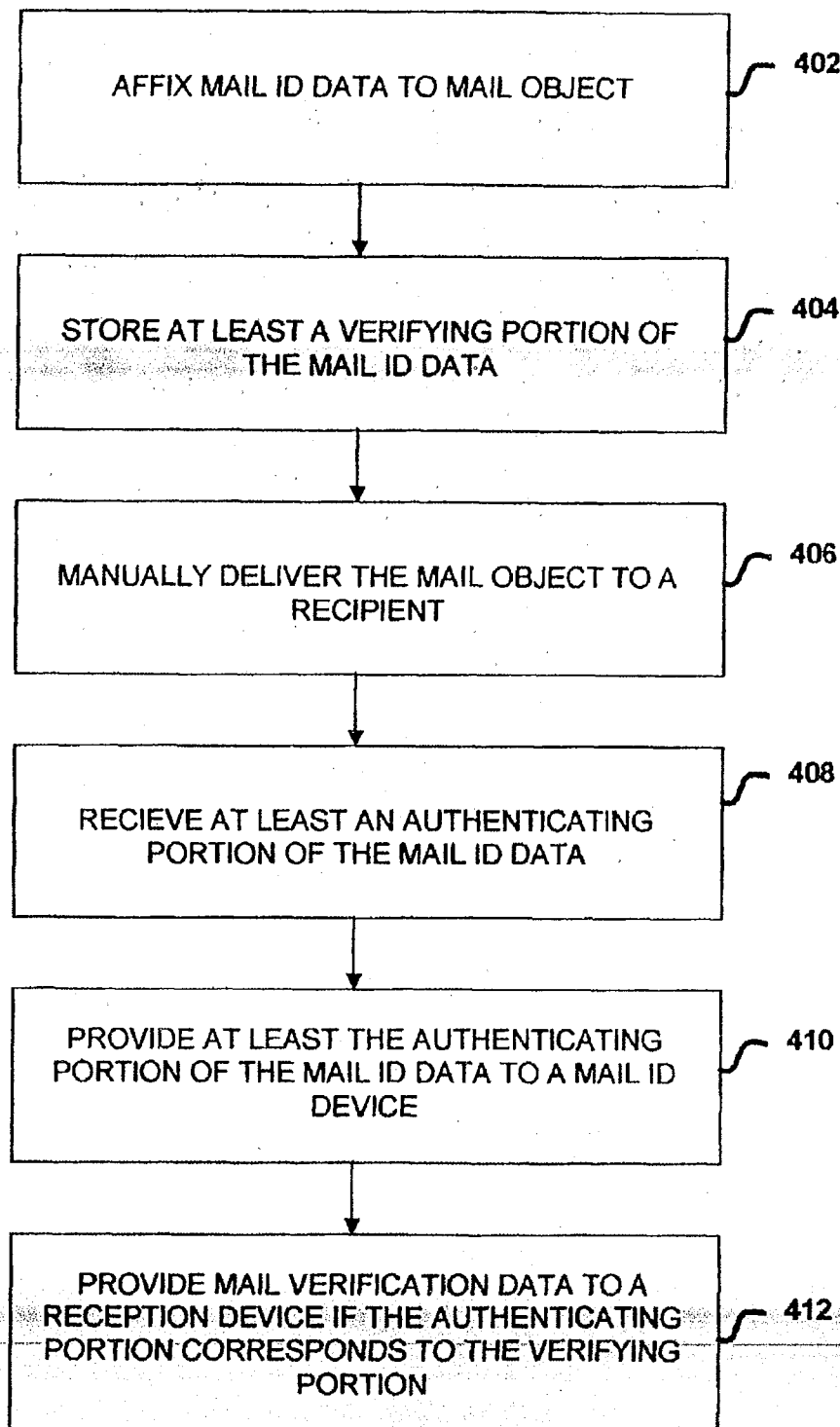


FIG. 4



US 7,818,268 B2

1

## SYSTEM AND METHOD FOR MAIL VERIFICATION

### CROSS-REFERENCE TO RELATED APPLICATION

This application claims benefit pursuant to 35 U.S.C. §119(e) of U.S. Provisional Application No. 60/330,031 filed Oct. 16, 2001, which application is specifically incorporated herein, in its entirety, by reference.

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

The present invention relates to mail verification, and more particularly to a system and method of authenticating at least one mail object by providing at least a portion of mail identification data over a wide area network, such as the Internet, in order to receive mail verification data.

#### 2. Description of Related Art

Currently there are two ways to provided mail objects (e.g., letters, documents, packages, etc.) to an end user; that being electronically (e.g., email, etc.) and through traditional mail services (e.g., U.S. Postal Service, Federal Express, UPS, Courier, etc.). However, because certain mail objects cannot be delivered electronically (either because its impossible or impractical), they are delivered using traditional mail services.

There are several problems with delivering mail objects through traditional mail services. First, the mail object is typically secured inside packaging (e.g., envelops, boxes, etc.) before it is provided to the mail service. Thus, neither the mail service nor the recipient is aware of the contents of the package until such package is opened by the recipient. This creates a problem in that hazardous mail objects (i.e., Anthrax, explosives, etc.) are not detected until they are opened by the recipient, thus exposing the recipient to the hazardous material. It also creates a problem in that mail objects (in general) are not known until they are opened by the recipient, thus making it difficult for the recipient (or his designee) to properly screen, sort or avoid certain mail objects (e.g., offensive mail, annoying mail, etc).

Second, a manually delivered mail object is limited to a one-way production of a finite set of information and/or products. This becomes problematic when the sender of the mail object is interested in providing or receiving additional information (e.g., product instructions, warranty information, etc.). Finally, contents that can be delivered electronically (e.g., advertisements, software, etc.) are often included in mail objects that are delivered via traditional mail services. The drawback with this is that it increases the cost associated with producing and/or delivering the mail object and increase the size of the mail object. For at least these reasons, a need exists in the industry for a system and method of providing mail verification data in response to receiving mail ID data over a wide area network, such as the Internet.

### SUMMARY OF THE INVENTION

The present invention provides a system and method for providing mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. Preferred embodiments of the present invention operate in accordance with at least one reception device, a mail identification (ID) device, a memory, and a mail verification application adapted to communicate with the reception device over a wide area

2

network, such as the Internet. Specifically, the mail verification application is adapted to store at least a verifying portion of mail ID data in memory. In one embodiment of the present invention, the verifying portion of the mail ID data includes an identifiable code portion (e.g., an alpha code, a numeric code, an alphanumeric code, a symbolic code, a digital code, etc.), a shipping portion (e.g., ship date, shipping location, shipping method, etc.) and/or a recipient portion (e.g., the recipients name, address, email address, IP address, account number, social security number, etc.). The mail ID data is then affixed to a mail object. The mail object, which may further include a mail-to-address, a return-mail-address, and/or postage, is then manually delivered to a recipient. In one embodiment of the present invention, the mail ID data further includes mail-to-address data, return-mail-address data, and/or postage data.

At least an authenticating portion of the mail ID data is then provided to the reception device. The reception device, which communicates with the mail ID device over a wide area network, transmits at least the authenticating portion of the mail ID data to the mail verification application operating on the mail ID device. The mail verification application then compares the authenticating portion of the mail ID data with the verifying portion stored in memory. If the authenticating portion corresponds to the verifying portion (e.g., matches, is reasonably related, etc.), then mail verification data is sent to the reception device. In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data (indicating that the mail ID data has been authenticated), securing data (indicating who secured the mail object), sender data (indicating who sent the mail object), recipient data (indicating the intended recipient of the mail object) and/or additional data (e.g., the contents of the mail object, downloadable product data, sender web-page information, third party advertisements, etc).

In one embodiment of the present invention, the mail ID device further includes an input device adapted to provide at least a verifying portion of the mail ID data to the mail verification application and/or an output device adapted to affix the mail ID data on the mail object. In another embodiment of the present invention, the reception device includes an input device for receiving at least an authenticating portion of the mail ID data from the mail object and/or a mail authenticating application adapted to receive at least the authenticating portion of the mail ID data from the input device and provide at least the authenticating portion of the mail ID data to the mail ID device. In another embodiment of the present invention, the U.S. Postal Service (or an interim authenticating or screening entity) is the recipient of the mail object, thus interacting with the reception device to receive mail verification data.

A more complete understanding of the system and method for providing mail verification data in response to receiving at least a portion of mail ID data will be afforded to those skilled in the art, as well as a realization of additional advantages and objects thereof, by a consideration of the following detailed description of the preferred embodiment. Reference will be made to the appended sheets of drawings which will first be described briefly.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates one embodiment of the mail verification system.

FIG. 2 illustrates a mail ID device communicating with a plurality of reception devices over a wide area network, such as the Internet.

US 7,818,268 B2

3

FIG. 3 illustrates one embodiment of the mail ID device and the reception device depicted in FIG. 1.

FIG. 4 is a flow chart illustrating one method of providing mail verification data in response to receiving at least a portion of mail ID data.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention provides a system and method for providing mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. In the detailed description that follows, like element numerals are used to describe like elements illustrated in one or more figures.

Preferred embodiments of the present invention operate in accordance with at least one reception device, a mail identification (ID) device, a memory, and a mail verification application adapted to communicate with the reception device over a wide area network, such as the Internet. FIG. 1 illustrates one embodiment of the mail verification system 10, which includes a mail ID device 110 and a reception device 120 communicating through a wide area network 102, such as the Internet. It should be appreciated, as depicted in FIG. 2, that the reception device(s) 120 includes, but is not limited to, personal computers, set top boxes, personal digital assistants (PDAs), mobile phones, land-line phones, televisions, bar code readers, and all other physically and wirelessly connected reception devices generally known to those skilled in the art. It should further be appreciated that the number of reception devices 120 depicted in FIGS. 1 and 2 are merely to illustrate how the present invention operates, and are not intended to further limit the present invention.

As shown in FIG. 3, the mail ID device 110 further includes a mail verification application 112 and a memory 114. The mail verification application 112 is adapted to store at least a portion (i.e., a verifying portion) of mail ID data in the memory 114, receive at least a portion (i.e., an authenticating portion) of mail ID data from the reception device 120, and provide mail verification data if the portion of the mail ID data received from the reception device 120 is authenticated. It should be appreciated that the mail verification application 112 may further be adapted to generate the mail ID data and provide it to an external device (e.g., a printer, etc.) or receive at least a verifying portion of the mail ID data from an external device (e.g., a scanner, etc.). It should also be appreciated that the mail verification application 112 may exist as a single application, or as multiple applications (locally and/or remotely stored) that operate together to perform the verification functions as described herein. It should further be appreciated that the location of the memory device 114 depicted in FIG. 3 is not intended to further limit the present invention. Thus, a memory device that is, for example, external to the mail ID device 110 is within the spirit and scope of the present invention.

Referring back to FIG. 1, where the dashed arrows indicate data transactions and the solid arrow indicates physical movement, mail ID data 132 is affixed to a mail object 130 (as used in its broader sense to encompass the packaging that surrounds the content). It should be appreciated that mail ID data can be encoded/encrypted (e.g., using bar code data, digital data, etc.) to prevent fraudulent usage. It should further be appreciated that affixing the mail ID data 132 on the mail object 130 includes, but is not limited to, printing or attaching mail ID data directly on the outer surface of the mail object 130 or printing/storing the mail ID data 132 on labels, ICs,

4

smart cards, RFID tags, or any other data storage devices (or materials) generally known to those skilled in the art, and attaching them to the outer surface of the mail object 130. It should also be appreciated that the location of the mail ID data 132 on the mail object 130 in FIG. 1 is merely to exemplify how the invention operates, and is not intended to further limit the present invention. Thus, affixing the mail ID data 132 in some other location, such as over the sealing flap of an envelope, is within the spirit and scope of this invention.

At least a portion (i.e., a verifying portion) of the mail ID data 132 (either before or after the mail ID data is affixed) is stored in the mail ID device 110, or more particular (as shown in FIG. 3) in a memory 114 located within the mail ID device 110. Specifically, the mail verification application 112 either receives or generates at least the verifying portion of the mail ID data 132. The verifying portion is then stored in the memory 114. In one embodiment of the present invention, the verifying portion of the mail ID data includes a identifiable code portion (e.g., an alpha code, a numeric code, and alphanumeric code, a symbolic code, a digital code, etc.), a shipping portion (e.g., ship date, shipping location, shipping method, etc.), and/or a recipient portion (e.g., the recipients name, address, email address, IP address, account number, social security number, etc.). The mail object 130, which may further include a mail-to-address 134, a return-mail-address 136, and/or postage 138, can then be manually delivered to a recipient. It should be appreciated that the mail ID data 132 can also be encoded (e.g., in a bar code, etc.) to include mail-to-address data, return-mail-address data, and/or postage data. In other words, for example, mail ID data could be encoded to include both coded data and postage-account data.

Once the recipient (or their designee) receives the mail object 130, at least an authenticating portion of the mail ID data 132 is provided to the reception device 120. The reception device 120, which communicates with the mail ID device 110 over a wide area network 102, transmits at least the authenticating portion of the mail identification data to the mail verification application 112 operating on the mail ID device 110. The mail verification application 112 then compares the authenticating portion of the mail ID data with the verifying portion stored in memory 114. If the received portion is authenticated, or corresponds to the verifying portion (e.g., matches, is reasonably related, etc.), then mail verification data is sent to the reception device 120.

In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data (e.g., image data, audio data, etc.) indicating that the mail ID data has been authenticated. This would allow, for example, the reception device 120 to produce at least one authenticating image on a display and/or perform at least one authenticating sound on a speaker. In one embodiment of the present invention, at least a portion of the mail verification data includes securing data (indicating who secured the mail object), sender data (indicating who sent the mail object), recipient data (indicating who is to receive the mail object) and/or additional data (e.g., the contents of the mail object, downloadable product data, sender web-page data, third party advertisements, etc.).

In another embodiment of the present invention, the mail ID device and/or the reception device further include an input device (e.g., 118, 124) adapted to receive at least a portion of the mail ID data. It should be appreciated that that the input devices depicted and discussed herein (e.g., 118, 124) include, but are not limited to, scanners (e.g., bar code scanners, etc.), keyboards, RFID readers, smart card readers, IC readers, and all other input devices generally known to those skilled in the art.

US 7,818,268 B2

5

In another embodiment of the present invention, the mail ID device further includes an output device 116 adapted to affix (e.g., print, store, etc.) the mail ID data on the mail object. It should be appreciated that affixing the mail ID data on the mail object includes, but is not limited to, printing or attaching mail ID data directly on the outer surface of the mail object or printing/storing the mail ID data on labels, ICs, smart cards, RFID tags, or any other data storage devices (or materials) generally known to those skilled in the art, and attaching them to the outer surface of the mail object. It should further be appreciated that the output device depicted and described herein (e.g., 116) includes, but is not limited to, printers, data storage device (e.g., device capable of storing data on ICs, smart cards, RFID tags, etc.), and all other output devices generally known to those skilled in the art.

In another embodiment of the present invention, as shown in FIG. 3, the reception device 120 further includes a mail authenticating application 122 adapted to receive at least the authenticating portion of the mail ID data from the input device 124 and provide at least the authenticating portion of the mail ID data to the mail ID device. It should be appreciated that the mail authenticating application 122 may exist as a single application, or as multiple applications (locally and/or remotely stored) that operate together to perform the authenticating functions as described herein.

In one embodiment of the present invention, the mail ID data further includes software-booting data adapted to boot the mail authenticating application, an email application and/or a browser application. Either one of these applications could then be used to provide at least an authenticating portion of said mail ID data to said mail ID device, provide additional information to said mail ID device (or the sender of the mail object), and/or receive additional information from either the mail ID device, the sender of the mail object, or a third-party. In another embodiment, the mail verification data further includes software-booting data adapted to boot an email application and/or a browser application. Either one of these applications could then be used to provide additional information to the mail ID device and/or receive additional information from either the mail ID device, the sender of the mail object, or a third party.

In another embodiment of the invention, the reception device 120, or more particularly the mail authenticating application 122 is adapted to provide a reply email to the mail ID device 130 or the sender of the mail object. This reply email may either be sent automatically, to acknowledge the reception of the mail ID data and/or mail verification data, or manually, to allow the recipient to communicate with the mail ID device and/or sender of the mail object. In another embodiment of the invention the mail verification application 112 is adapted to provide the mail verification data to the reception device 120 via an email.

In another embodiment of the present invention, the U.S. Postal Service (or an interim authenticating or screening entity) is the recipient (as defined by this application) of the mail object 130, thus interacting with the reception device 120 to receive mail verification data. If mail is authenticated (or approved in the case of screening), the mail object 130 is forwarded on to the actual intended recipient.

FIG. 4 is a flow chart illustrating one method of providing mail verification data in response to receiving at least a portion of the mail ID data. Specifically, in step 402 mail ID data is affixed to a mail object. At step 404, a verifying portion of the mail ID data is stored in a memory device. The mail object is then delivered to its recipient (or designee) at step 406. At step 408, a reception device receives at least an authenticating portion of the mail ID data. The reception device then pro-

6

vides at least the authenticating portion to a mail ID device at step 410. If the authenticating portion of the mail ID data corresponds to the verifying portion of the mail ID data, then mail verification data is provided to the reception device at step 412. It should be appreciated that storing the verifying portion of the mail ID data before the mail ID data is affixed to the mail object is within the spirit and scope of the present invention.

Having thus described multiple embodiments of a system and method of providing mail verification data in response to receiving mail ID data, it should be apparent to those skilled in the art that certain advantages of the system have been achieved. It should also be appreciated that various modifications, adaptations, and alternative embodiments thereof may be made within the scope and spirit of the present invention. The invention is further defined by the following claims.

What is claimed is:

1. A method of verifying mail identification data, comprising:

affixing mail identification data to at least one mail object, said mail identification data comprising a single set of encoded data that includes at least a unique identifier, sender data, recipient data and shipping method data, wherein said unique identifier consists of a numeric value assigned by a sender of said at least one mail object;

storing at least a verifying portion of said mail identification data;

receiving by a computer at least an authenticating portion of said mail identification data from at least one reception device via a network, wherein said authenticating portion of said mail identification data comprises at least said sender data and said shipping method data; and providing by said computer mail verification data via said network when said authenticating portion of said mail identification data corresponds with said verifying portion of said mail identification data.

2. The method of claim 1, wherein said step of affixing mail identification data further comprises affixing a bar code on said at least one mail object.

3. The method of claim 1, wherein said step of affixing mail identification data further comprises printing said mail identification data at least indirectly on said at least one mail object.

4. The method of claim 1, wherein said step of affixing mail identification data further comprises storing said mail identification data on a device attached to said at least one mail object.

5. The method of claim 1, wherein said step of receiving at least an authenticating portion of said mail identification data further comprises receiving at least said authenticating portion of said mail identification data from said at least one reception device via said network, wherein said authenticating portion of said mail identification data further comprises at least said unique identifier.

6. The method of claim 5, wherein said step of affixing mail identification data further comprises affixing at least a human readable version of said unique identifier on said at least one mail object.

7. The method of claim 5, wherein said step of affixing mail identification data further comprises affixing at least a human readable version of recipient data on said at least one mail object.

8. The method of claim 5, wherein said step of affixing mail identification data further comprises affixing at least a human readable version of said sender data on said at least one mail object.

US 7,818,268 B2

7

9. The method of claim 1, wherein said step of receiving at least an authenticating portion of said mail identification data further comprises receiving at least said authenticating portion of said mail identification data from said at least one reception device via said network, wherein said authenticating portion of said mail identification data further comprises at least said recipient data.

10. The method of claim 1, wherein said step of receiving at least an authenticating portion of said mail identification data further comprises receiving at least said authenticating portion of said mail identification data from said at least one reception device via said network, wherein said authenticating portion of said mail identification data further comprises at least said recipient data and said unique identifier.

11. The method of claim 1, where said step of providing mail verification data further comprises providing said mail verification data to said at least one reception device.

12. The method of claim 1, wherein said step of providing mail verification data further comprises providing at least authenticating data to said at least one reception device.

13. The method of claim 1, wherein said step of providing mail verification data further comprises providing said mail verification data to a recipient of said at least one mail object.

14. The method of claim 13, wherein said step of providing mail verification data further comprises providing said mail verification data to said recipient of said at least one mail object via an email.

15. The method of claim 13, wherein said step of providing mail verification data further comprises providing at least said sender data to said recipient of said at least one mail object.

16. The method of claim 1, further comprising the step of sending a web page to a sender of said at least one mail object, said web page including data related to said at least one mail object.

17. The method of claim 1, further comprising the step of sending an email to a sender of said at least one mail object, said email including data related to said at least one mail object.

18. A method of verifying mail identification data, comprising:

receiving said mail identification data from a mail object, said mail identification data comprising a single set of encoded data that includes at least a unique identifier, recipient data, shipping method data and sender data, wherein said unique identifier consists of a numeric value that is assigned by a sender of said mail object; providing by at least one computer at least said sender data and said shipping method data to a mail identification device over a network;

receiving by said at least one computer mail verification data from said mail identification device when said at least said sender data and said shipping method data are stored on said mail identification device, said mail verification data indicating, at least in part, that said at least one mail object was sent by an identifiable entity, and therefore traceable to a source; and

routing said at least one mail object to be delivered to a recipient if said mail verification data is received.

19. The method of claim 18, wherein said steps of providing at least said sender data and said shipping method data and receiving mail verification data further comprises providing at least said recipient data to said mail identification device over said network and receiving said mail verification data from said mail identification device if said sender data, said shipping method data and said at least said recipient data are stored on said mail identification device.

8

20. The method of claim 19, wherein said steps of providing at least said sender data, said shipping method data and said recipient data and receiving mail verification data further comprises providing at least said unique identifier to said mail identification device over said network and receiving said mail verification data from said mail identification device if said sender data, said unique identifier, said recipient data and said shipping method data are stored on said mail identification device.

21. The method of claim 18, wherein said steps of providing at least said sender data and said shipping method data and receiving mail verification data further comprises providing at least said unique identifier to said mail identification device over said network and receiving mail verification data from said mail identification device if said sender data, said shipping method data and said at least said unique identifier are stored on said mail identification device.

22. The method of claim 18, further comprising using said mail identification data to generate an email addressed to said mail identification device.

23. The method of claim 18, further comprising using said mail identification data to generate an email addressed to a sender of said mail object.

24. The method of claim 18, further comprising booting a mail authenticating application in response to receiving said mail identification data.

25. The method of claim 18, further comprising producing an authenticating image on a display after said mail verification data is received.

26. The method of claim 18, further comprising producing an authenticating-sound on at least one speaker after said mail verification data is received.

27. The method of claim 18, further comprising the step of sending a web page to a sender of said mail object, said web page including data related to said mail object.

28. The method of claim 27, wherein said steps of providing at least said sender data and said shipping method data and receiving mail verification data further comprises providing at least said unique identifier to said mail identification device over said network and receiving said mail verification data from said mail identification device if said sender data, said shipping method data and said at least said unique identifier are stored on said mail identification device.

29. The method of claim 28, wherein said steps of providing at least said sender data, said shipping method data and said unique identifier and receiving mail verification data further comprises providing at least said recipient data to said mail identification device over said network and receiving said mail verification data from said mail identification device if said sender data, said shipping method data, said unique identifier and said at least said recipient data are stored on said mail identification device.

30. The method of claim 18, further comprising the step of storing a shipping location of said mail object on said mail identification device.

31. The method of claim 18, further comprising the step of storing a shipping date of said mail object on said mail identification device.

32. The method of claim 18, further comprising the step of sending an email to a sender of said mail object, said email including data related to said mail object.

33. A mail verification system for authenticating at least one mail object, said at least one mail object being a physical object and including mail identification data, comprising: at least one mail verification device adapted to communicate with at least one reception device via a network, said at least one mail verification device comprising:

a memory; and  
 a mail verification application adapted to:  
 store at least a verifying portion of mail identification data in said memory, said mail identification data comprising a single set of encoded data that includes at least a unique identifier, sender information, recipient information and shipping method information, wherein said unique identifier consists of a numeric value assigned by a sender of said at least one mail object;  
 receive at least an authenticating portion of said mail identification data from said at least one reception device via said network, wherein said authenticating portion comprises at least said sender information and said shipping method information; and  
 provide mail verification data via said network if at least said authenticating portion of said mail identification data corresponds to said verifying portion of said mail identification data.

34. The mail verification system of claim 33, wherein a portion of said mail verification application under said sender's control is further adapted to generate at least said verifying portion of said mail identification data.

35. The mail verification system of claim 34 further comprising an output device adapted to affix said mail identification data on said at least one mail object.

36. The mail verification system of claim 35, wherein said output device is adapted to affix said mail identification data on said at least one mail object by printing said mail identification data on at least one label.

37. The mail verification system of claim 35, wherein said output device is adapted to affix said mail identification data on said at least one mail object by storing said mail identification data on at least one tag.

38. The mail verification system of claim 33 further comprising an input device adapted to receive at least said verifying portion of said mail identification data.

39. The mail verification system of claim 33, wherein said authenticating portion of said mail identification data further includes at least said unique identifier.

40. The mail verification system of claim 39, wherein said authenticating portion of said mail identification data further includes at least said recipient information.

41. The mail verification system of claim 33, wherein said mail identification data is encoded on said at least one mail object through a bar code.

42. The mail verification system of claim 33, wherein a portion of said mail verification application under said sender's control is further adapted to generate at least said unique identifier.

43. The mail verification system of claim 33, wherein said mail identification data further includes at least postage data.

44. The mail verification system of claim 33, wherein said mail verification data includes at least authenticating data.

45. The mail verification system of claim 33, wherein said mail verification data includes at least said sender information.

46. The mail verification system of claim 33, wherein said mail identification data includes at least mail-object-content data.

47. The mail verification system of claim 33, wherein said mail verification data includes at least securing data.

48. The mail verification system of claim 33, wherein said mail verification application is further adapted to send an email in response to receiving said authenticating portion of said mail identification data.

49. The mail verification system of claim 33, wherein said mail verification application is further adapted to send an email if said authenticating portion of said mail identification data corresponds to said verifying portion of said mail identification data.

50. The mail verification system of claim 33, further comprising said at least one reception device.

51. The mail verification system of claim 50, wherein said at least one reception device comprises an input device for receiving at least a portion of said mail identification data from said at least one mail object.

52. The mail verification system of claim 51, wherein said at least one reception device further comprises a mail authenticating application adapted to:

receive said at least a portion of said mail identification data from said input device; and

provide at least said authenticating portion of said mail identification data to said at least one mail verification device.

53. The mail verification system of claim 52, wherein said at least one reception device further includes a display, said mail authenticating application being further adapted to display at least one authenticating image on said display if said mail verification data is not received.

54. The mail verification system of claim 52, wherein said at least one reception device further includes at least one speaker, said mail authenticating application being further adapted to produce at least one authenticating sound on said at least one speaker if said mail verification data is not received.

55. The mail verification system of claim 52, wherein said mail authenticating application is further adapted to send an email in response to receiving said mail identification data.

56. The mail verification system of claim 52, wherein said mail authenticating application is further adapted to send an email in response to receiving said mail verification data.

\* \* \* \* \*

# EXHIBIT 3





US008073787B2

(12) **United States Patent**  
**Fitzsimmons**

(10) **Patent No.:** US 8,073,787 B2  
 (45) **Date of Patent:** \*Dec. 6, 2011

(54) **SYSTEM AND METHOD FOR MAIL VERIFICATION**

(76) **Inventor:** Todd E. Fitzsimmons, Long Beach, CA (US)

(\* ) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 431 days.

This patent is subject to a terminal disclaimer.

- 5,684,705 A 11/1997 Herbert
- 5,963,927 A 10/1999 Herbert
- 5,984,366 A 11/1999 Priddy
- 6,260,029 B1 7/2001 Critelli
- 6,289,323 B1 9/2001 Gordon et al.
- 6,510,992 B2 1/2003 Wells et al.
- 6,539,360 B1 3/2003 Kadaba
- 6,810,408 B1 10/2004 Bates et al.
- 7,200,753 B1 4/2007 Shinzaki et al.
- 7,305,104 B2 12/2007 Carr et al.
- 2002/0029152 A1 3/2002 Lee et al.

(Continued)

**FOREIGN PATENT DOCUMENTS**

JP 09-099931 4/1997

(Continued)

*Primary Examiner* — Fadey Jabr

(21) **Appl. No.:** 12/454,052

(22) **Filed:** May 11, 2009

(65) **Prior Publication Data**  
 US 2009/0287344 A1 Nov. 19, 2009

**Related U.S. Application Data**

(63) Continuation of application No. 10/271,471, filed on Oct. 15, 2002, now Pat. No. 7,818,268.

(60) Provisional application No. 60/330,031, filed on Oct. 16, 2001.

(51) **Int. Cl.**  
*G06F 17/00* (2006.01)  
*G06F 21/00* (2006.01)  
*G06Q 10/00* (2006.01)  
*G06Q 20/00* (2006.01)  
*G07B 17/02* (2006.01)

(52) **U.S. Cl.** ..... 705/401; 705/1.1; 705/64; 705/402; 705/408; 713/186

(58) **Field of Classification Search** ..... 705/1.1, 705/64, 401, 402, 408; 713/186  
 See application file for complete search history.

(56) **References Cited**

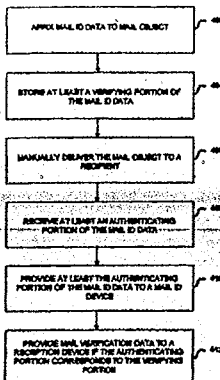
**U.S. PATENT DOCUMENTS**

- 4,558,318 A 12/1985 Katz et al.
- 5,043,908 A 8/1991 Manduley et al.

(57) **ABSTRACT**

A system and method is provided for transmitting mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. In one embodiment of the present invention, a mail verification application is adapted to store at least a verifying portion (e.g., an identifiable code portion, a shipping portion, a recipient portion, etc.) of mail ID data in memory. The mail ID data is then affixed to a mail object. The mail object is then manually delivered to a recipient. At least an authenticating portion of the mail ID data is then provided to a reception device. The reception device, which communicates with the mail ID device over a wide area network, transmits at least the authenticating portion of the mail ID data to the mail verification application operating on the mail ID device. The mail verification application then compares the authenticating portion of the mail ID data with the verifying portion stored in memory. If the authenticating portion of the mail ID data is authenticated, mail verification data is sent to the reception device. In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data, securing data, sender data, recipient data, mail-content data, downloadable-product data, sender-web-page data, and/or third-party-web-page data.

58 Claims, 3 Drawing Sheets





US 8,073,787 B2

Page 2

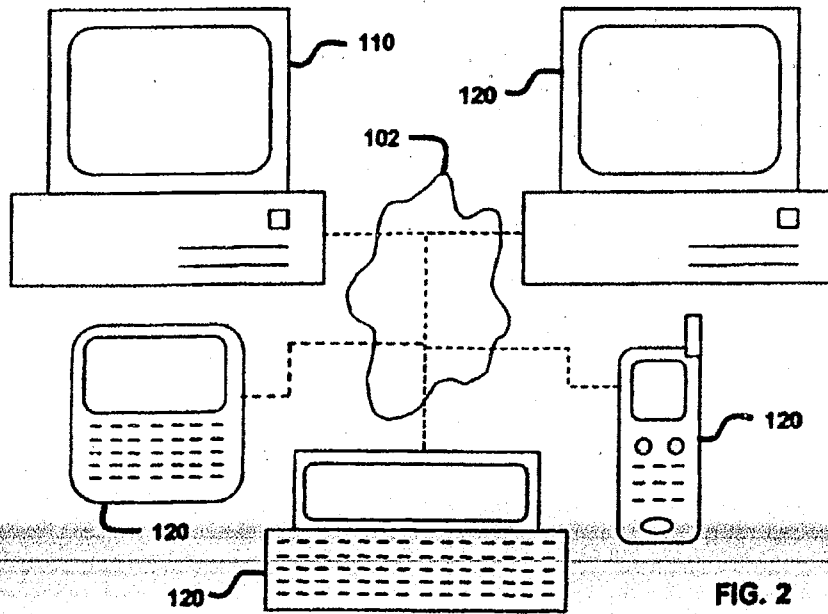
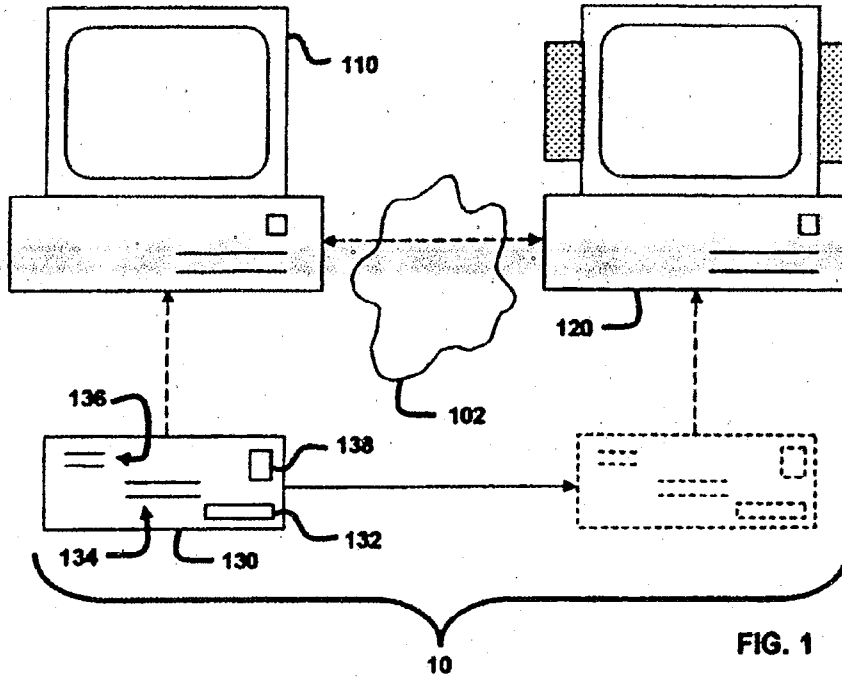
U.S. PATENT DOCUMENTS

2002/0083022	A1	6/2002	Algazi
2003/0004830	A1	1/2003	Frederick
2003/0101143	A1	5/2003	Montgomery et al.
2003/0101148	A1	5/2003	Montgomery et al.
2003/0102374	A1	6/2003	Wojdyla et al.
2003/0118191	A1	6/2003	Wang et al.
2003/0141358	A1	7/2003	Hudson et al.

2003/0177095 A1 9/2003 Zorab et al.

FOREIGN PATENT DOCUMENTS

JP	2001275159	10/2001
JP	2002284239	10/2002
WO	WO 96/03286	2/1996
WO	WO 96/13015	5/1996
WO	WO 01/35348	5/2001



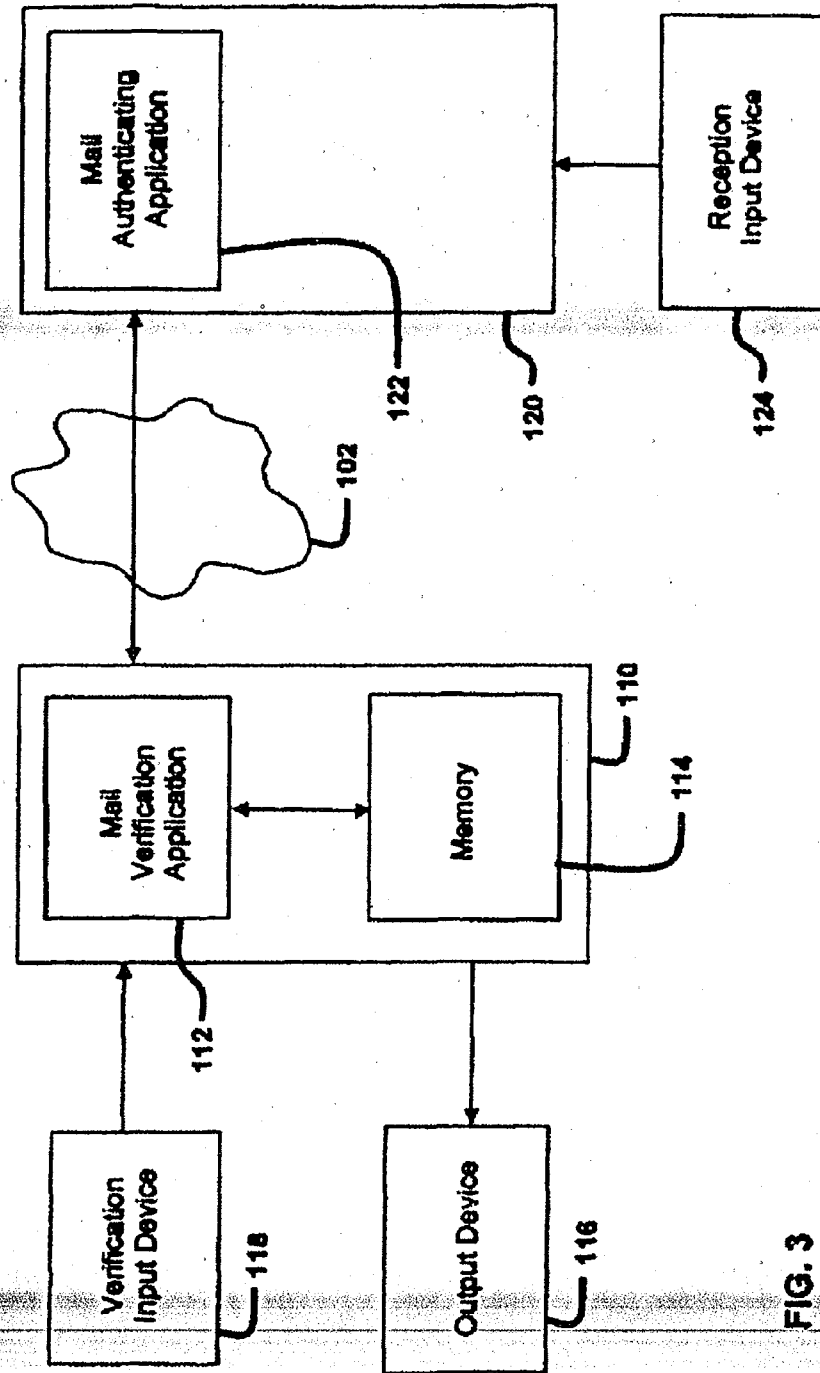


FIG. 3

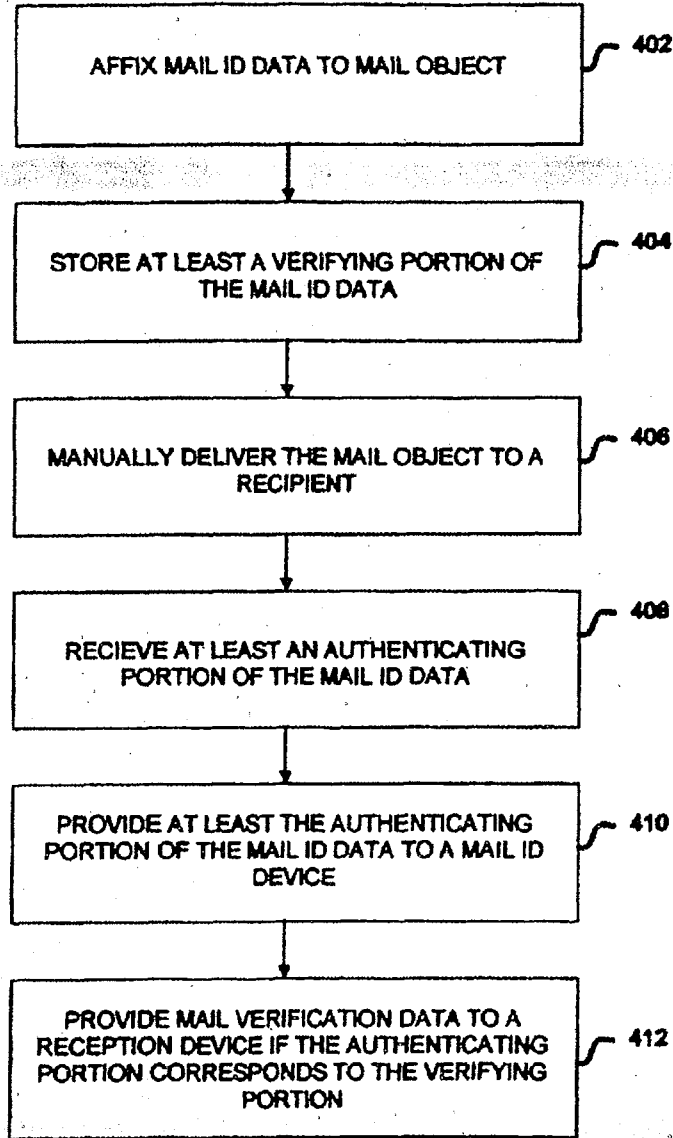


FIG. 4

US 8,073,787 B2

1

## SYSTEM AND METHOD FOR MAIL VERIFICATION

### CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation of U.S. patent application Ser. No. 10/271,471, filed Oct. 15, 2002, now U.S. Pat. No. 7,818,268 which claims the benefit pursuant to 35 U.S.C. §119(e) of U.S. Provisional Patent Application No. 60/330,031 filed Oct. 16, 2001, which applications are specifically incorporated herein, in their entirety, by reference.

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

The present invention relates to mail verification, and more particularly to a system and method of authenticating at least one mail object by providing at least a portion of mail identification data over a wide area network, such as the Internet, in order to receive mail verification data.

#### 2. Description of Related Art

Currently there are two ways to provide mail objects (e.g., letters, documents, packages, etc.) to an end user; that being electronically (e.g., email, etc.) and through traditional mail services (e.g., U.S. Postal Service, Federal Express, UPS, Courier, etc.). However, because certain mail objects cannot be delivered electronically (either because its impossible or impractical), they are delivered using traditional mail services.

There are several problems with delivering mail objects through traditional mail services. First, the mail object is typically secured inside packaging (e.g., envelopes, boxes, etc.) before it is provided to the mail service. Thus, neither the mail service nor the recipient is aware of the contents of the package until such package is opened by the recipient. This creates a problem in that hazardous mail objects (i.e., Anthrax, explosives, etc.) are not detected until they are opened by the recipient, thus exposing the recipient to the hazardous material. It also creates a problem in that mail objects (in general) are not known until they are opened by the recipient, thus making it difficult for the recipient (or his designee) to properly screen, sort or avoid certain mail objects (e.g., offensive mail, annoying mail, etc.).

Second, a manually delivered mail object is limited to a one-way production of a finite set of information and/or products. This becomes problematic when the sender of the mail object is interested in providing or receiving additional information (e.g., product instructions, warranty information, etc.). Finally, contents that can be delivered electronically (e.g., advertisements, software, etc.) are often included in mail objects that are delivered via traditional mail services. The drawback with this is that it increases the cost associated with producing and/or delivering the mail object and increase the size of the mail object. For at least these reasons, a need exists in the industry for a system and method of providing mail verification data in response to receiving mail ID data over a wide area network, such as the Internet.

### SUMMARY OF THE INVENTION

The present invention provides a system and method for providing mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. Preferred embodiments of the present invention operate in accordance

2

with at least one reception device, a mail identification (ID) device, a memory, and a mail verification application adapted to communicate with the reception device over a wide area network, such as the Internet. Specifically, the mail verification application is adapted to store at least a verifying portion of mail ID data in memory. In one embodiment of the present invention, the verifying portion of the mail ID data includes an identifiable code portion (e.g., an alpha code, a numeric code, an alphanumeric code, a symbolic code, a digital code, etc.), a shipping portion (e.g., ship date, shipping location, shipping method, etc.) and/or a recipient portion (e.g., the recipients name, address, email address, IP address, account number, social security number, etc.). The mail ID data is then affixed to a mail object. The mail object, which may further include a mail-to-address, a return-mail-address, and/or postage, is then manually delivered to a recipient. In one embodiment of the present invention, the mail ID data further includes mail-to-address data, return-mail-address data, and/or postage data.

At least an authenticating portion of the mail ID data is then provided to the reception device. The reception device, which communicates with the mail ID device over a wide area network, transmits at least the authenticating portion of the mail ID data to the mail verification application operating on the mail ID device. The mail verification application then compares the authenticating portion of the mail ID data with the verifying portion stored in memory. If the authenticating portion corresponds to the verifying portion (e.g., matches, is reasonably related, etc.), then mail verification data is sent to the reception device. In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data (indicating that the mail ID data has been authenticated), securing data (indicating who secured the mail object), sender data (indicating who sent the mail object), recipient data (indicating the intended recipient of the mail object) and/or additional data (e.g., the contents of the mail object, downloadable product data, sender web-page information, third party advertisements, etc.).

In one embodiment of the present invention, the mail ID device further includes an input device adapted to provide at least a verifying portion of the mail ID data to the mail verification application and/or an output device adapted to affix the mail ID data on the mail object. In another embodiment of the present invention, the reception device includes an input device for receiving at least an authenticating portion of the mail ID data from the mail object and/or a mail authenticating application adapted to receive at least the authenticating portion of the mail ID data from the input device and provide at least the authenticating portion of the mail ID data to the mail ID device. In another embodiment of the present invention, the U.S. Postal Service (or an interim authenticating or screening entity) is the recipient of the mail object, thus interacting with the reception device to receive mail verification data.

A more complete understanding of the system and method for providing mail verification data in response to receiving at least a portion of mail ID data will be afforded to those skilled in the art, as well as a realization of additional advantages and objects thereof, by a consideration of the following detailed description of the preferred embodiment. Reference will be made to the appended sheets of drawings which will first be described briefly.

US 8,073,787 B2

3

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates one embodiment of the mail verification system.

FIG. 2 illustrates a mail ID device communicating with a plurality of reception devices over a wide area network, such as the Internet.

FIG. 3 illustrates one embodiment of the mail ID device and the reception device depicted in FIG. 1.

FIG. 4 is a flow chart illustrating one method of providing mail verification data in response to receiving at least a portion of mail ID data.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention provides a system and method for providing mail verification data over a wide area network, such as the Internet, in response to receiving and authenticating at least a portion of mail identification (ID) data. In the detailed description that follows, like element numerals are used to describe like elements illustrated in one or more figures.

Preferred embodiments of the present invention operate in accordance with at least one reception device, a mail identification (ID) device, a memory, and a mail verification application adapted to communicate with the reception device over a wide area network, such as the Internet. FIG. 1 illustrates one embodiment of the mail verification system 10, which includes a mail ID device 110 and a reception device 120 communicating through a wide area network 102, such as the Internet. It should be appreciated, as depicted in FIG. 2, that the reception device(s) 120 includes, but is not limited to, personal computers, set top boxes, personal digital assistants (PDAs), mobile phones, land-line phones, televisions, bar code readers, and all other physically and wirelessly connected reception devices generally known to those skilled in the art. It should further be appreciated that the number of reception devices 120 depicted in FIGS. 1 and 2 are merely to illustrate how the present invention operates, and are not intended to further limit the present invention.

As shown in FIG. 3, the mail ID device 110 further includes a mail verification application 112 and a memory 114. The mail verification application 112 is adapted to store at least a portion (i.e., a verifying portion) of mail ID data in the memory 114, receive at least a portion (i.e., an authenticating portion) of mail ID data from the reception device 120, and provide mail verification data if the portion of the mail ID data received from the reception device 120 is authenticated. It should be appreciated that the mail verification application 112 may further be adapted to generate the mail ID data and provide it to an external device (e.g., a printer, etc.) or receive at least a verifying portion of the mail ID data from an external device (e.g., a scanner, etc.). It should also be appreciated that the mail verification application 112 may exist as a single application, or as multiple applications (locally and/or remotely stored) that operate together to perform the verification functions as described herein. It should further be appreciated that the location of the memory device 114 depicted in FIG. 3 is not intended to further limit the present invention. Thus, a memory device that is, for example, external to the mail ID device 110 is within the spirit and scope of the present invention.

Referring back to FIG. 1, where the dashed arrows indicate data transactions and the solid arrow indicates physical movement, mail ID data 132 is affixed to a mail object 130 (as used in its broader sense to encompass the packaging that sur-

4

rounds the content). It should be appreciated that mail ID data can be encoded/encrypted (e.g., using bar code data, digital data, etc.) to prevent fraudulent usage. It should further be appreciated that affixing the mail ID data 132 on the mail object 130 includes, but is not limited to, printing or attaching mail ID data directly on the outer surface of the mail object 130 or printing/storing the mail ID data 132 on labels, ICs, smart cards, RFID tags, or any other data storage devices (or materials) generally known to those skilled in the art, and attaching them to the outer surface of the mail object 130. It should also be appreciated that the location of the mail ID data 132 on the mail object 130 in FIG. 1 is merely to exemplify how the invention operates, and is not intended to further limit the present invention. Thus, affixing the mail ID data 132 in some other location, such as over the sealing flap of an envelope, is within the spirit and scope of this invention.

At least a portion (i.e., a verifying portion) of the mail ID data 132 (either before or after the mail ID data is affixed) is stored in the mail ID device 110, or more particular (as shown in FIG. 3) in a memory 114 located within the mail ID device 110. Specifically, the mail verification application 112 either receives or generates at least the verifying portion of the mail ID data 132. The verifying portion is then stored in the memory 114. In one embodiment of the present invention, the verifying portion of the mail ID data includes a identifiable code portion (e.g., an alpha code, a numeric code, and alphanumeric code, a symbolic code, a digital code, etc.), a shipping portion (e.g., ship date, shipping location, shipping method, etc.), and/or a recipient portion (e.g., the recipients name, address, email address, IP address, account number, social security number, etc.). The mail object 130, which may further include a mail-to-address 134, a return-mail-address 136, and/or postage 138, can then be manually delivered to a recipient. It should be appreciated that the mail ID data 132 can also be encoded (e.g., in a bar code, etc.) to include mail-to-address data, return-mail-address data, and/or postage data. In other words, for example, mail ID data could be encoded to include both coded data and postage-account data.

Once the recipient (or their designee) receives the mail object 130, at least an authenticating portion of the mail ID data 132 is provided to the reception device 120. The reception device 120, which communicates with the mail ID device 110 over a wide area network 102, transmits at least the authenticating portion of the mail identification data to the mail verification application 112 operating on the mail ID device 110. The mail verification application 112 then compares the authenticating portion of the mail ID data with the verifying portion stored in memory 114. If the received portion is authenticated, or corresponds to the verifying portion (e.g., matches, is reasonably related, etc.), then mail verification data is sent to the reception device 120.

In one embodiment of the present invention, at least a portion of the mail verification data includes authenticating data (e.g., image data, audio data, etc.) indicating that the mail ID data has been authenticated. This would allow, for example, the reception device 120 to produce at least one authenticating image on a display and/or perform at least one authenticating sound on a speaker. In another embodiment of the present invention at least a portion of the mail verification data includes securing data (indicating who secured the mail object), sender data (indicating who sent the mail object), recipient data (indicating who is to receive the mail object) and/or additional data (e.g., the contents of the mail object, downloadable product data, sender web-page data, third party advertisements, etc.).

In another embodiment of the present invention, the mail ID device and/or the reception device further include an input

US 8,073,787 B2

5

device (e.g., 118, 124) adapted to receive at least a portion of the mail ID data. It should be appreciated that the input devices depicted and discussed herein (e.g., 118, 124) include, but are not limited to, scanners (e.g., bar code scanners, etc.), keyboards, RFID readers, smart card readers, IC readers, and all other input devices generally known to those skilled in the art.

In another embodiment of the present invention, the mail ID device further includes an output device 116 adapted to affix (e.g., print, store, etc.) the mail ID data on the mail object. It should be appreciated that affixing the mail ID data on the mail object includes, but is not limited to, printing or attaching mail ID data directly on the outer surface of the mail object or printing/storing the mail ID data on labels, ICs, smart cards, RFID tags, or any other data storage devices (or materials) generally known to those skilled in the art, and attaching them to the outer surface of the mail object. It should further be appreciated that the output device depicted and described herein (e.g., 116) includes, but is not limited to, printers, data storage device (e.g., device capable of storing data on ICs, smart cards, RFID tags, etc.), and all other output devices generally known to those skilled in the art.

In another embodiment of the present invention, as shown in FIG. 3, the reception device 120 further includes a mail authenticating application 122 adapted to receive at least the authenticating portion of the mail ID data from the input device 124 and provide at least the authenticating portion of the mail ID data to the mail ID device. It should be appreciated that the mail authenticating application 122 may exist as a single application, or as multiple applications (locally and/or remotely stored) that operate together to perform the authenticating functions as described herein.

In one embodiment of the present invention, the mail ID device further includes software-booting data adapted to boot the mail authenticating application, an email application and/or a browser application. Either one of these applications could then be used to provide at least an authenticating portion of said mail ID data to said mail ID device, provide additional information to said mail ID device (or the sender of the mail object), and/or receive additional information from either the mail ID device, the sender of the mail object, or a third-party. In another embodiment, the mail verification data further includes software-booting data adapted to boot an email application and/or a browser application. Either one of these applications could then be used to provide additional information to the mail ID device and/or receive additional information from either the mail ID device, the sender of the mail object, or a third party.

In another embodiment of the invention, the reception device 120, or more particularly the mail authenticating application 122 is adapted to provide a reply email to the mail ID device 130 or the sender of the mail object. This reply email may either be sent automatically, to acknowledge the reception of the mail ID data and/or mail verification data, or manually, to allow the recipient to communicate with the mail ID device and/or sender of the mail object. In another embodiment of the invention the mail verification application 112 is adapted to provide the mail verification data to the reception device 120 via an email.

In another embodiment of the present invention, the U.S. Postal Service (or an interim authenticating or screening entity) is the recipient (as defined by this application) of the mail object 130, thus interacting with the reception device 120 to receive mail verification data. If mail is authenticated (or approved in the case of screening), the mail object 130 is forwarded on to the actual intended recipient.

6

FIG. 4 is a flow chart illustrating one method of providing mail verification data in response to receiving at least a portion of the mail ID data. Specifically, in step 402 mail ID data is affixed to a mail object. At step 404, a verifying portion of the mail ID data is stored in a memory device. The mail object is then delivered to its recipient (or designee) at step 406. At step 408, a reception device receives at least an authenticating portion of the mail ID data. The reception device then provides at least the authenticating portion to a mail ID device at step 410. If the authenticating portion of the mail ID data corresponds to the verifying portion of the mail ID data, then mail verification data is provided to the reception device at step 412. It should be appreciated that storing the verifying portion of the mail ID data before the mail ID data is affixed to the mail object is within the spirit and scope of the present invention.

Having thus described multiple embodiments of a system and method of providing mail verification data in response to receiving mail ID data, it should be apparent to those skilled in the art that certain advantages of the system have been achieved. It should also be appreciated that various modifications, adaptations, and alternative embodiments thereof may be made within the scope and spirit of the present invention. The invention is further defined by the following claims.

What is claimed is:

1. A system for authenticating a mail object, said mail object being provided to a mail carrier and including mail identification data affixed on said mail object in a single barcode, comprising:

a first computer configured to communicate at least a first portion of said mail identification data over a network, said mail identification data including a shipping portion, a recipient portion, a sender portion, and an identifier portion, wherein said shipping portion includes shipping method data, said recipient portion includes an address of a recipient of said mail object, and said identifier portion includes a unique identifier that consists of a numeric value assigned by a sender of said mail object; a database; and

a second computer comprising a verification application, said second computer being configured to receive at least said first portion of said mail identification data from said first computer via said network, said first portion of said mail identification data consisting of said shipping portion, said sender portion and said identifier portion;

wherein said verification application is in communication with said database and configured to authenticate said first portion of said mail identification data by determining whether said first portion of said mail identification data is stored in said database and providing verifying data to said first computer via said network, said verifying data indicating whether said first portion of said mail identification data is stored in said database, wherein at least a portion of said first portion can be used by said mail carrier to identify said sender of said mail object.

2. The system of claim 1, wherein said first computer is further configured to generate said unique identifier.

3. The system of claim 1, wherein said first computer further comprises an output device for affixing said barcode onto said mail object.

4. The system of claim 3, wherein said first computer is further configured to encode said mail identification data into said barcode prior to said barcode being affixed to said mail object.

## US 8,073,787 B2

7

5. The system of claim 4, wherein said first computer is further configured to encrypt said mail identification data before it is encoded into said barcode.

6. The system of claim 1, wherein said sender portion includes data that is assigned by said mail carrier and can be used by said mail carrier to identify said sender of said mail object.

7. The system of claim 6, wherein said verifying data further includes postage data pertaining to said mail object.

8. The system of claim 7, wherein said verification application is further configured to determine whether said first portion of said mail identification data is stored in said database and to provide said verifying data to said first computer before said mail object is accepted by said mail carrier.

9. The system of claim 6, wherein said first computer is further configured to communicate said first portion of said mail identification data to said second computer before said mail object is provided to said mail carrier.

10. The system of claim 1, wherein said verifying data further includes postage data pertaining to said mail object.

11. The system of claim 10, wherein said verification application is further configured to generate an email concerning said verifying data and provide said email to said first computer.

12. The system of claim 1, wherein said verification application is further configured to determine whether said first portion of said mail identification data is stored in said database and to provide said verifying data to said first computer before said mail object is accepted by said mail carrier.

13. The system of claim 1, wherein said first computer is further configured to communicate second mail identification data to said second computer, said second mail identification data being affixed in a single barcode to a second mail object provided to said mail carrier, wherein said second mail identification data includes sender data and a second unique identifier assigned by said sender, and said verification application is further configured to determine whether said second mail identification data is stored in said database, wherein said verifying data further indicates whether said second mail identification data is stored in said database.

14. The system of claim 13, wherein said verifying data further includes content data pertaining to said second mail object.

15. The system of claim 13, wherein said verifying data further includes postage data pertaining to said second mail object.

16. The system of claim 14, wherein said second mail identification data further includes destination data and shipping method data.

17. A method for authenticating a mail object, said mail object including mail identification data affixed on said mail object as a single barcode, comprising:

communicating by at least one computer at least a first portion of said mail identification data over a network, said mail identification data includes a shipping portion, a recipient portion, a sender portion, and an identifier portion, wherein said shipping portion includes shipping method data, said recipient portion includes destination data of said mail object, and said identifier portion consists of a numeric value assigned by a sender of said mail object; and

receiving by a second computer at least said first portion of said mail identification data, said first portion of said mail identification data consisting of said shipping portion, said sender portion and said identifier portion;

8

determining by said second computer whether said first portion of said mail identification data is stored in a database in communication with said second computer; and

generating at least one electronic file in response to said step of determining whether said first portion is stored on said database, said at least one electronic file comprising verification data and postage data, said verification data providing whether said first portion of said mail identification data is stored in said database;

wherein said at least one electronic file is accessible to said at least one computer and at least a portion of said first portion of said mail identification data can be used by a mail carrier to identify said sender.

18. The method of claim 17, further comprising: encoding said mail identification data in said single barcode;

affixing by an output device said single barcode on said mail object; and

providing said mail object to said mail carrier.

19. The method of claim 18, further comprising using an algorithm to digitally code said mail identification data prior to encoding said mail identification data in said single barcode.

20. The method of claim 18, wherein said sender portion includes sender data that is assigned by said mail carrier, wherein said sender data can be used by said mail carrier to identify said sender of said mail object.

21. The method of claim 20, wherein said steps of determining whether said first portion of said mail identification data is stored in said database and generating said at least one electronic file are performed before said mail object is accepted by said mail carrier.

22. The method of claim 20, further comprising: communicating by said at least one computer second mail identification data to said second computer, said second mail identification data being affixed as a single barcode on a second object provided to said mail carrier and including at least said sender data and an identifier assigned by said sender;

determining by said second computer whether said second mail identification data is stored in said database, wherein said verification data further provides whether said second mail identification data is stored in said database.

23. The method of claim 22, wherein said verification data further includes content data pertaining to said second object.

24. The method of claim 23, further comprising scanning said single barcode on said second object to acquire said second mail identification data, determining whether said second mail identification data is stored in said database, and providing data to said at least one computer if said second mail identification data is stored in said database, said data indicating that said second object has been received by said mail carrier.

25. The method of claim 22, further comprising scanning said single barcode on said second object to acquire said second mail identification data, determining whether said second mail identification data is stored in said database, and providing content data pertaining to said second object over said network if said second mail identification data is stored in said database.

26. The method of claim 18, further comprising providing said at least one electronic file to said at least one computer via said network, wherein said steps of determining whether said first portion of said mail identification data is stored in



## US 8,073,787 B2

9

said database and providing said verifying data to said at least one computer are performed before said mail object is accepted by said mail carrier.

27. The method of claim 18, wherein said step of communicating at least said first portion of said mail identification data over said network is performed before said step of providing said mail object to said mail carrier.

28. The method of claim 17, wherein said postage data pertains to at least said mail object.

29. The method of claim 17, further comprising generating an email concerning said verifying data, and addressing said email to said sender of said mail object.

30. A method for authenticating a mail object that includes mail identification data, said mail identification data being encoded into a single barcode, which is then affixed onto said mail object, comprising:

communicating by at least one sender computer at least a first portion of said mail identification data over a network, said mail identification data including a shipping portion including at least shipping method data, a recipient portion including destination data for said mail object, a sender portion, and an identifier portion including at least a numeric value assigned by a sender of said mail object, and said first portion of said mail identification data consisting of said shipping portion, said sender portion and said identifier portion;

receiving by said at least one sender computer verifying data from a second computer via a network, wherein said verifying data verifies the authenticity of said first portion of said mail identification data by stating whether said first portion corresponds to data that is stored on a database in communication with said second computer; providing said mail object to a mail carrier, wherein at least a portion of said first portion can be used by said mail carrier to identify said sender of said mail object.

31. The method of claim 30, further comprising using an algorithm to encrypt said mail identification data prior to encoding said mail identification data in a single barcode.

32. The method of claim 30, wherein said sender portion includes data that is assigned by said mail carrier and can be used to identify a sender of said mail object.

33. The method of claim 30, wherein said step of communicating at least said first portion of said mail identification data over said network is performed before said step of providing said mail object to said mail carrier, and said verifying data states whether said first portion of said mail identification data, as communicated by said at least one sender computer, corresponds to data that is stored on said database.

34. The method of claim 30, wherein said step of receiving verifying data is performed before said mail object is routed by said mail carrier through a mail stream to a recipient of said mail object.

35. The method of claim 30, further comprising: communicating by said at least one sender computer second mail identification data to said second computer, said second mail identification data being affixed as a single barcode on a second object provided to said mail carrier and including at least sender data and an identifier assigned by said sender;

wherein said verifying data further states whether said second mail identification data corresponds to data that is stored in said database.

36. The method of claim 35, wherein said verifying data further includes data on a content of said second object.

37. The method of claim 35, wherein said verifying data further includes postage data pertaining to said second object.

10

38. The method of claim 36, wherein said verifying data further includes postage data pertaining to said second object.

39. The method of claim 36, further comprising: scanning said single barcode on said second object to retrieve said second mail identification data; providing data to said at least one sender computer if said second mail identification data is stored in said database, said data indicating that said second object has been received by said mail carrier.

40. The method of claim 35, further comprising: scanning said single barcode on said second object to retrieve said second mail identification data; providing to said at least one sender computer data on a content of said second object if said second mail identification data corresponds to data that is stored on said database.

41. A method for providing electronic data concerning a mail object having mail identification data encoded into a single barcode and affixed to said mail object, comprising:

receiving by at least a first computer at least a first portion of said mail identification data from said mail object, said mail identification data including a shipping portion including at least shipping method data, a recipient portion including destination data for said mail object, a sender portion, and an identifier portion comprising a numeric value, and said first portion of said mail identification data consisting of said shipping portion, said sender portion, and said identifier portion;

determining by said at least said first computer whether said first portion of said mail identification data is stored in a database in communication with said at least said first computer;

providing by said at least said first computer said electronic data to at least a second computer via a network, wherein said electronic data is generated when said first portion of said mail identification data matches data that is stored in said database.

42. The method of claim 41, further comprising the step of providing by said at least said second computer at least a portion of said electronic data to a third computer via said network.

43. The method of claim 42, wherein said step of providing by said at least said second computer at least a portion of said electronic data to a third computer further comprises providing said at least a portion of said electronic data to said third computer via an email.

44. The method of claim 42, wherein said step of providing by said at least said second computer at least a portion of said electronic data to a third computer further comprises providing said at least a portion of said electronic data to said third computer via a web page.

45. The method of claim 44, further comprising the step of generating by said at least said second computer said numeric value.

46. The method of claim 44, further comprising the step of providing by said at least said second computer an email concerning said mail object to said third computer via said network.

47. The method of claim 46, wherein said email is provided automatically in response to the reception of the mail object by the United States Postal Service.

48. The method of claim 42, further comprising the step of providing by said at least said second computer additional information concerning said mail object to said third computer via said network, said additional information being at least one of information on a recipient of said mail object,

US 8,073,787 B2

11

information on a sender of said mail object, and postage information on at least said mail object.

49. The method of claim 48, wherein said additional information further indicates whether said mail object has been received by the United States Postal Service.

50. A system for providing electronic data concerning a mail object having mail identification data encoded into a single barcode and affixed to said mail object, comprising:

- a scanner configured to scan at least a first portion of said mail identification data from said mail object, said mail identification data including a shipping portion including at least shipping method data, a recipient portion including destination data for said mail object, a mailer portion, and an identifier portion comprising a numeric value assigned by a mailer of said mail object, and said first portion of said mail identification data consisting of said shipping portion, said mailer portion, and said identifier portion;

a database for storing data on said mail object; at least a first computer in communication with said scanner and said database; and

at least one application running on said at least said first computer and configured to (i) receive at least a first portion of said mail identification data from said scanner, (ii) determine whether said first portion of said mail identification data is stored in said database, and (iii) provide said electronic data to at least a second computer via a network, wherein said electronic data is generated when said first portion of said mail identification data matches said data that is stored in said database.

12

51. The method of claim 50, further comprising at least said second computer having at least one other application configured to provide at least a portion of said electronic data to a third computer via said network and via at least one of an email and a web page.

52. The system of claim 51, wherein said at least one other application is further configured to generate said numeric value.

53. The system of claim 51, wherein said at least one other application is further configured to provide an email concerning said mail object to said third computer via said network.

54. The system of claim 51, wherein said at least one other application is further configured to provide additional information concerning said mail object to said third computer via said network, said additional information being at least one of information on a recipient of said mail object, information on a sender of said mail object, and information on postage of at least said mail object.

55. The system of claim 53, wherein said email is provided automatically in response to said mail object being received by a recipient of said mail object.

56. The system of claim 53, wherein said email is provided automatically in response to said mail object being received by the United States Postal Service.

57. The system of claim 54, wherein said additional information further indicates whether said mail object has been received by a recipient of said mail object.

58. The system of claim 54, wherein said additional information indicates whether said mail object has been received by the United States Postal Service.

\* \* \* \* \*

PROOF OF SERVICE

I, Lynn S. Talab, declare:

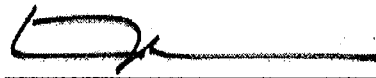
I am a resident of the State of California and over the age of eighteen years, and not a party to the within action; my business address is 400 South Hope Street, Los Angeles, CA 90071-2899. On October 29, 2012, I served the foregoing document

<input checked="" type="checkbox"/>	by placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid, in the United States mail at Los Angeles, California addressed as set forth below. I am readily familiar with the firm's practice of collecting and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if the postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit;
<input type="checkbox"/>	by causing the document(s) to be emailed or electronically transmitted to the person(s) at the email addresses set forth below, pursuant to a court order or an agreement of the parties to accept service by email or electronic transmission. I did not receive, within a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful;

on the attached Service List.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

Executed on October 29, 2012 at Los Angeles, California.



Lynn S. Talab, Paralegal  
O'MELVENY & MYERS LLP  
400 South Hope Street  
Los Angeles, CA 90071-2899

SERVICE LIST

Counsel for Defendants Advanced Image Direct, LLC;  
Envelopes Unlimited, Inc.; Vertis, Inc.; and Vertis Holdings, Inc.

James E. Doroshow  
jdoroshow@foxrothschild.com  
Lena Bacani  
lbacani@foxrothschild.com  
FOX ROTHSCHILD LLP  
1800 Century Park East, Suite 300  
Los Angeles, CA 90067

Counsel for Advanced Image Direct, LLC

Marc E. Hankin  
marc@HankinPatentLaw.com  
Kevin Schraven  
kevin@HankinPatentLaw.com  
HANKIN PATENT LAW, APC  
12400 Wilshire Boulevard, Suite 1265  
Los Angeles, CA 90025

Counsel for Defendants Microdynamics  
Corporation, Microdynamics, Inc. and Microdynamics Group, Inc.

Thomas S. McConville  
tmconville@orrick.com  
Ric T. Fukushima  
rfukushima@orrick.com  
ORRICK, HERRINGTON & SUTCLIFFE LLP  
2050 Main Street, Suite 1100  
Irvine, CA 92614

Robert M. Isackson  
risackson@orrick.com  
Nicholas H. Lam  
nlam@orrick.com  
ORRICK, HERRINGTON & SUTCLIFFE LLP  
51 West 52nd Street  
New York, NY 10019-6142

Counsel for Defendant R.R. Donnelley & Sons Company

Peter E. Perkowski  
pperkowski@winston.com  
David P. Enzminger  
denzminger@winston.com  
WINSTON & STRAWN LLP  
333 South Grand Avenue  
Los Angeles, CA 90071-1543

Samantha L. Maxfield  
smaxfield@winston.com  
Derek J. Sarafa  
dsarafa@winston.com  
WINSTON & STRAWN LLP  
35 West Wacker Drive  
Chicago, IL 60601-9703

Counsel for Defendants Harte-Hanks, Inc., et al.

Mario Moore  
mario.moore@morganlewis.com  
MORGAN, LEWIS & BOCKIUS LLP  
5 Park Plaza, Suite 1750  
Irvine, CA 92614

James A. Glenn  
jglenn@morganlewis.com  
Michael L. Raspino  
mraspino@morganlewis.com  
MORGAN, LEWIS & BOCKIUS LLP  
1000 Louisiana Street, Suite 4000  
Houston, TX 77002