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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RICOH AMERICAS CORPORATION and XEROX CORPORATION
Petitioners

v.

MPHJ TECHNOLOGY INVESTMENTS LLC
Patent Owner

Case IPR2013-TBA
Patent 7,986,426

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,986,426

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Regulations

EXHIBIT LIST (37 C.F.R § 42.63(e))

Exhibit	DESCRIPTION
RIC 1001	U.S. Patent No. 7,986,426 to Klein
RIC 1002	Xerox Network Systems Architecture General Information Manual, April 1985 ("XNS")
RIC 1003	Xerox 150 Graphic Input Station Operator and Reference Manual, January 1985 ("GIS 150")
RIC 1004	U.S. Patent No. 5,123,063 to Ohkubo ("Ohkubo")
RIC 1005	U.S. Patent No. 5,872,569 to Salgado et al. ("Salgado")
RIC 1006	U.S. Patent No. 5,513,126 to Harkins et al. ("Harkins")
RIC 1007	U.S. Patent No. 5,818,603 to Motoyama ("Motoyama")
RIC 1008	Declaration of Petitioner's Expert Dr. Roger Melen ("Melen Decl.") (C/V attached as Attachment 1; *Newton's Telecom Dictionary* attached as Attachment 2.)
RIC 1009	Prosecution History of U.S. Patent Application No. 12/328,104, as obtained from PAIR ("'104 application")
RIC 1010	Prosecution History of U.S. Patent Application No. 10/874,172, as obtained from PAIR ("'172 application")
RIC 1011	Declaration of Michael D. Specht

I.   Introduction

Ricoh Americas Corporation and Xerox Corporation (collectively "Petitioners") Petition for *inter partes* review ("Petition"), seeking cancellation of claims 1-11 ("challenged claims") of U.S. Patent No. 7,986,426 ("the '426 patent") (RIC 1001).

II.   Overview

That core purpose of *inter partes* review, cancellation of unpatentable claims, is furthered by this Petition, as the challenged claims of the '426 patent should never have been issued. Because Petitioner is at a minimum reasonably likely to prevail in showing unpatentability, the Petition should be granted and trial instituted on all of the challenged claims as set forth below.

The '426 patent was issued on July 26, 2011, and appears to claim priority to August 15, 1996.[1] The claims of the '426 patent claim nothing more than a well-known concept for enabling a typical PC user to add electronic paper processing to their existing business process by scanning paper from a first device and copying the image of that paper to a remotely-located second device. (RIC 1001, Abstract.) The '426 patent also teaches the well-known concept of optionally copying paper from a first device directly into a business application residing on a network or on

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[1] Petitioners do not concede this is the correct effective filing date.

the Internet, or *vice versa*. (*Id.*) The system performs basic management of software to manage paper to copy the paper in and out of devices and business applications without needing to modify the devices or applications. (*Id.*) None of this was new at the effective filing date, or even a decade before.

At least *a decade* before the alleged effective date of the '426 patent, Xerox was already publically using the disclosed and claimed technology, as evidenced by the XNS document that published in 1985. Many other companies since 1985 have also utilized this simple technology, as evidence by the sample of prior art documents submitted within this Petition – Ohkubo, Salgado, Harkins, and Motoyama. Dr. Roger Melen, a technical expert in this field for 30 years following his Ph.D. from Stanford University, explains how each of these prior art documents disclose, teach, and suggest each and every claim feature.

No features in the improperly allowed claims, or anywhere in the disclosure, will overcome the overwhelming evidence of anticipation and obviousness presented in this Petition. In view of the evidence presented, the Board should cancel all of the patented claims.

III.   Mandatory Notices (37 C.F.R. § 42.8(a)(1))

Real party-in-interest (37 C.F.R. § 42.8(b)(1)): Ricoh Americas Corporation and Xerox Corporation Petition for *inter partes* review. The real parties-in-interest

are Ricoh Americas Corporation (DE corporation, principle place of business in Malvern, PA); Ricoh Americas Holding, Inc. (DE corporation, principle place of business in West Caldwell, NJ); Ricoh Company, Ltd (Japanese corporation, principle place of business in Tokyo, Japan); and Xerox Corporation (CT corporation, principle place of business in Norwalk, CT).

Notice of related matters (37 C.F.R. § 42.8(b)(2)): The '426 patent is involved in a declaratory judgment action in *Engineering & Inspection Services, LLC v. IntPar, LLC*, No. 13-0801 (E.D. La..) Engineering & Inspection Services, LLC is unrelated to the real parties-in-interest. The Vermont Attorney General has filed a consumer protection lawsuit against MPHJ Technologies alleging unfair and deceptive practices associated with assertion of the '426 patent, and related patents. *See,* State of Vermont v. MPHJ Technology Investments LLC, No. 282-5-13 (Vermont Superior Court, Washington Unit). U.S. Patent Application, Ser. No. 13/182,857, entitled Distributed Computer Architecture and Process for Document Management, claims priority to the '426 patent.

Designation of lead and back-up counsel (37 C.F.R. § 42.8(b)(3)):

    Lead Counsel: Michael D. Specht (Reg. No. 54,463); 202.772.8756

    Backup Counsel: Jason D. Eisenberg (Reg. No. 43,447); 202.772.8645

Address: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.,

1100 New York Avenue, NW, Washington, DC 20005,

202.371.2540 (fax)

Service information (37 C.F.R. § 42.8(b)(4)):

Please address all correspondence to the lead counsel at the address shown above. Petitioners consent to electronic service by email at: Mspecht-PTAB@skgf.com.

IV.   Grounds For Standing (37 C.F.R. § 42.104(a))

Petitioners certify that the patent for which review is sought is eligible for *inter partes* review and that the Petitioners are not barred or estopped from requesting *inter partes* review challenging the patent claims on the grounds identified in this Petition. The required fee is paid via online credit card payment. The Office is authorized to charge fee deficiencies and credit overpayments to Deposit Acct. No. 19-0036 (Customer ID No. 45324).

V.   Statement of Relief Requested

Petitioners respectfully request *inter partes* review and cancellation of claims 1-11 of the '426 patent based on the detailed statements presented in Section VII below.

VI. Claim Construction

Except as noted below, all claims carry their ordinary and customary meanings. Consistent with the statute and the legislative history of the AIA, the Board should construe the claims using the broadest reasonable interpretation. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48756, 48766 (Aug. 14, 2012); 37 CFR § 42.100(b). The claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The Office must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification. *Id.* (citing *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002)). There is a "heavy presumption" that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). By "ordinary meaning" we refer to *e.g., Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc.*, 249 F.3d 1341, 1349 (Fed. Cir. 2001) (finding no error in non-construction of "melting"); *Mentor H/S, Inc. v. Med. Device Alliance, Inc.*, 244 F.3d 1365, 1380 (Fed. Cir. 2001) (finding no error in court's refusal to construe "irrigating" and "frictional heat").

A person of ordinary skill in the art ("POSA") is presumed to be aware of all pertinent art, thinks along conventional wisdom in the art, and is a person of ordinary creativity. With respect to the '426 patent, a POSA is a person holding a

Bachelor of Science degree in a computer related technical field—such as electrical engineering, computer engineering, or computer science—without experience in the field. (Melen Decl., RIC 1008, ¶ 18.)

The prosecution of the application that matured into the '426 patent (*i.e.*, Appl. No. 12/328,104) included a non-final Office Action, a Response to the Office Action, an Interview, and subsequent allowance of the application. In the non-final office action, claims 3-11 (which issued as claims 1-8) were rejected under 35 U.S.C. § 101 for statutory double patenting over U.S. Pat. No. 7,477,410 (the parent patent of the '426 patent). Claims 3-11 were amended to include the "at least one scanner . . ." limitation to overcome the statutory double patenting rejection. (*See* RIC 1009).

The examiner did not explain the reason(s) for allowance of the claims in the '104 application. (*See* RIC 1009). But, the same examiner considered nearly identical claims in the '410 patent, and provided reasons for allowance. Again, many of the claims of the '410 patent are identical to the claims in the '426 patent, except for the "at least one scanner . . ." limitation. There, the examiner considered certain functions of the claimed document management system – *i.e.*, "seamlessly" replicating and transmitting an image, integrating an electronic image into a destination application without the need to modify the destination application, copying images using a "Go" operation, and adding processing with a single

programming step – to be the "novel" features; not the system itself. (*See* RIC 1010).

Claims 1 and 9 recite the term "seamlessly." The disclosure does not provide an explicit definition for this term, nor does it imply a meaning. Rather, the term is used vaguely—"The VC invention is software that manages paper so that it can be electronically and seamlessly copied in and out of devices and business applications . . . ." (RIC 1001, 68:26-28); "Virtual Copier will accomplish all translations between device and applications automatically and seamlessly." (*Id.* at 46:54-56). After reviewing the disclosure and claims of the '426 patent, and after consulting a technical dictionary published at the time of the '426 patent, it is Dr. Melen's opinion that different POSA would likely interpret "seamlessly" in different ways. Furthermore, as Dr. Melen notes, even a technical dictionary at the time viewed the use of the term "seamlessly" as vague.[2] Dr. Melen opined that because he was asked to provide a single interpretation for the word "seamlessly,"

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[2] Petitioners therefore observe that any claim incorporating the term "seamlessly" is likely invalid under 35 U.S.C § 112. However, Petitioners recognize that claims cannot be challenged under 35 U.S.C. § 112 within an *inter partes* review. Thus, for demonstrating the invalidity of these claims under 35 U.S.C. §§ 102 and 103, Petitioners are providing a required claim construction.

under this constraint it is his opinion that a POSA would understand "seamlessly" to mean: A low amount of effort. (Melen Decl., RIC 1008, ¶ 27.)

The term "**Go operation**" recited in claims 3, 9, and 11 means: An operation that begins a process. (Melen Decl., RIC 1008, ¶ 28.)

The construction of claims invoking 35 U.S.C. § 112(f) "must identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function." 37 C.F.R. § 42.104(b)(4).[3]

Each limitation in the body of claim 10 is computer-implemented, and invokes § 112(f). Regarding the term "**enable virtual copy operation means**," the

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[3] The construction of a means-plus-function limitation follows a two-step approach: (1) identify the claimed function; and (2) identify the corresponding structures in the written description. *AllVoice Computing PLC v. Nuance Commc'ns, Inc.*, 504 F.3d 1236, 1240 (Fed. Cir. 2007). When a means-plus-function limitation relates to a computer process, the corresponding structure must be more than simply a general-purpose computer. *Aristocrat Techs. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). Instead, the specification should disclose an algorithm or method to perform the function that "render[s] the bounds of the claim understandable to one of ordinary skill in the art." *AllVoice*, 504 F.3d at 1245.

structure performing this function appears to be disclosed at RIC 1001, 77:1-29; regarding the term **"maintain list of available module means,"** the structure performing this function appears to be disclosed at RIC 1001, 73:17-35, FIG. 36; regarding the term **"maintain currently active modules means,"** the structure performing this function appears to be disclosed at RIC 1001, 75:25-30, FIG. 37; and regarding the term **"maintain complete document information means,"** the structure performing this function appears to be disclosed at RIC 1001, 75:40-50, FIG. 39.

The referenced portions of the Specification do not describe structure including an algorithm as required;[4] rather the Specification explains that these limitations describe computer software *per se*.[5] (RIC 1001, 68:26 ("The VC invention is software."); 72:30-58.) Thus, the terms are construed to include any hardware and/or software that can achieve the stated functions. The same analysis applies to the means-plus-function elements of claim 6.

VII. Identification Of Challenge (37 C.F.R. § 42.104(b))

IPR is requested on the Grounds of Unpatentability listed in the index below. Per 37 C.F.R. § 42.6(d), copies of the references listed in the index below are filed with this Petition. In support of the proposed Grounds of Unpatentability, this

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[4] Raising issues, which cannot be challenged here, under 35 U.S.C. § 112.

[5] Raising issues, which cannot be challenged here, under 35 U.S.C. § 101.

Petition is accompanied by a declaration of a technical expert, Dr. Roger Melen ("Melen Decl."; RIC 1008), which explains what the art would have conveyed to a POSA.

Ground	35 USC	Index of Reference(s)	Claims
1	102(b)	XNS (with inherent features evidenced by GIS 150)	1-11
2	102(b)	Ohkubo	1-11
3	102(e)	Salgado	1-11
4	102(a), (e)	Harkins	1-11
5	103(a)	Ohkubo in view of APA	3, 5-9, 11
6	103(a)	Salgado in view of APA	3, 5-9, 11
7	103(a)	Harkins in view of Motoyama	1-8

These Grounds are each highly relevant, and are neither horizontally nor vertically redundant.[6] The "meaningful distinction"[7] between Grounds is explained

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[6] When prior art references are applied not in combination to complement each other, but as distinct and separate alternatives, "each reference has to be better in some respect or else the references are collectively horizontally redundant." CBM2012-00003, Paper 7, p. 5, ll. 8-16 (emphasis added). When a plurality of prior art is applied both in partial combination and in full combination, "[t]here must be an explanation of why the reliance in part may be the stronger assertion as applied in certain instances and why the reliance in whole may also be the stronger assertion in other instances. Without a bi-directional explanation, the assertions are vertically redundant." CBM2012-00003, Paper 7, p. 5, ll. 17-24 (emphasis added).

in detail below. Each of the references used as an anticipation reference is better in some respect that the other anticipation references. Similarly, with respect to the obviousness references each combination is stronger in some instances than the other Grounds of Unpatentability.

Denial of one of the Grounds of Unpatentability in this Petition for only being redundant, without reaching its merits, would thwart the statutory mandate to provide just, speedy and inexpensive resolution of this proceeding, as required by 37 C.F.R. § 42.1(b). CBM2012-00003, Paper 7, p. 2, ll. 8-15. As a threshold matter, page limitations in an *inter partes* review petition already place significant limitations on Petitioners to present a full and complete basis for a review to be instituted. These page limits (combined with font size and margin limitations) already recognize the need to balance the objectives of justice and speed. Having an overly restrictive view on what Grounds of Unpatentability to consider, would shift this balance inappropriately, thereby undermining the objective of justice.[8] Furthermore, given the highly restrictive estoppel provisions, justice and speed are

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[7] *See, e.g.,* IPR2013-00057, Paper 21; IPR2013-00011, Paper 44.

[8] Petitioners have already been forced by the page limit restrictions to use only a small sampling of references available to demonstrate the unpatentability of the claims of the present patent.

better served by taking a broader view (within the page limit restrictions) of Grounds of Unpatentability that should be considered, particularly when the relative relevancy of Grounds of Unpatentability may be impacted by later claim interpretation decisions.

Here, several factors weigh heavily in favor of adopting all Grounds of Unpatentability. First, the Patent Owner has embarked on an aggressive campaign of sending assertion letters to many small and mid-size business owners across the country.[9] Therefore, it is likely that significant financial resources are being used by targeted small businesses to consider the validity of the patents, and may result in many additional PTAB and court actions by many parties if this *inter partes review* proceeding is not perceived as comprehensive. Thus, justice and speed are well served by being comprehensive in this proceeding. Second, the claims at issue are lengthy and include many different features. Numerous references are needed to teach or disclose (with differing relative strengths) these myriad of features. Third, as stated above, there is "meaningful distinction" between the Grounds of Unpatentability because each is highly relevant with different relevant strengths and reasons for consideration. Fourth, the references have varying effective dates, such that some cannot be antedated with evidence of conception and diligence to

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[9] *See, e.g., Engineering & Inspection Services, LLC v. IntPar*, LLC, No. 13-0801 (E.D. La.).

reduction to practice.[10]   Petitioner now presents each Ground of Unpatentability,

in detail, for claims 1-11 of the '426 patent. Because the preamble and first three

limitations of each of claims 1-5 are identical, the claim charts that follow address

these limitations (when appropriate) in claim 1 as **[1.P]**, **[1.1]**, **[1.2]**, and **[1.3a-b]**.

Also, the preamble of claim 9 is addressed in claim 1 as **[1.P]** because the

preambles of claims 1 and 9 are nearly identical (the only difference being claim 1

recites, "comprising," whereas claim 9 recites, "wherein the system comprises").

Finally, all underlining and bold are added emphasis unless otherwise noted.

A.   Ground 1: Claims 1-11 are anticipated under 35 U.S.C. § 102(b) by XNS, (with inherent features evidenced by GIS 150).

XNS was published April 1985, and qualifies as prior art under 35 U.S.C.

§ 102(b) because it was published more than one year prior to the earliest priority

date claimed by the '426 patent. GIS 150 (RIC 1003), used to evidence inherent

claim features[11], was published January 1985, and also qualifies as prior art under

35 U.S.C. § 102(b).

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[10] *See, e.g.,* IPR2013-00024, Paper 22.

[11] The Federal Circuit has consistently said that extrinsic evidence can be

considered to determine inherency. *Schering Corp. v. Geneva Pharmaceuticals,*

339 F.3d 1373, 1377 (Fed. Cir. 2003) ("Court may consult artisans of ordinary skill

XNS is a comprehensive manual addressing networked integrated office systems and document management. It describes, *inter alia*, technology and equipment for network scanning services, network printing services, electronic mail (Email) services, and network filing services. XNS was published in April 1985 – more than 11 years before the earliest effective date claimed by the '426 patent – and clearly establishes that network-based document management was a mature technology long before the '426 patent (or any of its precursors) was filed. This reference is particularly relevant as prior art to the '426 patent because it provides an extremely early publication date for a comprehensive network scanning system and, as a system manual, demonstrates that network scanning systems were widely known long before the filing date of the present patent. Also, as non-patent system manual, it provides insight to the types of equipment and technology that was commercially available in April 1985. (Melen Decl., RIC 1008, ¶ 84.) XNS discloses network scanning using the Xerox 150 Scanner. (RIC 1002, p. 112) Xerox 150 Graphic Input Station Operator and Reference Manual ("GIS 150") (RIC 1003) evidences certain features that are inherent on the Xerox 150 Scanner. Claim Chart I indicates that XNS, explicitly or inherently (as

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to ascertain their understanding about subject matter disclosed in the prior art, including limitations inherent in the prior art.")

evidenced by GIS 150) teaches all of the limitations of, and therefore anticipates, claims 1-11.

CLAIM CHART I
Claim 1 is anticipated by XNS
[1.P] *A computer data management system including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet, comprising:*
[1.P]: XNS provides a "system overview" describing a data and document management system: The general objectives of XNS is therefore to increase the ROIA by facilitating the <u>creation, capture, storage, communication, printing, and replicating of electronic or paper documents within the office</u>, especially at the work group and departmental levels. This is what Xerox calls <u>document management</u>." (RIC 1002, p. 8.) **XNS** also discloses many network configurations for document management and transmission both locally and via Internet (*Id.* at 21-42), such as FIG. 11-2 on page 112, and FIG. 11-3 on page 113:   Figure 11-2 Two models for scanning service Figure 11-3 Intelligent scanning system converts hardcopy to text (*See also id.* at 71-76; (network filing); 83-90 (Email); 91-106 (network printing); 107-16 (network scanning).)
[1.1] *at least one scanner, digital copier or other multifunction peripheral capable of rendering at least one of said electronic image, electronic graphics and electronic document;*
[1.1]: XNS discloses network scanning, and at least one scanner: [The graphic input] model enables a user to digitize a hardcopy image by <u>scanning it at the scanner</u>. The digitized image (in

RES) may be <u>sent to</u> a specified file in a <u>File Service for storage, or to a Print Service for printing</u> (using Printer Subset of the <u>Filing Protocol</u>). A user interface exists <u>at the scanner</u> to allow a user to perform this function, as well as other functions such as cropping or scaling the image. <u>The scanner is an XNS system element which uses XNS protocols to communicate with other devices and services on the internet.</u>
(RIC 1002, p. 112; FIG. 11-2; *see also id.* at 126-35.)

[1.2] *at least one memory storing a plurality of interface protocols for interfacing and communicating;*

[1.2]: XNS discloses a plurality of interface protocols for interfacing and communicating:

The XNS architecture is particularly open-ended in respect to <u>multiple transmission protocols</u> corresponding to different types of communication services, and to <u>multiple application protocols</u> corresponding to different functions performed within the architectural boundaries.
(RIC 1002, p. 14-20; FIG. 2-4.)

XNS explains, "The devices that use <u>XNS protocols</u> and connect to the network are called <u>system elements</u>. . . . These system elements are generally classified as <u>workstations or servers</u>." (*Id.* at 17), and "a directly-connected device is expected to implement all the layers of XNS appropriate to its function, which would include *at least* all layers upward through Courier . . . plus selected application protocols." (*Id.* at 18). XNS also explains that a scanner can be a system element: "The scanner is an XNS element which uses <u>XNS protocols</u> to communicate with other devices and services on the internet." (*Id.* at 112.)

System elements—such as workstations, servers, scanners, etc.—inherently include memory storing the protocols in order to implement and use the protocols. (Melen Decl., RIC 1008, ¶ 34; *See, e.g., In re Oelrich*, 666 F.2d 578 (C.C.P.A. 1981); M.P.E.P. § 2112(IV) (regarding inherency).)

[1.3a] *at least one processor responsively connectable to said at least one memory, and* **[1.3b]** *implementing the plurality of interface protocols as a software application for interfacing and communicating with the plurality of external destinations including the one or more of the external devices and applications,*

[1.3a]: XNS discloses system elements (see **[1.2]**). System elements—such as workstations, servers, scanners, etc.—inherently include a processor used to implement the protocols. (Melen Decl., RIC 1008, ¶ 34.)

[1.3b]: XNS discloses implementing protocols as a software application: "These [application] protocols—mailing, printing, filing, and gateway access—<u>are implemented in hardware/software</u> to provide the XNS application services." (RIC

1002, p. 16.) **XNS** also discloses interfacing and communicating with external destinations using protocols: "[The graphic input] model enables a user to digitize a hardcopy image by <u>scanning it at the scanner</u>. The digitized image (in RES) may be <u>sent to</u> a specified file in a <u>File Service for storage, or to a Print Service for printing</u> (using Printer Subset of the <u>Filing Protocol</u>)." (*Id.* at 112; *see also id.* at 149-54 ("Examples of XNS Protocol Usage").)

[1.4] *wherein the computer data management system includes integration of at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations.*

[1.4]: XNS discloses seamless replication and transmission: "[The graphic input] model enables a user to digitize a hardcopy image by <u>scanning it at the scanner</u>. The digitized image (in RES) may be <u>sent to</u> a specified file in a <u>File Service for storage, or to a Print Service for printing</u> (using Printer Subset of the <u>Filing Protocol</u>)." (RIC 1002, p. 112); "These documents can be manipulated and <u>printed</u> using the power of Interpress and print services, <u>filed</u> using XNS filing, <u>distributed</u> with XNS mail, <u>edited</u> at a workstation, or <u>sent to</u> any device that is directly or indirectly connected to the internet (including remote facsimile machines)." (RIC 1002, p. 115; *see also Id.* at pp. 71-76; (filing to/from file server); 83-90 (Email); 91-106 (printing using printer(s)); 107-16 (scanning using scanner(s); Melen Decl., RIC 1008, ¶¶ 40-41).

XNS also discloses integration using software: "The scanned image may be <u>combined with text to form a composite document</u>. The combining can take place at a <u>workstation or at a printer</u>, using the <u>Interpress SequenceInsertFile</u>." RIC 1002, p. 112); "Where graphic elements are acquired from other sources (e.g., photographs), they can be <u>scanned</u> . . . and subsequently edited. <u>These electronic graphic elements can be automatically integrated with the text to form electronic final-form page masters</u>, ready for production." (*Id.* at 128; Melen Decl., RIC 1008, ¶¶ 40-41).

XNS also explains that integration, replication, and transmission is seamless to the user: "[M]ost important, [the characteristics of XNS services] are provided to the network users <u>on a transparent basis</u>, leaving them free to concentrate on their professional, managerial, and clerical tasks." (RIC 1002, p. 121.)

Claim 2 is anticipated by XNS

[2.4] *wherein the computer data management system includes integration of one or more of said electronic image, electronic graphics and electronic document into a destination application without the need to modify the destination application.*

[2.4]: Again, **XNS** discloses, *e.g.*, integrating a scanned electronic image

with text to form a composite document at a destination, such as a workstation or printer. (*See* **[1.4]** of CLAIM CHART I.)

XNS also discloses applications and devices that are compatible with XNS: "These documents can be manipulated and <u>printed</u> using the power of Interpress and print services, <u>filed</u> using XNS filing, <u>distributed</u> with XNS mail, <u>edited</u> at a workstation, or <u>sent to</u> any device that is directly or indirectly connected to the internet (including remote facsimile machines)." (RIC 1002, p. 115; 117-35 (describing compatible XNS applications, and compatible devices (*e.g.*, Xerox Star)); 126-35 ("Electronic publishing")).

Compatible applications and devices can be used with XNS without modification. (Melen Decl., RIC 1008, ¶ 43.)

Claim 3 is anticipated by XNS

[3.4] *wherein the computer data management system includes an interface that enables copying of at least one of said electronic image, electronic graphics and electronic document between two or more of said external devices and applications using a single GO operation.*

[3.4]: XNS discloses a "user interface . . . at a scanner" that allows a user to "digitize a hardcopy image" and send the digitized image "to a specified file in a File Service for storage, or to a Print Service for printing." (RIC 1002, p. 112.) XNS explains: "The Xerox 150 scanner uses this model in providing scanned image service to XNS users." (*Id.*)

GIS 150 shows a "Start" button/operation as an inherent feature of Xerox 150 Scanner:

> After options and values for all features have been set . . . and the original has been positioned on the Document Glass, <u>pressing the START button causes the 150 GIS to begin scanning</u>. While the 150 GIS is scanning the message SCANNING is displayed. After scanning is complete the image <u>is automatically sent to the selected destination</u>, ...
>
> (RIC 1003, p. 4-3.)

GIS 150 explains that up to <u>five</u> destinations can be stored in the Xerox 150 scanner, and a destination "may be a device installed on a different network." (*Id.* at 6-4.) So, XNS (as evidenced by GIS 150) discloses an interface enabling copying between at least five external devices and applications using a Start operation.

XNS also discloses an Email service (RIC 1002, p. 83-90) allowing documents to be attached (*Id.* at 88) and mailed, *i.e.*, copied, to numerous locations via distribution lists (*Id.* at 89), including distribution to devices on other networks (*Id.* at 90). So, the Email service is also an interface satisfying **[3.4]**.

Claim 4 is anticipated by XNS

[4.4] *wherein the computer data management system includes adding at least one of electronic document, data and paper processing means via a single programming step.*
[4.4]: GIS 150 shows adding electronic document processing via a single programming step is inherent on the Xerox 150 scanner. (RIC 1003, pp. 5-1 – 5-10.) For example, "cropping" can be added by providing instructions to (programming) the user interface. (*Id.* at 5-5.) So, **XNS** (as evidenced by **GIS 150**) discloses **[4.4]**.
Claim 5 is anticipated by XNS
wherein the software application comprises: **[5.4a]** *at least one input module managing data comprising at least one of paper and electronic input to the computer data management system, and managing said at least one scanner, digital copier or other multifunction peripheral, and* **[5.4b]** *managing the electronic input from at least one third-party software application;*
[5.4a]: XNS, as illustrated in FIG. 2-4—including the application protocols, Courier (*see* RIC 1002, pp. 43-48), transport protocols, and the like—manages electronic input/output and input/output devices connected to the system (*Id.* at 14-17). Application protocols "are implemented in hardware/software." (*Id.* at 16.) For example, "[The graphic input] model enables a user to digitize a hardcopy image by <u>scanning it at the scanner</u>. The digitized image (in <u>RES</u>) may be <u>sent to</u> a specified file in a <u>File Service for storage, or to a Print Service for printing</u> (using Printer Subset of the <u>Filing Protocol</u>)." (*Id.* at 112.) **[5.4b]: XNS** explains non-Xerox systems (hardware and software) are supported: "Techniques are also provided within XNS for <u>bi-directional</u> protocol and format conversion, <u>permitting other systems to achieve integration with XNS</u>." (*Id.* at 16.) Example non-Xerox systems include equipment from: Kurzweil (*Id.* at 113); IBM and DEC (*Id.* at 117); "<u>Any</u> personal computer, workstation, or other terminal that supports the standard asynchronous ASCII communications can connect to the network via the Interactive Terminal Service and send or receive mail messages and documents." *Id.* at 120; and "<u>any Xerox or non-Xerox facsimile device</u> that is compatible with CCITT Group 1, 2, or 3" (*Id.*). In one example, **XNS** discloses managing electronic input from a "Kurzweil Intelligent Scanning System, which not only scans a document but converts it into its textual rather than bit-map representation" and "uses the 860 gateway service to connect to the internet . . . to store files no a file server or mail them to a user for editing at a workstation. (*Id.* at 117.) (*See* Melen Decl., RIC 1008, ¶¶ 42-46.) **XNS** also discloses the "Gateway Access Protocol," for interfacing with other, non-Xerox, networks and equipment. (*Id.* at 65-70.)
[5.5a] *at least one output module managing the data output from the computer data management system, managing at least one imaging device to*

output the data to at least one of a standard windows printer, an image printer, and a digital copier, and **[5.5b]** *managing the output of the data to the third-party software application;*
[5.5a]: See **[5.4a]** of Claim Chart I, and **XNS** discloses managing data output from the system to a printer: "The digitized image (in RES) may be <u>sent to . . . a Print Service for printing</u> (using Printer Subset of the Filing Protocol)" (RIC 1002, p. 112), and to facsimile devices (*Id.* at 120). (*See* Melen Decl., RIC 1008, ¶¶ 42-46.) **[5.5b]:** See **[5.4b]** of Claim Chart I.
[5.6] *at least one process module applying at least one data processing to the data comprising the at least one of the paper and the electronic input as it is being copied, applying additional functionality including at least one of workflow and processing functionality to the data comprising the at least one of paper and electronic input as it is being copied, and applying multiple processes to a single virtual copy;*
[5.6]: **XNS** discloses "[a] user interface . . . at the scanner to allow a user <u>to perform . . . functions such as cropping or scaling</u> the image." (RIC 1002, p. 112.) **XNS** also discloses combining a scanned image with text: "The scanned image may be <u>combined with text</u> to form a composite document." (*Id.*) **GIS 150** discloses the following processes that can be applied to a scanned image: document sizing (RIC 1003, p. 5-3); automatic labeling (*Id.* at 5-4); Cropping (*Id.* at 5-5); document orientation (*Id.* at 5-6). So, **XNS** (as further evidenced by **GIS 150**) disclose **[5.6]**.
[5.7] *at least one client module presenting the data comprising the at least one of paper and electronic input as it is being copied, and information related to at least one of input and output functions; and*
[5.7]: **XNS** discloses the "graphic input model" of network scanning where "the scanner is an XNS system element with a user interface of its own" to allow a user to scan, send, apply settings, etc. (RIC 1002, pp. 111-12.) **XNS** also discloses the "peripheral device model" of network scanning where a "workstation [coupled to the scanner] controls the scanner [and has] a bit map <u>display</u> and image editing capabilities." (*Id.* at 113.)
[5.8] *at least one server module communicable with said at least one input, output, client, and process modules and external applications, and capable of dynamically combining the external applications with at least one of digital capturing devices and digital imaging devices.*
[5.8]: See **[5.4a-b]** of Claim Chart I.
Claim 6 is anticipated by XNS
A computer data management system according to claim 5, wherein the server

module includes: **[6.1]** *enable virtual copy operation means for initiating, canceling and resetting said computer data management system;*
[6.1]: See **[10.1]** of Claim Chart I.
[6.2] *maintain list of available module means for maintaining a registry containing a list of said input, output, and process modules that can be used in said computer data management system, said list being read on startup, and maintaining another copy of said list in a modules object accessible by said input, output client, process and server modules;*
[6.2]: See **[10.2a-b]** of Claim Chart I.
[6.3] *maintain currently active modules means for maintaining said input, output, and process modules currently being used for a current computer data management system copy operation in a program object, and saving the currently active modules in a process template file; and*
[6.3]: See **[10.2a-b]** and **[10.3]** of Claim Chart I.
[6.4] *maintain complete document information means for maintaining information regarding a current file being copied, and saving the information in a document template file.*
[6.4]: See **[10.4]** of Claim Chart I.
Claim 7 is anticipated by XNS
A computer data management system according to claim 5, wherein **[7.1]** *the server module includes at least one server module application programmer interface.*
[7.1]: Dr. Melen explains that at least one API is inherent in XNS: "Numerous application programming interfaces exist between the programs illustrated FIG. 2-4. Application programming interfaces are necessary in order to link the various programs, layers, *etc.*, so that they may interact as described throughout the XNS disclosure." (Melen Decl., RIC 1008, ¶ 35.)
Claim 8 is anticipated by XNS
A computer data management system according to claim 7, wherein the at least one server module application programmer interface comprises the following interfaces: **[8.1]** *at least one modules object maintaining a first list of available input, output, and process modules;*
[8.1]: See **[10.2a-b]** and **[10.3]** of Claim Chart I.
[8.2] *at least one document object maintaining information regarding a current document being copied;*
[8.2]: See **[10.4]** of Claim Chart I.
[8.3] *at least one system management method object used to initiated, cancel, and reset said computer data management system;*
[8.3]: See **[10.1]** of Claim Chart I.

[8.4] *at least one system management event object used to provide feedback to the client module.*
[8.4]: See **[5.7]** of Claim Chart I.
Claim 9 is anticipated by XNS
[9.1a] *an application system to integrate an image using software so that the image gets seamlessly replicated into at least one external device or application, without the need to modify said at least one external device or application;*
[9.1a]: See **[1.3a-b]**, **[1.4]**, and **[2.4]** of Claim Chart I.
[9.2a] *at least one interface wherein images are copied between physical devices and applications, using a single GO operation, and* **[9.2b]** *where said application system implements a workflow for transmitting at least one of said images to at least one of said external destinations, and* **[9.2c]** *a capacity for adding at least one of electronic document and paper processing with a single programming step.*
[9.2a]: See **[1.3a-b]** and **[3.4]** of Claim Chart I. **[9.2b]**: See **[1.3a-b]** and **[1.4]** of Claim Chart I. **[9.2c]**: See **[4.4]** of Claim Chart I.
Claim 10 is anticipated by XNS
[10.P] *A computer data management system including a server module comprising:*
[10.P]: See **[1.P]** of Claim Chart I.
[10.1] *enable virtual copy operation means for initiating, canceling, and resetting at least one operation managed by said computer data management system;*
[10.1]: **XNS** discloses the Xerox 150 Scanner. (RIC 1002, p. 112.) **GIS 150** shows that initiating, canceling, and resetting are inherent features of the Xerox 150 Scanner. (RIC 1003, pp. 4-3 - 4-4.) So, **XNS** (evidenced by **GIS 150**) discloses **[10.1]**.
[10.2a] *maintain list of available module means for maintaining a list of input, output, and process modules that can be used in said computer data management system,* **[10.2b]** *said list being used by at least one module object accessible by said server module;*
[10.2a-b]: **XNS** discloses "Clearinghouse" (RIC 1002, pp. 49-63), which "is essentially a data base of objects" (*Id.* at 50). The "objects" correspond to devices and services available on the network. (*Id.*) XNS also discloses "Database replication" where Clearinghouse "is decentralized and replicated." (*Id.* at 52-53.) So, more than one database or "list" may be maintained.
[10.3] *maintain currently active modules means for maintaining input,*

output, and process modules currently being used for a current computer data management system operation in a program object; and
[10.3]: Again, **XNS** discloses "Clearinghouse." (RIC 1002, pp. 49-63.) **XNS** also discloses that a protocol may allow a client to obtain status information: "The Printing Protocol allows clients to obtain information on the properties and the <u>status</u> of a printer." (*Id.* at 103.)
[10.4] *maintain complete document information means for maintaining information regarding a current file.*
[10.4]: **XNS** discloses that documents can be filed and stored. (RIC 1002, pp. 71-76.) **XNS** also discloses maintaining "attributes," which "are additional information about [a] file." (*Id.* at 74.)
Claim 11 is anticipated by XNS
[11.P] *A computer data management method including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet, wherein the method comprises the steps of:*
[11.P]: See **[1.P]** of Claim Chart I.
[11.1] *integrating an image using software so that the image is transmitted into at least one of other devices and applications, and via the Internet;*
[9.2a]: See **[1.3a-b]** and **[1.4]** of Claim Chart I.
[11.2] *integrating electronic images into existing applications without the need to modify a destination application;*
[9.2a]: See **[1.3a-b]** and **[2.4]** of Claim Chart I.
[11.3] *interfacing via a software application enabling copying images between physical devices and applications, using at least one single GO operation; and*
[9.2a]: See **[1.3a-b]** and **[3.4]** of Claim Chart I.
[11.4] *adding at least one of electronic document and paper processing with a single programming step.*
[9.2a]: See **[1.3a-b]** and **[4.4]** of Claim Chart I.

B.   Ground 2:   Claims 1-11 are anticipated under 35 U.S.C. § 102(b) by Ohkubo

U.S. Patent No. 5,123,063 (RIC 1004) issued to Ohkubo on June 16, 1992.

Ohkubo qualifies as prior art under 35 U.S.C. § 102(b) because it was issued more

than one year prior to the earliest priority date claimed by the '426 patent.

Ohkubo describes an office computer network connecting, *e.g.*, scanners,

printers, image processors, and servers (mail and communication). (RIC 1004,

1:12-16; 3:9-30; FIGS. 1 and 4.) A table stores control information for different

types of scanners coupled to the network so that "it is possible to control the

scanners even if the operator is not knowledgeable about the characteristics of the

respective scanners." (*Id.* at 4:63-67.) Ohkubo demonstrates, *inter alia*, that

accommodating different types of equipment on an office network in a "user-

friendly" manner was known at least four (4) years before the '426 patent (or any

of its precursors) was filed. Ohkubo is not merely cumulative and is particularly

relevant for describing how networked machines can interact in a manner that is

transparent to an end user. (Melen Decl., RIC 1008, ¶ 85.) Claim Chart II indicates

that Ohkubo teaches all of the limitations of, and therefore anticipates, claims 1-11.

CLAIM CHART II
Claim 1 is anticipated by Ohkubo
[1.P] *A computer data management system including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet,*

comprising:

[1.P]: Ohkubo discloses a networked system connecting office equipment for document processing:

> FIG. 1 shows a configuration of an image processor . . . and its peripheral equipment. . . . A communication controller 31 is connected to a communication cable 32 such as a telephone line and a bus 22. <u>Other image processors</u> are connected to the communication cable 32 as are a <u>plurality of scanners 13-1 to 13-N for reading images,</u> and <u>printers 14-1 to 14-N for printing out images</u>. As a whole, the <u>system</u> constitutes a <u>local area network (LAN)</u>.
> (RIC 1004, 3:9-30; FIG. 1.)

Ohkubo provides additional technical disclosure of such a networked system in the "Background of the Invention" section, and explains the network may constitute a "local area network." (*Id.* at 1:13-32; FIG. 4.)

FIG. 1
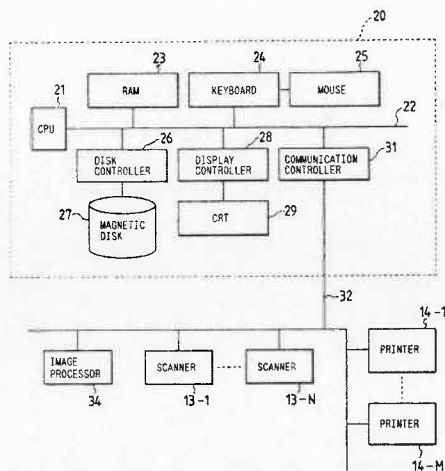
FIG. 4
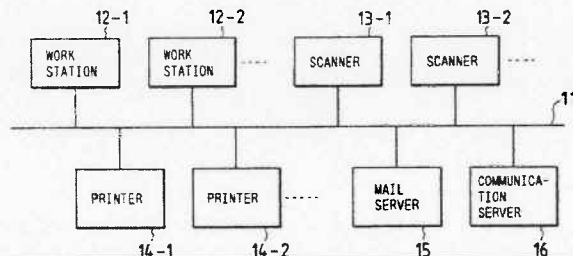
[1.1] *at least one scanner, digital copier or other multifunction peripheral capable of rendering at least one of said electronic image, electronic graphics and electronic document;*

[1.1]: Ohkubo discloses "<u>a plurality of scanners</u> 13-1 to 13-N for reading images." (RIC 1004, 3:27-28, 1:12-32, FIGS. 1 and 4.)

[1.2] *at least one memory storing a plurality of interface protocols for interfacing and communicating;*

[1.2]: Ohkubo discloses a scanner table that is stored in memory:

> FIG. 2 illustrates the contents of a <u>scanner table</u> provided in the image processor shown in FIG. 1. <u>This scanner table 41 is stored in the magnetic disk 27</u> as data and is transferred to a predetermined area of the RAM 23 when the image processor 20 is activated. A scanner identification number (ID)

corresponding to each type of scanner is provided in the scanner table, and data representing information on <u>controlling the relevant scanner is stored</u> for each scanner ID."
(RIC 1004, 3:31-60; FIG 2.)

Ohkubo discloses that the scanner table includes "<u>data transfer units and types of commands supported by the scanners are present in the scanner table 41</u>." (RIC 1004, 3:61-63.)

Dr. Melen explains: "[T]he scanner table [includes] a plurality of protocols (*e.g.*, the control information for each scanner being analogous to a protocol) so that an image processor (*e.g.*, image processor 20—FIG. 1) could interface and communicate with the various scanners (*e.g.*, scanners 13-1, and 13-2—FIG. 1) over the network." (Melen Decl., RIC 1008, ¶ 56.)

FIG. 2

SCANNER ID	DATA STRUCTURE	-----	SYNCHRONIZA- TION PROCESSING	BUFFER RESTRICTIONS	STATUS CONVERSION TABLE
S001	COLORED. FACE SEQUENCE. A3, 400 dpi	-----	SYNCHRONIZA- TION PROCESSING SY1	NONE	T01
S002	MONOCHROME. MULTIARY. A3, 300 dpi	-----	SYNCHRONIZA- TION PROCESSING SY1	NONE	T02
S003	MONOCHROME. BINARY. A4, 300 dpi	-----	NONE	BUFFER PROCESSING	T03

[1.3a] *at least one processor responsively connectable to said at least one memory, and* **[1.3b]** *implementing the plurality of interface protocols as a software application for interfacing and communicating with the plurality of external destinations including the one or more of the external devices and applications,*

[1.3a]: Ohkubo discloses that "<u>image processor</u> 20 has a <u>central processor (CPU)</u> 21 connected to various circuit components via a bus 22 such as a data bus." (RIC 1004, 3:11-13; FIG. 1.) Image processor 20 is connectable to RAM 23 and Magnetic Disk 27, which store the scanner table. (*Id.* at 3:32-35, FIG. 1.)

[1.3b]: Ohkubo discloses a program (software) that controls the CPU 21 (*Id.* at 3:13-15), and "FIG. 3 illustrates the operation of the image processor having the above-described configuration. . . . ." (*Id.* at 3:66-4:62; FIG. 3.)—which describes network scanning.

[1.4] *wherein the computer data management system includes integration of at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations.*

[1.4]: Ohkubo discloses replicating and transmitting a document from a scanner to, *e.g.*, an image processor: "The <u>image processor</u> . . . prepares itself for <u>receiving image information</u> in correspondence with the information read from the scanner table 41, <u>receives the image information which has begun to be transferred from the scanner</u> in the above-described flow, and then affects that processing." (RIC 1004, 4:57-62.)

Ohkubo further discloses that, by using the scanner table, this process is seamless: "Since a table in which contents of control are described for each type of scanner is prepared in the image processor, it is possible to control the scanners even if the operator is not knowledgeable about the characteristics of the respective scanners." (*Id.* at 4:63-67; *see* Melen Decl., RIC 1008, ¶¶ 52-53.)

Claim 2 is anticipated by Ohkubo

[2.4] *wherein the computer data management system includes integration of one or more of said electronic image, electronic graphics and electronic document into a destination application without the need to modify the destination application.*

[2.4]: Ohkubo explains the perceived limitations of conventional systems *circa* 1990: "[E]ach time a scanner 13 is selected, it is necessary to perform operations such as <u>exchanging the interface circuit or adjusting each circuit terminal</u> in order to make the image processor correspond to the scanner. Also, in cases where signal processing is controlled by software, <u>it has been necessary to alter the program</u>. Such operations are time-consuming and expensive." (RIC 1004, 1:65-2:3.)

By using the scanner table, **Ohkubo** overcomes these perceived limitations: "[A] plurality of scanners of different types which are connected to the image processor and <u>retain the ability to use the functions peculiar to the individual scanners</u> . . . ." (*Id.* at 2:14-54.) So, "use of a scanner table as disclosed by Ohkubo eliminates the need to modify the hardware and/or software of the conventional office networks." (Melen Decl., RIC 1008, ¶ 54.)

Claim 3 is anticipated by Ohkubo

[3.4] *wherein the computer data management system includes an interface that enables copying of at least one of said electronic image, electronic graphics and electronic document between two or more of said external devices and applications using a single GO operation.*

[3.4]: Ohkubo discloses that selection of a scanner triggers a network scan/copy process: "<u>Upon selection of a scanner</u> for transmitting image information to the image processor or connection of that scanner to the image processor, the CPU 21 [executes the method illustrated in FIG. 3]." (RIC 1004, 3:67-4:62; FIG. 3.) So, Ohkubo discloses copying between two devices—scanner and image processor—based on this single operation.

Claim 4 is anticipated by Ohkubo
[4.4] *wherein the computer data management system includes adding at least one of electronic document, data and paper processing means via a single programming step.*
[4.4]: Ohkubo discloses new scanners for document processing can be added to the system using a single registration (programming) step: "ID's for the scanners are registered by inputting ID's corresponding to the types of scanners through the keyboard 24 and storing this information in a predetermined area of the RAM 23." (RIC 1004, 4:16-20.)

Claim 5 is anticipated by Ohkubo
wherein the software application comprises: **[5.4a]** *at least one input module managing data comprising at least one of paper and electronic input to the computer data management system, and managing said at least one scanner, digital copier or other multifunction peripheral, and* **[5.4b]** *managing the electronic input from at least one third-party software application;*
[5.4a-b]: Ohkubo discloses, "A RAM . . . stores a <u>program</u> and temporary data from controlling the processor 21." (RIC 1004, 3:13-15.) The program executing on the processor satisfies the "input module," "output module," "process module," "client module," and "server module." Regarding input and input devices, **Ohkubo** discloses: "The image processor . . . prepares itself for receiving image information in correspondence with the information read from the scanner table 41, receives the image information which has begun to be <u>transferred from the scanner</u> in the above-described flow, and then affects that processing." (*Id.* at 4:57-62.) Also, a stated purpose of Ohkubo is to accommodate different "types" of devices/applications. (*See id.* at 1:12-2:11; 2:14-54; 4:63-5:21.)
[5.5a] *at least one output module managing the data output from the computer data management system, managing at least one imaging device to output the data to at least one of a standard windows printer, an image printer, and a digital copier, and* **[5.5b]** *managing the output of the data to the third-party software application;*
[5.5a-b]: See **[5.4a-b]**, and regarding output and output devices, **Ohkubo** discloses: "Other image processors are connected to the communication cable 32 as are a plurality of scanners 13-1 to 13-N for reading images, and <u>printers 14-1 to 14-N for printing out images</u>." (RIC 1004, 26-30; FIG. 1.)
[5.6] *at least one process module applying at least one data processing to the data comprising the at least one of the paper and the electronic input as it is being copied, applying additional functionality including at least one of workflow and processing functionality to the data comprising the at least one of paper and*

electronic input as it is being copied, and applying multiple processes to a single virtual copy;

[5.6]: See **[5.4a-b]**, and **Ohkubo** discloses applying data processing: "When the necessary information is obtained from the scanner table 41, the CPU 21, on the basis of this information, checks whether or not the relevant scanner is capable of performing various <u>processing requests</u> from the image processor before the transmission of data (Step 6). . . . If the scanner is of the type for which <u>the first processing</u> is to be made (Y), the CPU 21 requests the scanner to effect <u>processing</u> in such a manner as to read all of the data (Step 9). On the other hand, if the scanner is of the type for which the <u>second processing</u> is to be used (Step 8; N), the CPU 21 requests the scanner to move the reading element to a position for reading the document in correspondence with the read parameters." (RIC 1004, 4:21-45.)

[5.7] *at least one client module presenting the data comprising the at least one of paper and electronic input as it is being copied, and information related to at least one of input and output functions; and*

[5.7]: See *[5.4a-b]* and **Ohkubo** discloses "[a] display controller 28, which is connected to a CRT 29, controls the displaying of characters and images on the CRT 29." (RIC 1004, 3:21-23.)

[5.8] *at least one server module communicable with said at least one input, output, client, and process modules and external applications, and capable of dynamically combining the external applications with at least one of digital capturing devices and digital imaging devices.*

[5.8]: See **[5.4a-b]**.

Claim 6 is anticipated by Ohkubo

A computer data management system according to claim 5, wherein the server module includes: **[6.1]** *enable virtual copy operation means for initiating, canceling and resetting said computer data management system;*

[6.1]: See **[10.1]** of Claim Chart II.

[6.2] *maintain list of available module means for maintaining a registry containing a list of said input, output, and process modules that can be used in said computer data management system, said list being read on startup, and maintaining another copy of said list in a modules object accessible by said input, output client, process and server modules;*

[6.2]: See **[10.2a-b]** of Claim Chart II. **Ohkubo** further discloses that the scanner table is "transferred to a predetermined area of the RAM 23 when the image processor 20 is activated." (RIC 1004, 3:32-35.)

[6.3] *maintain currently active modules means for maintaining said input, output, and process modules currently being used for a current computer data management system copy operation in a program object, and saving the currently*

active modules in a process template file; and
[6.3]: See **[10.2a-b]** and **[10.3]** of Claim Chart II.
[6.4] *maintain complete document information means for maintaining information regarding a current file being copied, and saving the information in a document template file.*
[6.4]: See **[10.4]** of Claim Chart II.
Claim 7 is anticipated by Ohkubo
A computer data management system according to claim 5, wherein **[7.1]** *the server module includes at least one server module application programmer interface.*
[7.1]: Dr. Melen explains an API is inherent in **Ohkubo**: FIG. 1 illustrates, *e.g.*, the image processor 20 and the scanner 13-1 as separate devices connected by "a communication cable 32." (Ohkubo, 3:24.) In order to achieve the network scanning functions described by Ohkubo (*see* Ohkubo, 3:66-4:62), an interface is present between the image processor and the scanner, and the image processor uses a collection of function calls to instruct the scanner via the interface. The collection of function calls is an application programming interface. (Melen Decl., RIC 1008, ¶ 49.)
Claim 8 is anticipated by Ohkubo
A computer data management system according to claim 7, wherein the at least one server module application programmer interface comprises the following interfaces: **[8.1]** *at least one modules object maintaining a first list of available input, output, and process modules;*
[8.1]: See **[10.2a-b]** of Claim Chart II.
[8.2] *at least one document object maintaining information regarding a current document being copied;*
[8.2]: See **[10.4]** of Claim Chart II.
[8.3] *at least one system management method object used to initiated, cancel, and reset said computer data management system;*
[8.3]: See **[10.1]** of Claim Chart II.
[8.4] *at least one system management event object used to provide feedback to the client module.*
[8.4]: Ohkubo discloses, "[a] display controller 28, which is connected to a CRT 29, controls the displaying of characters and images on the CRT 29." (RIC 1004, 3:21-23.)
Claim 9 is anticipated by Ohkubo
[9.1a] *an application system to integrate an image using software so that the*

image gets seamlessly replicated into at least one external device or application, without the need to modify said at least one external device or application;
Ohkubo discloses [9.1a]: See **[1.3a-b]**, **[1.4]**, and **[2.4]** of Claim Chart II.
[9.2a] *at least one interface wherein images are copied between physical devices and applications, using a single GO operation, and* **[9.2b]** *where said application system implements a workflow for transmitting at least one of said images to at least one of said external destinations, and* **[9.2c]** *a capacity for adding at least one of electronic document and paper processing with a single programming step.*
[9.2a]: See **[1.3a-b]** and **[3.4]** of Claim Chart II. **[9.2b]:** See **[1.3a-b]** and **[1.4]** of Claim Chart II.. **[9.2c]:** See **[4.4]** of Claim Chart II.
Claim 10 is anticipated by Ohkubo
[10.P] *A computer data management system including a server module comprising:*
[10.P]: See **[1.P]** of Claim Chart II.
[10.1] *enable virtual copy operation means for initiating, canceling, and resetting at least one operation managed by said computer data management system;*
[10.1]: Dr. Melen explains that "a control feature—such as a power button—to initiate, cancel, and reset the device's operation" is inherent in **Ohkubo**. (Melen Decl., RIC 1008, ¶ 50.)
[10.2a] *maintain list of available module means for maintaining a list of input, output, and process modules that can be used in said computer data management system,* **[10.2b]** *said list being used by at least one module object accessible by said server module;*
[10.2a-b]: See **[1.2]** and **Ohkubo** discloses: "FIG. 2 illustrates the contents of a <u>scanner table</u> provided in the image processor shown in FIG. 1." (RIC 1004, 3:31-32.) The scanner table is a list of available modules.
[10.3] *maintain currently active modules means for maintaining input, output, and process modules currently being used for a current computer data management system operation in a program object; and*
[10.3]: See **[1.2]** and **Ohkubo** discloses: "FIG. 2 illustrates the contents of a <u>scanner table</u> provided in the image processor shown in FIG. 1." (RIC 1004, 3:31-32.) The scanner table is a list of active modules.
[10.4] *maintain complete document information means for maintaining information regarding a current file.*
[10.4]: Ohkubo discloses storing or "maintaining" information of a current file: "[T]he prepared document data [is] stored in the magnetic disk 27." (RIC

1004, 3:21-22.)
Claim 11 is anticipated by Ohkubo
[11.P] *A computer data management method including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet, wherein the method comprises the steps of:*
[11.P]: See **[1.P]** of Claim Chart II, and **Ohkubo**, FIG. 3.
[11.1] *integrating an image using software so that the image is transmitted into at least one of other devices and applications, and via the Internet;*
[11.1]: See **[1.3a-b]** and **[1.4]** of Claim Chart II.
[11.2] *integrating electronic images into existing applications without the need to modify a destination application;*
[11.2]: See **[1.3a-b]** and **[2.4]** of Claim Chart II.
[11.3] *interfacing via a software application enabling copying images between physical devices and applications, using at least one single GO operation; and*
[11.3]: See **[1.3a-b]** and **[3.4]** of Claim Chart II.
[11.4] *adding at least one of electronic document and paper processing with a single programming step.*
[11.4]: See **[1.3a-b]** and **[4.4]** of Claim Chart II.

C. Ground 3: Claims 1-11 are anticipated under 35 U.S.C. § 102(e) by Salgado

U.S. Patent No. 5,872,569 (RIC 1005) was filed by Salgado *et al.* on October 30, 1995. Salgado qualifies as prior art under 35 U.S.C. § 102(e) because it was filed before the earliest priority date claimed by the '426 patent.

Salgado describes a document processing system that includes a variety of networked input and output components—*e.g.*, scanner, digital copier, workstation, printer, facsimile machine. (RIC 1005, 13:22-35; FIG. 6.) A "profile" for each component connected to the network is created and stored in a database. (*Id.* at

14:39-42.) Profiles are used and combined in a "plug-and-play" manner to create a document processing workflow. (*See Id.* at 14:51-54; 17:15-29.) Salgado demonstrates that techniques for interfacing and combining networked components to create a document processing workflow were known before the '426 patent (or any of its precursors) was filed. Salgado is not merely cumulative and is particularly relevant for, and provides more advanced teachings than the other references of, specific techniques available to a user to build document processing workflows. (Melen Decl., RIC 1008, ¶ 86.) Claim Chart III indicates that Salgado teaches all of the limitations of, and therefore anticipates, claims 1-11.

| CLAIM CHART III |
|---|
| **Claim 1 is anticipated by Salgado** |
| **[1.P]** *A computer data management system including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet, comprising:* |
| **[1.P]: Salgado** discloses a data and document management system:
    FIG. 6, a <u>network document processing system,</u> . . . is designated by the reference numeral 100. . . . the network 100 . . . includes devices for input including <u>scanner or digital copier 102</u>, . . . devices for output including <u>display terminal 112, printer 114</u>, and speakers 116. Input/output (I/O) devices include <u>facsimile 120, file server 122, and telephone 124</u>.
    (RIC 1005, 13:22-33, FIG. 6.)
  Salgado discloses local and Internet connections: "[W]orkstation 82 is connected to other systems and devices through <u>local area network (LAN) or wide area network (WAN) 134, gateway 136, and/or modem 138</u>." (*Id.* at 13:51-54, FIG. 6.) |
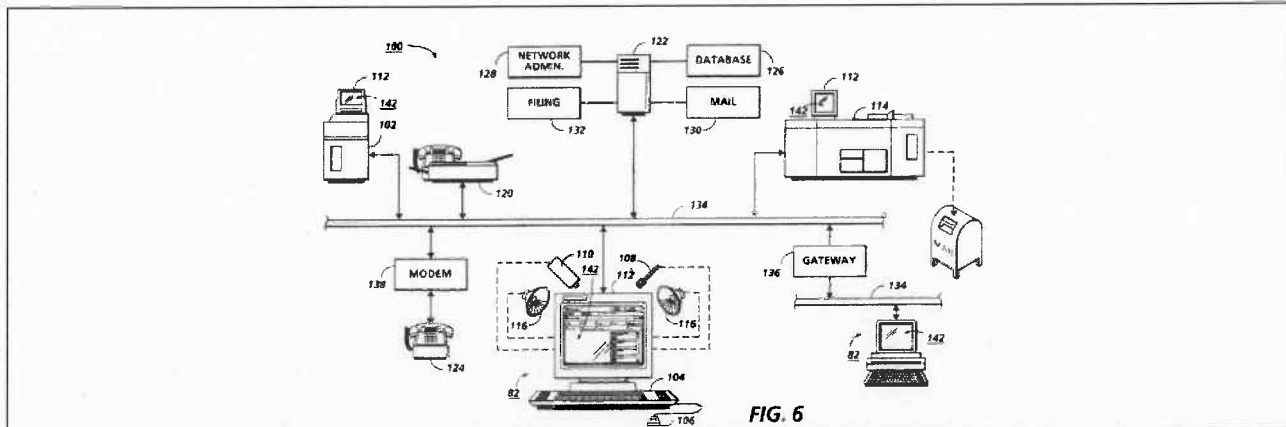
FIG. 6

[1.1] *at least one scanner, digital copier or other multifunction peripheral capable of rendering at least one of said electronic image, electronic graphics and electronic document;*	
[1.1]: Salgado discloses at least one scanner or digital copier: "[T]he network 100 . . . includes devices for input including <u>scanner or digital copier 102</u>." (RIC 1005, 13:25-28; FIG. 6.)	
[1.2] *at least one memory storing a plurality of interface protocols for interfacing and communicating;*	
[1.2]: Salgado discloses that a profile for each component connected to the network is stored in a database at the server: "[T]he application server includes . . . <u>the relational database 126</u>. . . . <u>For each component</u> coupled with the network 134, <u>a profile</u> representing the coupled component is developed . . . <u>for storage in the database 126</u>." (RIC 1005, 14:26-39.) Profiles can be used in a "plug-and-play" manner to generate document processing workflows using the networked equipment. (*Id.* at 14:51-54, 22:6-17.) Dr. Melen explains "a component's profile [includes] an interface protocol for interfacing and communicating so that the system, via the profile, can exploit and use the functions of the underlying component." (Melen Decl., RIC 1008, ¶ 68.) **Salgado** also discloses protocols—such as, a protocol to implement fax functions (RIC 1005, 10:51-67), network protocols implemented in software and hardware from Novell Corp. (*Id.* at 12:23-30), the protocols made available by XNS (*Id.* at 19:63-67), and an event notification protocol (e.g., SNMP) (*Id.* at 20:12-14)—the components of the network document processing system use to interface and communicate. (*See* Melen Decl., RIC 1008, ¶ 67.)	
[1.3a] *at least one processor responsively connectable to said at least one memory, and* **[1.3b]** *implementing the plurality of interface protocols as a software application for interfacing and communicating with the plurality of external destinations including the one or more of the external devices and applications,*	
[1.3a]: Salgado discloses that "the server is configured to serve as an application server. . . . various suitable arrangements including <u>one or more</u>	

<u>processors</u> and appropriate storage capacity could be used to provide the functionality of 122." (RIC 1005, 14:24-34.) FIG. 6 of **Salgado** illustrates the server 122 includes/is "connectable" to the database 126.

[**1.3b**]: **Salgado** discloses that workstations, scanners, and printers—connected to the server—implement a user interface (*Id.* at 13:58-14:9) that is used to build document processing workflows using the profiles stored in the database. (*See* Melen Decl., RIC 1008, ¶¶ 66-67.)

Salgado states: "[P]rofiles are mapped to one or more metaphor elements, respectively. In one example, the <u>metaphor elements are conventional pictograms mapped with the profiles in a known manner</u>. In one application . . ., a profile of print attributes is mapped to a printer icon. In one embodiment, the user is provided with a selection from a plurality of metaphor elements. These may be provided by way of a common file which is accessible to users across the network." (*Id.* at 16:58-67.)

Salgado discloses that "providing the operator with a visual means of interacting with these components is the basis of the metaphorical workflow strategy. . . . provided to the operator is a means of describing a complex workflow scenario based upon its component parts and interactions between those parts. " (*Id.* at 16:2-9.)

[**1.4**] *wherein the computer data management system includes integration of at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations.*

[**1.4**]: **Salgado** discloses "scan-to-print," "scan-to-Email," "scan-to-fax," "scan-to-file," and "scan-to-print" functions:

> [A] metaphor representing <u>a scanner, a printer, a facsimile device or an E-mail destination</u> is coupled with the initiating metaphor element by way of a connector arrow of the type shown in FIGS. 12 and 13. The connector is associated with code that permits a document, . . ., to be executed in accordance with a device profile. . . . As will be understood, by reference to FIGS. 12 and 13, a given template can include multiple combinations so that, for example, <u>output can be provided to multiple locations.</u>
> (RIC 1005, 17:16-29, FIGS. 12 and 13.) (Melen Decl., RIC 1008, ¶¶ 62-65.)

> [T]he user provides the system with a heuristic <u>indicating that s/he desires a scan-to-file process</u>. Accordingly, the scanner 282

and storage device 306 are added to the system automatically. [M]any instances of scan-to-file may be available. (RIC 1005, 22:8-15.)
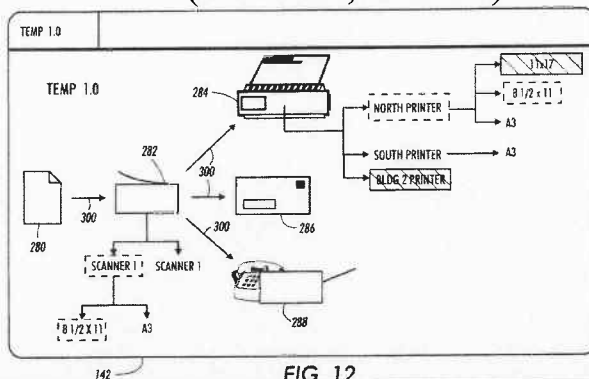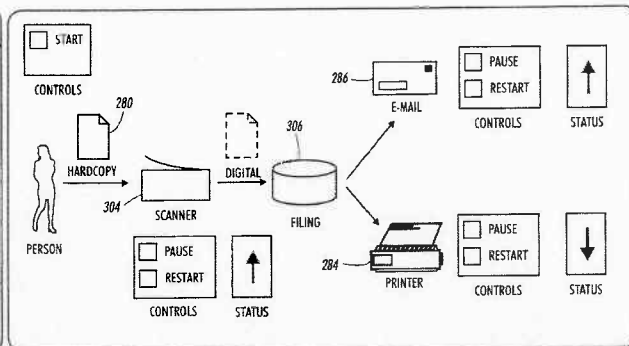

FIG. 12   FIG. 13

Claim 2 is anticipated by Salgado
[2.4] *wherein the computer data management system includes integration of one or more of said electronic image, electronic graphics and electronic document into a destination application without the need to modify the destination application.*
[2.4]: Salgado discloses various applications and devices that are compatible with the document processing system. (RIC 1005, 7:1-50, 13:66-14:1, 16:62.) Compatible applications and devices can be used with without modification. (*See* Melen Decl., RIC 1008, ¶ 43.)

Claim 3 is anticipated by Salgado
[3.4] *wherein the computer data management system includes an interface that enables copying of at least one of said electronic image, electronic graphics and electronic document between two or more of said external devices and applications using a single GO operation.*
[3.4]: See **[1.4]** of Claim Chart III, and **Salgado** at FIG. 13, "Start."

Claim 4 is anticipated by Salgado
[4.4] *wherein the computer data management system includes adding at least one of electronic document, data and paper processing means via a single programming step.*
[4.4]: Salgado discloses (1) adding a component to the system via a single programming step (RIC 1005, 14:39-42: "For each component coupled with the network 134, a profile representing the coupled component is developed […] for storage in the database 126."); (2) adding a combination via a single programming step (*Id.* at 16:42-57: "FIG. 7 provides, […], for the programming of a new combination or combinations when appropriate. […] the server administrator may hard code the one or more

new combinations, in an alternative example, the combination(s) could be developed dynamically with a suitable API […]."); and

(3) adding a service to a workflow via a single programming step (*Id.* at 14:51-53: "The concept underlying construction of the profiles and their use in a 'plug-and-play' context is grounded on a transfer function analysis."; *Id.* at 17:15-24: "To initiate the template building process (step 178), a device metaphor, such as a metaphor representing a scanner, a printer, a facsimile device or an E-mail destination is coupled with the initiating metaphor element by way of a connector arrow of the type shown in FIGS. 12 and 13. The connector is associated with code that permits a document, represented by a set of job requirements, to be executed in accordance with a device profile. In one example, connector code may serve to automatically 'drag and drop' a job/document into a device.").
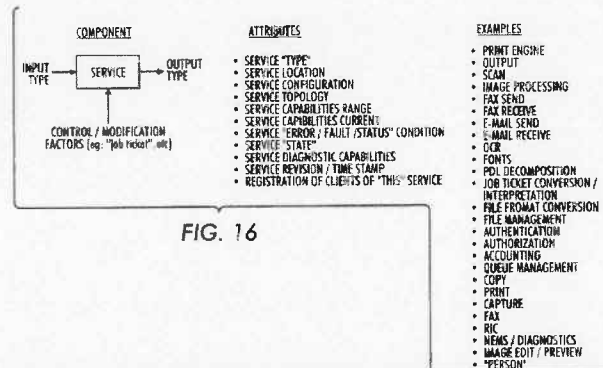
Each of (1), (2), and (3) satisfy **[4.4]**. (Melen Decl., RIC 1008, ¶ 64.)

Claim 5 is anticipated by Salgado

wherein the software application comprises: **[5.4a]** *at least one input module managing data comprising at least one of paper and electronic input to the computer data management system, and managing said at least one scanner, digital copier or other multifunction peripheral, and* **[5.4b]** *managing the electronic input from at least one third-party software application;*

[5.4a-b]: The UI 142 (*see* RIC 1005, 13:58-14:9), server 122 (*see Id.* at 14:22-34), and the profiles (*see Id.* at 14:51-67; FIG. 16 (reproduced below)) described in Claim 1 of Claim Chart III achieve the functions of the "input," "output," "process," "client," and "server" modules.

Salgado discloses non-Xerox software applications: 7:44-46 (regarding Novell, Microsoft, IBM software applications); 12:23-30 (Novell software applications); 12:31-39 (Adobe Corporation software application). (*See* Melen Decl., RIC 1008, ¶ 66.)

FIG. 16

[5.5a] *at least one output module managing the data output from the computer data management system, managing at least one imaging device to output the data to at least one of a standard windows printer, an image printer, and a digital copier, and* **[5.5b]** *managing the output of the data to the third-party*

software application;
[5.5a-b]: See **[5.4a-b]** of Claim Chart III.
[5.6] *at least one process module applying at least one data processing to the data comprising the at least one of the paper and the electronic input as it is being copied, applying additional functionality including at least one of workflow and processing functionality to the data comprising the at least one of paper and electronic input as it is being copied, and applying multiple processes to a single virtual copy;*
[5.6]: See **[5.4a-b]** of Claim Chart III. Again, **Salgado** discloses "[P]roviding the operator with a visual means of interacting with these components is the basis of the metaphorical <u>workflow strategy</u> which is a significant concept underlying the subject matter of the present disclosure. [...] provided to the operator is a means of describing a <u>complex workflow scenario</u> based upon its component parts and interactions between those parts. [...], a visual description of what is currently happening could easily be provided, along with providing controls at each important 'Service Provider' in order to modify the total <u>workflow</u> progress." (RIC 1005, 16:2-13.)
[5.7] *at least one client module presenting the data comprising the at least one of paper and electronic input as it is being copied, and information related to at least one of input and output functions; and*
[5.7]: See **[5.4a-b]**, and **[5.6]** (regarding the "visual means of interacting with these components") of Claim Chart III.
[5.8] *at least one server module communicable with said at least one input, output, client, and process modules and external applications, and capable of dynamically combining the external applications with at least one of digital capturing devices and digital imaging devices.*
[5.8]: See **[5.4a-b]**, and **[1.4]** of Claim Chart III.
Claim 6 is anticipated by Salgado
A computer data management system according to claim 5, wherein the server module includes: **[6.1]** *enable virtual copy operation means for initiating, canceling and resetting said computer data management system;*
[6.1]: See **[10.1]** of Claim Chart III.
[6.2] *maintain list of available module means for maintaining a registry containing a list of said input, output, and process modules that can be used in said computer data management system, said list being read on startup, and maintaining another copy of said list in a modules object accessible by said input, output client, process and server modules;*
[6.2]: See **[10.2a-b]** of Claim Chart III.
[6.3] *maintain currently active modules means for maintaining said input,*

output, and process modules currently being used for a current computer data management system copy operation in a program object, and saving the currently active modules in a process template file; and
[6.3]: See **[10.2a-b]** and **[10.3]** of Claim Chart III.
[6.4] *maintain complete document information means for maintaining information regarding a current file being copied, and saving the information in a document template file.*
[6.4]: See **[10.4]** of Claim Chart III.

Claim 7 is anticipated by Salgado
A computer data management system according to claim 5, wherein **[7.1]** *the server module includes at least one server module application programmer interface.*
[7.1]: See **[2.4]** of Claim Chart III.

Claim 8 is anticipated by Salgado
A computer data management system according to claim 7, wherein the at least one server module application programmer interface comprises the following interfaces: **[8.1]** *at least one modules object maintaining a first list of available input, output, and process modules;*
[8.1]: See **[10.2a-b]** of Claim Chart III.
[8.2] at least one document object maintaining information regarding a current document being copied;
[8.2]: See **[10.4]** of Claim Chart III.
[8.3] *at least one system management method object used to initiated, cancel, and reset said computer data management system;*
[8.3]: See **[10.1]** of Claim Chart III.
[8.4] *at least one system management event object used to provide feedback to the client module.*
[8.4]: See **[10.3]** of Claim Chart III.

Claim 9 is anticipated by Salgado
[9.1a] *an application system to integrate an image using software so that the image gets seamlessly replicated into at least one external device or application, without the need to modify said at least one external device or application;*
Salgado discloses [9.1a]: See **[1.3a-b]**, **[1.4]**, and **[2.4]** of Claim Chart III.
[9.2a] *at least one interface wherein images are copied between physical devices and applications, using a single GO operation, and* **[9.2b]** *where said application system implements a workflow for transmitting at least one of said images to at least one of said external destinations, and* **[9.2c]** *a capacity for adding at least one of electronic document and paper processing with a single programming step.*

| |
|---|
| **[9.2a]:** See **[1.3a-b]** and **[3.4]** of Claim Chart III.
[9.2b]: See **[1.3a-b]** and **[1.4]** of Claim Chart III.
[9.2c]: See **[4.4]** of Claim Chart III. |
| **Claim 10 is anticipated by Salgado** |
| **[10.P]** *A computer data management system including a server module comprising:* |
| **[10.P]: Salgado** discloses "FIG.6, a <u>network document processing system,</u> . . . is designated by the reference numeral 100. . . . the network 100 . . . includes . . . <u>file server 122</u> . . . ." (RIC 1005, 13:22-32, FIG. 6.) |
| **[10.1]** *enable virtual copy operation means for initiating, canceling, and resetting at least one operation managed by said computer data management system;* |
| **[10.1]: Salgado** discloses "[O]ne or more control graphic indicators . . . is provided for each metaphor element . . . ." (RIC 1005, 19:57-59, FIG. 13; *see* Melen Decl., RIC 1008, ¶¶ 59, 65.)
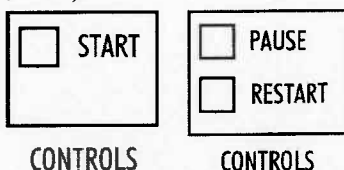
☐ START   ☐ PAUSE   ☐ RESTART
CONTROLS   CONTROLS |
| **[10.2a]** *maintain list of available module means for maintaining a list of input, output, and process modules that can be used in said computer data management system,* **[10.2b]** *said list being used by at least one module object accessible by said server module;* |
| **[10.2a-b]: Salgado** discloses "[T]he application server includes . . . <u>the relational database 126.</u> . . . <u>For each component</u> coupled with the network 134, <u>a profile</u> representing the coupled component is developed . . . <u>for storage in the database 126.</u>" (RIC 1005, 14:26-39.)

Salgado further discloses "[O]ne or more profiles are mapped to one or more metaphor elements, respectively. . . . [T]he user is provided with a selection from a plurality of metaphor elements. These may be provided by way of <u>a common file</u> which is accessible to users across the network." (*Id.* at 16:58-67.) |
| **[10.3]** *maintain currently active modules means for maintaining input, output, and process modules currently being used for a current computer data management system operation in a program object; and* |
| **[10.3]: Salgado** discloses that "application server queries a device to obtain suitable state information," and "it is desirable to maintain a relationship in which each device automatically informs the application server of <u>its current status.</u> Accordingly, . . . a device . . . is registered with the application server for event notification." (RIC 1005, 20:1-12.) |

[10.4] *maintain complete document information means for maintaining information regarding a current file.*
[10.4]: Salgado discloses storage of a document at a local or a remote location. (RIC 1005, 17:12-14.)
Claim 11 is anticipated by Salgado
[11.P] *A computer data management method including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet, wherein the method comprises the steps of:*
[11.P]: See **[1.P]** of Claim Chart III, and **Salgado** at FIGS. 7-11.
[11.1] *integrating an image using software so that the image is transmitted into at least one of other devices and applications, and via the Internet;*
[11.1]: See **[1.3a-b]** and **[1.4]** of Claim Chart III.
[11.2] *integrating electronic images into existing applications without the need to modify a destination application;*
[11.2]: See **[1.3a-b]** and **[2.4]** of Claim Chart III.
[11.3] *interfacing via a software application enabling copying images between physical devices and applications, using at least one single GO operation; and*
[11.3]: See **[1.3a-b]** and **[3.4]** of Claim Chart III.
[11.4] *adding at least one of electronic document and paper processing with a single programming step.*
[11.4]: See **[1.3a-b]** and **[4.4]** of Claim Chart III.

D.   Ground 4: Claims 1-11 are anticipated under 35 U.S.C. § 102(a) and (e) by Harkins

U.S. Patent No. 5,515,126 (RIC 1006) issued to Harkins *et al.* on April 30, 1996. Harkins qualifies as prior art under 35 U.S.C. § 102(a) because it issued before the earliest priority date claimed by the '426 patent, and under 35 U.S.C.

§ 102(e) because it was filed before the earliest priority date claimed by the '426 patent.[12]

Harkins describes a network connecting a variety of input/output components – such as a scanner, digital copier, workstation, video camera, printer, facsimile, file server, telephone, *etc.* (RIC 1006, 6:4-23; FIG. 1.) The networked components can be used in combination to process a document. (*See Id.* at 7:46-63.) Harkins is not merely cumulative and is particularly relevant prior art for the claims of the '426 patent from the perspective of an end user interacting and using a networked document processing system. (Melen Decl., RIC 1008, ¶ 87.) Claim Chart IV indicates that Harkins teaches all of the limitations of, and therefore anticipates, claims 1-11.

CLAIM CHART IV
Claim 1 is anticipated by Harkins
[1.P] *A computer data management system including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and*

---

[12] Harkins likely qualifies under 35 U.S.C. § 102(b) because the priority documents listed by the '426 patent do not appear to be enabling for the '426 patent claims. Rather, the priority documents appear to be a collection of marketing documents, unfinished manuals, print-outs of computer code, and a magazine article.

applications responsively connectable to at least one of locally and via Internet, comprising:

[1.P]: Harkins a data and document management system:
FIG. 1, an exemplary <u>multimedia device information system or network 2</u> including work station 4 enables users to communicate in a transparent and device independent manner. <u>Multimedia system 2</u> [...] includes devices for input including <u>scanner or Digital Copier 5</u>, keyboard 6, pointing device or mouse 7, microphone 8, and video camera 9. [...] devices for output including <u>display terminal 10, printer 11</u>, and speakers 12. Input/output (I/O) devices include <u>facsimile 13, file server 14, and telephone 15</u>.
(RIC 1006, 6:4-14, FIG. 1.)

Harkins discloses local and Internet connections: "Work station 4 can exist in a <u>distributed</u> or centralized environment. In either environment workstation 4 is <u>connected to other systems and devices through local area network (LAN) 24, gateway 25, and/or modem 26.</u>" *Id.* at 6:30-33; FIG. 1 (reproduced below).
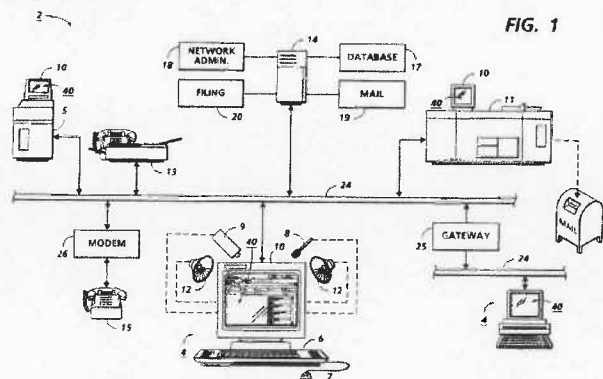
FIG. 1

[1.1] *at least one scanner, digital copier or other multifunction peripheral capable of rendering at least one of said electronic image, electronic graphics and electronic document;*

[1.1]: Harkins discloses "Multimedia system 2 [...] includes devices for input including <u>scanner or Digital Copier 5</u>, [...], and video camera 9. [...]. Input/output (I/O) devices include <u>facsimile 13</u>, file server 14, and telephone 15." (RIC 1006, 6:8-14; FIG. 1.)

[1.2] *at least one memory storing a plurality of interface protocols for interfacing and communicating;*

[1.2]: Harkins discloses "<u>Protocols</u> defining integrated system behavior for devices such as <u>printers, scanners, workstations and facsimiles, are well known</u>. These <u>protocols</u> define how the systems should integrate across networks. . . . In this environment the manipulation of information (such as documents) is

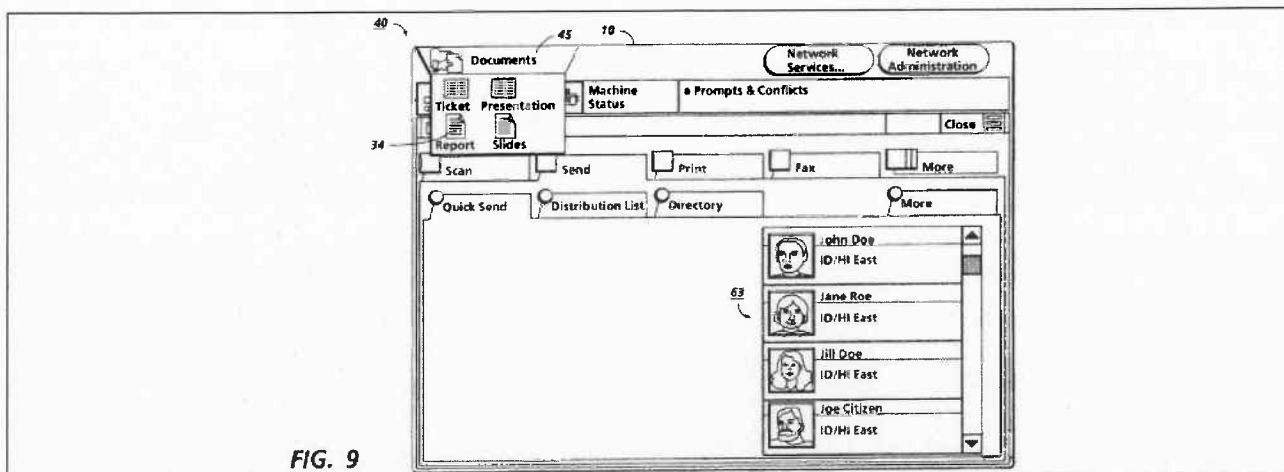| transparent to users as a result of the <u>various network protocols</u> that define the manner in which devices manipulate information." (RIC 1006, 1:22-25.)

    Dr. Melen explains: "[T]he networked computing devices disclosed by Harkins necessarily include hardware—*i.e.*, memory, a processor, and the like—and software to implement, at least, network protocols used to interface and communicate over the network." (Melen Decl., RIC 1008, ¶ 71.) |
|---|
| **[1.3a]** *at least one processor responsively connectable to said at least one memory, and* **[1.3b]** *implementing the plurality of interface protocols as a software application for interfacing and communicating with the plurality of external destinations including the one or more of the external devices and applications,* |
| **[1.3a-b]:** See [1.2] of Claim Chart IV. |
| **[1.4]** *wherein the computer data management system includes integration of at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations.* |
| **[1.4]: Harkins** discloses seamless replication and transmission:

      Operational transparency across networks and device platforms, <u>provide users with an increasingly integrated and transparent system environment</u>. In this environment the manipulation of information (<u>such as documents</u>) is <u>transparent to the user</u> as a result of the various network protocols that define the manner in which devices manipulate information.
      (RIC 1006, 1:25-31; Melen Decl., RIC 1008, ¶ 75.)

Harkins further discloses:

      To operate a communication channel such as channel 63, select a document from document source 45 (e.g. report 34) and move it to communication channel 63 as shown in FIG. 9. Job status window 195 shown in FIG. 10 subsequently displays the document send progress."
      (RIC 1006, 10:56-60, FIG. 9; Melen Decl., RIC 1008, ¶ 75.) |

FIG. 9

Claim 2 is anticipated by Harkins
[2.4] *wherein the computer data management system includes integration of one or more of said electronic image, electronic graphics and electronic document into a destination application without the need to modify the destination application.*
[2.4]: Harkins discloses "Operational transparency across networks and device platforms, <u>provide users with an increasingly integrated and transparent system environment</u>. In this environment the manipulation of information (<u>such as documents</u>) is <u>transparent to the user</u> as a result of the various network protocols that define the manner in which devices manipulate information." (RIC 1006, 1:25-31.) **Harkins** also discloses: "Additionally, <u>'Acrobat' products by 'Adobe'</u> will provide transparent document sharing. 'Acrobat' can be viewed using a portable document format, through a 'PostScript' file format that describes pages and their interrelation within a document." (*Id.* at 2:10-13.) (*See* Melen Decl., RIC 1008, ¶ 72.)

Claim 3 is anticipated by Harkins
[3.4] *wherein the computer data management system includes an interface that enables copying of at least one of said electronic image, electronic graphics and electronic document between two or more of said external devices and applications using a single GO operation.*
[3.4]: See **[1.4]** of Claim Chart IV. Also, **Harkins** discloses "Distribution list 60 is a sub-service that provides similar functionality as a quick-send sub-service except that distribution lists are communication channels that <u>are directed to groups of individuals</u>." (RIC 1006, 7:57-60.)

Claim 4 is anticipated by Harkins
[4.4] *wherein the computer data management system includes adding at least one of electronic document, data and paper processing means via a single*

programming step.

[4.4]: Harkins discloses "Profile properties 153 are a number of different profile categories, each category can be either checked, locked, or unselected. [...]. A checked category such as fax category box 155 identifies facsimile as the users established default receive preference." (RIC 1006, 8:39-44, FIGS. 2 and 4.)

"[A] network user [...] has the capability to set forth [...] a profile describing the preferred <u>form</u> (facsimile, electronic mail, voice mail, hard copy, color or black, file server, etc.) and <u>service</u> (the specific printer, facsimile machine etc.) documents should take to be rendered. Thus, individuals always wanting their documents printed on a color printer can specify a specific printer and the appropriate <u>format</u> that document should take." (*Id.* at 10:39-49.)
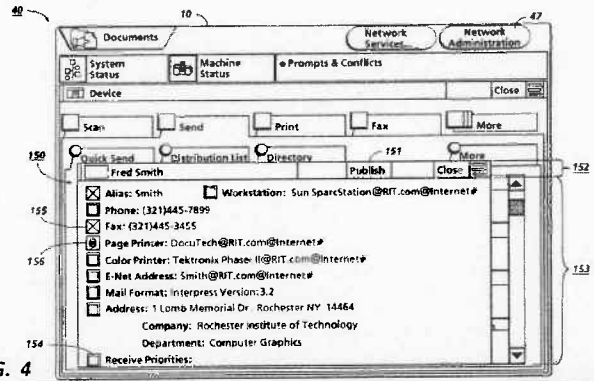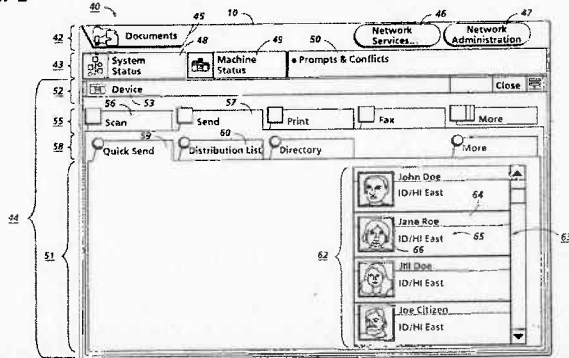

FIG. 2

FIG. 4

Claim 5 is anticipated by Harkins

wherein the software application comprises: **[5.4a]** *at least one input module managing data comprising at least one of paper and electronic input to the computer data management system, and managing said at least one scanner, digital copier or other multifunction peripheral, and* **[5.4b]** *managing the electronic input from at least one third-party software application;*

[5.4a-b]: The UI disclosed by **Harkins** satisfies the "input," "output," "process," "client," and "server" modules. (RIC 1006, 6:37-60, FIG. 2; Melen Decl., RIC 1008, ¶ 72.) **Harkins** provides the following examples of using the UI:

> Resource bar 42 is a menu bar that provides users access to high level services that are integrated on network 24. Within the resource bar document source or suitcase 45 provides the user with a temporary storage space for documents. Suitcase 45 stores active and editable documents for easy movement across network services, or it is a transitional space where documents are stored while a user navigates through network 24.
> (RIC 1006, 6:61-67.)
>
> Workspace 51 provides a user area for preparing documents for distribution, which can include publication and archival.

(*Id.* at 7:38-40.)

> Network services menu 46 provides access to any networked service such as printer 11, facsimile 13, scanner 5, file server 20 (private, shared and public file storage), database server 17, mail servers (e.g. voice mail, email, etc.) 19, ports (such as modem 26, network gateway 25), and other workstations 4. Also, available in services area 44 are published communications channels 63 available from network admin 18. These are channels that have been provided to a utility (not shown) that manages network administration 18.
> (*Id.* at 7:2-11.)

Harkins also discloses third-party software applications, e.g.,: "Additionally, 'Acrobat' products by 'Adobe' will provide transparent document sharing. 'Acrobat' can be viewed using a portable document format, through a 'PostScript' file format that describes pages and their interrelation within a document." (*Id.* at 2:10-13; *see also id.* at 1:25-31 (Regarding discussion of "[o]perational transparency across networks and device platforms."))

[5.5a] *at least one output module managing the data output from the computer data management system, managing at least one imaging device to output the data to at least one of a standard windows printer, an image printer, and a digital copier, and* **[5.5b]** *managing the output of the data to the third-party software application;*
Harkins discloses [5.5a-b]: See **[5.4a-b]**.
[5.6] *at least one process module applying at least one data processing to the data comprising the at least one of the paper and the electronic input as it is being copied, applying additional functionality including at least one of workflow and processing functionality to the data comprising the at least one of paper and electronic input as it is being copied, and applying multiple processes to a single virtual copy;*
Harkins discloses [5.6]: See **[5.4a-b]**.
[5.7] *at least one client module presenting the data comprising the at least one of paper and electronic input as it is being copied, and information related to at least one of input and output functions; and*
Harkins discloses [5.7]: See **[5.4a-b]**.
[5.8] *at least one server module communicable with said at least one input, output, client, and process modules and external applications, and capable of dynamically combining the external applications with at least one of digital*

capturing devices and digital imaging devices.
Harkins discloses [5.8]: See **[5.4a-b]**.
Claim 6 is anticipated by Harkins
A computer data management system according to claim 5, wherein the server module includes: **[6.1]** *enable virtual copy operation means for initiating, canceling and resetting said computer data management system;*
[6.1]: See **[10.1]** of Claim Chart IV.
[6.2] *maintain list of available module means for maintaining a registry containing a list of said input, output, and process modules that can be used in said computer data management system, said list being read on startup, and maintaining another copy of said list in a modules object accessible by said input, output client, process and server modules;*
[6.2]: See **[10.2a-b]** of Claim Chart IV.
[6.3] *maintain currently active modules means for maintaining said input, output, and process modules currently being used for a current computer data management system copy operation in a program object, and saving the currently active modules in a process template file; and*
[6.3]: See **[10.2a-b]** and **[10.3]** of Claim Chart IV.
[6.4] *maintain complete document information means for maintaining information regarding a current file being copied, and saving the information in a document template file.*
[6.4]: See **[10.4]** of Claim Chart IV.
Claim 7 is anticipated by Harkins
A computer data management system according to claim 5, wherein **[7.1]** *the server module includes at least one server module application programmer interface.*
[7.1]: Harkins discloses: "Manager 110 interfaces user interface 111 with network 24, local storage disk 112 and cache 113, receiver service 114 and sender service 115. Listed in Appendix A is an example of an interface for manager 110 between the user interface 111 and receiver and sender service 114 and 115." (RIC 1006, 8:13-18.)
Claim 8 is anticipated by Harkins
A computer data management system according to claim 7, wherein the at least one server module application programmer interface comprises the following interfaces: **[8.1]** *at least one modules object maintaining a first list of available input, output, and process modules;*
[8.1]: See **[10.2a-b]** and **[10.3]** of Claim Chart IV.
[8.2] at least one document object maintaining information regarding a current document being copied;

[8.2]: See **[10.4]** of Claim Chart IV.
[8.3] *at least one system management method object used to initiated, cancel, and reset said computer data management system;*
[8.3]: See **[10.1]** of Claim Chart IV.
[8.4] *at least one system management event object used to provide feedback to the client module.*
[8.4]: See **[10.2a-b]** and **[10.3]** of Claim Chart IV.
Claim 9 is anticipated by Harkins
[9.1a] *an application system to integrate an image using software so that the image gets seamlessly replicated into at least one external device or application, without the need to modify said at least one external device or application;*
[9.1a]: See **[1.4]** and **[2.4]** of Claim Chart IV.
[9.2a] *at least one interface wherein images are copied between physical devices and applications, using a single GO operation, and* **[9.2b]** *where said application system implements a workflow for transmitting at least one of said images to at least one of said external destinations, and* **[9.2c]** *a capacity for adding at least one of electronic document and paper processing with a single programming step.*
[9.2a]: See **[3.4]** of Claim Chart IV.   **[9.2b]**: See **[1.4]** of Claim Chart IV.   **[9.2c]**: See **[4.4]** of Claim Chart IV.
Claim 10 is anticipated by Harkins
[10.P] *A computer data management system including a server module comprising:*
[10.P]: See **[1.P]** of Claim Chart IV.
[10.1] *enable virtual copy operation means for initiating, canceling, and resetting at least one operation managed by said computer data management system;*
[10.1]: **Harkins** discloses "User interface (UI) 40." (RIC 1006, 6:51-52.)
[10.2a] *maintain list of available module means for maintaining a list of input, output, and process modules that can be used in said computer data management system,* **[10.2b]** *said list being used by at least one module object accessible by said server module;*
[10.2a-b]: **Harkins** discloses "Network services menu 46 provides access to any networked service such as printer 11, facsimile 13, scanner 5, file server 20 (private, shared and public file storage), database server 17, mail servers (e.g. voice mail, email, etc.) 19, ports (such as modem 26, network gateway 25), and other workstations 4." (RIC 1006, 7:2-7.)
[10.3] *maintain currently active modules means for maintaining input,*

output, and process modules currently being used for a current computer data management system operation in a program object; and
[10.3]: Harkins discloses "Status bar 43 is divided into three dedicated message areas, system message area 48, device message area 49 . . . . For example, when a printer is down, the message area provides "Printer Down" message; further selection of the message area 50 provides more detail of causes for the printer to be down." (RIC 1006, 21-28.)
[10.4] *maintain complete document information means for maintaining information regarding a current file.*
[10.4]: Harkins discloses "Suitcase 45 stores active and editable documents for easy movement across network services, or it is a transitional space where documents are stored . . . ." (RIC 1006, 6:64-67.)
Claim 11 is anticipated by Harkins
[11.P] *A computer data management method including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable to at least one of locally and via Internet, wherein the method comprises the steps of:*
[11.P]: See **[1.P]** of Claim Chart IV. **Harkins** also discloses "The present invention is a method for a sender to automatically distribute information to a receiver on a network using devices (such as printers and facsimile machines) and communication channels (such as electronic mail) […]." (RIC 1006, 4:40-44.)
[11.1] *integrating an image using software so that the image is transmitted into at least one of other devices and applications, and via the Internet;*
[11.1]: See **[1.4]** of Claim Chart IV.
[11.2] *integrating electronic images into existing applications without the need to modify a destination application;*
[11.2]: See **[2.4]** of Claim Chart IV.
[11.3] *interfacing via a software application enabling copying images between physical devices and applications, using at least one single GO operation; and*
[11.3]: See **[3.4]** of Claim Chart IV.
[11.4] *adding at least one of electronic document and paper processing with a single programming step.*
[11.4]: See **[4.4]** of Claim Chart IV.

E.   Ground 5:   Claims 3, 5-9, and 11 are obvious under 35 U.S.C. § 103(a) over Ohkubo in view of APA

Claim Chart II shows that Ohkubo anticipates claims 1-11 of the '426 patent. The analysis that follows provides an alternative interpretation of Ohkubo, and is not intended to affect the propriety of Claim Chart II. Claim Chart V only reflects arguments for the specific claim features discussed in this Section, e.g., that may be alleged as lacking in Ohkubo. All other claim features are disclosed in Ohkubo as discussed in Claim Chart II.

1.   Claim 3

Ohkubo teaches the limitations of claim 3. However, Patent Owner may allege that Ohkubo but does not explicitly disclose a "single GO operation." The '426 patent acknowledges a "GO button" for executing a GO operation was a standard feature of conventional copiers at the time of the invention, and was included in the invention disclosed by the '426 patent to achieve the same "feel" as conventional copiers (see Claim Chart V). It would have been obvious to a POSA at the time of the invention to include the GO operation (disclosed as prior art in '426 patent) in the system disclosed by Ohkubo to provide a user with ability to begin a process, such as the process described in FIG. 3 of Ohkubo. The same analysis applies to claims 9 and 11. (*See* Melen Decl., RIC 1008, ¶ 79.) Thus, the combination of Ohkubo and the admissions of prior art in the '426 patent establish *prima facie* obviousness of claims 3, 9, and 11.

2. Claim 5

Ohkubo teaches the limitations of claim 5. However, Patent Owner may allege that Ohkubo does not explicitly teach the "input," "output," "process," and "client" modules. The '426 patent acknowledges that these modules were known at the time of the invention—shown in Claim Chart V. It would have been obvious to a POSA at the time of the '426 patent to include the modules (disclosed as prior art in '426 patent) in the system of Ohkubo so that, *e.g.*, the scanners and printers of Ohkubo can achieve their intended functions. (*See* Melen Decl., RIC 1008, ¶ 80.) Ohkubo teaches the additional features presented in claims 6-8—thus, Ohkubo and APA establish *prima facie* obviousness of claims 5-8.

CLAIM CHART V
Claim 3 (element 3.4): Ohkubo in view of Admitted Prior Art (APA)
[3.4] *wherein the computer data management system includes an interface that enables copying of at least one of said electronic image, electronic graphics and electronic document between two or more of said external devices and applications using a single GO operation.*
Ohkubo teaches the limitations of claim 3, but may not explicitly disclose a "single GO operation."   **APA** discloses **[3.4]**: *E.g.*, "VC is an extension of the concept we understand as copying. In its simplest form it extends the notion of copying from a process that involves paper going through a <u>conventional copier device</u> . . . ." RIC 1001, 45:34-37.   *E.g.*, "The interface of the consumer product called Virtual Copier <u>has a Go button much like a physical copier</u>." *Id.* at 46:28-30.   *E.g.*, "[I]t replicates the identical motions that a user who is making a copy using a physical copier goes through. When a user photocopies a document, he/she . . . and <u>then presses a GO button</u> to actually carry out the photocopy process. With Virtual Copier the process feels familiar because <u>the sequence is the same</u> . . . ."*Id.* at 46:34-42.   It would have been obvious to enhance **Okubo** with "a single go operation"

in view of **APA** because "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.[13]

Claim 5 (elements 5.4-5.8): Ohkubo in view of Admitted Prior Art (APA)
wherein the software application comprises: **[5.4a]** *at least one input module managing data comprising at least one of paper and electronic input to the computer data management system, and managing said at least one scanner, digital copier or other multifunction peripheral, and* **[5.4b]** *managing the electronic input from at least one third-party software application;*
[5.5a] *at least one output module managing the data output from the computer data management system, managing at least one imaging device to output the data to at least one of a standard windows printer, an image printer, and a digital copier, and* **[5.5b]** *managing the output of the data to the third-party software application;*
[5.6] *at least one process module applying at least one data processing to the data comprising the at least one of the paper and the electronic input as it is being copied, applying additional functionality including at least one of workflow and processing functionality to the data comprising the at least one of paper and electronic input as it is being copied, and applying multiple processes to a single virtual copy;*
[5.7] *at least one client module presenting the data comprising the at least one of paper and electronic input as it is being copied, and information related to at least one of input and output functions; and*
[5.8] *at least one server module communicable with said at least one input, output, client, and process modules and external applications, and capable of dynamically combining the external applications with at least one of digital capturing devices and digital imaging devices.*

Ohkubo teaches the limitations of claim 5, but may not explicitly disclose elements 5.4a, 5.4b, 5.6, and 5.7.

APA discloses, e.g., "To accommodate third-party extensions, VC is divided into five essential modules. Each module is a counterpart to an aspect that is found on a conventional copier." RIC 1001, 70:40-42.

APA discloses **[5.4a-b]**: *E.g.*, "The counterpart to VC's Input Module on a conventional copier is the scanner subsystem." *Id.* at 70:52-53.

APA discloses **[5.5a-b]**: *E.g.*, "The counterpart to VC's Output Module on a conventional copier is the printer or fax subsystem." RIC 1001, 70:60-61.

APA discloses **[5.6]**: *E.g.*, "The counterpart to VC's Process Module on a

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[13] See FN 15.

conventional copier is the controller." RIC 1001, 71:2-3.

APA discloses **[5.7]**: *E.g.*, "The counterpart to VC's Client Module on a conventional copier is the panel." RIC 1001, 71:11-12.

It would have been obvious to enhance **Okubo** with elements 5.4a, 5.4b, 5.6, and 5.7 in view of **APA** because "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.[14]

F.   Grounds 6: Claims 3, 5-9, and 11 are obvious under 35 U.S.C. § 103(a) over Salgado in view of APA

Claim Chart III shows that Salgado anticipates claims 1-11 of the '426 patent. The analysis that follows provides an alternative interpretation of Salgado, and is not intended to affect the propriety of Claim Chart III.

1.   Claim 3

Salgado teaches the limitations of claim 3. However, Patent Owner may allege that Salgado does not explicitly disclose the "single GO operation." The '426 patent admits a "GO button" for executing a GO operation was a well-known feature of conventional copiers at the time of the invention, and was included in the invention disclosed by the '426 patent to achieve the same "feel" as a conventional copier (see Claim Chart V). It would have been obvious to a person having ordinary skill in the art at the time of the invention to include the GO operation disclosed by Patentee's admission of prior art in the system disclosed by Salgado to execute a document processing job represented by the metaphorical templates described in Salgado. The same analysis applies to claims 9 and 11. (*See* Melen

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[14] See FN 13

Decl., RIC 1008, ¶ 79.) Thus, the combination of Salgado and the admissions of prior art in the '426 patent establish *prima facie* obviousness of claims 3, 9, and 11.

2. Claim 5

Salgado teaches the limitations of claim 5. However, Patent Owner may allege that Salgado does not explicitly disclose the "input," "output," "process," and "client" modules. The '426 patent acknowledges that these modules were known at the time of the invention—shown in Claim Chart V. It would have been obvious to a POSA at the time of the '426 patent to include the modules (disclosed as prior art in '426 patent) in the system of Salgado so that, *e.g.*, the scanners and printers of Salgado can achieve their intended functions. (*See* Melen Decl., RIC 1008, ¶ 80.) Salgado teaches the additional features presented in claims 6-8—thus, Salgado and APA establish *prima facie* obviousness of claims 5-8.

G. Ground 7: Claims 1-8 are obvious under 35 U.S.C. § 103(a) over Harkins in view of Motoyama

U.S. Patent No. 5,818,603 (RIC 1007) filed by Motoyama on March 29, 1996. Motoyama qualifies as prior art under 35 U.S.C. § 102(e) because it was filed before the earliest priority date claimed by the '426 patent.

Claim Chart IV illustrates that Harkins anticipates claims 1-11 of the '426 patent. The analysis that follows provides an alternative interpretation of Harkins, and is not intended to affect the propriety of Claim Chart IV. Claim Chart VI is

used to illustrate just the features that may be alleged as lacking in Harkins. All other features of the claims rejected in this Ground are found in Claim Chart IV.

Harkins discloses a "multimedia device information system or network" including a variety of networked devices—such as a scanner or digital copier, workstation, server, printer, facsimile machine, etc.—which is further described in Claim Chart IV. (RIC 1006, 6:4-22; FIG. 1.) Harkins explains, "Protocols defining integrated system behavior for devices such as printers, scanners, workstations and facsimiles, are well known. These protocols define how the systems should integrate across networks." (Id. at 1:22-25.)

However, Patent Owner may allege that Harkins does not explicitly disclose a memory that stores the protocols and a processor that implements the protocols, as recited in claim limitations **[1.2]** and **[1.3a-b]** of the '426 patent. These limitations are also found in independent claims 2-5.

As shown in Claim Chart VI, discussing claim features **[1.2]** and **[1.3a-b]**, Motoyama explicitly discloses a database storing a plurality of communication protocols used for communicating with a variety of networked machines. It would have been obvious to a POSA at the time of the invention to include the database storing a plurality of communication protocols disclosed by Motoyama in the "multimedia device information system or network" disclosed by Harkins. A POSA would make this combination to provide Harkins' network with the ability

to interact with different protocols automatically, and in a manner that is transparent to end users. (*See e.g.*, Motoyama, 1:59-2:57; Melen Decl., RIC 1008, ¶ 81.) Doing so would also provide Harkins' system with the ability to upgrade and change the equipment and protocols on its network, such adding new non-proprietary or "third party" equipment. (*See e.g.*, Motoyama, 1:11-17; Melen Decl., RIC 1008, ¶ 81.) And Harkins and Motoyama demonstrate that all the claimed elements were known in the prior art, and a POSA could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results.[15]

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[15] "'[P]atent for a combination which only unites old elements with no change in their respective functions . . . obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men. ... The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR v Teleflex*, 550 U.S. 398, 415-16 (2007). "For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *KSR*, 550 U.S. at 417.

Harkins teaches the additional features presented in claims 1-8 (see Claim Chart IV)—thus, Harkins and Motoyama establish *prima facie* obviousness of claims 1-8.

CLAIM CHART VI
Claim 1 (elements 1.2, 1.3a, and 1.3b): Harkins in view of Motoyama
[1.2] *at least one memory storing a plurality of interface protocols for interfacing and communicating;*
Harkins teaches the limitations of claim 1, but may not explicitly disclose element 1.2.   **Motoyama discloses [1.2]:** *E.g.,* "The control/diagnostic system 26 includes <u>a data base 28 which stores a plurality of communication protocols</u> for use in communicating with the various machines connected thereto." RIC 1007, 3:41-44; FIG. 1 (reproduce in-part, right).   It would have been obvious to enhance **Harkins** with the features as taught in **Motoyama** because "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.[16]
[1.3a] *at least one processor responsively connectable to said at least one memory, and* **[1.3b]** *implementing the plurality of interface protocols as a software application for interfacing and communicating with the plurality of external destinations including the one or more of the external devices and applications,*
Harkins teaches the limitations of claim 1, but may not explicitly disclose element 1.3a and/or 1.3b.   **Motoyama discloses [1.3a]:** *E.g.,* "The control/diagnostic system 26 includes hardware found in a conventional general purpose computer such as a microprocessor, RAM, ROM, display, disk drive [...]." RIC 1007, 4:22-24.

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[16] See FN 15.

E.g., "This invention may be conveniently implemented using a conventional general purpose digital computer or <u>microprocessor</u> programmed according to the teachings of the present specification, […]." *Id.* at 14:42-45.

Motoyama discloses [1.3b]: *E.g.*, "The present invention includes a <u>computer program product</u> which is a storage medium including instructions which can be used to program a computer to perform a process of the invention." *Id.* at 14:55-58.

It would have been obvious to enhance **Harkins** with the features as taught in **Motoyama** because "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.[17]

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[17] See FN 15.

CONCLUSION

This Petition meets that threshold of demonstrating "a reasonable likelihood that the Petitioner would prevail with respect to at least one of the claims challenged in the petition," 35 U.S.C. § 314(a), because all elements of claims 1-11 are taught in the prior art as explained above in the detailed proposed Grounds for Unpatentability. Thus, for the reasons provided above, *inter partes* review of claims 1-11 of U.S. Patent No. 7,986,426 is requested.

Respectfully submitted,

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