

Exhibit 5
Part 7
To Third Declaration of
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claim limitations and the Campbell, et al. disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claim 26	Campbell, et al.
A method for central management, storage and verification of remotely captured paper transactions from documents and receipts comprising the steps of:	“Checks used to effectuate commercial and private <u>transactions</u> may be cleared through the banking system by <u>transporting images of those checks between sending institutions</u> and receiving institutions in forward and reverse flow paths between banks of first deposit and payor banks. The check images are transported through a public switched telephone network which contains a special <u>check imaging node</u> which provides a network based <u>check clearing service</u> for customers of telephone network. The check imaging node receives images of checks from institutions which subscribe to this service and routes those images through the telephone network to intended subscriber and non-subscriber recipients....” (Campbell, et al., Abstract.)
capturing an image of the paper transaction data at one or more remote locations and sending a captured image of the paper transaction data;	“The sending institution 14 possesses <u>check imaging equipment</u> 18 which produces electrical or optical signals representing the image of a check <u>The imaging equipment may be large multiworkstation systems available from companies such as IBM, UNISYS, or NCR.</u> (Campbell, et al., Col. 2, l. 64 to Col. 3, l. 12.) Remote location = sending institution 14.
managing the capturing and sending of the transaction data;	“The images produced by the equipment 18 are directed to a network interface 20 which converts the signals from the equipment 18 into signals suitable for <u>transmission on the telephone network 10.</u> ” (Campbell, et al., Col. 3, ll. 17-20.) “The output of the network interface 20 is connected to one or more network access lines 22 in FIG. 1.” (Campbell, et al., Col. 3, ll. 20-22.)
collecting, processing, sending and	“The images produced by the equipment 18 are <u>directed</u> to a <u>network interface</u> 20 which <u>converts</u> the signals from the equipment 18 into signals suitable for transmission on the telephone network 10.” (Campbell, et al., Col. 3, ll. 17-20.) <u>“The imaging equipment may be large multiworkstation systems available from companies such as IBM, UNISYS, or NCR.”</u> (Campbell, et al., Col. 3, ll. 10-12.).
	“The network 10 contains at least one check image processing node 12 which provides check clearance services. The node 12 <u>receives</u> images of checks from a sending institution 14 transmitted through the network 10. The node 12 <u>processes</u> the check images and <u>sends</u> them to a receiving institution 16.” (Campbell, et al., Col. 2, ll. 26-32.)

storing the transaction data at a central location;	<p>“[T]he processing node 12 receives check images and performs certain processing procedures on those images, including at least temporary <u>storage</u> of the received check images.” (Campbell, et al., Col. 3, ll. 55-58.)</p> <p>“The node 12 contains a frame relay assembler/disassembler 40 which <u>receives</u> frames of digital information representing check images sent by service subscribers to the network 38. The assembler/disassembler 40 also <u>transmits</u> frames of digital information representing check images to the network 38 after those images have been processed by the node 12. A node controller and router 42 <u>controls the routing</u> of check images to their intended destinations, both in the controller and to their ultimate destinations outside the network 38.” (Campbell, et al., Col. 4, ll. 30-39.)</p> <p>“The controller 42 may <u>receive instructions</u> from the work center 54 through the interface 52 to control changes made to the information in the database 46. These changes may include the addition or changes to personal identification numbers or bank related data.” ... “The controller 42 may read some data accompanying check images, for example, it may identify that TCP/IP protocol information accompanying those images. That information may instruct the node 12 about <u>the identity of the sending institution</u> and the intended receiving institution.” (Campbell, et al., Col. 5, ll. 23-28.)</p>
managing the collecting, processing, sending and storing of the transaction data;	<p>“A node controller and router 42 <u>controls the routing</u> of check images to their intended destinations, both in the controller and to their ultimate destinations outside the network 38.” (Campbell, et al., Col. 4, ll. 36-39.)</p> <p>“The node controller and router 42 <u>provides interfaces</u> to systems external to the node 12. It is connected to all the other subsystems in the node 12 by way of the local area network 56. The controller 42 <u>provides access</u> to the database 46 and <u>directs check images</u> to appropriate subsystems in the node 12 connected to the local area network 56. The controller 42 also <u>routes</u> the check images from the node 12 to their ultimate destinations by way of the assembler/disassembler 40 and the frame relay network 38. The controller 42 may <u>read some data</u> accompanying check images, for example, it may identify that TCP/IP protocol information accompanying those images. That information may <u>instruct the node 12</u> about the identity of the sending institution and the intended receiving institution The controller 42 may also be <u>configured to handle information encrypted</u> by sending institutions to provide security for the images transported by the network 38. The controller 42 may have its own encryption and decryption equipment to provide a secure environment in the node 12.” (Campbell, et al., Col 5, ll. 14-60.)</p>

encrypting subsystem identification information and the transaction data; and	<p>“The controller 42 may also be <u>configured to handle information encrypted by sending institutions</u> to provide security for the images transported by the network 38. The controller 42 may have its own <u>encryption and decryption equipment</u> to provide a secure environment in the node 12.” (Campbell, et al., Col. 5, ll. 55-60.) This implies that the sending bank 14 sends encrypted information. This information includes check images and also information “<u>about the identity of the sending institution</u>.” (Campbell, et al., Col. 5, ll. 26-27.) Thus, both the check images and the identifying information may be encrypted.</p>
transmitting the transaction data and the subsystem identification information within and	<p>“The <u>image of a check</u> is created in a sending institution and sent to a receiving institution by means of the <u>public switched telephone network</u>.” (Campbell, et al., Col. 2, ll. 20-22.)</p> <p>“The controller 42 may read some data accompanying check images, for example, it may identify that TCP/IP protocol information accompanying those images. That information may instruct the node 12 about the <u>identity of the sending institution</u> and the intended receiving institution.” (Campbell, et al., Col. 5, ll. 23-28.)</p> <p>Within the node 12: “A local area network 56 connects the subsystems of the node 12 described above.” (Campbell, et al., Col. 4, ll. 56-58.)</p> <p>Within the sending bank 14: “The images produced by the equipment 18 are directed to a network interface 10 which converts the signals from the equipment 18 into signals suitable for transmission on the telephone network 10.” (Campbell, et al., Col. 3, ll. 17-20.)</p>
between the remote location(s) and the central location.	<p>Between: “The <u>public switched telephone network</u> 10 may be a telephone network provided by a local exchange carrier ... (Campbell, et al., Col. 2, ll. 50-63.) “The network access lines 22 may comprise any form of transmission line suitable for carrying the expected volume of check image traffic <u>between the sending institution 14 and the telephone network 10</u>.” (Campbell, et al., Col. 3, ll. 23-26.)</p>

Claims 29 depends from claim 26. How Campbell, et al. discloses the limitations found within this claim has been fully explained in the Exhibit entitled “Element by element comparison of claims 1-41 of the ‘988 Patent to Campbell, et al. (U.S. Patent No. 5,373,550)” that the requester presented in its request of reexamination. This Exhibit is

incorporated herein as the analysis demonstrating the correlation between claim limitations and the Campbell, et al. disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claim 42	Campbell, et al.
<p>A communication network for the transmission of data within and between one or more remote data processing subsystems, at least one intermediate data collecting subsystem and at least one central subsystem forming a tiered architecture wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one data collecting subsystem and each of said at least one data collecting subsystem communicate with a corresponding some of said one or more data processing subsystems,</p> <p>said data processing subsystem including an imaging subsystem for capturing images of documents and receipts, comprising:</p>	<p>“The system of FIG. 1 comprises a <u>public switched telephone network</u> 10. The network 10 contains at least one check image processing node 12 which provides check clearance services. The node 12 <u>receives</u> images of checks from a <u>sending institution</u> 14 <u>transmitted</u> through the network 10. The node 12 processes the check images and <u>sends</u> them to a <u>receiving institution</u> 16.” (Campbell, et al., Col. 2, ll. 25-33.)</p> <p>“The sending institution 14 possesses <u>check imaging equipment</u> 18 which produces electrical or optical signals representing the image of a check. The image may comprise a sequence of signals each representing some characteristic of a picture element, for example, each signal may represent the intensity or color of light reflected from a small region on the front or back surface of a check. The check imaging equipment may be any device which can create suitable graphic image signals. For example, the imaging equipment may comprise systems which scan the front face, the back face or both the front and back faces of a check, as required, to create a series of intensity or color signals for each picture element making up the scanned surfaces of the check. <u>The imaging equipment may be large multiworkstation systems available from companies such as IBM, UNISYS, or NCR.</u>” (Campbell, et al., Col. 2, l. 64 to Col. 3, l. 12.)</p>
<p>at least one first local area network for transmitting data within a corresponding one of said one or more remote subsystems;</p>	<p>“<u>The imaging equipment may be large multiworkstation systems available from companies such as IBM, UNISYS, or NCR.</u>” (Campbell, et al., Col. 3, ll. 10-12.) “The images produced by the equipment 18 are <u>directed</u> to a network interface 20 which <u>converts</u> the signals from the equipment 18 into signals suitable for transmission on the telephone network 10.” (Campbell, et al., Col. 3, ll. 17-20.) “The output of the network interface 20 is connected to one or more network access lines 22 in FIG. 1. The network access lines 22 may comprise any form of transmission</p>

	<p>line suitable for carrying the expected volume of check image traffic between the sending institution 14 and the telephone network 10. For example, the network access lines 22 may comprise one or more digital transmission lines operating at speeds of about 2400 bits per second to about 1.544 megabits per second or more. Connection to the network 10 may be by an ordinary dial up line or by a dedicated private line.” (Campbell, et al., Col. 3, ll. 20-31.)</p>
<p>at least one second local area network for transmitting data within a corresponding one of said at least one intermediate subsystem;</p>	<p>“A <u>local area network</u> 56 connects the subsystems of the node 12 described above.” (Campbell, et al., Col. 4, ll. 56-58.) “The node controller and router 42 provides interfaces to systems external to the node 12. It is connected to all the other subsystems in the node 12 by way of the local area network 56. The controller 42 provides access to the database 46 and <u>directs check images to appropriate subsystems in the node 12</u> connected to the local area network 56. The controller 42 also routes the check images from the node 12 to their ultimate destinations by way of the assembler/disassembler 40 and the frame relay network 38. The controller 42 may read some data accompanying check images, for example, it may identify that TCP/IP protocol information accompanying those images.” (Campbell, et al., Col. 5, ll. 14-26.)</p>
<p>at least one third local area network for transmitting data within a corresponding one of said at least one central subsystem; and</p>	<p>“Check images are received in a <u>network interface</u> 30 in the receiving institution 16. The interface 30 transforms the signals from the network 10 into a form <u>suitable for use by check image processing equipment</u> 32 located in the receiving institution 16. The check image processing equipment 32 may be similar to the imaging equipment 18 located in the sending institution 14. The equipment 32 may also be <u>facsimile equipment, character recognition equipment, e-mail systems, or any other image processing equipment</u> by which the images received may be <u>displayed or used</u> by the receiving institution.” (Campbell, et al., Col. 3, ll. 41-52.)</p>
<p>at least one wide area network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one central subsystem.</p>	<p>“The image of a check is created in a sending institution and sent to a receiving institution by means of the <u>public switched telephone network</u>.” (Campbell, et al., Col. 2, ll. 20-22.) “The <u>public switched telephone network</u> 10 may be a telephone network provided by a local exchange carrier such as one of the Regional Bell Operating Companies or it may be a telephone network provided by a long distance carrier such as AT&T. Another example of a public switched telephone network 10 is the combined network provided by a local exchange carrier and a long distance carrier. The network may be either electrically or optically based or may involve combinations of those two technologies. The network may be digital or analog. Two examples of suitable digital networks are a packet network and a</p>

	frame relay network, such as the existing packet and frame relay networks now provided by carriers such as AT&T." (Campbell, et al., Col. 2, ll. 50-63.)
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Claim 46	Campbell, et al.
A method for transmitting data within and between one or more remote subsystems, at least one intermediate subsystem and at least one central subsystem in a tiered manner wherein each of the central subsystems communicate with at least one intermediate subsystem and each of the intermediate subsystems communicate with at least one remote subsystems comprising the steps of:	"The system of FIG. 1 comprises a <u>public switched telephone network</u> 10. The network 10 contains at least one check image processing node 12 which provides check clearance services. The node 12 <u>receives</u> images of checks from a <u>sending institution</u> 14 <u>transmitted</u> through the network 10. The node 12 processes the check images and <u>sends</u> them to a <u>receiving institution</u> 16." (Campbell, et al., Col. 2, ll. 25-33.)
capturing an image of documents and receipts and extracting data therefrom;	"The sending institution 14 possesses check imaging equipment 18 which produces electrical or optical signals representing the image of a check." (Campbell, et al., Col. 2, ll. 64-66.) " <u>The imaging equipment may be large multiworkstation systems available from companies such as IBM, UNISYS, or NCR.</u> " (Campbell, et al., Col. 3, ll. 10-12.) "The images produced by the equipment 18 are <u>directed</u> to a network interface 20 which <u>converts</u> the signals from the equipment 18 into signals suitable for transmission on the telephone network 10." (Campbell, et al., Col. 3, ll. 17-20.) Extracting: " <u>The destination identifying data may be manually entered by an operator at the time the image is generated</u> in institution 14. The data may also be entered by <u>character recognition equipment or the like in response to the image produced by the equipment</u> 18. One alternative to the sending institution producing data relating to the destination of the check image is to install character recognition equipment in the check image processing node 12. The character recognition in the node 12 then can read the check image and determine its destination from certain characteristics of the such as the endorsements on the check." (Campbell, et al., Col. 3, l. 65 to Col. 4, l. 9.)
transmitting data within the remote locations;	" <u>The imaging equipment may be large multiworkstation systems available from companies such as IBM, UNISYS, or NCR.</u> " (Campbell, et al., Col. 3, ll. 10-12.) "The images produced by the equipment 18 are <u>directed</u> to a network interface 20 which <u>converts</u> the signals from the equipment 18 into signals suitable for transmission on the telephone network 10." (Campbell, et al., Col. 3, ll. 17-20.)

transmitting data from each remote location to corresponding intermediate location;	“The network 10 contains at least one check image processing node 12 which provides check clearance services. The <u>node 12 receives images of checks from a sending institution 14 transmitted the network 10.</u> ” (Campbell, et al., Col. 2, ll. 26-32.)
transmitting data within the intermediate locations;	“A <u>local area network 56 connects the subsystems of the node 12 described above.</u> ” (Campbell, et al., Col. 4, ll. 56-58.) “The node controller and router 42 provides interfaces to systems external to the node 12. It is connected to all the other subsystems in the node 12 by way of the local area network 56. The controller 42 provides access to the database 46 and <u>directs check images to appropriate subsystems in the node 12 connected to the local area network 56.</u> ” (Campbell, et al., Col. 5, ll. 14-26.)
transmitting data from each intermediate location to corresponding central locations; and	“The network 10 contains at least one check image processing node 12 which provides check clearance services. The node 12 receives images of checks from a sending institution 14 transmitted through the network 10. The <u>node 12 processes the check images and sends them to a receiving institution 16.</u> ” (Campbell, et al., Col. 2, ll. 26-32.)
transmitting data within the central locations.	“Check images are received in a <u>network interface 30</u> in the receiving institution 16. The interface 30 <u>transforms</u> the signals from the network 10 into a form <u>suitable for use by check image processing equipment 32</u> located in the receiving institution 16. The check image processing equipment 32 may be similar to the imaging equipment 18 located in the sending institution 14. The equipment 32 may also be <u>facsimile equipment, character recognition equipment, e-mail systems, or any other image processing equipment</u> by which the images received may be <u>displayed or used</u> by the receiving institution.” (Campbell, et al., Col. 3, ll. 41-52.)

Claims 47 through 50 depend from claim 46. How Campbell, et al. discloses the limitations found within these claims has been fully explained in the Exhibit entitled “Element by element comparison of claims 46-50 of the ‘988 Patent to Campbell, et al. (U.S. Patent No. 5,373,550)” that the requester presented in its request of reexamination. This Exhibit is incorporated herein as the analysis demonstrating the correlation between claim limitations and the Campbell, et al. disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claims 42 through 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Minoli, "Imaging in Corporate Environments: Technology and Communication" (Minoli).

The below claim charts identify the claim limitation vis-à-vis Minoli's disclosure of said limitation.

Claim 42	Minoli
<p>A communication network for the transmission of data within and between one or more remote data processing subsystems, at least one intermediate data collecting subsystem and at least one central subsystem forming a tiered architecture</p> <p>wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one data collecting subsystem and each of said at least one data collecting subsystem communicate with a corresponding some of said one or more data processing subsystems,</p>	<p>Minoli is entitled "Imaging in Corporate Environments: Technology and Communication." As Minoli states in the preface to his book, "<u>The word Communication in the subtitled emphasizes aspects of remote deliver of stored image information, whether across a local area network (LAN) in a building or campus, or a wide area network (WAN) covering a region, a state, or the nation.</u>" Minoli, p. xi. "WAN communication services [] can be employed in support of distributed imaging in general and LAN interconnection in particular." Minoli, p. 39. FIGs. 2.5, 2.6, 2.8, 2.10 and 9.8 show multi-tiered imaging architecture.</p> <p>Minoli teaches that a typical remote image capture application in the banking industry "involves (1) <u>scanning of documents at branch offices for transmission to a host computer at the main office of the central site.</u>" Minoli, p. 20. The Scan segment provides an imaging subsystem (scanner) that captures images of documents. These images may be routed in electronic form through the 'Utilities segment' to make use of the fax server or mainframe, to the "Access segment for viewing and storage. As is clear from Figure 2.6, in order for images to be transmitted to the 'Access Segment,' they must be routed through the 'Utilities segment.' Minoli, p. 31. The top-left-hand corner of FIG. 2.6 demonstrates several scanners connected by a LAN as a '<u>Scan segment</u>' in a 3-tier architecture. Minoli, p. 31. Each of the 3 LANs has a LAN wiring hub, which is a common connection point for devices in a network. The LANs are illustrated as connected by a LAN bridge, which is a device that connects two or more LANs. However, Minoli contemplates that these 3 LANs could also be connected by a WAN, "WAN communication services [] can be employed in support of distributed imaging in general and LAN interconnection in particular." Minoli, p. 39. In FIG. 9.8, a 'remote site' having a 'LAN wiring hub' which is connected to a central site through a WAN. See Minoli, p. 270.</p>

said data processing subsystem including an imaging subsystem for capturing images of documents and receipts, comprising:	'Scanning station' "converts documents into compressed data files and transmits them (typically over a LAN) to a shared-image database." Minoli, p. 9.
at least one first local area network for transmitting data within a corresponding one of said one or more remote subsystems;	Minoli teaches that a typical remote image capture application in the banking industry "involves (1) <u>scanning of documents at branch offices for transmission to a host computer at the main office of the central site.</u> " Minoli, p. 20. The top-left-hand corner of FIG. 2.6 is the 'Scan segment' and demonstrates several scanners connected by a LAN having a 'LAN wiring hub.' See Minoli, p. 31.
at least one second local area network for transmitting data within a corresponding one of said at least one intermediate subsystem;	The bottom-left-hand corner of FIG. 2.6 demonstrates a 'fax server' and a mainframe connected via a 'LAN wiring hub' in a portion of the 3-tiered-architecture shown as the 'Utilities segment.' Minoli, p. 31.
at least one third local area network for transmitting data within a corresponding one of said at least one central subsystem; and	FIG. 2.6 shows an 'Access segment' in the bottom corner of the 3-tiered architecture including a file server, a printer, and viewing workstations connected through a 'LAN wiring hub.' This LAN is connected to the 'Utilities segment' LAN via a 'LAN bridge.' Minoli, p. 31.
at least one wide area network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one central subsystem.	"WAN communication services [] can be employed in support of distributed imaging in general and LAN interconnection in particular." Minoli, p. 39. "Figure 9.8 depicts <u>WAN connectivity using public frame relay service for LANs supporting imaging applications.</u> " Minoli, p. 270. The caption of that figure teaches that this network architecture can be used "to support <u>enterprisewide dissemination of image</u> ," such as "scanning of documents at branch offices for transmission to a host computer at the main office of the central site." A WAN is also illustrated in FIGs. 2.8 and 2.10 allowing remote users access to images. Routers and bridges are illustrated providing communications over a WAN.

Claims 43 through 45 depend from claim 42. How Minoli discloses the limitations found within these claims has been fully explained in the Exhibit entitled "Element by element comparison of claims 46-50 of the '988 Patent to Minoli, Imaging in Corporate Environments" (which includes a copy of Figure 2.6 referenced herein) that the requester presented in its request of reexamination. This Exhibit is incorporated

herein as the analysis demonstrating the correlation between claim limitations and the Minoli disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claims 46, 47, 48 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Geer (USPN 5,930, 788).

The below claim charts identify the claim limitation vis-à-vis Geer's disclosure of said limitation.

Claim 46	Geer
A method for transmitting data within and between one or more remote subsystems, at least one intermediate subsystem and at least one central subsystem in a tiered manner wherein each of the central subsystems communicate with at least one intermediate subsystem and each of the intermediate subsystems communicate with at least one remote subsystems comprising the steps of:	"The present invention comprises an integrated system beginning at a payee's item capture facility for effecting the efficient submission of checks and other financial instruments into the payment system for collection of funds. The financial instruments are received by a payee at a capture location remote from the payee's collecting and clearing depository bank and are presented for payment through the check payment system to the multiple institutions on which the instruments are drawn. In one embodiment, electronic scanning means at a first location established by the payee receives the financial instruments, scans and extracts necessary data therefrom including the data of the magnetic ink character recognition (MICR) line of the instrument, adds necessary data such as the amount and a document identification number to the electronic information associated with each check, and sends this electronic information to the payee's depository bank for further electronic sorting and processing both with regard to the introduction of the checks into the payment system and the crediting of funds represented by the checks to the payee's account at the bank, as the payee processes the check in its own record of account with the check payor. In this first embodiment, the paper financial instruments are typically imaged (electronically, digitally, optically, on microfilm or disk, or otherwise) for archival storage at the payee's location remote from the payee's depository bank, substantially contemporaneous with the capture of the financial or other information on the instrument. The paper instrument itself may then be disposed of, eliminating the need for any additional mechanical sorting, indorsing or imprinting by either the payee or the payee's depository bank." (Geer, Col. 4, l. 46 to Col. 5, l. 9.)

	<p>Wherein:</p> <p>payee 2 is the remote subsystem;</p> <p>depository bank 10 is the intermediate subsystem; and</p> <p>payment system 12 is the central subsystem.</p>
<p>capturing an image of documents and receipts and</p> <p>extracting data therefrom;</p>	<p>“The financial instruments are received by a payee at a capture location remote from the payee's collecting and clearing depository bank.” (Geer, Col 4, ll. 49-51.) “[F]or retail establishments such as grocery chains and the like that receive large numbers of point of sale checks, the present invention is applicable with the item capture location of the payee being the point of sale check receiving establishment. Point of sale capture may, but need not necessarily, include imaging of the check.” (Geer, Col. 8, ll. 48-54.)</p> <p>“An image of the physical check is created.” ... “The image may be an optical or electronic gray-scale or color image of the check maintained in archival storage in pixel-by-pixel digital, optical, magnetic, electronic, fully optical or other storage technology from which information can be derived.” (Geer, Col. 8, ll. 12-19.) “The electronic scanning for extraction of the data from the MICR line, etc., may be combined with the imaging of the check.” (Geer, Col. 8, ll. 61-64.)</p>
<p>transmitting data within the remote locations;</p>	<p>The internal communication network at the remote capture location is inherently disclosed within Geer. Referring to Geer's figures 1 and 2, it is clear that electronic data is transmitted within the remote location among the functional components including the electronic sorter, the imaging unit, the archive, etc. “Following receipt and item capture by the payee, the check will advance to scanning and processing in the electronic scanning block 6 of FIG. 1. In this step, the check is scanned by a suitable reader.” (Geer, Col. 7, ll. 38-41.) Thus, check images are created. “The data thus collected will typically include the MICR (Magnetic Ink Character Recognition) data from the MICR lines of the checks. The amount of the check and a date will also be collected (optionally verified by a human operator) and included with the electronic record to be associated with each check.” (Geer, Col. 7, ll. 44-50.) Ultimately, the check images and the information extracted from the check must be organized and transmitted to the bank of first deposit. Therefore, the electronic data is inherently transmitted within the remote location.</p> <p>“The embodiment of FIG. 1 uses electronic transmission of information related to electronically sorted information about</p>

	<p>checks received and electronic cash letters related to the particular groups of sorted checks. Therefore, sorting, reconciliation, etc., is effected by electronic means without the need for mechanical processing or delivery of physical paper checks.” (Geer, Col. 7, ll. 31-37.)</p> <p>“The information flow within the check payee's organization from item capture 4 to the check payee accounting function 5 is a matter of payee preference.” (Geer, Col. 8, ll. 6-9.)</p>
transmitting data from each remote location to corresponding intermediate location;	“A communication link is established between the payee's location and the depository bank. Information pertaining to the checks and/or the cash letters in anticipation of a deposit in the payee's account corresponding to a cash letter (or cash letters) is transmitted from the payee to the collecting and clearing depository bank.” (Geer, Col. 5, ll. 25-31.) “[T]his image of the check may, also be transmitted electronically to the bank along with the other information extracted from the check.” (Geer, Col. 9, ll. 1-10.)
transmitting data within the intermediate locations;	While the specification does not explicitly disclose the communication network internally at the bank of first deposit, it does disclose the flow of the electronic check information and check images through several functional blocks of the bank of first deposit. ¹ Therefore, the electronic data is inherently transmitted within the bank of first deposit.
transmitting data from each intermediate location to corresponding central locations; and	“The electronic check information ... is sent via an appropriate communication link 15 into the payment system 12.” (Geer, Col. 9, ll. 27-30.)
transmitting data within the central locations.	<p>“The payment system 12 includes clearing institutions such as the Federal Reserve Banks, Correspondent banks, The National Clearinghouse Association (described in United States Letters Pat. No. 5,265,007), the electronic check clearing house organization (described in Stephens et al., <i>supra</i>), and like mechanisms. Having a direct relationship to the check payment system, the collecting and clearing depository bank 10 is considered a part of the check payment system.” (Geer, Col. 9, ll. 30-37.)</p> <p>“The payment system 12 receives checks from depository</p>

¹ “The electronic check information ... is sent via an appropriate communication link 15 into the payment system 12.” (Geer, Col 9, ll. 27-30.) “The image 7 is transferred via a communication link 11 from payee 2 to depository bank 10 for financial information processing and archival storage.” (Geer, Col. 10, ll. 1-3.) “At the depository bank, the appropriate adjustments of the payee's account balances by the depository bank are carried out 13.” (Geer, Col. 9, ll. 11-25) “The payee's account is credited with the appropriate amounts as such are compiled by the payee and the information thereof is received electronically from the payee. The electronic check information is sorted and routed via 14, with appropriate electronic information added thereto to insure proper routing through the payment and clearing system to the appropriate payor bank.” (Geer, Col. 9, ll. 14-16.)

	bank 10 and other banks of first and subsequent deposit (not depicted on FIG. 1) intended for various payor banks, B ₁ , B ₂ , B ₃ ... B _n , collectively denoted as 16 in FIG. 1. The check information from the payment system 12 reaches the appropriate payor banks 16 for proper debiting of the accounts of check writers 1 thus completing the payment cycle. In the event of dishonor of a check by a payor bank, the process reverses as to the collection of the dishonored check, and this information may be transmitted electronically back through payment system 12 (or by more direct means of reversal) to depository bank 10 for unwinding the transaction and for debiting of the payee's account as to the dishonored check." (Geer, Col. 9, ll. 38-51.)
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Claims 47, 48 and 50 depend from claim 46. How Geer discloses the limitations found within these claims has been fully explained in the Exhibit entitled "Element by element comparison of claims 46-50 of the '988 Patent to Geer (USP 5,930,788)" that the requester presented in its request of reexamination. This Exhibit is incorporated herein as the analysis demonstrating the correlation between claim limitations and the Geer disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claims 1, 2, 18, 26, 27 and 29 are rejected under 35 U.S.C. 102(a) as being anticipated by the ANSI/ABA X9.46-1995 document (ANSI).

The below claim charts identify the claim limitation vis-à-vis ANSI's disclosure of said limitation.

Claim 1	ANSI
A system for central management, storage and report generation of remotely captured paper transactions from documents and receipts comprising:	The ANSI X9.46 standard is an electronic data interchange protocol for the exchange of electronic digitized images of financial documents among different financial institutions involved in a payment transaction. ANSI, p. 1. The exchange occurs across diverse computing platforms. Packaged interchange content may be delivered from the originating imaging application's financial image interchange translator to

	<p>the receiving imaging application's financial image interchange translator is through a computer network by transmitting the data electronically. ANSI, p. 15-16. "This standard is intended to improve the payments system by supporting the interchange of digitized images of financial documents, specifically check and similar paper-based instruments; facilitate the truncation of the paper at the earliest possible point in the clearing process; and support transmissions from a single transaction to many transaction serving banking payment processing applications." ANSI, p. 1.</p>
one or more remote data access subsystems for capturing and sending paper transaction data and subsystem identification information comprising at least one imaging subsystem for capturing the documents and receipts and	<p>The ANSI X9.46 standard is an electronic data interchange protocol for the exchange of electronic digitized images of financial documents <u>among different financial institutions</u> involved in a payment transaction. ANSI, p. 1.</p> <p>"The institution participating in <u>check image interchange</u> shall <u>capture both the full front and the full back of the item</u>. ANSI, p. 9. The definition of 'Image Capture' is found in the glossary of the standard on p. 220: "The operation of converting a human-readable image on paper to a digital representation stored in memory, or some other electronic, or optical, or electromagnetic, surfaced storage media. This is normally accomplished using some type of <u>scanning device or camera</u>."</p> <p><u>Transaction sets are interchanged</u>. Transaction set contents are different for each functional group that can be <u>interchanged</u>. ANSI, p. 14.</p> <p>The function groups include '<u>item views</u>'. ANSI, p. 12. '<u>Item Views</u>' include "<u>bundles of views of imaged items</u>, item information for each view and item view data." ANSI, p. 12. "For each <u>item</u>, e.g., <u>check</u>, this standard defines mechanisms for sending and receiving both information about the item (item information) and digitized representations of the item." ANSI, p. 9.</p> <p>Subsystem ID: In addition to images, a data element known as '<u>creation computer</u>' which "<u>conveys the system name of the originator's host computer that was used to create and digitize the imaging data</u>" may be transmitted. ANSI, p. 105. The '<u>creation computer</u>' is a item view data element. ANSI, p. 93-94.</p> <p>"The institution participating in check image interchange shall capture both the full front and the full back of the item." ANSI, p. 9. This is accomplished using: some type of</p>

	scanning device or camera. See ANSI, p. 172.
at least one data access controller for managing the capturing and sending of the transaction data;	<p>“The data to be interchanged from the originating imaging application are <u>packaged by the FII-translator</u>” ANSI, p. 12.</p> <p>“The translator (FII-translator) function of the originating application produces an interchange object (i.e., a complex data structure) by translating the output of the local imaging handling, data processing, or data storage application into a standardized interchangeable ‘edi’ structure.” ANSI, pp. 14 and 150-151.</p>
at least one central data processing subsystem for processing, sending, verifying and storing the paper transaction data and	<p>“The data to be interchanged from the originating imaging application are packaged by the FII-translator, and sent to the <u>receiving imaging application</u>.” ANSI, p. 12.</p> <p>“[U]pon <u>receipt of the interchanged data, the FII-translator will parse the incoming data for the receiving imaging application</u>. Then, the receiving imaging application may generate acknowledgements or replies to query requests, and <u>become the originating imaging application for a new image interchange</u>.” ANSI, p. 12.</p> <p>On p.14, lines 465-466, of the standard states that the ‘edi’ translator function of the receiving application “<u>translates the ‘edi’ interchange into the locally understood data structures for subsequent storage or processing of the data by the receiver’s application</u>.”</p> <p><u>Transaction sets are interchanged.</u> Transaction set contents are different for each functional group that can be <u>interchanged</u>. ANSI, p. 14. The function groups include ‘item views’. ANSI, p. 14. ‘Item Views’ include “<u>bundles of views of imaged items</u>, item information for each view and item view data.” ANSI, p. 14. “For each <u>item, e.g., check</u>, this standard defines mechanisms for sending and receiving both information about the item (item information) and digitized representations of the item.” ANSI, p. 9.</p>
the subsystem identification information comprising	Subsystem ID: In addition to images, a data element known as ‘creation computer’ which “conveys the system name of the originator’s host computer that was used to create and digitize the imaging data” may be transmitted. ANSI, p. 105. The ‘creation computer’ is a item view data element. ANSI, p. 93-94.
a management subsystem for	“[U]pon receipt of the interchanged data, the FII-translator

managing the processing, sending and storing of the of the transaction data; and	will parse the incoming data for the receiving imaging application. Then, the receiving imaging application may generate acknowledgements or replies to query requests, and become the originating imaging application for a new image interchange.” ANSI, p. 12.
at least one communication network for the transmission of the transaction data	“[P]ackaged interchange content is delivered from the originating imaging application's financial image interchange translator to the receiving imaging application's financial image interchange translator is through a <u>computer network</u> by transmitting the packaged interchange data electronically.” ANSI, pp. 16 and 199.
within and	Items are transmitted from the "Image and Data Processing Application" to the "Originating FII translator" within the originating financial institution. See ANSI, p. 202, Figure F. 1. Items are transmitted from the "Receiving FII translator" to the "Image and Data Processing Application" within the receiving financial institution. See ANSI, p. 203, Figure F.2.
between said one or more data access subsystems and said at least one data processing subsystem,	Examples of communication methods include “teleprocessing methods: links, network end point addresses, speed, data transfer protocols, etc.” ANSI, pp. 172 and 199.
with the data access subsystem providing encrypted subsystem identification information and encrypted paper transaction data to the data processing subsystem.	The ANSI describes encryption and various security methods. See ANSI, pp. 55-61. Encryption of specific data elements is taught, “[e]ncryption key name..., conveys the name of the key used to <u>encipher the contents of this functional group</u> . The name is mutually known to the security originator and the security recipient, is unique for this relationship, and allows a particular key to be specified.” ANSI, p. 57. Thus, data elements are encrypted (enciphered) at the functional group level. This is further supported by the initialization vector showing the length of the data element to be encrypted. ANSI, p. 58. As explained, one (1) type of <u>functional group</u> is known as ‘item views.’ The <u>check images</u> are item views. The ‘creation computer’ which identifies the computer that creates the image is also an item view data element. See ANSI, pp. 93 and 105. Thus, the originating institution (remote subsystem) provides encryption to both the images and the subsystem identification information.

Claims 2 and 18 depend from claim 1. How ANSI discloses the limitations found within these claims has been fully explained in the Exhibit entitled “Element by element comparison of claims 1-41 of the ‘988 Patent to the ANSI/ABA X9.46-1995 document,

alone and in combination with the newly cited and previously cited prior art" that the requester presented in its request of reexamination. This Exhibit is incorporated herein as the analysis demonstrating the correlation between claim limitations and the ANSI disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claim 26	ANSI
A method for central management, storage and verification of remotely captured paper transactions from documents and receipts comprising the steps of:	The ANSI X9.46 standard is an <u>electronic data interchange protocol for the exchange of electronic digitized images of financial documents among different financial institutions</u> involved in a payment transaction. See ANSI, p. 1. The exchange occurs across diverse computing platforms. Packaged interchange content may be delivered from the <u>originating imaging application's financial image interchange translator to the receiving imaging application's financial image interchange translator is through a computer network</u> by transmitting the data electronically. See ANSI, pp. 15-16. "This standard is intended to improve the payments system by supporting the interchange of digitized images of financial documents, <u>specifically check and similar paper-based instruments</u> , facilitate the truncation of the paper at the earliest possible point in the clearing process; and support transmissions from a single transaction to many transaction serving banking payment processing applications." ANSI, p. 1.
capturing an image of the paper transaction data at one or more remote locations and sending a captured image of the paper transaction data;	<p>"The institution participating in <u>check image interchange shall capture both the full front and the full back of the item.</u>" ANSI, p. 9.</p> <p>The ANSI X9.46 standard is an electronic data interchange protocol for the exchange of electronic digitized images of financial documents <u>among different financial institutions</u> involved in a payment transaction. See ANSI, p. 1.</p> <p><u>Transaction sets are interchanged.</u> Transaction set contents are different for each functional group that can be <u>interchanged</u>. See ANSI, p. 16. The function groups include 'item views'. See ANSI, p. 14. 'Item Views' include "bundles of views of imaged items, item information for each view and item view data." ANSI, p. 16. "For each item, e.g., check, this standard defines mechanisms for sending and receiving both</p>

	information about the item (item information) and digitized representations of the item.” ANSI, p. 9.
managing the capturing and sending of the transaction data;	“The data to be interchange from the originating imaging application are <u>packaged by the FII-translator</u> .” ANSI, p. 10. “The translator (FII-translator) function of the originating application produces an interchange object (i.e., a complex data structure) <u>by translating the output of the local imaging handling, data processing, or data storage application</u> into a standardized interchangeable ‘edi’ structure.” ANSI, pp. 12 and 150-151.
collecting, processing, sending and storing the transaction data at a central location;	“The data to be interchanged from the originating imaging application are packaged by the FII-translator, and sent to the <u>receiving imaging application</u> .” ANSI, p. 12. “[U]pon <u>receipt of the interchanged data, the FII-translator will parse the incoming data for the receiving imaging application</u> . Then, the receiving imaging application may generate <u>acknowledgements or replies</u> to query requests, and <u>become the originating imaging application for a new image interchange</u> .” ANSI, p. 12. On p. 14, lines 465-466, of the standard states that the ‘edi’ translator function of the receiving application “ <u>translates the ‘edi’ interchange into the locally understood data structures for subsequent storage or processing of the data by the receiver's application</u> .” The ANSI X9.46 standard is an electronic data interchange protocol for the exchange of electronic digitized images of financial documents among <u>different financial institutions</u> involved in a payment transaction. ANSI, p. 1.
managing the collecting, processing, sending and storing of the transaction data;	“[U]pon <u>receipt of the interchanged data, the FII-translator will parse the incoming data for the receiving imaging application</u> . Then, the receiving imaging application may generate <u>acknowledgements or replies</u> to query requests, and <u>become the originating imaging application for a new image interchange</u> .” ANSI, p. 12.
encrypting subsystem identification information and	The ANSI describes encryption and various security methods. See ANSI, p. 55-61. Encryption of specific data elements is taught, “[e]ncryption key name..., conveys the name of the key used to <u>encipher the contents of this functional group</u> . The name is mutually known to the security originator and the security recipient, is unique for this relationship, and allows a particular key to be specified.” ANSI, p. 56. Thus, data elements are encrypted (enciphered) at the functional group level. This is further supported by the initialization vector showing the length of the data element to be encrypted.

	<p>ANSI, pp. 55 and 57. As explained, one (l) type of functional group is known as 'item views.' The <u>check images</u> are item views. The '<u>creation computer</u>' which identifies the computer that creates the image is also an item view data element. See ANSI, pp. 93-94 and 105. Thus, the originating institution (remote subsystem) provides encryption to both the images and the subsystem identification information.</p> <p><u>Transaction sets are interchanged.</u> Transaction set contents are different for each functional group that can be <u>interchanged</u>. See ANSI, p. 14. The function groups include '<u>item views</u>'. See ANSI, p. 14. 'Item Views' include "<u>bundles of views of imaged items</u>, item information for each view and item view data." ANSI, p. 14. "For each <u>item</u>, e.g., <u>check</u>, this standard defines mechanisms for sending and receiving both information about the item (item information) and digitized representations of the item." ANSI, p. 9.</p>
<p>the transaction data; and</p> <p>transmitting the transaction data and the subsystem identification information</p> <p>within and between</p> <p>the remote location(s) and the central location.</p>	<p>Packaged interchange content is delivered from the originating imaging application's FII [financial image interchange] translator to the receiving imaging application's FII [financial image interchange] translator is through a <u>computer network</u> by transmitting the packaged interchange data electronically. See ANSI, pp. 15-16 and 199.</p> <p>Items are transmitted from the "Image and Data Processing Application" to the "Originating FII translator" within the originating financial institution. See ANSI, p. 202 (Figure F.1). Items are transmitted from the 'Receiving FII translator' to the 'Image and Data Processing Application' within the receiving financial institution. See ANSI, p. 203 (Figure F.2).</p>

Claims 27 and 29 depend from claim 26. How ANSI discloses the limitations found within these claims has been fully explained in the Exhibit entitled "Element by element comparison of claims 1-41 of the '988 Patent to the ANSI/ABA X9.46-1995 document, alone and in combination with the newly cited and previously cited prior art" that the requester presented in its request of reexamination. This Exhibit is incorporated herein as the analysis demonstrating the correlation between claim limitations and the

ANSI disclosure. For the convenience of the Patent Owner, this requester Exhibit is attached to the end of this Office action as an Appendix.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-8, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell, et al. in view of Applicant's Admission of Prior Art (AAPA) at the time of filing and prosecution.

What Campbell, et al. discloses, teaches and suggest to one of ordinary skill in the art is discussed above and incorporated herein.

As acknowledged by the Applicant in the disclosure of the '988 patent, "[a]s is known to persons of ordinary skill in the art, the DATs 200 could also include additional devices for capturing other biometric data for additional security. These devices include facial scans, fingerprints, voice prints, iris scans, retina scans and hand geometry." ('988 Patent, Col. 6, ll. 46-50.) Moreover, the '988 patent admits:

In addition to scanning images and text, the DAT scanner 202 also scans DataGlyph™ elements, available from Xerox Corporation. As is known to persons of ordinary skill in the art, the Xerox DataGlyph™ Technology represents digital information with machine readable data which is encoded into many, tiny, individual glyph elements. Each glyph element consists of a 45 degree diagonal line which could be as short as 1/100th of an inch