

servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph); and

- d) at least one network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one or more central subsystem (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph).

Eckerson does not explicitly teach a communication network wherein the network for transmitting data within any one of the remote, intermediate or central subsystems is a local area network.

However, **Dilella** teaches the use of a conventional local area network to connect the various components internal to a banking system, including a data processing unit,

data entry processor, image display terminals, and an encode and sort unit (see col. 2, lines 58-65 and drawing Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data within any one of a remote, intermediate or central subsystem as a local area network, since it would have merely involved the combination of known prior art elements (e.g., various computer components and a local area network to connect said components) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

Neither **Eckerson** nor **Dilella** explicitly teaches a communication network wherein the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, is a wide area network.

However, **Houvener** teaches the use of a wide area network for connecting computer systems which are remotely geographically located (see disclosure of the use of a wide area network to connect a point of verification terminal with a number of

geographically remote database storage sites, col. 5, lines 35-42, col. 6, lines 25-29 and 38-42, as well as drawing Figures 1, 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, as a wide area network, since it would have merely involved the combination of known prior art elements (e.g., various computer systems and a wide area network to connect said systems) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

None of **Eckerson**, **Dilella** nor **Houvener** explicitly teach a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents.

Geer, however, teaches a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents (see disclosure that checks or other financial instruments are scanned and the information

forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Eckerson, Dilella** and **Houvener**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson, Dilella, Houvener** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Eckerson**, to electronically transmit data from captured images, as in **Geer**, via local and wide area networks as disclosed by **Dilella** and **Houvener**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

None of **Eckerson**, **Dilella**, **Houvener** nor **Geer** explicitly teaches a data processing system wherein the data processed includes images of receipts, nor wherein the data is from credit card transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from credit card transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces via local and wide area networks as disclosed by **Dilella** and **Houvener**, for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose credit card receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from credit card

transactions' obvious to an ordinary artisan at the time of the invention, since credit card transactions are a subset of transactions, and receipts serve to document transactions.

41. Regarding claim 110, **Eckerson** teaches 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 (see Illustration 1:

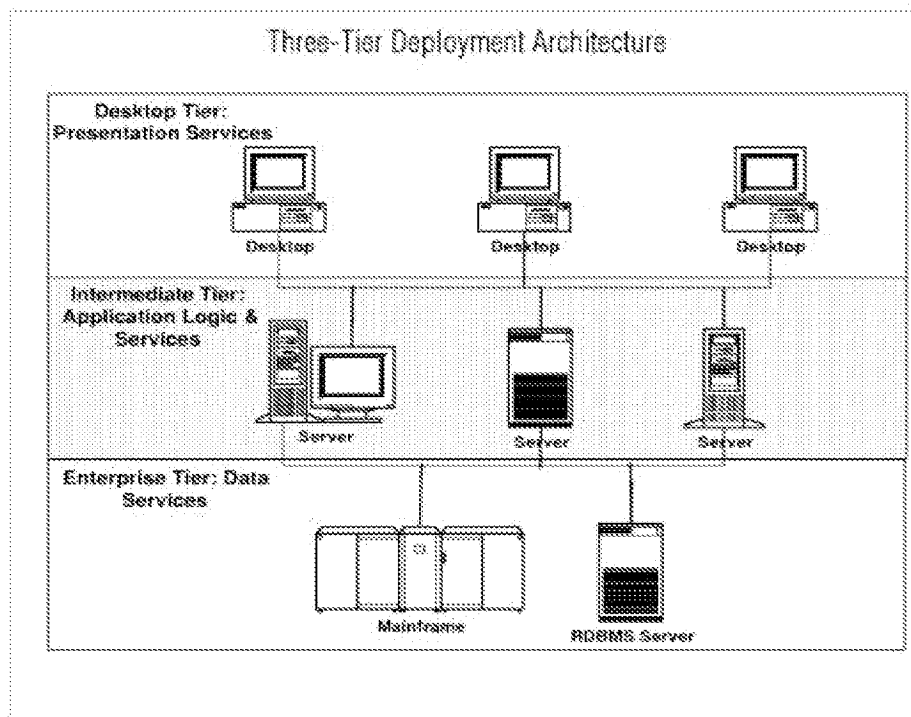


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph), comprising:

- a) at least one first network for transmitting data within a corresponding one of said one or more remote subsystems (see disclosure regarding three-tier

models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);

b) at least one second network for transmitting data within a corresponding one of said at least one intermediate subsystem (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);

c) at least one third network for transmitting data within a corresponding one of said at least one central subsystem (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph); and

d) at least one network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one

or more central subsystem (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph).

Eckerson does not explicitly teach a communication network wherein the network for transmitting data within any one of the remote, intermediate or central subsystems is a local area network.

However, **Dilella** teaches the use of a conventional local area network to connect the various components internal to a banking system, including a data processing unit, data entry processor, image display terminals, and an encode and sort unit (see col. 2, lines 58-65 and drawing Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data within any one of a remote, intermediate or central subsystem as a local area network, since it would have merely

involved the combination of known prior art elements (e.g., various computer components and a local area network to connect said components) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

Neither **Eckerson** nor **Dilella** explicitly teaches a communication network wherein the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, is a wide area network.

However, **Houvener** teaches the use of a wide area network for connecting computer systems which are remotely geographically located (see disclosure of the use of a wide area network to connect a point of verification terminal with a number of geographically remote database storage sites, col. 5, lines 35-42, col. 6, lines 25-29 and 38-42, as well as drawing Figures 1, 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, as a wide area network, since it would have merely involved the combination of known

prior art elements (e.g., various computer systems and a wide area network to connect said systems) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

None of **Eckerson, Dilella** nor **Houvener** explicitly teach a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents.

Geer, however, teaches a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Eckerson, Dilella** and **Houvener**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson**, **Dilella**, **Houvener** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Eckerson**, to electronically transmit data from captured images, as in **Geer**, via local and wide area networks as disclosed by **Dilella** and **Houvener**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

None of **Eckerson**, **Dilella**, **Houvener** nor **Geer** explicitly teaches a data processing system wherein the data processed includes images of receipts, nor wherein the data is from internet transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from internet transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces via local and wide area networks as disclosed by **Dilella** and **Houvener**, for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose internet receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from internet transactions' obvious to an ordinary artisan at the time of the invention, since internet transactions are a subset of transactions, and receipts serve to document transactions.

42. Claims 46-50, 88-92, 97-101, 106-109, 114-116, 121 and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Eckerson** in view of **Geer** and **Patent Owner Admissions**.

43. The Requester has presented proposed arguments and rationale for rejecting claims 46-50, 88-92, 97-101, 106-109, 114-116, 121 and 122 based upon **Eckerson, Geer** and **Patent Owner Admissions**, section VI.B, pages 95-161 of their request, as well as claim chart B. These arguments and rationale for rejecting the claims are adopted by the Office, as modified and further discussed below.

44. Regarding claim 46, **Eckerson** teaches 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 (see Illustration 1:

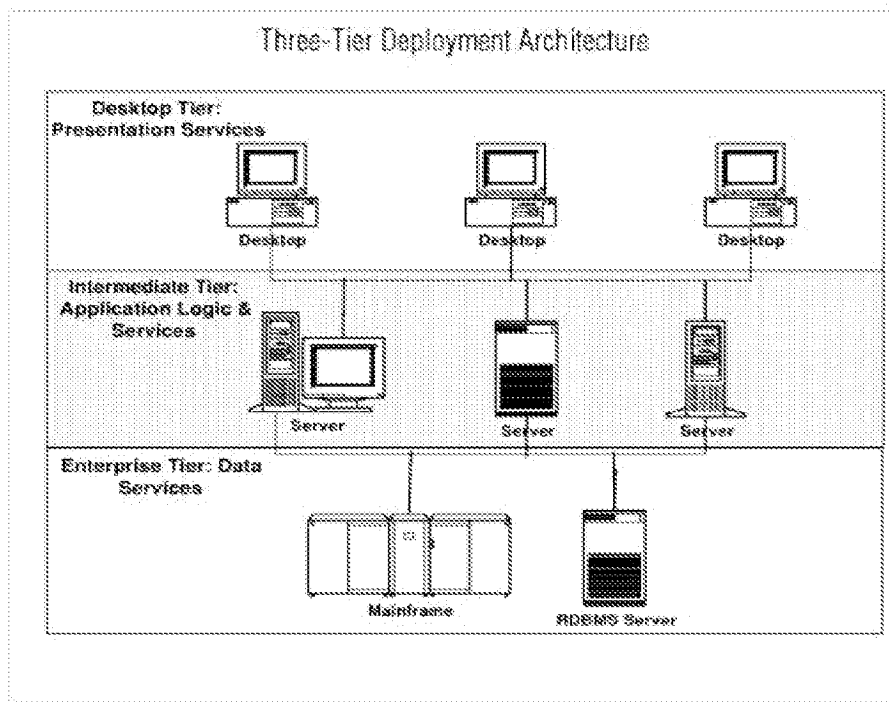


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph) comprising the steps of:

- a) transmitting data within the remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the

examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- b) transmitting data from each remote location to corresponding intermediate locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);
- c) transmitting data within the intermediate locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- d) transmitting data from each of the intermediate locations to corresponding central locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- e) transmitting data within the central locations (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Eckerson does not explicitly teach a method for transmitting data including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method for transmitting data including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Eckerson**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in

Eckerson, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Eckerson** nor **Geer** explicitly teaches a method of transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

45. Regarding claim 47, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step includes the steps of:

- a) connecting each remote location to a corresponding intermediate location (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph).

46. Regarding claim 48, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step includes the steps of:

- a) connecting each intermediate location to an external communication network
(see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5); and
- b) connecting the corresponding central locations to the external communication network (see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5).

47. Regarding claim 49, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the use of ORBs which run in cooperation with the TCP/IP protocol, page 16, third paragraph).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

48. Regarding claim 50, **Geer** additionally teaches a method for transmitting data wherein data is obtained from (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 26-50; see also col. 8, lines 48-54 et seq.).

49. Regarding claim 88, **Eckerson** teaches a method for transmitting data within and between one or more remote subsystems that provide remote data processing identification information, 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 (see Illustration 1:

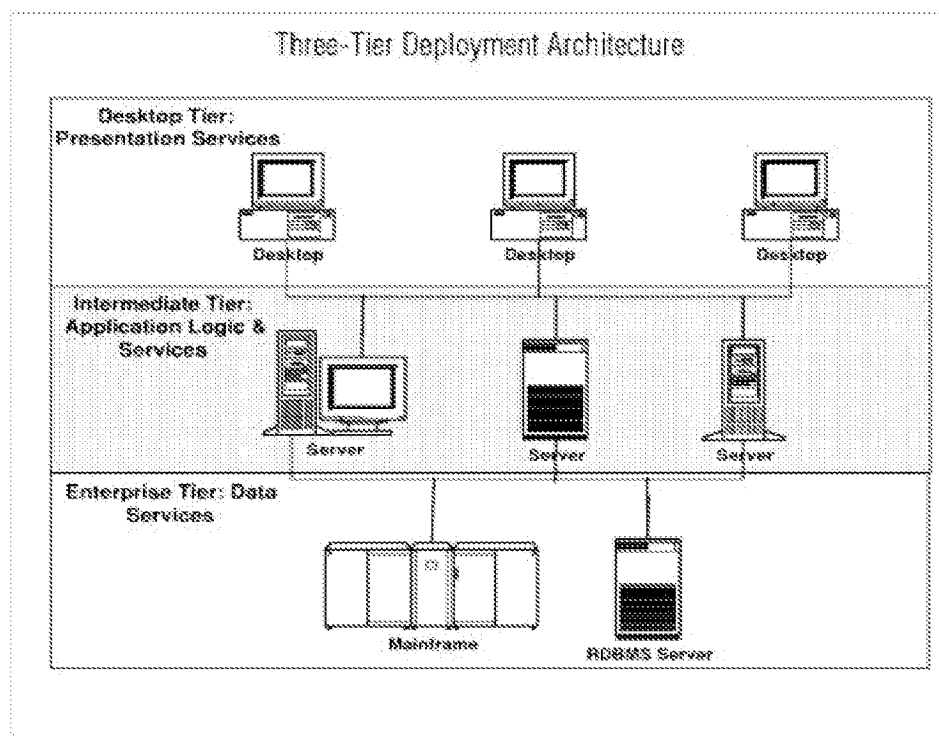


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph) comprising:

- a) transmitting data within the remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the

examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- b) transmitting data from each remote location to corresponding intermediate locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);
- c) transmitting data within the intermediate locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- d) transmitting data from each of the intermediate locations to corresponding central locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- e) transmitting data within the central locations (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Eckerson does not explicitly teach a method for transmitting data including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method for transmitting data including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Eckerson**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in

Eckerson, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Eckerson** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

50. Regarding claim 89, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step includes the steps of:

- a) connecting each remote location to a corresponding intermediate location (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph).

51. Regarding claim 90, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step includes the steps of:

- a) connecting each intermediate location to an external communication network
(see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5); and
- b) connecting the corresponding central locations to the external communication network (see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5).

52. Regarding claim 91, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the use of ORBs which run in cooperation with the TCP/IP protocol, page 16, third paragraph).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

53. Regarding claim 92, **Geer** additionally teaches a method for transmitting data wherein data is obtained from (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 26-50; see also col. 8, lines 48-54 et seq.).

54. Regarding claim 97, **Eckerson** teaches 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 (see Illustration 1:

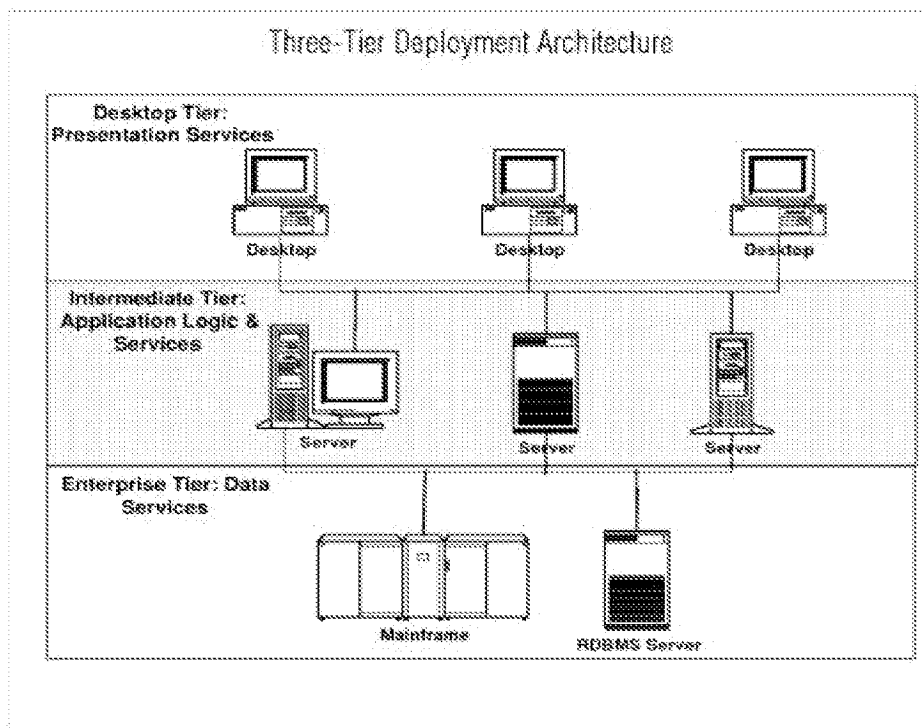


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph) comprising:

- a) transmitting data within the remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the

examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- b) transmitting data from each remote location to corresponding intermediate locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);
- c) transmitting data within the intermediate locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- d) transmitting data from each of the intermediate locations to corresponding central locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- e) transmitting data within the central locations (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Eckerson does not explicitly teach a method for transmitting data including the step of capturing an image of documents and extracting data therefrom, and whereby the intermediate locations call the remote locations.

Geer, however, teaches a method for transmitting data including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.), and whereby the intermediate locations call the remote locations (see disclosure that transmissions between the payee, depository bank and payment system occurs on a predetermined schedule and is coordinated by a control unit, col. 10, lines 7-27 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Eckerson**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Eckerson**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Eckerson** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces for the information processing systems including an

imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

55. Regarding claim 98, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step comprises:

- a) connecting each remote location to a corresponding intermediate location (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a

three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph).

56. Regarding claim 99, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step comprises:

- a) connecting each intermediate location to an external communication network
(see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5); and
- b) connecting the corresponding central locations to the external communication network (see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5).

57. Regarding claim 100, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the use of ORBs which run in cooperation with the TCP/IP protocol, page 16, third paragraph).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

58. Regarding claim 101, **Geer** additionally teaches a method for transmitting data wherein data is obtained from (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 26-50; see also col. 8, lines 48-54 et seq.).

59. Regarding claim 106, **Eckerson** teaches 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 (see Illustration 1:

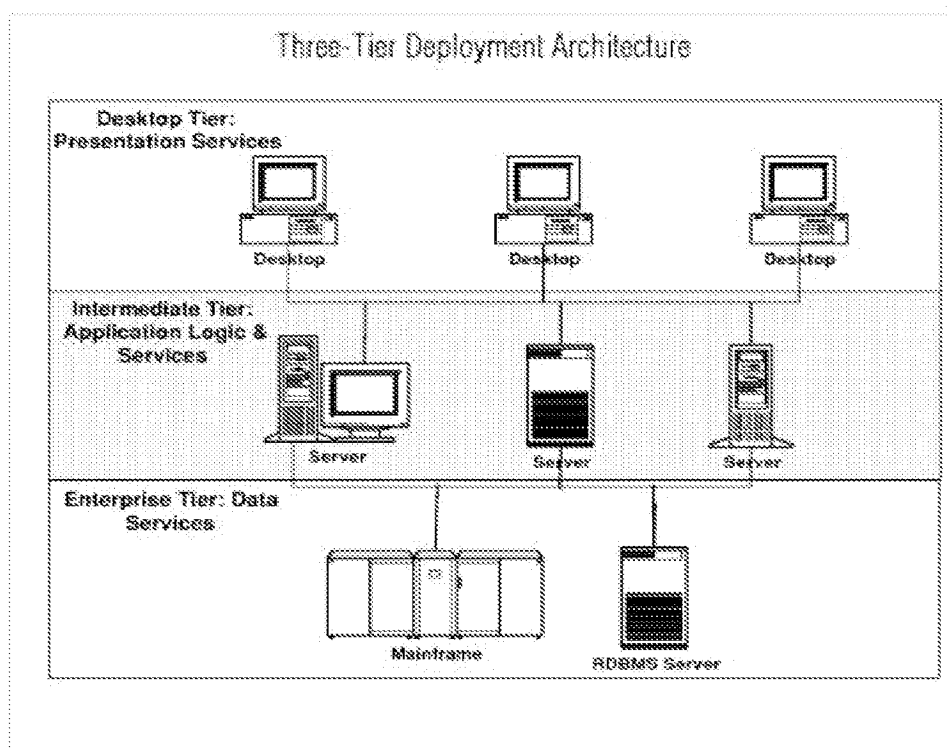


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph) comprising the steps of:

- a) transmitting data within the remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);
- b) transmitting data from each remote location to corresponding intermediate locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);
- c) transmitting data within the intermediate locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a

three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

d) transmitting data from each of the intermediate locations to corresponding central locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and

e) transmitting data within the central locations (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the

three-tier architecture, beginning on page 9, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Eckerson does not explicitly teach a method for transmitting data including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method for transmitting data including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by

Eckerson, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Eckerson**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Eckerson** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts, nor wherein the data is from credit card transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from credit card transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose credit card receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from credit card transactions' obvious to an ordinary artisan at the time of the invention, since credit card transactions are a subset of transactions, and receipts serve to document transactions.

60. Regarding claim 107, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step comprising:

- a) connecting each remote location to a corresponding intermediate location (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph).

61. Regarding claim 108, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step comprising:

- a) connecting each intermediate location to an external communication network
(see disclosure regarding the intermediate server and its advantages

regarding transparency and extensibility, page 9, first paragraph and Illustration 5); and

- b) connecting the corresponding central locations to the external communication network (see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5).

62. Regarding claim 109, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the use of ORBs which run in cooperation with the TCP/IP protocol, page 16, third paragraph).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

63. Regarding claim 114, **Eckerson** teaches 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 (see Illustration 1:

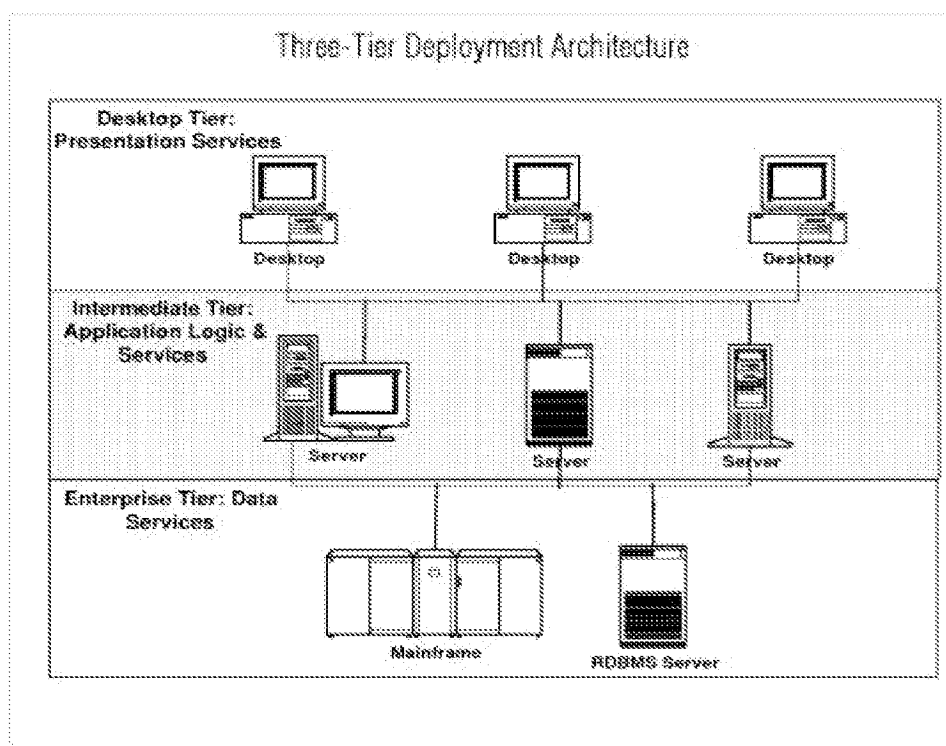


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph) comprising the steps of:

- a) transmitting data within the remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);
- b) transmitting data from each remote location to corresponding intermediate locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);
- c) transmitting data within the intermediate locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a

three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

d) transmitting data from each of the intermediate locations to corresponding central locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and

e) transmitting data within the central locations (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the

three-tier architecture, beginning on page 9, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Eckerson does not explicitly teach a method for transmitting data including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method for transmitting data including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by

Eckerson, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Eckerson**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Eckerson** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts, nor wherein the data is from internet transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from internet transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose internet receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from internet transactions' obvious to an ordinary artisan at the time of the invention, since internet transactions are a subset of transactions, and receipts serve to document transactions.

64. Regarding claim 115, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step comprising:

- a) connecting each remote location to a corresponding intermediate location (see disclosure regarding three-tier models, page 1, second and third

paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph); and

b) connecting the intermediate locations to corresponding remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph).

65. Regarding claim 116, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step comprising:

a) connecting each intermediate location to an external communication network (see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5); and

b) connecting the corresponding central locations to the external communication network (see disclosure regarding the intermediate server and its advantages regarding transparency and extensibility, page 9, first paragraph and Illustration 5).

66. Regarding claim 117, **Eckerson** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the use of ORBs which run in cooperation with the TCP/IP protocol, page 16, third paragraph).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

67. Regarding claim 121, **Eckerson** teaches a method for transmitting data within and between at least one remote subsystem, at least one intermediate subsystem and at least one central subsystem (see Illustration 1:

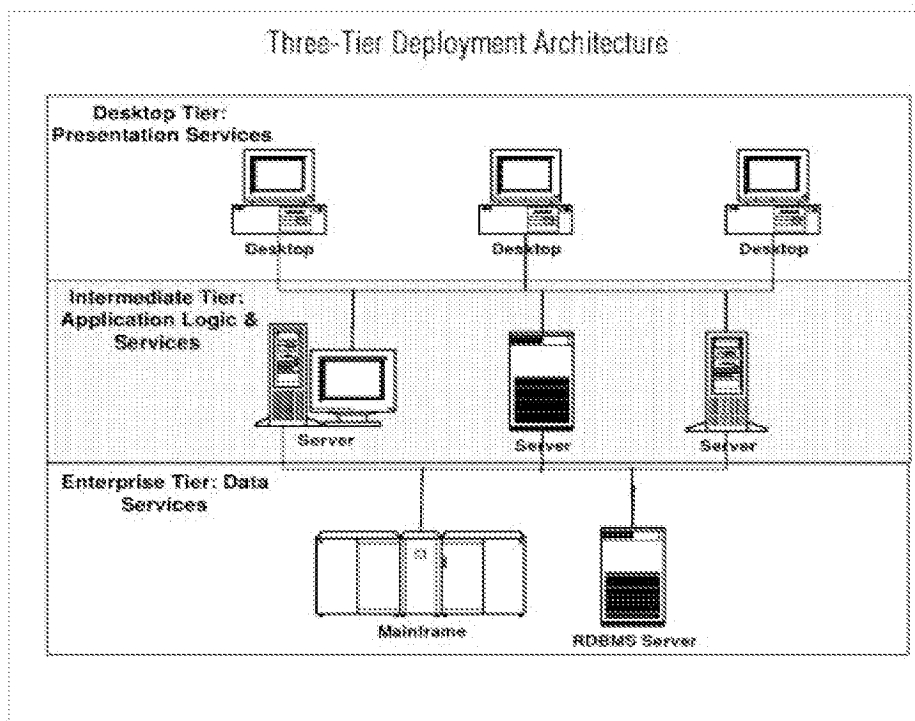


Illustration 1. A three-tier architecture deploys application components (presentation, functional logic, and data) across three tiers of computer platforms: desktop machines, intermediate application servers, and back-end database servers.

see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph), said method comprising:

- a) arranging said at least one remote subsystem, said at least one intermediate subsystem, and said at least one central subsystem in a tiered manner (see

Illustration 1; see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph);

b) each of said at least one central subsystem communicating with said at least one intermediate subsystem (see Illustration 1; see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.);

c) each of said at least one intermediate subsystem communicating with said at least one remote subsystem (see Illustration 1; see also disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.);

d) transmitting data within the remote locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be

transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

e) transmitting data from each remote location to corresponding intermediate locations (see disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph);

f) transmitting data within the intermediate locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first paragraph; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

g) transmitting data from each of the intermediate locations to corresponding central locations (see Illustration 1; see also disclosure regarding three-tier models, page 1, second and third paragraphs; see also disclosure regarding

the intermediate servers in a three-tier architecture, page 8, first paragraph;
see also disclosure regarding concurrency in three-tier models, page 13,
second paragraph); and

h) transmitting data within the central locations (see disclosure regarding three-tier models, page 1, second to last paragraph, page 2, last paragraph and page 20, third paragraph et seq.; see also disclosure regarding the intermediate servers in a three-tier architecture, page 8, first two paragraphs; see also disclosure regarding concurrency in three-tier models, page 13, second paragraph; see also disclosure of the advantages of the three-tier architecture, beginning on page 9, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Eckerson does not explicitly teach a method for transmitting data including the step of capturing an image of documents and extracting data therefrom, nor wherein the data is transmitted in a secure fashion.

Geer, however, teaches a method for transmitting data including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.), as well as disclosing measures taken to ensure that data is transmitted in a secure fashion, col. 14, lines 17-39 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Eckerson**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Eckerson** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Eckerson**, pages 1-2 and 6-10), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Eckerson**, to electronically transmit data from captured images, as in **Geer**, to achieve

the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Eckerson** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Eckerson** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

68. Regarding claim 122, **Eckerson** additionally teaches a method for transmitting data further comprising uniquely identifying the at least one remote subsystem used by a customer (see disclosure of the use of ORBs which run in cooperation with the TCP/IP protocol, technologies which inherently require each connected computing device to be uniquely identifiable through the use of an IP address, page 16, third paragraph).

69. Claims 42, 84, 102 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weiss** in view of **Geer, Dilella, Houvener, and Patent Owner Admissions**.

70. The Requester has presented proposed arguments and rationale for rejecting claims 42, 84, 102 and 110 based upon **Weiss, Geer and Patent Owner Admissions**, section VI.C, pages 161-225 of their request, as well as claim chart C. These arguments and rationale for rejecting the claims are adopted by the Office, as modified and further discussed below.

71. Regarding claim 42, **Weiss** teaches 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 (see drawing Figure 4:

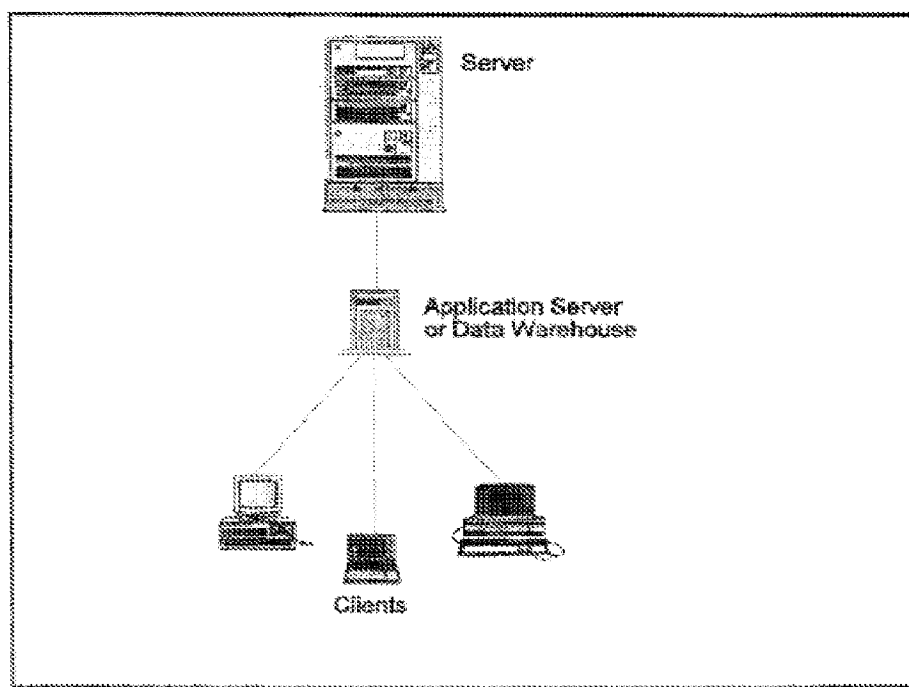


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21), comprising:

- a) at least one first network for transmitting data within a corresponding one of said one or more remote subsystems (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- b) at least one second network for transmitting data within a corresponding one of said at least one intermediate subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) at least one third network for transmitting data within a corresponding one of said at least one central subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also

disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and

- d) at least one network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one or more central subsystem (see disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16).

Weiss does not explicitly teach a communication network wherein the network for transmitting data within any one of the remote, intermediate or central subsystems is a local area network.

However, **Dilella** teaches the use of a conventional local area network to connect the various components internal to a banking system, including a data processing unit, data entry processor, image display terminals, and an encode and sort unit (see col. 2, lines 58-65 and drawing Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data within any one of a remote, intermediate or central subsystem as a local area network, since it would have merely involved the combination of known prior art elements (e.g., various computer components and a local area network to connect said components) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

Neither **Weiss** nor **Dilella** explicitly teaches a communication network wherein the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, is a wide area network.

However, **Houvener** teaches the use of a wide area network for connecting computer systems which are remotely geographically located (see disclosure of the use of a wide area network to connect a point of verification terminal with a number of geographically remote database storage sites, col. 5, lines 35-42, col. 6, lines 25-29 and 38-42, as well as drawing Figures 1, 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, as a wide area network, since it would have merely involved the combination of known prior art elements (e.g., various computer systems and a wide area network to connect said systems) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

None of **Weiss, Dilella** nor **Houvener** explicitly teach a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents.

Geer, however, teaches a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss, Dilella** and **Houvener**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss, Dilella, Houvener** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, via local and wide area networks as disclosed by **Dilella** and **Houvener**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

None of **Weiss, Dilella, Houvener** nor **Geer** explicitly teaches a data processing system wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces via local and wide area networks as disclosed by **Dilella** and **Houvener**, for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

72. Regarding claim 84, **Weiss** teaches a communication network for the transmission of data within and between one or more remote data processing subsystems that provide remote data processing subsystem identification information, at least one intermediate data collecting subsystem and at least one central data processing 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 remote data processing subsystems (see drawing Figure 4:

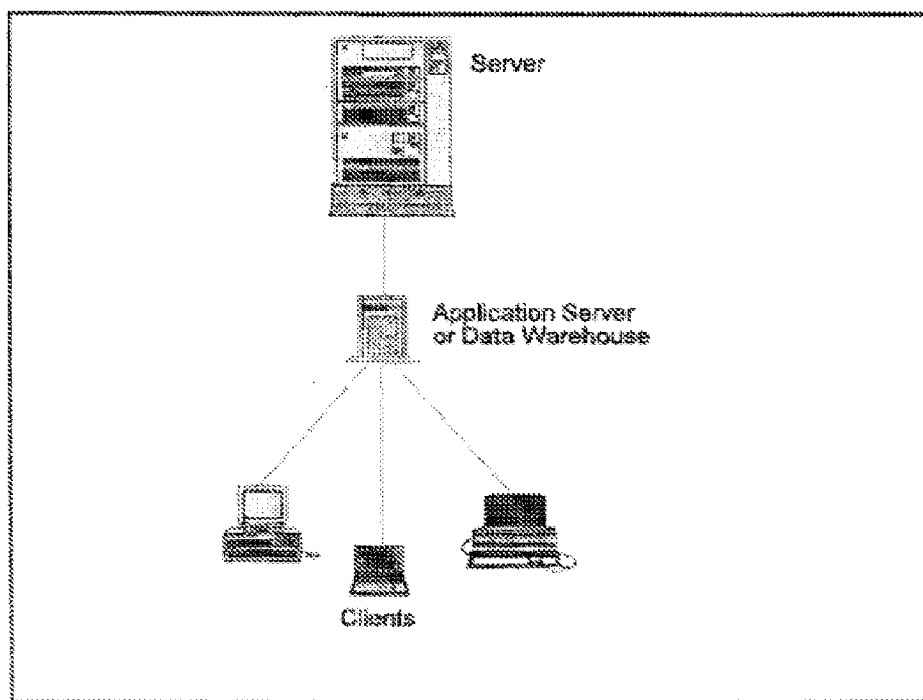


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum

distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed identification information being inherent when using Internet and WWW technologies which rely on TCP/IP; see also disclosure of a directory service which stores the current address for all network servers, section C.4, page 37), comprising:

- a) at least one first network for transmitting data within a corresponding one of said one or more remote data processing subsystems (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- b) at least one second network for transmitting data within a corresponding one of said at least one intermediate data collecting subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);

- c) at least one third network for transmitting data within a corresponding one of said at least one central data processing subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and
- d) at least one network for transmitting data between said one or more remote data processing subsystems, said at least one intermediate data collecting subsystem and said at least one or more central data processing subsystem (see disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16).

Weiss does not explicitly teach a communication network wherein the network for transmitting data within any one of the remote, intermediate or central subsystems is a local area network.

However, **Dilella** teaches the use of a conventional local area network to connect the various components internal to a banking system, including a data processing unit, data entry processor, image display terminals, and an encode and sort unit (see col. 2, lines 58-65 and drawing Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data within any one of a remote, intermediate or central subsystem as a local area network, since it would have merely involved the combination of known prior art elements (e.g., various computer components and a local area network to connect said components) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

Neither **Weiss** nor **Dilella** explicitly teaches a communication network wherein the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, is a wide area network.

However, **Houvener** teaches the use of a wide area network for connecting computer systems which are remotely geographically located (see disclosure of the use of a wide area network to connect a point of verification terminal with a number of geographically remote database storage sites, col. 5, lines 35-42, col. 6, lines 25-29 and 38-42, as well as drawing Figures 1, 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, as a wide area network, since it would have merely involved the combination of known prior art elements (e.g., various computer systems and a wide area network to connect said systems) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

None of **Weiss**, **Dilella** nor **Houvener** explicitly teach a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents.

Geer, however, teaches a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss, Dilella** and **Houvener**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss, Dilella, Houvener** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, via local and wide area networks as disclosed by **Dilella** and **Houvener**, to achieve the

predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

None of **Weiss, Dilella, Houvener** nor **Geer** explicitly teaches a data processing system wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces via local and wide area networks as disclosed by **Dilella** and **Houvener**, for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

73. Regarding claim 102, **Weiss** teaches 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 (see drawing Figure 4:

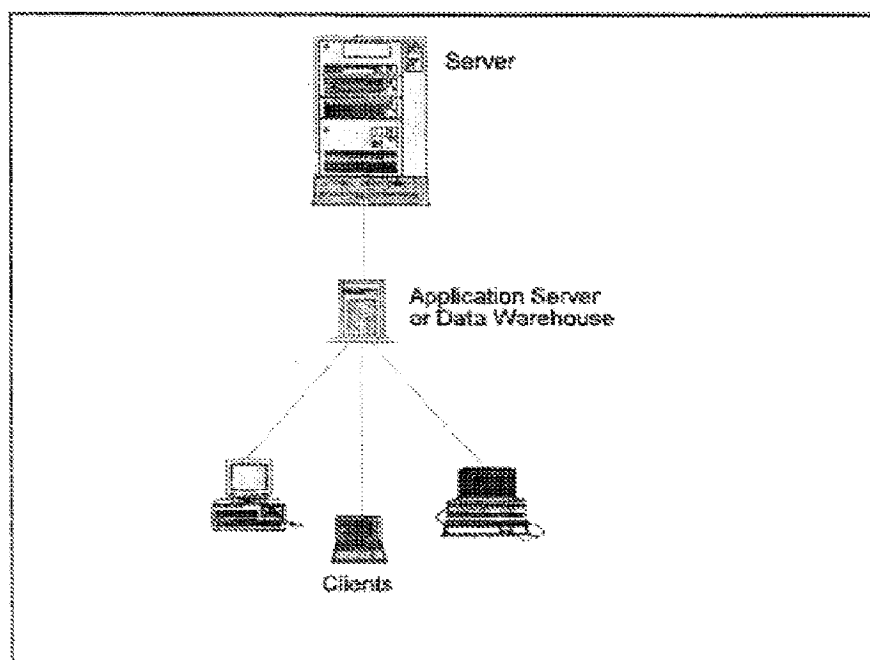


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21), comprising:

- a) at least one first network for transmitting data within a corresponding one of said one or more remote subsystems (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- b) at least one second network for transmitting data within a corresponding one of said at least one intermediate subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) at least one third network for transmitting data within a corresponding one of said at least one central subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect

computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and

- d) at least one network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one or more central subsystem (see disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16).

Weiss does not explicitly teach a communication network wherein the network for transmitting data within any one of the remote, intermediate or central subsystems is a local area network.

However, **Dilella** teaches the use of a conventional local area network to connect the various components internal to a banking system, including a data processing unit, data entry processor, image display terminals, and an encode and sort unit (see col. 2, lines 58-65 and drawing Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data within any one of a remote, intermediate or central subsystem as a local area network, since it would have merely involved the combination of known prior art elements (e.g., various computer components and a local area network to connect said components) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

Neither **Weiss** nor **Dilella** explicitly teaches a communication network wherein the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, is a wide area network.

However, **Houvener** teaches the use of a wide area network for connecting computer systems which are remotely geographically located (see disclosure of the use of a wide area network to connect a point of verification terminal with a number of geographically remote database storage sites, col. 5, lines 35-42, col. 6, lines 25-29 and 38-42, as well as drawing Figures 1, 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, as a wide area network, since it would have merely involved the combination of known prior art elements (e.g., various computer systems and a wide area network to connect said systems) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

None of **Weiss, Dilella** nor **Houvener** explicitly teach a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents.

Geer, however, teaches a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss, Dilella** and **Houvener**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss, Dilella, Houvener** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, via local and wide area networks as disclosed by **Dilella** and **Houvener**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

None of **Weiss, Dilella, Houvener** nor **Geer** explicitly teaches a data processing system wherein the data processed includes images of receipts, nor wherein the data is from credit card transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from credit card transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces via local and wide area networks as disclosed by **Dilella** and **Houvener**, for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose credit card receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from credit card transactions' obvious to an ordinary artisan at the time of the invention, since credit card transactions are a subset of transactions, and receipts serve to document transactions.

74. Regarding claim 110, **Weiss** teaches 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 (see drawing Figure 4:

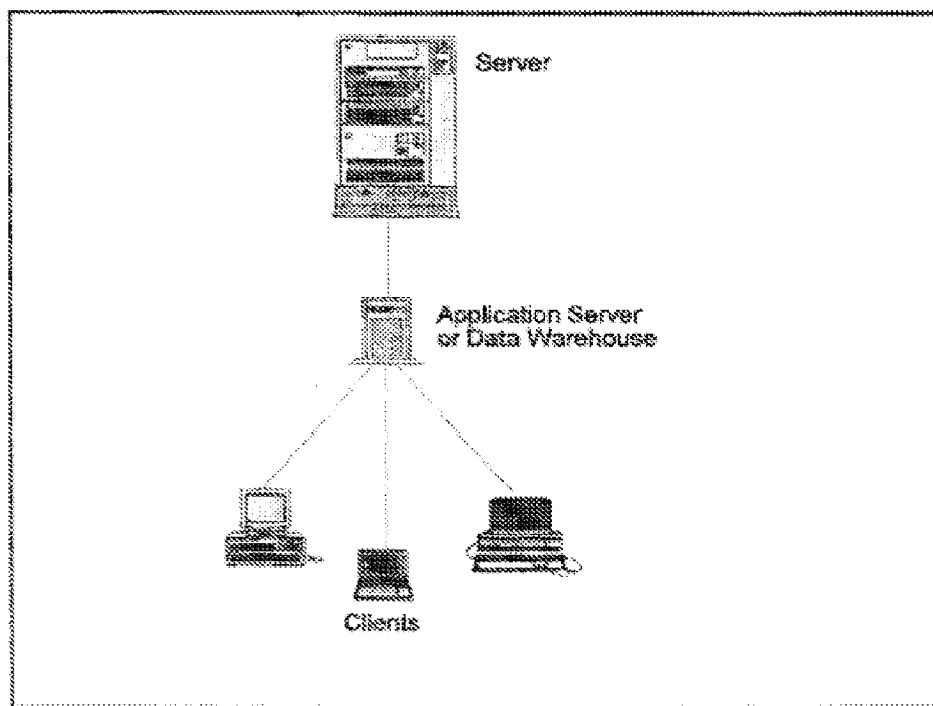


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21), comprising:

- a) at least one first network for transmitting data within a corresponding one of said one or more remote subsystems (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);

- b) at least one second network for transmitting data within a corresponding one of said at least one intermediate subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) at least one third network for transmitting data within a corresponding one of said at least one central subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and
- d) at least one network for transmitting data between said one or more remote subsystems, said at least one intermediate subsystem and said at least one or more central subsystem (see disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also

disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16).

Weiss does not explicitly teach a communication network wherein the network for transmitting data within any one of the remote, intermediate or central subsystems is a local area network.

However, **Dilella** teaches the use of a conventional local area network to connect the various components internal to a banking system, including a data processing unit, data entry processor, image display terminals, and an encode and sort unit (see col. 2, lines 58-65 and drawing Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data within any one of a remote, intermediate or central subsystem as a local area network, since it would have merely involved the combination of known prior art elements (e.g., various computer components and a local area network to connect said components) that would

reasonably have been expected to maintain their respective properties and functions after they had been combined.

Neither **Weiss** nor **Dilella** explicitly teaches a communication network wherein the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, is a wide area network.

However, **Houvener** teaches the use of a wide area network for connecting computer systems which are remotely geographically located (see disclosure of the use of a wide area network to connect a point of verification terminal with a number of geographically remote database storage sites, col. 5, lines 35-42, col. 6, lines 25-29 and 38-42, as well as drawing Figures 1, 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the network to transmit data between the remote and intermediate subsystems, and between the intermediate and central subsystems, as a wide area network, since it would have merely involved the combination of known prior art elements (e.g., various computer systems and a wide area network to connect

said systems) that would reasonably have been expected to maintain their respective properties and functions after they had been combined.

None of **Weiss, Dilella** nor **Houvener** explicitly teach a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents.

Geer, however, teaches a communication network wherein the data processing subsystem includes an imaging subsystem for capturing images of documents (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss, Dilella** and **Houvener**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss**, **Dilella**, **Houvener** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, via local and wide area networks as disclosed by **Dilella** and **Houvener**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

None of **Weiss**, **Dilella**, **Houvener** nor **Geer** explicitly teaches a data processing system wherein the data processed includes images of receipts, nor wherein the data is from internet transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from internet transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces via local and wide area networks as disclosed by **Dilella** and **Houvener**, for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose internet receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from internet transactions' obvious to an ordinary artisan at the time of the invention, since internet transactions are a subset of transactions, and receipts serve to document transactions.

75. Claims 46-50, 88-92, 97-101, 106-109, 114-117, 121 and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weiss** in view of **Geer** and **Patent Owner Admissions**.

76. The Requester has presented proposed arguments and rationale for rejecting claims 46-50, 88-92, 97-101, 106-109, 114-116, 121 and 122 based upon **Weiss, Geer** and **Patent Owner Admissions**, section VI.C, pages 161-225 of their request, as well as claim chart C. These arguments and rationale for rejecting the claims are adopted by the Office, as modified and further discussed below.

77. Regarding claim 46, **Weiss** teaches 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 (see drawing Figure 4:

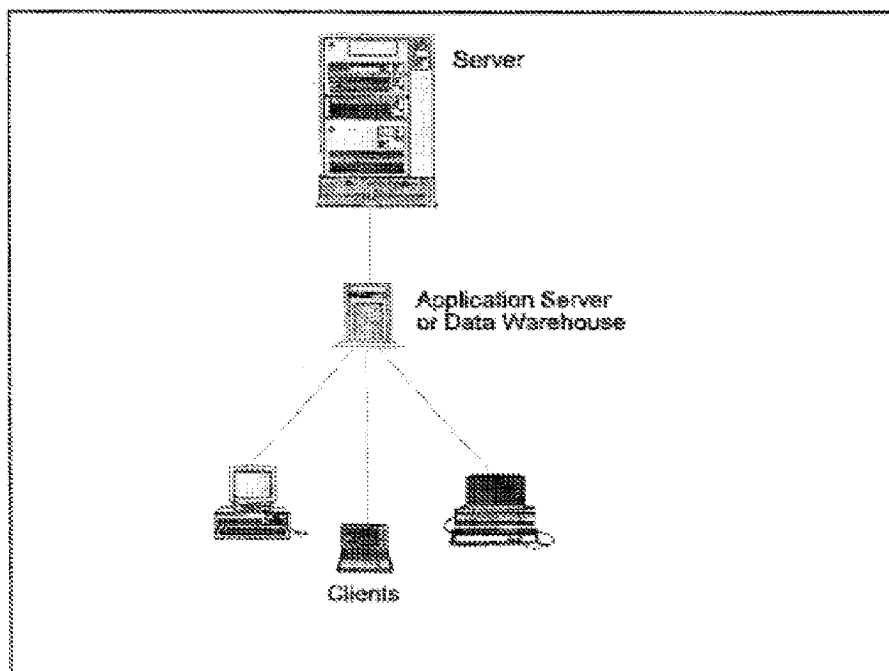


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21) comprising the steps of:

- a) transmitting data within the remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing

system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- b) transmitting data from each remote location to corresponding intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) transmitting data within the intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- d) transmitting data from each of the intermediate locations to corresponding central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and
- e) transmitting data within the central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Weiss does not explicitly teach a method including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of

ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Weiss** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

78. Regarding claim 47, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step includes the steps of:

- a) connecting each remote location to a corresponding intermediate location (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph).

79. Regarding claim 48, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step includes the steps of:

- a) connecting each intermediate location to an external communication network
(see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72);
and
- b) connecting the corresponding central locations to the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72).

80. Regarding claim 49, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into

frames and transmitting the frames through the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed packaging into frames and transmitting the frames being inherent when using Internet and WWW technologies which rely on TCP/IP).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

81. Regarding claim 50, **Geer** additionally teaches a method for transmitting data wherein data is obtained from (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 26-50; see also col. 8, lines 48-54 et seq.).

82. Regarding claim 88, **Weiss** teaches a method for transmitting data within and between one or more remote subsystems that provide remote subsystem identification information, 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 (see drawing Figure 4:

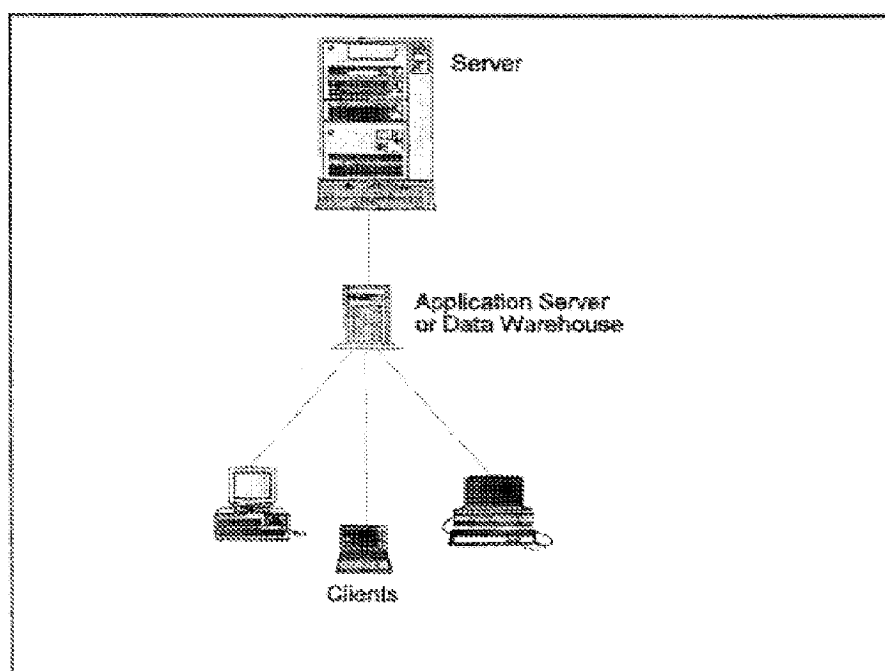


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure of the desirability of connecting the respective servers of the three-tier

architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed identification information being inherent when using Internet and WWW technologies which rely on TCP/IP; see also disclosure of a directory service which stores the current address for all network servers, section C.4, page 37) comprising:

- a) transmitting data within the remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);
- b) transmitting data from each remote location to corresponding intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see

also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);

c) transmitting data within the intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

d) transmitting data from each of the intermediate locations to corresponding central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of

a single centralized database for enterprise-wide computing, section A.5, page 16); and

e) transmitting data within the central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Weiss does not explicitly teach a method including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Weiss** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

83. Regarding claim 89, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step includes the steps of:

- a) connecting each remote location to a corresponding intermediate location (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph).

84. Regarding claim 90, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step includes the steps of:

- a) connecting each intermediate location to an external communication network
(see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72);
and
- b) connecting the corresponding central locations to the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72).

85. Regarding claim 91, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into

frames and transmitting the frames through the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed packaging into frames and transmitting the frames being inherent when using Internet and WWW technologies which rely on TCP/IP).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

86. Regarding claim 92, **Geer** additionally teaches a method for transmitting data wherein data is obtained from (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 26-50; see also col. 8, lines 48-54 et seq.).

87. Regarding claim 97, **Weiss** teaches 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 (see drawing Figure 4:

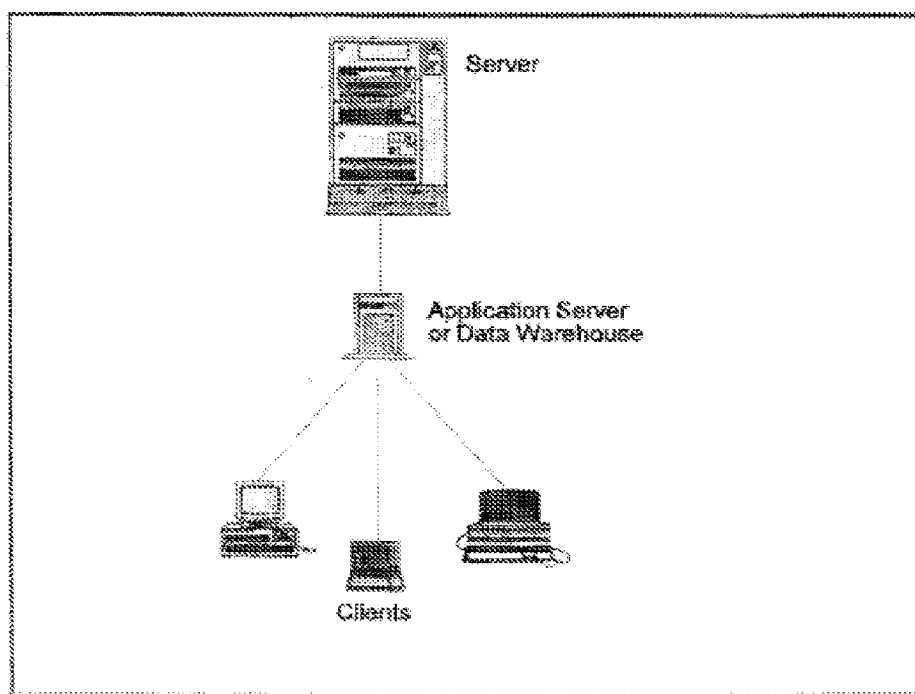


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21) comprising:

- a) transmitting data within the remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);
- b) transmitting data from each remote location to corresponding intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) transmitting data within the intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs,

page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

d) transmitting data from each of the intermediate locations to corresponding central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and

e) transmitting data within the central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to

connect computers, page 15, first paragraph and page 17, last paragraph;
see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Weiss does not explicitly teach a method including the step of capturing an image of documents and extracting data therefrom, and whereby the intermediate locations call the remote locations.

Geer, however, teaches a method including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.), and whereby the intermediate locations call the remote locations (see disclosure that transmissions between the payee, depository bank and

payment system occurs on a predetermined schedule and is coordinated by a control unit, col. 10, lines 7-27 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Weiss** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

88. Regarding claim 98, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step includes the steps of:

- a) connecting each remote location to a corresponding intermediate location (see drawing Figure 4; see also disclosure regarding three-tier models, section

B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph); and

b) connecting the intermediate locations to corresponding remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph).

89. Regarding claim 99, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step includes the steps of:

a) connecting each intermediate location to an external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve

maximum distribution, section C.2, page 62, and section E.2, pages 71-72);
and

- b) connecting the corresponding central locations to the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72).

90. Regarding claim 100, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed packaging into frames and transmitting the frames being inherent when using Internet and WWW technologies which rely on TCP/IP).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

91. Regarding claim 101, **Geer** additionally teaches a method for transmitting data wherein data is obtained from (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 26-50; see also col. 8, lines 48-54 et seq.).

92. Regarding claim 106, **Weiss** teaches 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 (see drawing Figure 4:

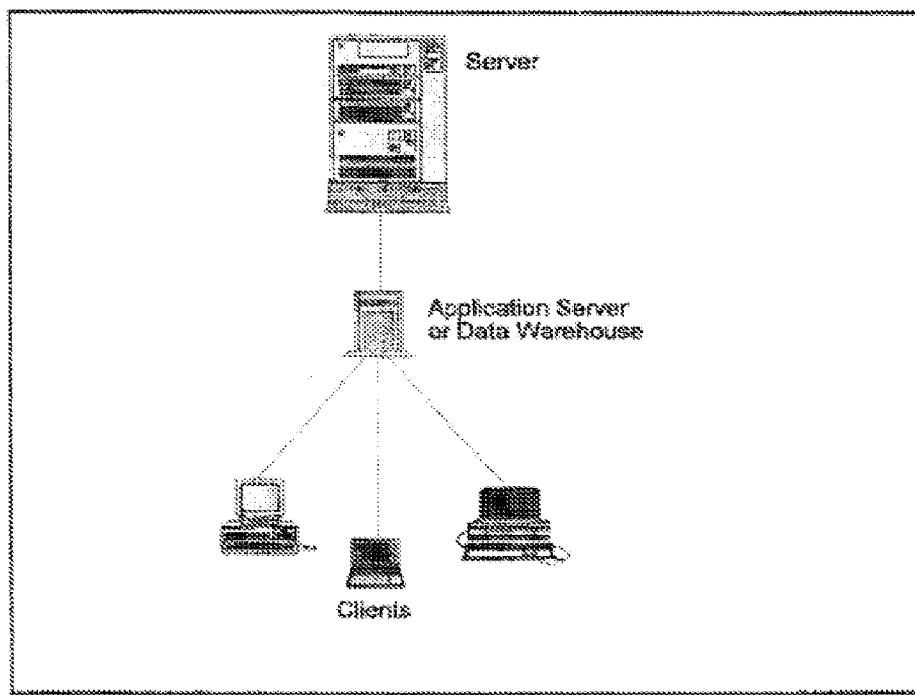


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21) comprising the steps of:

- a) transmitting data within the remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing

system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- b) transmitting data from each remote location to corresponding intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) transmitting data within the intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- d) transmitting data from each of the intermediate locations to corresponding central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and
- e) transmitting data within the central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Weiss does not explicitly teach a method including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of

ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Weiss** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts, nor wherein the data is from credit card transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from credit card transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1,

lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose credit card receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from credit card transactions' obvious to an ordinary artisan at the time of the invention, since credit card transactions are a subset of transactions, and receipts serve to document transactions.

93. Regarding claim 107, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step comprising:

- a) connecting each remote location to a corresponding intermediate location (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph); and

b) connecting the intermediate locations to corresponding remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph).

94. Regarding claim 108, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step comprising:

a) connecting each intermediate location to an external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72); and

b) connecting the corresponding central locations to the external communication network (see disclosure of the desirability of connecting the respective

servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72).

95. Regarding claim 109, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into frames and transmitting the frames through the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed packaging into frames and transmitting the frames being inherent when using Internet and WWW technologies which rely on TCP/IP).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

96. Regarding claim 114, **Weiss** teaches 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 (see drawing Figure 4:

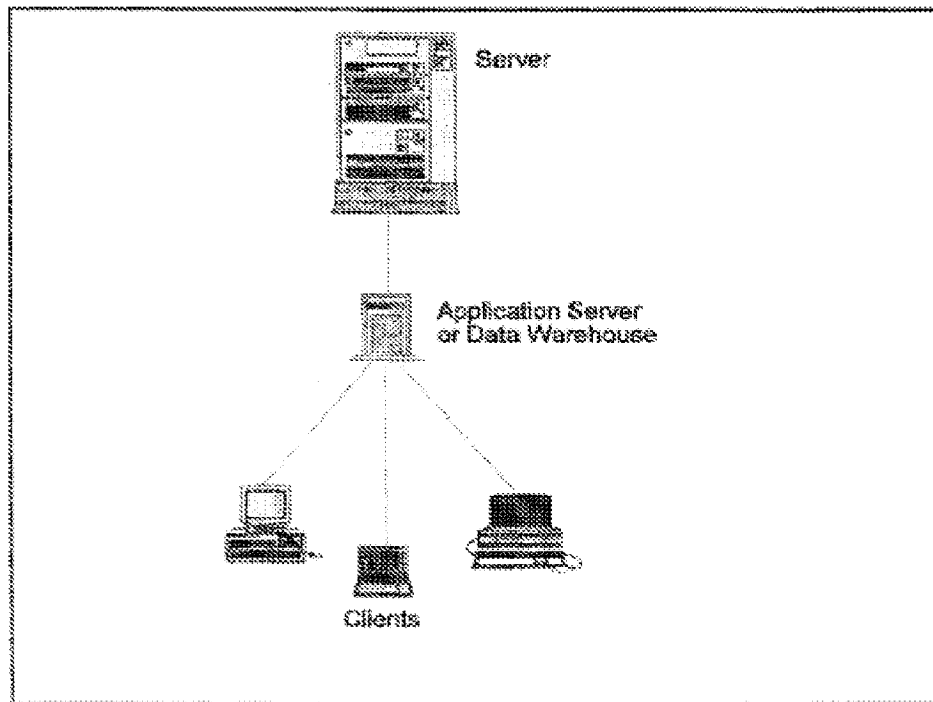


Figure 4 Three-tier Client/Server Architecture

see also disclosure regarding three-tier models, section B.2, pages 19-21) comprising the steps of:

- a) transmitting data within the remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);
- b) transmitting data from each remote location to corresponding intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- c) transmitting data within the intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs,

page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

d) transmitting data from each of the intermediate locations to corresponding central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and

e) transmitting data within the central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to

connect computers, page 15, first paragraph and page 17, last paragraph;
see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Weiss does not explicitly teach a method including the step of capturing an image of documents and extracting data therefrom.

Geer, however, teaches a method including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks or other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Weiss** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts, nor wherein the data is from internet transactions.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts [such as from internet transactions] and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1, lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

To the extent that **Patent Owner Admissions** fails to explicitly disclose internet receipts, the broad disclosure of the extraction of data from receipts would have rendered the claimed 'transmission of data comprising data from internet transactions' obvious to an ordinary artisan at the time of the invention, since internet transactions are a subset of transactions, and receipts serve to document transactions.

97. Regarding claim 115, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each remote location to corresponding intermediate locations step comprising:

- a) connecting each remote location to a corresponding intermediate location (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph); and
- b) connecting the intermediate locations to corresponding remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph).

98. Regarding claim 116, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step comprising:

a) connecting each intermediate location to an external communication network
(see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72);
and

b) connecting the corresponding central locations to the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72).

99. Regarding claim 117, **Weiss** additionally teaches a method for transmitting data wherein said transmitting data from each intermediate location to corresponding central locations step further comprises the steps of packaging the transaction data into

frames and transmitting the frames through the external communication network (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed packaging into frames and transmitting the frames being inherent when using Internet and WWW technologies which rely on TCP/IP).

Furthermore, **Patent Owner's Admissions** discloses at col. 12, lines 46-55 that a person of ordinary skill in the art would be familiar with the use of the frame relay protocol for transmitting data via packets.

100. Regarding claim 121, **Weiss** teaches a method for transmitting data within and between at least one remote subsystem, at least one intermediate subsystem and at least one central subsystem (see drawing Figure 4:

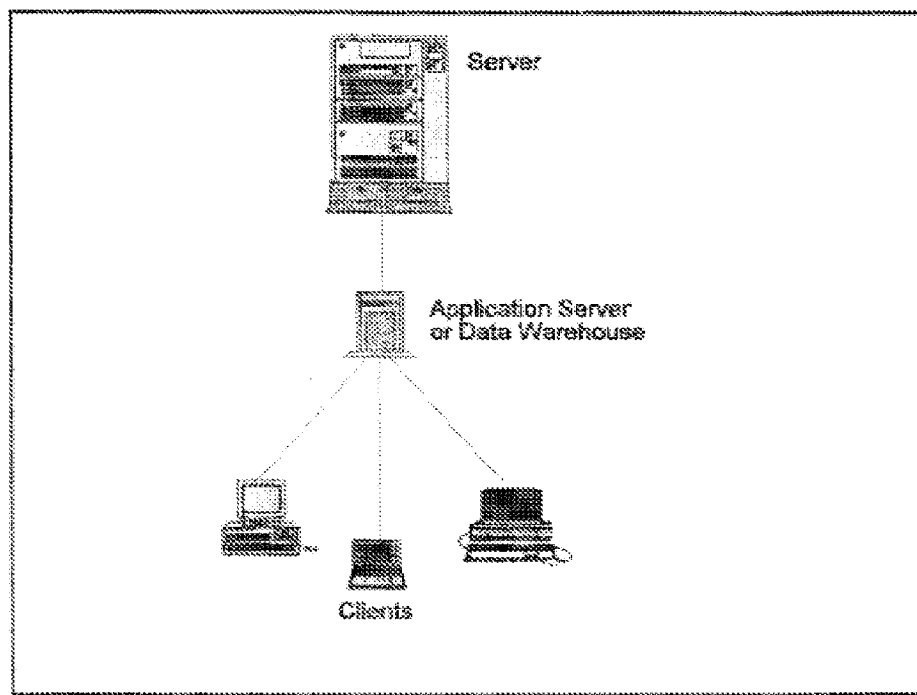


Figure 4 Three-tier Client/Server Architecture

;

see also disclosure regarding three-tier models, section B.2, pages 19-21), said method comprising:

- a) arranging said at least one remote subsystem, said at least one intermediate subsystem, and said at least one central subsystem in a tiered manner (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs);

- b) each of said at least one central subsystem communicating with said at least one intermediate subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph et seq.);
- c) each of said at least one intermediate subsystem communicating with said at least one remote subsystem (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph et seq.);
- d) transmitting data within the remote locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing

system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- e) transmitting data from each remote location to corresponding intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph);
- f) transmitting data within the intermediate locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system);

- g) transmitting data from each of the intermediate locations to corresponding central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16); and
- h) transmitting data within the central locations (see drawing Figure 4; see also disclosure regarding three-tier models, section B.2, pages 19-21; see also disclosure regarding computers which are connected via LANs and WANs, page 7, third bulleted item; see also disclosure of the use of a LAN to connect computers, page 15, first paragraph and page 17, last paragraph; see also disclosure of the use of a single centralized database for enterprise-wide computing, section A.5, page 16; the examiner also points out that transmitting data within a data processing system is inherent, since in order to process data, the data must be transmitted from component to component [such as from storage to memory to processor, etc.] within the system).

Weiss does not explicitly teach a method including the step of capturing an image of documents and extracting data therefrom, nor wherein the data is transmitted in a secure fashion.

Geer, however, teaches a method including the step of capturing an image of documents and extracting data therefrom (see disclosure that checks of other financial instruments are scanned and the information forwarded via a network to the payee's depository bank, col. 4, line 46 through col. 5, line 9; see also col. 7, lines 38-50; see also col. 8, lines 48-54 et seq.), as well as disclosing measures taken to ensure that data is transmitted in a secure fashion, col. 14, lines 17-39 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the imaging subsystem disclosed by **Geer** to capture data from documents to be processed and transmitted across the three-tier network disclosed by **Weiss**, since gathering data via an imaging subsystem increases the efficiency over previous manual methods of inputting data.

The combination of **Weiss** and **Geer** simply teaches gathering data from prior art imaging tools to yield the predictable result of transmitting that data over a three-tier

architecture. Given the known drawbacks to using two-tier systems and the known benefits of using three-tier systems (disclosed in **Weiss**, pages 17-20), a person of ordinary skill in the art would have been motivated to use a three-tier system, as in **Weiss**, to electronically transmit data from captured images, as in **Geer**, to achieve the predictable results of transmitting image data over a scalable, secure, efficient, and reliable distributed computing system.

Neither **Weiss** nor **Geer** explicitly teaches a method for transmitting data wherein the data processed includes images of receipts.

Patent Owner Admissions, however, teaches the archiving of information from paper receipts and documents acquired from customers at a central facility at col. 1, line 58 through col. 2, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the three-tiered network architecture disclosed by **Weiss** to provide communications interfaces for the information processing systems including an imaging subsystem disclosed by **Geer** in order to process data acquired from receipts, because receipts contain valuable information (see **Patent Owner Admissions**, col. 1,

lines 25-39), and furthermore because receipts contain information that can be used for market analysis (see **Patent Owner Admissions**, col. 1, lines 40-45).

101. Regarding claim 122, **Weiss** additionally teaches a method for transmitting data further comprising uniquely identifying the at least one remote subsystem used by a customer (see disclosure of the desirability of connecting the respective servers of the three-tier architecture via the World Wide Web (WWW) in order to achieve maximum distribution, section C.2, page 62, and section E.2, pages 71-72; the claimed identification information being inherent when using Internet and WWW technologies which rely on TCP/IP; see also disclosure of a directory service which stores the current address for all network servers, section C.4, page 37).

Conclusion

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 5,910,988 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

The Patent Owner is reminded that any proposed amendment to the specification and/or claims in the reexamination proceeding must comply with the provisions of 37 C.F.R. § 1.530(d)-(j), must be formally presented pursuant to 37 C.F.R. § 1.52(a) and (b), and must include any fees required by 37 C.F.R. § 1.20(c). See MPEP § 2250(IV) for examples to assist in the preparation of proper amendments in reexamination proceedings.

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37

CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

All correspondence relating to this ex parte reexamination proceeding should be directed:

By EFS-Web: Registered Users may submit correspondence via EFS-Web, at <https://efs.uspto.gov/efile/myportal/efs-registered>.

By Mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are "soft-scanned" (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submission after the "soft scanning" process is complete.

Any inquiry concerning this communication should be directed to the Central
Reexamination Unit at telephone number 571-272-7705.

/Luke S. Wassum/
Primary Examiner
Art Unit 3992

Conferees:

/Michael J. Yigdall/
Primary Examiner, Art Unit 3992

/Sudhanshu C. Pathak/
Supervisory Patent Examiner
Art Unit 3992

lsw
30 July 2013