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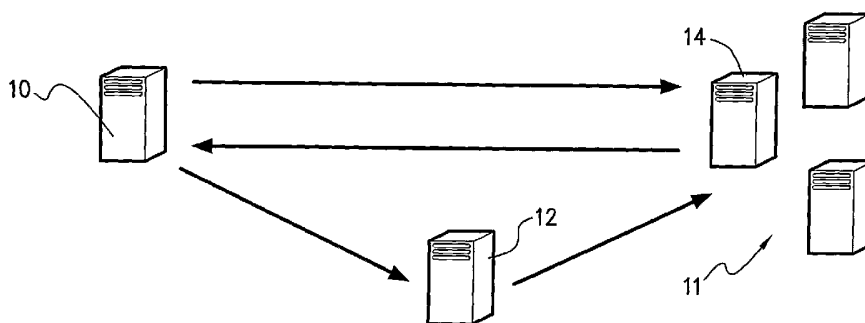
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(54) Title: COMMUNICATION SYSTEM



(57) Abstract: A communication and data exchange system for exchanging data, information, communications, accounts applications and other business services between separate registered clients (11) includes a secure, central connection management server (12) which maintains client details, including security data relating to each client, collaboration information concerning clients that are collaborating, and a central web service to facilitate maintenance of the system. The server (12) has a register of the connected parties (11) and directs communications from one party to a selected one or more of other connected parties. Peer-to-peer software downloaded from the server to the clients enable them to communicate directly between themselves without server interface. A collaboration class library contains logic for one or more of data access, security certificate management, logging, access control, peer-to-peer messaging logic and notification activities. The class library also implements collaboration rules and security.

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Communication System

Field of the Invention

This invention relates to a communication system and relates particularly to a
5 system that enables groups of people to communicate and exchange data and information.

The invention is particularly suitable to facilitate communication between professional businesses, such as law firms and law departments of corporations. However, the invention has wider application and may be useful in many service
10 industries including health, insurance, construction, engineering, banking and finance and many others. For the purposes of the present description, however, the invention will be described in terms of its application to the legal profession, although it will be understood that the invention is not so limited.

Background of the Invention

15 Legal and commercial business requires that information, instructions and accounts be exchanged between law firms and their clients, and between different law firms, and for the various parties to be able to initiate applications or conduct operations in relation to that information. While various communication protocols exist utilising either direct data connection or internet connection, currently known
20 systems have limitations which prevent the operation of applications other than those directly loaded on the systems of the connected users.

In most instances, the known systems require that the communicating parties use the same operating systems and, in many cases, the identical proprietary software.

Further, systems currently in use require the use of servers interposed between
25 the various users either directly in the internet environment or within local area networks. Such servers can give rise to bottle necks in the transfer of information between connected parties.

It is therefore desirable to provide an improved communications system which obviates at least some of the disadvantages of currently known systems.

30 It is also desirable to provide a communications and data exchange system which utilises peer-to-peer connectivity to facilitate sharing of information.

It is also desirable to provide a communications system that is able to provide real time collaboration between discreet practice management databases.

It is also desirable to provide a collaborative network utilising a range of existing technologies including the Microsoft ".Net" and XML web services.

It is also desirable to provide a communications and data exchange system which is operated using a web browser, such as "Internet Explorer" (trade mark).

5 **Summary of the Invention**

In accordance with one aspect of the invention there is provided a communication system for exchange of information between connected computers of different parties including a connection management server to register the connected parties and to direct initial communication from one party to a selected one or more of
10 other connected parties, and peer-to-peer software to enable the connected parties to communicate directly without server interface.

Preferably, the peer-to-peer software creates a collaborative network using existing technologies including .Net, XML web services and the like. Preferably, the software enables practice management and information exchange to take place directly
15 between the connected parties without the need for an interposed server to control inter-parties communications.

In preferred embodiments, the connection management server utilises "thin client" architecture to enable the software to be accessed using a web browser, such as Internet Explorer. The server may therefore be located at any suitable location to
20 provide access to the software necessary to manage the peer-to-peer network. Using the peer-to-peer software, a corporation law department, for example, is then able to communicate directly with and exchange information with a law firm of its choice which is connected to the system. Once connected, the peer-to-peer software facilitates information exchange without an interposed network server. This facilitates real time
25 communication and creates a fully auditable and searchable database. The system enables the corporation and the external law firm to work on documents and analyse financial data in a secure environment. Of course, in the preferred embodiments, the system also enables a plurality of law firms and/or a plurality of clients to communicate on one or more selected matters.

30 Still further, in preferred embodiments, the software will allow for the analysis of matters on a project by project basis. A company may create a path for their external law firm(s) which will integrate directly with Outlook (trade mark) or other calendar/email system. This thereby ensures work flow is implemented between the parties, creating time and cost efficiencies for both the corporate counsel and law

firm(s). In addition, the software of preferred embodiments will allow legal firms to receive documentation using, for example, QuickBrief (trade mark), and be able to invoice the corporate counsel electronically.

Thus, law firms will be able to gain work through the "QuickBrief" (trade mark) system, whereby a corporate client will be able to send a matter to a specific lawyer at a firm in a very secure on-line environment in real time.

According to a further aspect of the invention there is provided a communication and data exchange system for exchange of information between connected computers of different parties comprising:

10 a central connection management server which maintains client details including security data relating to each client, collaboration information concerning clients that are collaborating, and a central web service to facilitate maintenance of the system,

the server further maintaining a register of the connected parties and operating
15 to direct a communication from one party to a selected one or more of other connected parties, and

peer-to-peer software downloadable from the server to new clients to enable the connected parties to communicate directly without server interface.

Preferably, the system further including a collaboration class library that
20 contains logic for one or more of data access, security certificate management, logging, access control, peer-to-peer messaging logic and notification activities.

More preferably, the class library further implements collaboration rules, notification and security.

In particular embodiments, the server is hosted in a secure zone behind an edge
25 firewall, a DMZ and a backend firewall. Preferably, all data is sent over SSL between clients, each client having a security certificate issued which is sent with each transmission so as to be validated and the transmission authenticated. The communication transmissions preferably utilise WSDL and SOAP protocols to facilitate the communication between different computers using different operating
30 systems.

In accordance with another aspect of the invention there is provided a method of communicating data and exchanging information between connected computers of different parties comprising the steps of:

establishing a central server,

connecting a plurality of client computers to the server using the internet,
providing peer-to-peer software to each client computer,
registering each of the connected client parties and directing an initial
communication from one party to a selected one or more of other connected parties to
5 establish a peer-to-peer communication between the parties, and
facilitating multiple inter-party connections enabling collaboration between the
connected parties whereby the parties are able to exchange information without server
interface.

In order that the invention is more readily understood, embodiments thereof will
10 be described with reference to the accompanying drawings.

Description of the Drawings

Figure 1 illustrates one form of business communications system which is
utilised in embodiments of the present invention;

Figure 2 illustrates a second communication system;

15 Figure 3 is a schematic illustration of one application of the present invention;

Figure 4 is a schematic illustration of the communication operation of the
embodiment illustrated in Figure 3;

Figure 5 illustrates the security features of the described embodiments; and

Figure 6 diagrammatically shows the process of authentication of a certificate in
20 accordance with one embodiment.

Description of Preferred Embodiments

Embodiments of the present invention have been developed utilising existing
platforms and software, examples of which are as follows:

a) ".net"

25 This is a set of software technologies of Microsoft developed for connecting
information, people, systems and devices. It enables a high level of software
integration through the use of web services - small, discreet, building block
applications that connect to each other as well as to other, larger applications over the
internet.

30 b) "asp.net"

This is the engine for web based applications and XML web services. Asp.net
brings rapid application development to the server. As part of the class library in the
.net framework, asp.net pages use a compiled, event driven programming model that

improves performance and enables the separation of application logic and user interface.

c) XML web services

These are the fundamental building blocks in the move to distributed computing on the internet. Open standards and the focus on communication and collaboration among people at applications have created an environment where XML web services are becoming the platform for application integration. In embodiments of the invention, applications are constructed using multiple XML web services from various sources that work together regardless of where they reside or how they were implemented.

d) Active Directory

The Active Directory (trade mark) service is a central component of the Windows operating system platform, providing the means to manage the identities and relationships that make up network environments. Active Directory in Windows Server 2003 introduces key features ensuring that it is one of the most flexible directory structures in the market place. As directory-enabled applications become more prevalent, organisations are able to utilise the capabilities of active directory to manage even the most complicated enterprise network environments. From internet data centres to large distributed branch office enterprises, the improvements provided by Windows Server 2003 simplify administration and increase performance and efficiency, making it a truly versatile solution.

e) DMZ

In computer networks, a DMZ (demilitarized zone) is a computer host or small network inserted as a "neutral zone" between a company's private network and the outside public network. It prevents outside users from getting direct access to a server that has company data.

f) SSL (Secure Sockets Layer)

SSL is a protocol developed for transmitting private documents via the Internet. SSL uses a cryptographic system that uses two keys to encrypt data – a public key known to everyone and a private or secret key known only to the recipient of the message.

Referring to Figure 1, an application is illustrated in which data transfer is arranged between remote computers (8) and (9) using WSDL (web service description language), which is an XML-based language used to describe the services of a business

and to enable others to access the services electronically. The language is a basis for UDDI (Universal Description, Discovery Integration) which is a registry system for businesses to list themselves on the Internet. By using UDDI, law firms and companies may be registered with a connection management server (12) so as to be identified, and
5 the businesses identified thereby, enabling companies to find one another on the web. Once found, the companies are then able to communicate and exchange information, as indicated by arrows A, B and C.

By using programs such as SOAP (Simple Object Access Protocol) companies using different operating systems, such as Linux, Microsoft, Apple or other operating
10 systems are able to communicate with each other. SOAP specifies how to encode an http header and an XML file so that a program in one computer (8), such as a smart client spreadsheet application, can call a program in another computer (9) and pass information notwithstanding that the two computers use different operating systems.

Referring to Figure 2, XML web services enables users to develop applications
15 that directly connect two or more client peer computers without an intervening server. Such peer-to-peer (P2P) services enable two client computers (16) and (18) to both expose and consume information, largely eliminating the central server (12) and cutting down on network and processing bottle necks. Whether contacting a known peer or initially discovering one through the central connection management server (12), and
20 then switching to interact directly as hereinafter described, peer-to-peer applications expand the possible device and application interactions while largely eliminating server dependencies. In this way, highly collaborative communications and solutions can take form. In embodiments of the present invention, the peer-to-peer software provides innovative use of practice management software by providing real time collaboration
25 between, for example, the corporate counsel and their selected collaborative law firms that will benefit companies of all sizes and in all industries.

As further illustrated in Figure 3, a corporate counsel (14) running a software program "LegalNet" (trade mark) in accordance with embodiments of the present invention connects over the internet (20) with a law firm (10) selected from a group of
30 firms (11) identified through the central, managing network server (12). There is no limit to the number of law firms (11) that may then be connected to the corporate LegalNet system provided they all agree to the communication. As further shown in Figure 4, when the law firm (10) registers with the LegalNet central server (12), all other legal counsel (11) are notified by the server (12). A corporation (14) (or another

law firm) that wishes to establish a commercial relationship with the firm (10) then initiates collaboration communication protocol with the firm (10) and it is established when agreements to communicate are made. Matters are then able to be sent directly between the law firms (10) and the legal counsel at the corporation (14).

5 Before collaboration takes place, the LegalNet software is installed at both the corporation (14) and law firm (10). When a law firm (10) has an installation for the first time, it is assigned a Firm ID and entered into a "firm database" on the server (12). If a new party requires collaboration with an existing party, their certificate is installed into an access control table. Optionally, a contact list for individual or group contacts
10 may also be entered.

Where an existing installation is upgraded to a collaborative version in accordance with embodiments of the invention, collaboration components enabling establishment of collaboration using peer-to-peer with other firms or corporations are installed.

15 When the software has been installed and the user clients are registered with the central management server (12), a user can review the list of registered clients and decide to collaborate with another user, or more than one, in relation to a matter. The registered user is able to communicate peer-to-peer with any other registered user provided that both agree to the collaboration. To set up a collaboration, the software
20 provides appropriate functionality for one party to communicate with the other, in the manner shown in Figure 4.

A collaboration web service exposes an API (application program interface) to enable collaboration but delegates most functionality to a collaboration class library which implements collaboration rules, notification, security, access control, etc. The
25 collaboration class library contains logic for data access, certificate management, logging, access control, P2P messaging logic and notification.

The central management server (12) includes a web service and an administrative web application for maintaining and configuring the P2P network. The web application provided the data entry pages for entering and updating data about
30 firms, contact lists, contact details. The web application also has a collaborator page showing all firms that have collaboration installed, message pages and pending task pages. The web service handles requests related to maintenance, requests for collaboration, requests for firm lists and contact lists and details of client changes.

Of course, in an internet environment, security is paramount. In the illustrated embodiments, the connection management server (12), and associated SQL server (12a) is hosted in a secure zone behind an initial edge firewall (21) and a backend firewall (22) and also using a DMZ (23) to isolate the server (12) from the internet, as shown in Figure 5, so as to prevent breach of security. Any requests (X) from external parties are filtered and are passed to the server (12) only if the request is deemed valid. Security is handled at the IIS and application level. As shown in Figure 6, IIS (33) handles the majority of the security requirements. IIS (33) acts as a gatekeeper and will only allow authorised users with a valid Certificate (26) to access the web site (34).

10 The security architecture addresses several issues including secure transmission of data, authentication and identification and access control. To prevent data being intercepted by a third party, all data is sent over SSL (35) between the client and the collaborative service. Each installation has an X.509 encryption certificate (26) which is installed in IIS. The collaboration web service (36) is then deployed to IIS and is
15 accessible on port 443.

For authentication and authorisation, each user sends the X.509 certificate (26) with each transmission to the collaboration web service (36). This enables the server (12) to identify with 100% certainty who is attempting to access the web service. The certificate is validated by a root certificate authority.

20 Once the collaboration service knows that the data channel is secure and that the client is valid, it has to determine if the client is an authorised collaborator. Any organisation that is not listed as a collaborator will be refused access to the web service.

The advantages for the corporate lawyer (14) and a law firm (12) alike in transacting business through the peer-to-peer software include:

- 25 a) the system ensures that the law firm (14) accepts the brief and agrees to communicate;
- b) estimates for fees and disbursements are obtained that are tracked in the database operated by the corporation (14);
- c) the law firm (14), and associated teams, are notified of all relevant dates,
30 attributes and documents;
- d) all members of an external firm's team are tracked; and
- e) a full audit trail is retained.

Another significant advantage of the system of these embodiments of the invention is that financial data is able to be electronically communicated between the

relevant parties. Most corporate counsel have large legal expenditure but many are unable to effectively track that expenditure. Law firms will be able to provide a better service to clients by being able to constantly update status on matters of work, specific documentation as well as electronically invoicing clients and providing better financial
5 management.

As previously indicated, the peer-to-peer software utilises "thin client" architecture so that the software can be opened using a normal web browser. A key advantage of the system of the embodiments of the invention described, and particularly the peer-to-peer software, is that all data and software can be stored on the
10 central management server which allows changes to made to all software for all users without the need to reinstall the software on each user's personal desktop computer. Also, provided that the user has external access through relevant fire walls, a user is able to access the system from anywhere in the world.

By enabling law firms and corporate counsel, and others, to have discreet
15 databases that can talk to each other peer-to-peer, information transfer is enhanced and is secure.

CLAIMS

1. A communication and data exchange system for exchange of information between connected computers of different parties including a connection management
5 server to register the connected parties and to direct initial communication from one party to a selected one or more of other connected parties, and peer-to-peer software to enable the connected parties to communicate directly without server interface.

2. A communication and data exchange system according to claim 1 wherein
10 the peer-to-peer software creates a collaborative network using technologies including ".Net" and XML web services.

3. A communication and data exchange system according to claim 1 or claim 2 wherein the peer-to-peer software allows practice management, data and information
15 exchange to take place directly between the connected parties without an interposed server controlling the inter-parties communications.

4. A communication and data exchange system according to any one of claims 1 to 3 wherein the connection management server utilises "thin client"
20 architecture to enable the peer-to-peer software to be accessed using a web browser.

5. A communication and data exchange system according to any one of the preceding claims wherein a plurality of businesses communicate with each other on one or more selected matters using the peer-to-peer software.

25

6. A communication and data exchange system for exchange of information between connected computers of different parties comprising:

a central connection management server which maintains client details including security data relating to each client, collaboration information concerning
30 clients that are collaborating, and a central web service to facilitate maintenance of the system,

the server further maintaining a register of the connected parties and operating to direct a communication from one party to a selected one or more of other connected parties, and

peer-to-peer software downloadable from the server to new clients to enable the connected parties to communicate directly without server interface.

7. A communication and data exchange system according to claim 6 further
5 including a collaboration class library that contains logic for one or more of data access, security certificate management, logging, access control, peer-to-peer messaging logic and notification activities.

8. A communication and data exchange system according to claim 7 wherein
10 the class library further implements collaboration rules, notification and security.

9. A communication and data exchange system according to claim 7 wherein
the server is hosted in a secure zone behind an edge firewall, a DMZ and a backend
firewall.

15

10. A communication and data exchange system according to any one of
claims 6 to 9 wherein all data is sent over SSL between clients, each client having a
security certificate issued which is sent with each transmission so as to be validated and
the transmission authenticated.

20

11. A communication and data exchange system according to any one of
claims 6 to 10 wherein the communication transmissions utilise WSDL and SOAP
protocols to facilitate the communication between different computers using different
operating systems.

25

12. A method of communicating data and exchanging information between
connected computers of different parties comprising the steps of:

establishing a central server,

connecting a plurality of client computers to the server using the internet,

30 providing peer-to-peer software to each client computer,

registering each of the connected client parties and directing an initial
communication from one party to a selected one or more of other connected parties to
establish a peer-to-peer communication between the parties, and

facilitating multiple inter-party connections enabling collaboration between the connected parties whereby the parties are able to exchange information without server interface.

13. A method of communicating data and exchanging information between
5 connected computers of different parties according to claim 12 including the step of accessing a list of registered clients on the server to determine an appropriate collaborative partner, and subsequently communicating directly with the partner using the peer-to-peer software.

10 14. A method of communicating data and exchanging information between connected computers of different parties according to claim 12 or claim 13 further including the steps of providing a security certificate to each registered client, and checking each inter-client communication for validity using the certificate.

15 15. A method of communicating data and exchanging information between connected computers of different parties according to any one of claims 12 to 14 including the steps of providing a collaborating library containing logic for one or more of data access, security certificate management, logging, access control, peer-to-peer messaging logic and notification activities.

20 16. A communication and data exchange system for exchange of information between connected computers of different parties substantially as hereinbefore described with reference to the accompanying drawings

25 17. A method of communicating data and exchanging information between connected computers of different parties having the steps substantially as hereinbefore described.

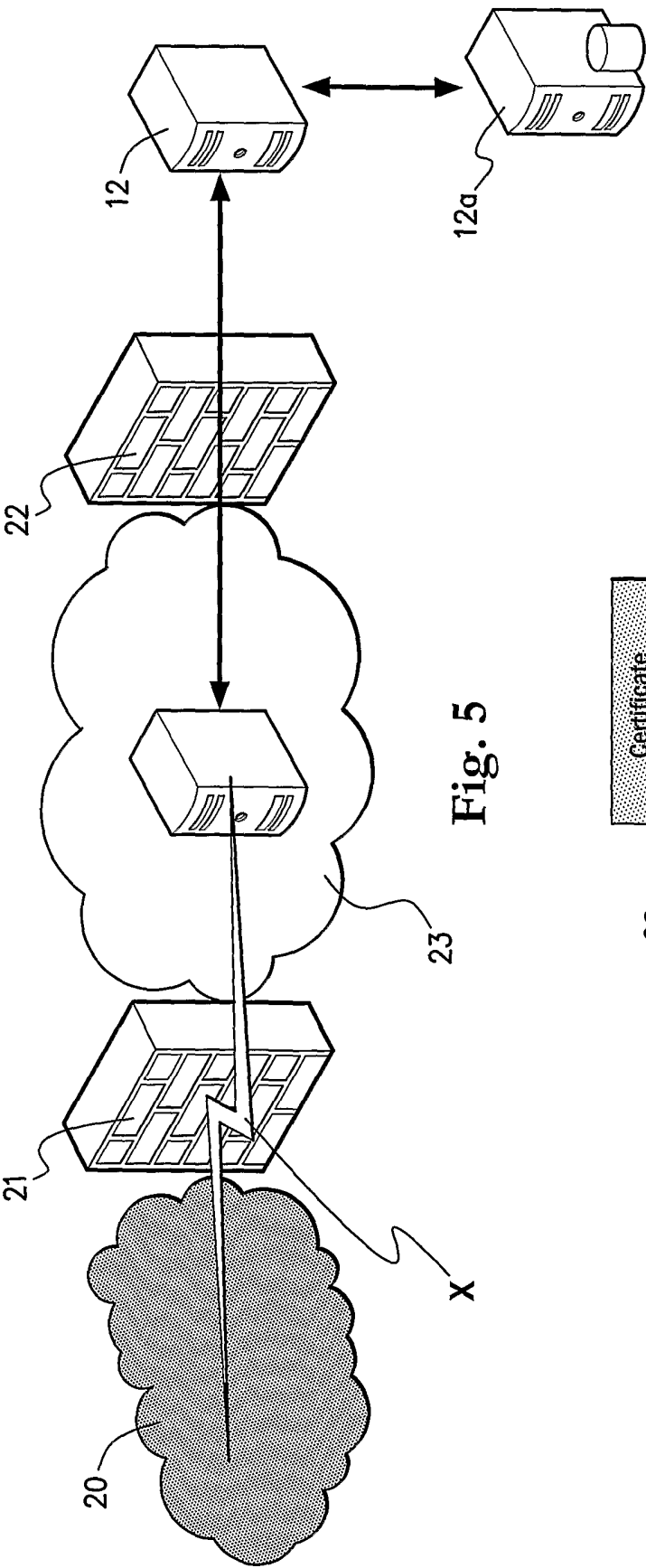


Fig. 5

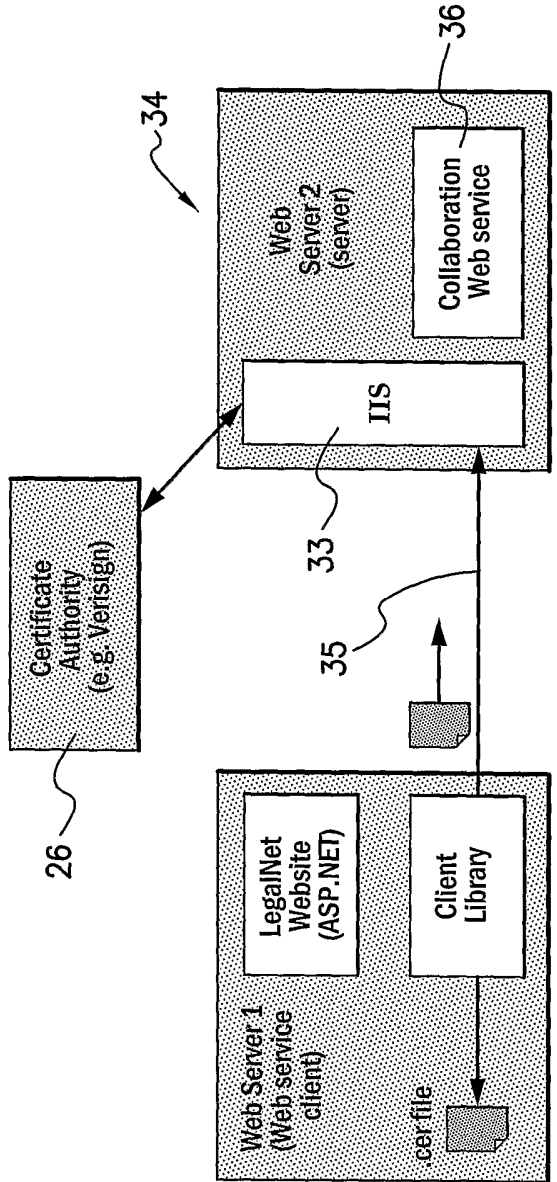


Fig. 6

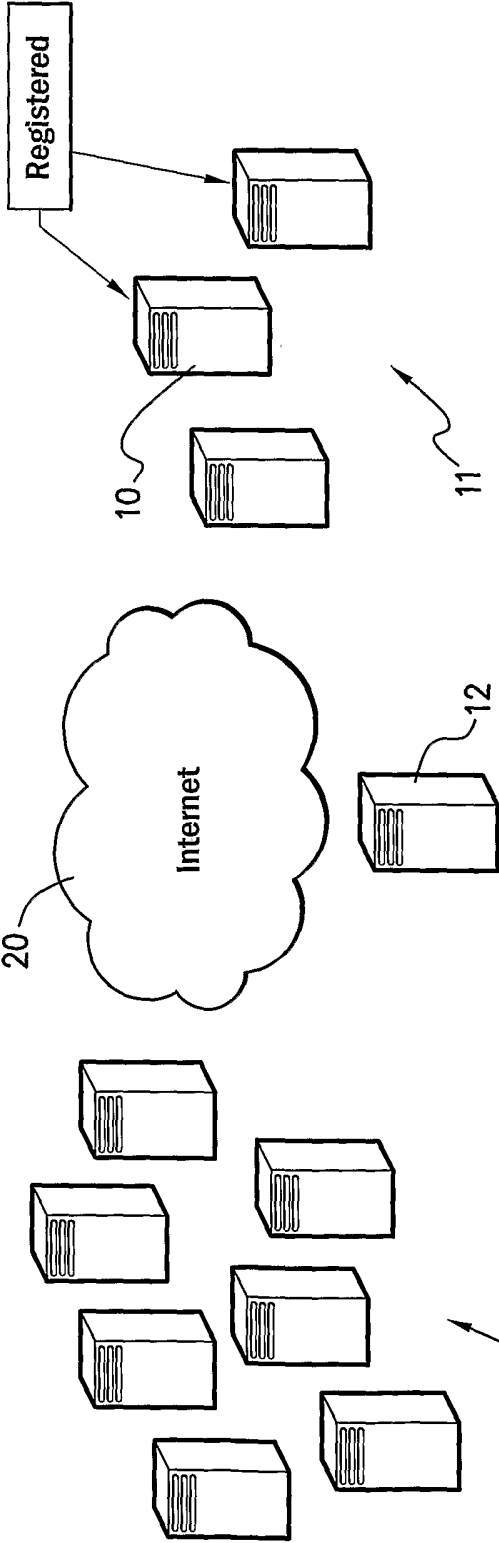


Fig. 3

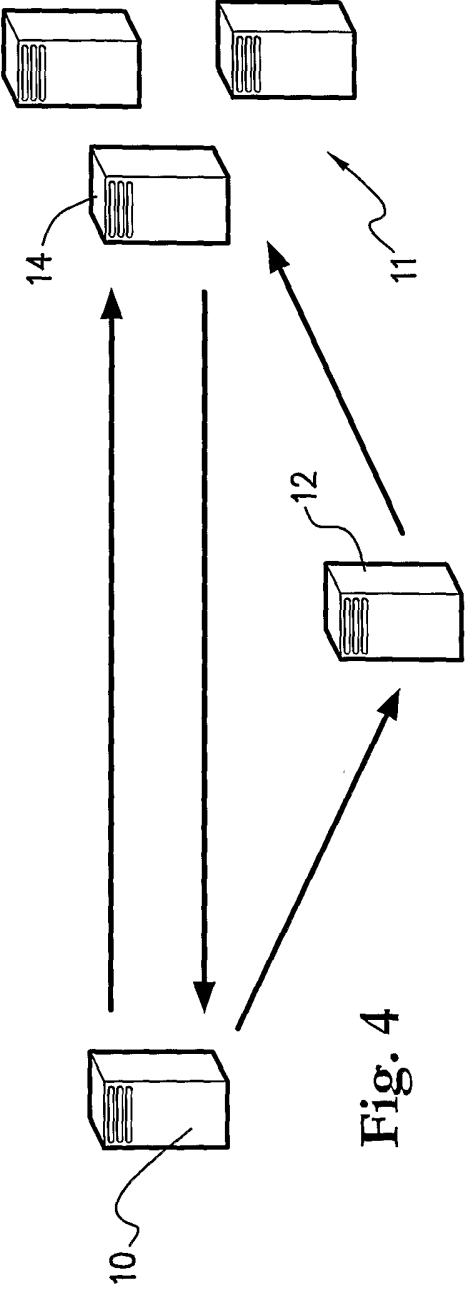
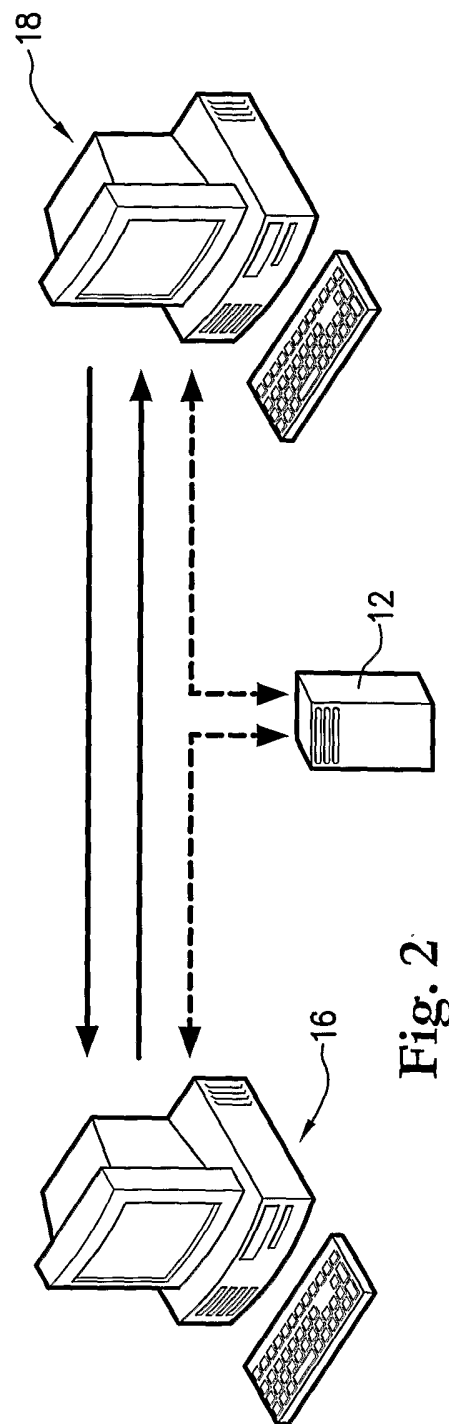
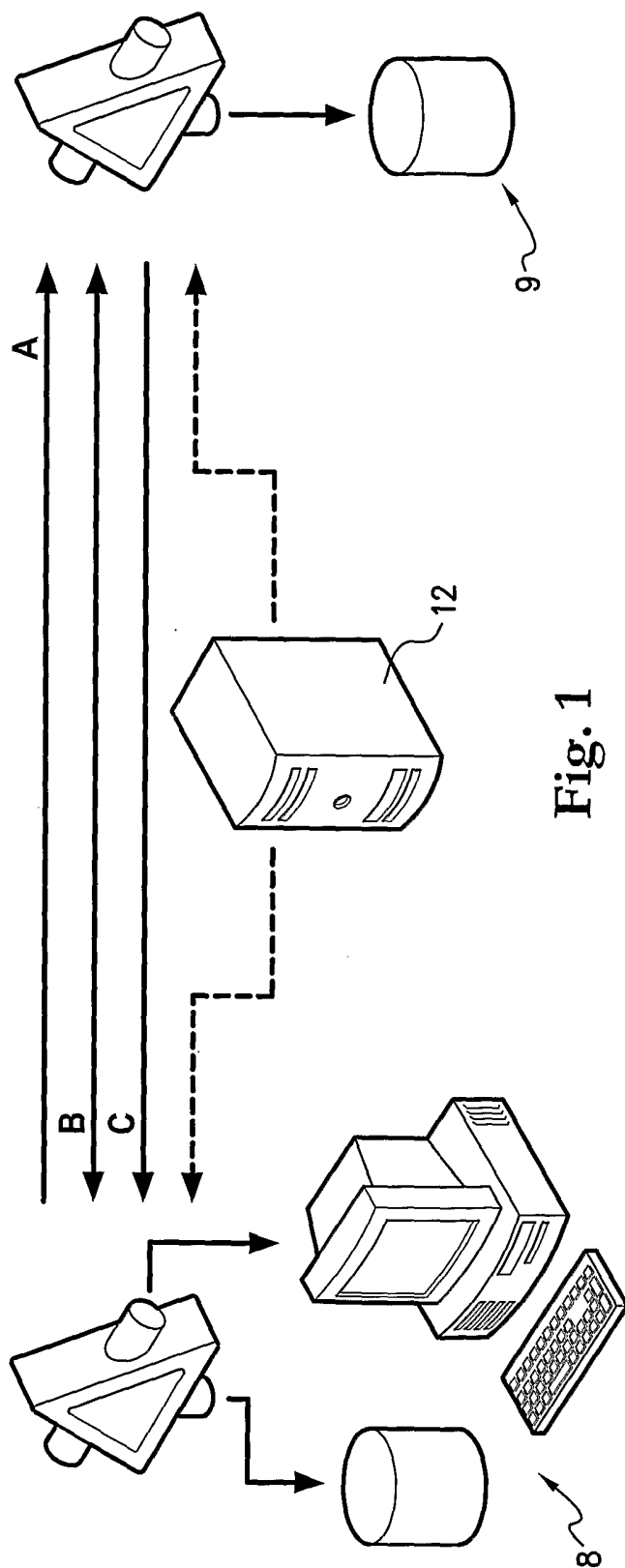


Fig. 4



INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2006/000180

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.

G06F 17/30 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT: Keywords: (peer-to-peer, internet browser, .net, hybrid p2p, xml and like terms); USPTO: Keywords: (peer-to-peer, xml and like terms)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0122958 A1 (WARDROP) 24 June 2004. See entire document.	1 – 17
X	US 2004/0148434 A1 (MATSUBARA et al.) 29 July 2004. See entire document.	1 – 17
X	US 2003/0217171 A1 (VON STUERMER et al.) 20 November 2003. See entire document	1 – 17
P, X	US 2005/0044146 A1 (NASSOR et al.) 24 February 2005. See entire document.	1 – 17



Further documents are listed in the continuation of Box C



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* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
29 March 2006Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2006/000180

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/0260761 A1 (LEAUTE et al.) 23 December 2004. See entire document.	
A	WO 2002/033575 A2 (CHASERAL LIMITED) 25 April 2002. See entire document.	
A	US 2002/0178087 A1 (HENDERSON et al.) 28 November 2002. See entire document.	
A	US 2003/0101235 A1 (ZHANG) 29 May 2003. See entire document.	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2006/000180

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	2004122958	AU	2003298964	CA	2506536	CN	1726446
		EP	1586018	WO	2004057517		
US	2004148434	CN	1517900	JP	2004227562		
US	2003217171						
US	2005044146	FR	2855691				
US	2004260761	AU	2004220808	EP	1606738	WO	2004084030
WO	0233575	AU	95748/01	GB	2390713		
US	2002178087						
US	2003101235	US	6865599	WO	03021798		
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
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