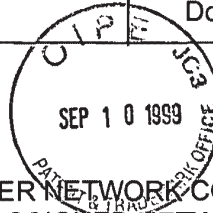


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AMENDMENT		Docket No. N0003/7004
Applicant:	Shane D. Mattaway, et al.	
Serial No.	08/719,554	
Filed:	September 25, 1996	
For:	POINT-TO-POINT COMPUTER NETWORK COMMUNICATION UTILITY UTILIZING DYNAMICALLY ASSIGNED NETWORK PROTOCOL ADDRESSES	
Examiner:	A. Patel	
Art Unit:	2732	



CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)
The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Assistant Commissioner for Patents, Washington, DC 20231 on September 7, 1999.

Bruce D. Jobse, Esq.

Assistant Commissioner for Patents
Washington, D.C. 20231

In response to the office communication dated March 4, 1999, please amend the above-identified application as follows:

In the Claims:

Please cancel claims 1-2 and 4-6, without prejudice.

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1. (Amended) A computer program product for use with a computer system, the computer system capable of executing a first process and connecting to other processes and a server process [having an audio transducer and a display device and being operatively coupled to other computer system and a server] over a computer network, the computer program product comprising a computer usable medium having a program code [means] embodied in the medium comprising:

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a. program code [means] for transmitting an E-mail signal [containing a network protocol address] from the first [processor] process to the server process over the computer network, the E-mail signal containing a first network protocol address assigned to the first process upon connection to the computer network;

b. program code [means] for receiving a second network protocol address from the second [processor] process over the computer network, the second network protocol address assigned to the second process upon connection to the computer network; and

c. program code [means], responsive to the second network protocol address, for establishing a point-to-point communication link between the first [processor] process and the second [processor] process over the computer network.

Please add the following claims:

1. In a first computer process operatively coupled over a computer network to a second process and an mail server process, a method of establishing a point-to-point communication between the first and second processes comprising the steps of:

a. transmitting an E-mail signal to the server process over the computer network, the E-mail signal containing a first network protocol address assigned to the first process upon connection to the computer network;

b. receiving a second network protocol address from the second process over the computer network, the second network protocol address assigned to the second process upon connection to the computer network; and

c. establishing a point-to-point communication link between the first process and the second process over the computer network, in response to receiving the second network protocol address.

8. A computer program product for use with a computer system capable of executing a first process and communicating with other processes, a directory server process and a mail server process over a computer network, the computer program

product comprising a computer usable medium having computer readable code means embodied in the medium comprising:

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- A. program code configured to determine the currently assigned network protocol address of the first process upon connection to the computer network;
 - B. program code configured to establish a communication connection with the directory server process once the assigned network protocol of the first process is known;
 - C. program code configured to forward the assigned network protocol address of the first process to the directory server process upon establishing a communication connection with the directory server process; and
 - D. program code configured to establish a point-to-point communication with another process over the computer network.

9. The computer program product of claim 8 wherein the program step D further comprises:

- D.1 transmitting, from the first process to the directory server process, a query as to whether a second process is connected to the computer network; and
- D.2 receiving a network protocol address of the second process from the directory server process, when the second process is connected to the computer network.

10. The computer program product of claim 8 wherein the program step D further comprises:

- D.1 transmitting an E-mail message containing a network protocol address from the first process to the mail server process over the computer network;

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D.2 receiving a second network protocol address from a second process over the computer network.

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11.

A computer program product for use with a computer system capable of executing a first process and connecting to other processes and a server process over a computer network, the computer program product comprising a computer usable medium having computer readable code means embodied in the medium comprising:

A. program code configured to, following connection of the first process to the computer network, forward to the server process a network protocol address at which the first process is connected to the computer network;

B. program code configured to query the address server as to whether the second process is connected to the computer network;

C. program code configured to receive a network protocol address of the second process from the address server, when the second process is connected to the computer network; and

D. program code configured to respond to the network protocol address of the second process, establish a point-to-point communication link with the second process over the computer network.

7

12. A computer data signal embodied in a carrier wave comprising:

A. program code configured to, following connection of a first process to a computer network, forward to a server process a network protocol address at which the first process is connected to the computer network;

B. program code configured to query the server process as to whether a second process is connected to the computer network;

C. program code configured to receive a network protocol address of the second process from the server process, when the second process is connected to the computer network; and

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D. program code, responsive to the network protocol address of the second process, and configured to establish a point-to-point communication connection with the second process over the computer network.

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13. An apparatus for use with a computer system, the computer system executing a first process operatively coupled over a computer network to a second process and a directory database server process, the apparatus comprising:

A. program logic configured to, following connection of the first process to the computer network forward to the address server a network, protocol address at which the first process is connected to the computer network;

B. program logic configured to query the address server as to whether the second process is connected to the computer network;

C. program logic configured to receive a network protocol address of the second process from the address server, when the second process is connected to the computer network; and

D. program logic configured to, in response to the network protocol address of the second process, establish a point-to-point communication link with the second process over the computer network.

9

14. A computer data signal embodied in a carrier wave comprising:

a. program code configured to access a directory database, the database having a network protocol address for a selected plurality of processes having on-line status with respect to the computer network, the network protocol address of each respective process forwarded to the database following connection to the computer network; and

b. program code responsive to one of the network protocol addresses and configured to establish a point-to-point communication link from the first process to the second process over the computer network.

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In a first computer process operatively coupled over a computer network to a second process and an address server, a method of establishing a point-to-point communication between the first and second processes comprising the steps of:

- a. accessing a directory database, the database having a network protocol address for a selected plurality of processes having on-line status with respect to the computer network, the network protocol address of each respective process forwarded to the database following connection to the computer network; and
- b. in response to one of the network protocol addresses, establish a point-to-point communication link from the first process to the second process over the computer network.

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16.

An apparatus for use with a computer system, the computer system capable of executing a first process connectable over a computer network to a second process and a directory database server process, the apparatus comprising:

- a. program logic configured to access a directory database, the database having a network protocol address for a selected plurality of processes having on-line status with respect to the computer network, the network protocol address of each respective process forwarded to the database following connection to the computer network; and
- b. program logic responsive to one of the network protocol addresses and configured to establish a point-to-point communication link from the first process to the second process over the computer network.

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17.

A computer data signal embodied in a carrier wave comprising:

- program code for transmitting to a server process, a network protocol address received by a first process following connection to a computer network;
- program code for transmitting, to the server process, a query as to whether a second process is connected to the computer network;

program code for receiving a network protocol address of the second process from the server process, when the second process is connected to the computer network; and

program code, responsive to the network protocol address of the second process, for establishing a point-to-point communication link between the first process and the second process over the computer network.

13

18. In a first computer process operatively coupled over a computer network to a second process and an address server, a method of establishing a point-to-point communication between the first and second processes comprising the steps of:

- a. transmitting to the server a network protocol address received by the first process following connection to the computer network;
- b. transmitting, to the server, a query as to whether the second process is connected to the computer network;
- c. receiving a network protocol address of the second process from the server, when the second process is connected to the computer network; and
- d. program code, responsive to the network protocol address of the second process, for establishing a point-to-point communication link between the first process and the second process over the computer network.

14

19. An apparatus for use with a computer system, the computer system capable of executing a first process and operatively connectable to a second process and a server process over a computer network, the apparatus comprising:

program logic configured to transmit to the server a network protocol address received by the first process following connection to the computer network;

program logic configured to transmit, to the server, a query as to whether the second process is connected to the computer network;

program logic configured to receive a network protocol address of the second process from the server, when the second process is connected to the computer network; and

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program logic, responsive to the network protocol address of the second process, and configured to establish a point-to-point communication link between the first process and the second process over the computer network.

Remarks

Applicants have considered carefully the Office Action dated March 4, 1999 and the references cited therein. In response, the claims have been amended. Applicants respectfully request reexamination and reconsideration of the application.

Applicants submit herewith formal drawings of Figs. 1-20D for the Examiner's consideration.

Claims 1-6 have been provisionally rejected under the judicially-created doctrine of double patenting over claims 1-4, 6-11, 21, 23, 24, 26-64, 66 and 67 of co-pending parent application Serial No. 08/533,115. A Notice of Allowance in parent application Serial No. 08/533,115 was mailed on May 25, 1999 and the issue fee paid by Applicants on August 3, 1999. For the Examiner's benefit, Applicants have set forth the claims, as allowed, in the Notice of Allowance for application Serial No. 08/533,115:

21. A computer program 10 product for use with a computer system, the computer system executing a first process and operatively connectable to a second and a server over a computer network, the computer program product comprising:

a computer usable medium having program code, the program code comprising:

program code for transmitting to the server a network protocol address received by the first process following connection to the computer network;

program code for transmitting, to the server, a query as to whether the second process is connected to the computer network;

program code for receiving a network protocol address of the second process from the server, when the second process is connected to the computer network; and
program code, responsive to the network protocol address of the second process, for establishing a point-to-point

85

communication link between the first process and the second process over the computer network.

23. An apparatus for enabling point-to-point communications between a first and a second process over a computer network, the apparatus comprising:

a processor;

a network interface, operatively coupled to the processor, for connecting the apparatus to the computer network;

a memory, operatively coupled to the processor, for storing a network protocol address for selected of a plurality of processes, each network protocol address stored in the memory following connection of a respective process to the computer network;

means, responsive to a query from the first process, for determining the on-line status of the second process and for transmitting a network protocol address of the second process to the first process in response to a positive determination of the on-line status of the second process.

24. The computer server apparatus of claim 23 further comprising a timer, operatively coupled to the processor, for time stamping the network protocol addresses stored in the memory.

26. A method for enabling point-to-point communication between a first process and a second process over a computer network, the method comprising the steps of:

A. receiving and storing into a computer memory a respective network protocol address for selected of a plurality of processes that have an on-line status with respect to the computer network, each of the network protocol addresses received following connection of the respective process to the computer network;

B. receiving a query from the first process to determine the on-line status of the second process;

C. determining the on-line status of the second process; and

D. transmitting an indication of the on-line status of the second process to the first process over the computer network.

27. The method of claim 26 wherein step C further comprises the steps of:

- c.1 searching the computer memory for an entry relating the second process; and
- c.2 retrieving a network protocol address of the second process in response to a positive determination of the on-line status of the second process.

28. The method of claim 26 wherein step D further comprises the steps of:

- d.1 transmitting the network protocol address of the second process to the first process when the second process is determined in step C to have a positive on-line status with respect to the computer network.

29. The method of claim 26 wherein step D further comprises the steps of:

- d.1 generating an off-line message when the second process is determined in step C to have a negative on-line status with respect to the computer network; and
- d.2 transmitting the off-line message to the first process.

30. The method of claim 26 further comprising the steps of:

- E. receiving an E-mail signal comprising a first network protocol address from the first [processing unit] process; and
- F. transmitting the E-mail signal over the computer network to the second process.

31. The method of claim 30 wherein the E-mail signal further comprises a session number and wherein step F further comprises the step of:

- f.1 transmitting the session number and network protocol address over the computer network to the second process.

32. In a computer system, a method for establishing a point-to-point communication link from a caller process to a callee process over a computer network, the caller process having a user interface and being operatively connectable to the callee process and a server over the computer network, the method comprising the steps of:

- A. providing a user interface element representing a first communication line;
- B. providing a user interface element representing a first callee process; and
- C. establishing a point-to-point communication link from the caller process to the first callee process, in response to a user associating the element representing the first callee process with the element representing the first communication line.

33. The method of claim 32 wherein step C further comprises the steps of:

- c.1 querying the server as to the on-line status of the first callee; process and
- c.2 receiving a network protocol address of the first callee process over the computer network from the server.

34. The method of claim 32 further comprising the step of:

- D. providing an element representing a second communication line.

35. The method of claim 34 further comprising the step of:

- E. terminating the point-to-point communication link from the caller process to the first callee process, in response to the user disassociating the element representing the first callee process from the element representing the first communication line; and
- F. establishing a different point-to-point communication link from the caller process to the first callee process, in response to the user associating the element representing the first callee process with the element representing the second communication line.

36. The method of claim 32 further comprising the steps of:
- D. providing a user interface element representing a second callee process; and
 - E. establishing a conference point-to-point communication link between the caller process and the first and second callee process, in response to the user associating the element representing the second callee process with the element representing the first communication line.
37. The method of claim 32 further comprising the step of:
- F. removing the second callee process from the conference point-to-point communication link in response to the user disassociating the element representing the second callee process from the element representing the first communication line.
38. The method of claim 32 further comprising the steps of:
- D. providing a user interface element representing a communication line having a temporarily disabled status; and
 - E. temporarily disabling a point-to-point communication link between the caller process and the first callee process, in response to the user associating the element representing the first callee process with the element representing the communication line having a temporarily disabled status.
39. The method of claim 38 wherein the element provided in step D represents a communication line on hold status.
40. The method of claim 39 wherein the element provided in step D represents a communication line on mute status.
41. The method of claim 32 wherein the caller process further comprises a visual display and the user interface comprises a graphic user interface.

42. The method of claim 41 wherein the steps of establishing a point-to-point link as described in step C is performed in response to manipulation of the graphic elements on the graphic user interface.

43. A computer program product for use with a computer system comprising:

a computer usable medium having program code embodied in the medium for establishing a point-to-point communication link from a caller process to a callee process over a computer network, the caller process having a user interface and being operatively connectable to the callee process and a server over the computer network, the medium further comprising:

program code for generating an element representing a first communication line;
program code for generating an element representing a first callee process;
program code, responsive to a user associating the element representing the first callee process with the element representing the first communication line, for establishing a point-to-point communication link from the caller process to the first callee process.

44. The computer program product of claim 43 wherein the program code for establishing a point-to-point communication link further comprises:

program code for querying the server as to the on-line status of the first callee process; and
program code for receiving a network protocol address of the first callee process over the computer network from the server.

45. A computer program product of claim 43 further comprising:

program code for generating an element representing a second communication line.

46. The computer program product of claim 45 further comprising:

program code, responsive to the user disassociating the element representing the first callee process from the element representing the first communication line, for terminating the point-to-point communication link from the caller process to the first callee process; and

program code, responsive to the user associating the element representing the first callee process with the element presenting the second communication line, for establishing a different point-to-point communication link from the caller process to the first callee process.

47. The computer program product of claim 43 further comprising:

program code for generating an element representing a second callee process; and

program code means, responsive to the user associating the element representing the second callee process with the element representing the first communication line, for establishing a conference communication link between the caller process and the first and second callee process.

48. The computer program product of claim 47 further comprising:

program code, responsive to the user disassociating the element representing the second callee process from the element representing the first communication line, for removing the second callee process from the conference communication link.

49. The computer program product of claim 43 further comprising:

program code for generating an element representing a communication line having a temporarily disabled status; and

program code, responsive association of the element representing the first callee process with the element representing the communication line having a temporarily disabled status, for temporarily disabling the point-to-point communication link between the caller process and the first callee process.

50. The computer program product of claim 49 wherein the communication line having a temporarily disabled status comprises a communication line on hold status.

51. The computer program product of claim 49 wherein the communication line having a temporarily disabled status comprises a communication line on mute status.

52. A computer program product of claim 43 wherein the computer system further comprises a visual display and the user interface comprises a graphic user interface.

53. The computer program product of claim 52 wherein the element representing the first communication line and the element representing the first callee process are graphic elements and wherein the program code for establishing a point-to-point communication link from the caller process to the first callee process further comprises:

program code, responsive to manipulation of the graphic elements on the graphic user interface, for establishing the point-to-point communication link from the caller process to the first callee process.

54. A method of locating a process over a computer network comprising the steps of:

a. maintaining an Internet accessible list having a plurality of selected entries, each entry comprising an identifier and a corresponding Internet protocol address of a process currently connected to the Internet, the Internet Protocol address added to the list following connection of the process to the computer network; and

b. in response to identification of one of the list entries by a requesting process, providing one of the identifier and the corresponding Internet protocol address of the identified entry to the requesting process.

55. A method for locating processes having dynamically assigned network protocol addresses over a computer network, the method comprising the steps of:

a. maintaining, in a computer memory, a network accessible compilation of entries, selected of the entries comprising a network protocol address and a corresponding identifier of a process connected to the computer network, the network protocol address of the corresponding process assigned to the process upon connection to the computer network; and

b. in response to identification of one of the entries by a requesting process providing one of the identifier and the network protocol address to the requesting process.

56. The method of claim 55 further comprising the step of:

c. modifying the compilation of entries.

57. The method of claim 56 wherein step c further comprises:

c.1 adding an entry to the compilation upon the occurrence of a predetermined event.

58. The method of claim 57 wherein the predetermined event comprises notification by a user process of an assigned network protocol address.

59. The method of claim 56 wherein step c further comprises:

c.1 deleting an entry from the compilation upon the occurrence of a predetermined event.

60. A computer program product for use with a computer system having a memory and being operatively connectable over a computer network to one or more computer processes, the computer program product comprising a computer usable medium having program code embodied in the medium the program code comprising:

a. program code configured to maintain, in the computer memory, a network accessible compilation of entries, selected of the entries comprising a network protocol

address and a corresponding identifier of a process connected to the computer network the network protocol address of the corresponding process assigned to the process upon connection to the computer network; and

b. program code responsive to identification of one of the entries by a requesting process and configured to provide one of the identifier and the network protocol address to the requesting process.

61. The computer program product of claim 60 further comprising:

c. program code configured to modify the compilation of entries.

62. The computer program product of claim 61 wherein program code configured to modify comprises:

c.1 program code configured to add an entry to the compilation upon the occurrence of a predetermined event.

63. The computer program product of claim 62 wherein the predetermined event comprises notification by a process of an assigned network protocol address.

64. The computer program product of claim 60 wherein step c further comprises:

c.1 program code configured to delete an entry from the compilation upon the occurrence of a predetermined event.

66. A computer program product for use with a computer system, the computer system executing a first process operatively coupled over a computer network to a second process and a server process, the computer program product comprising a computer usable medium having computer readable program code embodied therein, the program code comprising:

a. program code configured to access a directory database, the database having a network protocol address for a selected plurality of processes having on-line status with respect to the computer network, the network protocol

address of each respective process forwarded to the database following connection to the computer network; and

- b. program code responsive to one of the network protocol addresses and configured to establish a point-to-point communication link from the first process to the second process over the computer network.

67. In a first computer process operatively coupled over a computer network to a second process and an address server, a method of establishing a point-to-point communication between the first and second processes comprising the steps of:

- A. following connection of the first process to the computer network forwarding to the address server a network protocol address at which the first process is connected to the computer network;
- B. querying the address server as to whether the second process is connected to the computer network;
- C. receiving a network protocol address of the second process from the address server, when the second process is connected to the computer network; and
- D. in response to the network protocol address of the second process, establishing a point-to-point communication link with the second process over the computer network.

The Examiner will note that claims 1-4 and 6-11 were cancelled from the parent application, without prejudice.

Applicants have cancelled claims 1-2 and 4-6 in the present application, without prejudice. Accordingly, the Examiner's rejection of those claims are hereby deemed moot. Independent claim 3 remains for examination. Applicants have made amendments to the claim 3 to ensure consistent use terminology throughout the claims and to conform the claims to 35 U.S.C. Section 112, 2nd paragraph. Specifically, the term "means" has been eliminated from the remaining pending claims. Also, all occurrences of "processors" have been changed to "process". Various other amendments have been made to claim 3 for clarity sake. Such amendments are not necessitated by any reference cited by the Examiner but are offered to clarify the claim

language and to more particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

In addition, claims 7-19 have been added to more particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

Claims 1-6 had been examined and are rejected over various combinations of U.S. Patent 5,608,786(Gordon); U.S. Patent 5,740,231 (Cohn); and U.S. Patent 5,524,254 (Morgan). Before responding to the individual rejections set forth in the Office Action (Paper No. 6), Applicants request that the Examiner consider the following remarks.

In the office action, the Examiner has stated that "[I]t would have been obvious to one of ordinary skill in the art to include a database and search/retrieval mechanism to locate the needed network address because such mechanism permits the database to be modified over time to allow dynamic address assignment thus reducing the need to large address identifiers and thus the amount of data that needs to be transmitted with each packet of data."(Paper No. 6, paragraph 7). Applicants respectfully note that this mischaracterization of the motivation for the invention was first introduced in the parent application by the original Examiner (Serial No. 08/ 533,115, Paper 18, paragraph 7). Applicants' invention solves a fundamental problem associated with the Internet. The problem is not reducing the need for larger address identifiers. The problem is not the amount of data which needs to be transmitted with each packet over the network. The problem is: How can a global network user be located if he/she has no permanent network address?

Applicants have disclosed a two solutions to the above-described problem. The first solution utilizes a client/ server system. In the disclosed system, a client process contacts a dedicated address directory server and forwards to the server the network protocol address to which it has been assigned upon connection to the computer network, along with other identification information. The dedicated address directory server maintains a compilation or list of entries, each of which contain a process identifier and the corresponding network protocol address forwarded to the server by the process itself. Other processes wishing to contact a desired target process simply

19

query the address directory server to determine whether the target process is on-line and the current network protocol address at which the target process is located. The server forwards the network protocol address of the target process to the querying process. The querying process utilizes the information to establish a point-to-point communication with the target process. New claims 8-9 and 11-17 are directed to this first solution, as were originally filed claims 1-2 and 5-6.

Applicants' second solution also utilizes a client/ server system and is useful if the first solution is unavailable. In the second solution, a first process wishing to establish communications with a second process, sends, via E-mail, the network protocol address under which the first process is currently operating to the second process. Upon receipt of the E-mail message, the second process sends to the first process, via E-mail, the network protocol address under which the second process is currently operating. Upon receipt of the network protocol address of the second process, the first process establishes communications with the second process directly, without any intervention from the address/information server. As with the first technique, communications between two processes, are initiated by solely by one of the processes. Claim 3 and new claims 8 and 10 are directed towards this second solution.

Applicant respectfully traverses the rejection of claim 3 as being anticipated under 35 USC Section 102(e) by U.S. Patent 5, 608,786, Gordon, for the following reasons. Claim 3, as amended, now recites computer program product comprising a computer usable medium having a program code embodied in the medium and comprising "program code for transmitting an E-mail signal from the first process to the server process over the computer network, the E-mail signal containing a first network protocol address assigned to the first process upon connection to the computer network" and "program code for receiving a second network protocol address from the second process over the computer network, the second network protocol address assigned to the second process upon connection to the computer network" and (claim3, lines 7-12). Claim 3 further recites program code "responsive to the second network protocol address, for establishing a point-to-point communication link between the first process and the second process over the computer network" (claim3, lines 13-15).

The Examiner has not shown where Gordon discloses a technique where two processes exchange their respective dynamically assigned network protocol addresses to establish a point-to point communication connection. The Examiner will note that claim 3 does not require connection database, but a mail delivery server. In light of the amendments, Applicants respectfully assert that claim 3 is not anticipated by Gordon.

New claim 7 is a method claim and includes limitations similar to claim 3, as amended, and is likewise believed patentable over Gordon for the same reasons as claim 3.

The Examiner had rejected claims 1-6 under 35 USC §103 as being unpatentable over U.S. Patent 5,740,231, Cohn et al., (Cohn) in view of U.S. Patent 5,524,254, Morgan et al., (Morgan). Applicants respectfully assert that the claims, as amended, patentably distinguishes over the combined teachings of Cohn and Morgan for the following reasons. As stated by the Examiner, Cohn does not specify searching a database to match an address with a destination node. Although the sections of Morgan cited by the Examiner disclose an address recognition engine which reads each request and uses the address contained in the request as an index into an information database for look-up of a corresponding entry (Morgan, column 4, lines 44-56), the Examiner has failed to show where Morgan discloses a database in which the client process supply the database with their respective network addresses. The Examiner is relying primarily on Morgan to disclose a database containing one or more network addresses. The Examiner will note that although a database may be programmable or contain writable memory, such a database does not teach or suggest Applicants' inventive client/service system in which the client processes themselves update the database with their current information. This aspect distinguishes Applicants' system from the art of record. Accordingly all claims pending after entry of this amendment include limitations directed to this distinction.

New claims 11, 12 and 13 are formatted as computer program product, propagating signal and apparatus claims, respectively, and recite limitations similar to method claim 67, now allowed in the parent application. Support for the recitation of a computer data signal embodied in a carrier wave is set forth in the specification (page 21

64, lines 3-24, Figures 11 and 15A-C). The United States Patent Office has issued guidelines clearly indicating that claims directed to a data signal embodied in a carrier wave are statutory subject matter under 35 USC Section 101. Applicants can supply excerpts from these guidelines if the Examiner has any issues regarding the format of claim 12. Each of claims 11, 12 and 13 recite a method step or program code for following connection of a first process to a computer network, forwarding to a server process a network protocol address at which the first process is connected to the computer network. The Examiner has not shown where any of Gordon, Cohn or Morgan disclose, suggest or provide motivation for this limitation, whether considered singularly or in combination. Further, all of the Gordon, Cohn and Morgan references were considered by the Examiner in the parent application.

New claims 14, 15, and 16 are formatted as propagating signal, method and apparatus claims, respectively, and recite limitations similar to computer program product claim 66, now allowed in the parent application. Each of claims 14, 15 and 16 recite a program code or logic to access a directory database, the database having a network protocol address for a selected plurality of processes having on-line status with respect to the computer network, the network protocol address of each respective process forwarded to the database following connection to the computer network. The Examiner has not shown where any of Gordon, Cohn or Morgan disclose, suggest or provide motivation for this limitation, whether considered singularly or in combination. Again, all of the Gordon, Cohn and Morgan references were considered by the Examiner in the parent application.

New claims 17, 18, and 19 are formatted as propagating signal, method and apparatus claims, respectively, and recite limitations similar to computer program product claim 66, now allowed in the parent application. Each of claims 17, 18 and 19 recite a method step, program code or logic for transmitting to a server process, a network protocol address received by a first process following connection to a computer network. The Examiner has not shown where any of Gordon, Cohn or Morgan disclose, suggest or provide motivation for this limitation, whether considered singularly or in

combination. Again, all of the Gordon, Cohn and Morgan references were considered by the Examiner in the parent application.

New claim 8-10 recites limitations similar to claims 11-19 and are believed patentable over the art of record for the same reasons as those claims.

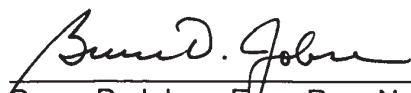
Applicants will submit an appropriate terminal disclaimer, as necessary, once the claims of parent application serial number 08/533,115 issue.

The cancellation of claims 1-2 and 4-6 should not be construed as an admission that the subject matter of those claims is unpatentable in light of any art of record, or the claimed allowed in the parent application. Applicants expressly reserve the right to pursue similar or identical claims in this or other applications which claim priority hereto. Claims 7-17 have been added to more particularly point out and distinctly claim the subject matter which Applicants regard as their invention and are offered by this amendment to advance this application to issue.

In light of the foregoing amendments to the claims, Applicants respectfully assert that all claims currently under consideration now patentably distinguish over the art of record, including the cited references, whether considered singularly or in combination. The Examiner is respectfully requested to advance this case to issuance and send a notice to that effect. In the event that outstanding issues remain following the Examiner's review of this response, Applicants' attorney requests that the Examiner contact Applicants' attorney at the number listed below to set up a telephone interview to attempt to resolve any outstanding issues with the claims and before any further Office Actions are issued.

The Commissioner is hereby authorized to charge any fees or credits under 37
C.F.R. §1.16 and 1.17 to our deposit account No. 02-3038.

Respectfully submitted



Date: _____

9/7/99

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