

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Hudetz et al.
Attorney Docket No.: 150-061REEX
Control No.: 90/008,779
Reexamined Patent: 6,199,048
Group Art Unit: 3900
Confirmation No.: 9814
Examiner: Anjan K. Deb

For: SYSTEM AND METHOD FOR AUTOMATIC ACCESS
OF A REMOTE COMPUTER OVER A NETWORK

AMENDMENT

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

Sirs:

This Amendment is submitted in response to the Office action mailed on July 3, 2008, which set a two-month period for response that expires on September 3, 2008. The following amendments and remarks are respectfully submitted. Reconsideration of the claims is respectfully requested. Kindly amend the application as follows:

I) IN THE CLAIMS:

1. (Currently amended) A method of connecting a user computing device to one of a plurality of remote information computers available for communication over a network comprising:

a) reading with a user computing device a data carrier modulated with an index;

b) transmitting the index to a remote server computer over the network;

c) accessing a database in the remote server computer with the index, the database comprising a plurality of records comprising predetermined relationships that link an index to a pointer which identifies a remote information computer on the network;

[c)] d) extracting a pointer from the database as a function of the index;

e) returning the pointer to the user computing device over the network; and

[d)] f) the user computing device using the pointer to establish communication directly with the remote information computer identified thereby.

2. (Original) The method of claim 1 wherein the step of reading a data carrier modulated with an index comprises the step of reading a light pattern emanating from an object and demodulating the light pattern to obtain the index.

3. (Original) The method of claim 2 wherein the step of reading a light pattern emanating from an object and demodulating the light pattern to obtain the index

comprises scanning a bar code symbol encoded with the index.

4. (Original) The method of claim 3 wherein the bar code symbol is encoded in accordance with an extrinsic standard.

5. (Original) The method of claim 2 wherein the step of reading a light pattern emanating from an object and demodulating the light pattern to obtain the index comprises using optical character recognition techniques.

6. (Original) The method of claim 1 wherein the index is at least a portion of a Universal Product Code.

7. (Original) The method of claim 1 wherein the index is at least a portion of a EAN code.

8. (Original) The method of claim 1 wherein the index is at least a portion of an ISBN code.

9. (Original) The method of claim 1 wherein the index is at least a portion of an ISSN code.

10. (Original) The method of claim 1 wherein the step of reading a data carrier modulated with an index comprises receiving a signal emanating from an article of commerce, the signal being modulated with the index.

11. (Original) The method of claim 1 wherein the step of reading a data carrier modulated with an index comprises inputting into the user computing device an audible signal modulated with information correlated to the index.

12. (Original) The method of claim 11 wherein the step of inputting into the user computing device an audible signal modulated with information correlated to the index comprises the use of voice recognition techniques.

13. (Original) The method of claim 1 wherein the step of reading a data carrier modulated with an index comprises inputting into the user computing device an RF signal modulated with information correlated to the index.

14. (Original) The method of claim 1 wherein the step of reading a data carrier modulated with an index comprises accessing a magnetic card with a magnetic card reader.

15. (Cancelled).

16. (Cancelled).

17. (Currently amended) The method of claim 1 wherein the database is distributed over more than one remote server computer.

18. (Original) The method of claim 1 wherein the pointer comprises a network address.

19. (Original) The method of claim 1 wherein the pointer comprises a Uniform Resource Locator.

20. (Original) The method of claim 1 wherein the pointer comprises the name of a remote computer.

21. (Original) The method of claim 1 wherein the pointer comprises an IP address.
22. (Original) The method of claim 1 wherein the index is comprised of a first field and a second field.
23. (Original) The method of claim 22 wherein the step of accessing a database with an index comprises the steps of using only the first field of the index to access the database.
24. (Original) The method of claim 23 wherein a plurality of indexes having the same first field and different second fields will result in extraction of the same pointer.
25. (Original) The method of claim 24 wherein the first field is a manufacturer identification number and the second field is a product identification number.
26. (Original) The method of claim 1 wherein the step of using the pointer to establish communication with the remote computer identified thereby is executed automatically by the user computing device without user intervention.
27. (Original) The method of claim 26 wherein the automatic communication by the user computing device with the remote computer is executed by a web browser program running on the user computing device.
28. (Currently amended) The method of claim 1 wherein the step of using the pointer to establish communication with

the remote computer identified thereby is executed by a user selecting a hypertext link returned to the user computing device by the remote server computer [database].

29. (Original) The method of claim 1 wherein the network over which the user computing device establishes communication with the remote computer is a wide area network.

30. (Original) The method of claim 29 wherein the wide area network is the Internet.

31. (Original) The method of claim 29 wherein the wide area network is a proprietary online service.

32. (Currently amended) The method of claim 31 wherein the remote server computer is [database is resident on] an online service provider computer with which the user computing device has established direct communication.

33. (Original) The method of claim 32 wherein the online service provider computer additionally provides a gateway to the Internet.

34. (Original) The method of claim 1 wherein access to the database requires entry of a password.

35. (Original) The method of claim 1 wherein the database is associated with a search engine.

36. (Currently amended) A system comprising:
a. a user computing device;

b. an input device associated with the user computing device, configured to read a data carrier modulated with an index;

c. a remote server computer selectively interconnected to the user computing device via a network, said remote server computer comprising means for storing a database comprising a plurality of records comprising predetermined relationships that link an index to a pointer which identifies a remote information computer; wherein the user computing device comprises:

means for communicating over the network with the remote server computer to (i) transmit the index to the remote server computer to enable the remote server computer to access the database to extract a pointer from the database as a function of the index, and (ii) receive the pointer extracted from the database from the remote server computer; and

means for using the pointer to establish communication via the network with the remote information computer identified by the pointer [thereby].

37. (Original) The system of claim 36 wherein the user input device comprises means for reading a light pattern emanating from an object and demodulating the light pattern to obtain the index.

38. (Original) The system of claim 37 wherein the means for reading a light pattern emanating from an object and demodulating the light pattern to obtain the index comprises means for scanning a bar code symbol encoded with the index.

39. (Original) The system of claim 38 wherein the means for scanning a bar code symbol is adapted to scan a bar code symbol encoded in accordance with an extrinsic standard.

40. (Original) The system of claim 37 wherein the means for reading a light pattern emanating from an object and demodulating the light pattern to obtain the index comprises means for using optical character recognition techniques.

41. (Original) The system of claim 36 wherein the input device is configured to read an index comprising at least a portion of a Universal Product Code.

42. (Original) The system of claim 36 wherein the input device is configured to read an index comprising at least a portion of a EAN code.

43. (Original) The system of claim 36 wherein the input device is configured to read an index comprising at least a portion of an ISBN code.

44. (Original) The system of claim 36 wherein the input device is configured to read an index comprising at least a portion of an ISSN code.

45. (Original) The system of claim 36 wherein the input device is adapted to receive a signal emanating from an article of commerce, the signal being modulated with the index.

46. (Original) The system of claim 36 wherein the input

device comprises means for inputting into the user computing device an audible signal modulated with information correlated to the index.

47. (Original) The system of claim 46 wherein the means for inputting into the user computing device an audible signal modulated with information correlated to the index is configured to utilize voice recognition techniques.

48. (Original) The system of claim 36 wherein the input device comprises means for inputting an RF signal modulated with information correlated to the index.

49. (Original) The system of claim 36 wherein the input device comprises means for reading a magnetic stripe card.

50. (Cancelled).

51. (Cancelled).

52. (Currently amended) The system of claim 36 wherein the means for storing a database is distributed over more than one remote server computer.

53. (Original) The system of claim 36 wherein the pointer comprises a network address.

54. (Original) The system of claim 36 wherein the pointer comprises a Uniform Resource Locator.

55. (Original) The system of claim 36 wherein the pointer comprises the name of a remote computer.

56. (Original) The system of claim 36 wherein the pointer comprises an IP address.

57. (Original) The system of claim 36 wherein the index is comprised of a first field and a second field.

58. (Original) The system of claim 57 wherein the means for accessing a database with an index comprises means for using only the first field of the index to access the database.

59. (Original) The system of claim 58 wherein a plurality of indexes having the same first field and different second fields will result in extraction of the same pointer.

60. (Original) The system of claim 59 wherein the first field is a manufacturer identification number and the second field is a product identification number.

61. (Original) The system of claim 36 wherein the means for using the pointer to establish communication with the remote computer identified thereby executes automatically by the user computing device without user intervention.

62. (Original) The system of claim 61 wherein the automatic communication by the user computing device with the remote computer is executed by a web browser program running on the user computing device.

63. (Currently amended) The system of claim 36 wherein the means for using the pointer to establish communication with

the remote computer identified thereby executes by a user selecting a hypertext link returned to the user computing device by the remote server computer [database].

64. (Original) The system of claim 36 wherein the network over which the user computing device establishes communication with the remote computer is a wide area network.

65. (Original) The system of claim 64 wherein the wide area network is the Internet.

66. (Original) The system of claim 64 wherein the wide area network is a proprietary online service.

67. (Original) The system of claim 66 wherein the database is resident on an online service provider computer with which the user computing device has established direct communication.

68. (Original) The system of claim 67 wherein the online service provider computer additionally provides a gateway to the Internet.

69. (Original) The system of claim 36 wherein access to the database requires entry of a password.

70. (Original) The system of claim 36 wherein the database is associated with a search engine.

71. (Currently amended) A user computing device comprising:
a. an input device configured to read a data carrier

modulated with an index; and

b. computer processing means for executing a software program adapted to:

communicate over a network with a remote server computer to enable the remote server computer to

(i) transmit the index to the remote server computer to enable the remote server computer to utilize the index to access a database comprising a plurality of records comprising predetermined relationships that link an index to a pointer which identifies a remote information computer[;] and retrieve from the database a pointer as a function of the index;

(ii) receive from the remote server computer the pointer that was retrieved from the database;
and

(iii) use the pointer to establish communication via the network with the remote information computer identified by the pointer [thereby].

72. (Original) The user computing device of claim 71 wherein the user input device comprises means for reading a light pattern emanating from an object and demodulating the light pattern to obtain the index.

73. (Original) The user computing device of claim 72 wherein the means for reading a light pattern emanating from an object and demodulating the light pattern to obtain the index comprises means for scanning a bar code symbol encoded with the index.

74. (Original) The user computing device of claim 73 wherein the means for scanning a bar code symbol is adapted to scan a bar code symbol encoded in accordance with an extrinsic standard.

75. (Original) The user computing device of claim 72 wherein the means for reading a light pattern emanating from an object and demodulating the light pattern to obtain the index comprises means for using optical character recognition techniques.

76. (Original) The user computing device of claim 71 wherein the input device is configured to read an index comprising at least a portion of a Universal Product Code.

77. (Original) The user computing device of claim 71 wherein the input device is configured to read an index comprising at least a portion of a EAN code.

78. (Original) The user computing device of claim 71 wherein the input device is configured to read an index comprising at least a portion of an ISBN code.

79. (Original) The user computing device of claim 71 wherein the input device is configured to read an index comprising at least a portion of an ISSN code.

80. (Original) The user computing device of claim 71 wherein the input device is adapted to receive a signal emanating from an article of commerce, the signal being modulated with the index.

81. (Original) The user computing device of claim 71 wherein the input device comprises means for inputting into the user computing device an audible signal modulated with information correlated to the index.

82. (Original) The user computing device of claim 81 wherein the means for inputting into the user computing device an audible signal modulated with information correlated to the index is configured to utilize voice recognition techniques.

83. (Original) The user computing device of claim 71 wherein the input device comprises means for inputting an RF signal modulated with information correlated to the index.

84. (Original) The user computing device of claim 71 wherein the input device comprises means for reading a magnetic stripe card.

85. (Cancelled).

86. (Cancelled).

87. (Currently amended) The user computing device of claim 71 wherein the software program is adapted to utilize the index to access a database distributed over more than one remote server computer.

88. (Original) The user computing device of claim 71 wherein the index is comprised of a first field and a second field, and wherein the software program is adapted

to access a database with only the first field of the index.

89. (Original) The user computing device of claim 88 wherein a plurality of indexes having the same first field and different second fields will result in extraction of the same pointer.

90. (Original) The user computing device of claim 71 wherein the software program is adapted to use the pointer to establish communication with the remote computer identified thereby automatically without user intervention.

91. (Original) The user computing device of claim 90 wherein the automatic communication by the user computing device with the remote computer is executed by a web browser program running on the user computing device.

92. (Currently amended) The user computing device of claim 71 wherein the software program is adapted to use the pointer to establish communication with the remote computer identified thereby by using a user-selected hypertext link returned to the user computing device by the remote server computer [database].

93. (Original) The user computing device of claim 71, further adapted to establish communication with the remote computer over a wide area network.

94. (Original) The user computing device of claim 93 further adapted to establish communication with the remote computer over the Internet.

95. (Original) The user computing device of claim 93 further adapted to establish communication with the remote computer over a proprietary online service.

II) REMARKS:

The undersigned would like to thank the Examiner as well as the panel conferees for the courtesy of the in-person interview held with the undersigned at the Patent Office on August 19, 2008. Applicant addresses the substance of the interview below.

A) Claim Status

Claims 1-95 were originally pending and under consideration.

Claims 1, 17, 28, 32, 36, 52, 63, 71, 87 and 92 have been amended herein. No new matter has been added as will be explained further herein.

Claims 15, 16, 50, 51, 85 and 86 have been cancelled, leaving claims 1-14, 17-49, 52-84 and 87-94 now pending and under consideration.

B) Rejections Under 35 USC 102 and/or 103

In the Office action, the claims have been rejected under various prior art references which will be addressed fully herein.

As noted below, U.S. Patent No. 5,640,193 to Wellner has been used by the Examiner as a basis for rejecting several claims under 35 USC 102(b). Applicant would like to point out that Wellner issued on June 17, 1997. The present patent under reexamination is based on an actual filing date of January 15, 1999, but has an effective filing date of at least October 3, 1995 since this application is a

divisional application of parent application number 08/538,365 which was filed October 3, 1995. Therefore, the Wellner reference is not a proper reference under 35 USC 102(b) since it issued after the effective filing date of the present application. However, Applicant notes that Wellner may be a proper prior art reference under a different subsection of 35 USC 102 since Wellner's filing date of August 15, 1994 is earlier than the Applicant's effective filing date of October 3, 1995. Therefore Applicant addresses the rejections under Wellner herein.

In addition, Applicant would like to point out that Wellner was in fact cited by the Applicant during prosecution of the parent application 08/538,365 (now US Patent No. 5,978,773) and is therefore not newly discovered prior art in this reexamination. The Manual of Patent Examining Procedure (MPEP) states clearly that

The examiner will consider information which has been considered by the Office in a parent application when examining: (A) a continuation application filed under [37 CFR 1.53\(b\)](#), (B) a divisional application filed under [37 CFR 1.53\(b\)](#), or (C) a continuation-in-part application filed under [37 CFR 1.53\(b\)](#). A listing of the information need not be resubmitted in the continuing application unless the applicant desires the information to be printed on the patent.

MPEP 609.02 (emphasis added). Therefore, since Wellner was cited and considered by the Patent Office during prosecution of the parent application 08/538,365, it is presumed that the examiner of divisional application 09/232,908 (which matured into the present patent under reexamination 6,199,048) considered the Wellner reference prior to allowing the claims of the '048 patent.

Therefore, the Examiner in this reexamination was incorrect in stating that

This teaching was not present during the prosecution of the application, which became the Hudetz et al. patent. Further, there is a substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claims are patentable. Accordingly, Wellner et al. raises a substantial new question of patentability with respect to at least claims 1-9, 16-22, 25-44, 51-57, 60-79, 86-87 and 90-95, which question has not been decided in a previous examination of the Hudetz et al. patent.

Order Granting Request for Ex Parte Reexamination, October 16, 2007.¹ On the contrary, since the Examiner is presumed to have considered Wellner when allowing the claims of the '048 patent, the question of patentability of the '048 claims with respect to Wellner has already been decided. Nonetheless, Applicant readily distinguishes over the cited Wellner reference as set forth in detail below.

C) The Claimed Invention as Amended Herein

The present invention is for a method and system that enables a user computing device to connect directly with a remotely located information computer over a network such as the Internet without needing to know the URL or any other address information of that computer. The invention utilizes machine-readable codes such as bar code symbols to

¹ It appears that the Examiner was misled by incorrect statements made by third party requester EFF (Electronic Frontier Foundation) in its Request for *Ex Parte* Reexamination in stating that "EFF has now found an earlier reference from 1994 [Wellner]" and that Wellner was "not considered by the USPTO during the prosecution of the '048 patent" (Request, page 2-3).

look up one or more previously-associated URL(s) in a remotely located database, and then use the looked-up URL to enable the user computer to connect directly to the remote computer designated by that URL. In particular, and in the preferred embodiment described in the specification, the bar code is scanned and decoded, and the bar code data is transmitted over the Internet to a database resident on a remote server computer. There, the bar code data is used to look up on the database one or more URLs that have been previously programmed into the database. The URL(s) are sent back to the user computing device, and then the user device uses the URL(s) to connect directly with the information computer.

As particularly described in the patent specification, remote nodes 24, 26 (remote information computers) have preassigned network locations and desired resources such as a web site/page identified by a URL (col. 5, lines 55-60). A service provider computer 22 (remote server computer) has a relational database 60 with records 62-68 containing a UPC product number that is mapped to a URL of one of the remote information computers (col. 7, line 1 through 20, also see Figure 4). (The database 60 may also reside on any remote computer such as a search engine computer (col. 7 line 58), a remote node, etc.)

The service provider computer 22 (the remote server computer) has a predetermined URL, and the browser software in the local host computer (the user computing device) is configured to automatically request that predetermined URL location after the bar code is scanned by the user (col. 7, lines 52-57). That is, the user device always connects as

a first step to the same remote server computer in order to access the database with the bar code data, since that predetermined remote server computer has the database of URLs.

In the preferred embodiment, a UPC bar code symbol is scanned by an input device, and an ASCII string decoded from the bar code is generated and sent to the local service provider 22 (the remote server computer). Then, the database is used to lookup that UPC data, and all records having that UPC data are retrieved from the database. These record(s) which contain the pre-associated URLs as described above, are returned to the user (see col. 8 line 38 through line 63). Browser software on the local computer then displays the returned URLs (see Figure 6), and the user may select a desired URL in the form of a hypertext link. When the user selects the desired link, the browser software loads the URL associated with the selected link in order to connect to the resource at the location specified by the URL (see col. 9, lines 5 through 20). In the alternative, the local host may be configured to automatically jump (link) to the desired resource by automatically loading the retrieved URL and point the user to the site corresponding to that URL (see col. 9, lines 55 through 63).

This novel and unobvious invention enables the use of existing identification standards such as the UPC (col. 3, lines 20-28). A computer database is provided that relates UPC codes to Internet URLs, for example (col. 3, lines 30-32). The inventors realized the great benefits in using this code-address database lookup schema, in that it (1)

eliminates the need for separately disseminating domain names or other network location data by using standardized or preassigned codes, (2) eliminates the need for manufacturers to redesign packaging to include bar codes that might include the URLs encoded directly in them, (3) eliminates the requirement for overly-lengthy bar codes that would be required to encode long network address information, and (4) allows manufacturers to simply change the UPC-URL lookup at the database rather than change printed bar codes, in the event a network resource address needs to change. See col. 3 line 58 through col. 4 line 31.

Claim 1 has been amended herein to more clearly distinguish over the cited references as will be further explained below. Amended claim 1 recites:

1. (Currently amended) A method of connecting a user computing device to one of a plurality of remote information computers available for communication over a network comprising:

- a) reading with a user computing device a data carrier modulated with an index;
- b) transmitting the index to a remote server computer over the network;
- c) accessing a database in the remote server computer with the index, the database comprising a plurality of records comprising predetermined relationships that link an index to a pointer which identifies a remote information computer on the network;
- ~~e~~) d) extracting a pointer from the database as a function of the index;
- e) returning the pointer to the user computing device over the network; and
- ~~d~~) f) the user computing device using the pointer to establish communication directly with the remote information computer identified thereby.

Thus, claim 1 clearly recites that the data carrier modulated with an index (for example a bar code symbol) is read with a user computing device. Then, the index is transmitted over the network to a remote server computer. A database in the remote server computer is accessed with the index, the database having a plurality of records comprising predetermined relationships that link an index to a pointer that identifies a remote information computer on the network. A pointer is extracted from the database as a function of the index and then returned to the user computing device. The user computing device then uses the pointer to establish communication directly with the remote information computer identified by that pointer. It is respectfully submitted that this claim 1, as amended, is patentably distinct from the prior art cited by the Examiner.

The Claim 1 Rejections

In particular, the Examiner has rejected former claim 1 under 35 USC 102(b) as being anticipated by Wellner (US 5,640,193) or, in the alternative, under 35 USC 103(a) as being obvious over Berners-Lee et al. (RFC 1738, URL document) (paragraph 3). The Examiner has also rejected claim 1 under 35 USC 102(b) as being anticipated by Baus (US 4,780,599) or, in the alternative, under 35 USC 103(a) as being obvious over Berners-Lee et al. (RFC 1738, URL document) (paragraph 11). The Applicant respectfully traverses as set forth herein.

The Wellner Reference

The Wellner reference describes a system that may be classified as a "direct encode" system. With reference to

Figure 1, Wellner relates to the use of a scanner pen device 11 to scan a bar code 10 and automatically access information (e.g. video programs, multimedia programs, or electronic documents) stored on a remote server 13. The patent does not provide any teaching as to the format of the bar code or the server address resolution process. The specification states only that the scanner pen 11 transmits the scanned information from the paper to an interface unit 15 (i.e. computer), and the interface "interprets" the information sent by the pen 11 and communicates with the multimedia server 13 to request the movie (file) the user has selected. The system has a scanner such as a wand that communicates with an interface unit such as a computer or TV/set-top box combination. The scanner reads the mark from an object, and sends the data (raw or decoded) to the interface. The interface interprets the data and sends a request to the server over the communications network. The server then returns the requested information. Other servers 17 may be accessed but there is little information provided in Wellner as to the interaction between the server 13 and the servers 17.

Although the Wellner reference is focused on video-on-demand and interactive TV, it briefly mentions that electronic documents could be downloaded and a computer could be used for the interface. There is also a paragraph that analogizes the system to the Internet and Uniform Resource Locators (URLs). The patent states that glyphs could be used if there is a lot of data to scan, such as with the encoding of a large code (i.e. a URL type of identifier). Also, multiple bar codes are used to store the service, domain, and object information, respectively.

It is apparent that Wellner teaches encoding the URL of the desired information server (i.e. the computer having the desired resource) directly into the bar code. That is why Wellner states that he uses:

marks 10 that represent a unique identifier code for electronic objects accessible on the TV network 18. These codes could work in a similar way as the well-known Universal Resource Locator (URL) identifiers in NCSA Mosaic (Internet client access software for World Wide Web), only they would be read from paper (instead of typed into an application) or invisibly linked to on-screen buttons. Because of the enormous number of objects that can be accessed, these codes need to be large, and standard bar-codes would become too large to be placed unobtrusively in paper publications. For this application, Xerox glyphs are more appropriate, because they can encode a large amount of data in a short space.

Wellner, col. 4 lines 32-44 (emphasis added). This text from Wellner makes it abundantly clear that the URL information is encoded directly into the bar code (which is why large bar codes are needed as he explains). This is quite different from the operation of the Applicant's claimed invention in which the URL is looked up in a database rather than being encoded directly into the bar code.

Thus, there is no teaching in Wellner of a lookup service wherein URLs are stored in a database and accessed with a bar code index such as a UPC or the like, and wherein that database is used to retrieve a URL and return the URL back to user device so that the user device itself may communicate directly with the server computer identified by

the URL.

It is therefore clear that the servers 13 are addressed directly by the user interface 15 via the network 14, with the address of the desired server 13 being encoded directly into the bar code (or glyph as stated above).

As mentioned above, Wellner also shows "other servers" 17 in Figure 1. Wellner states that these other servers are used for accounting or billing services (col. 3 lines 11-13). Wellner also states that these other servers may be multimedia servers that may work with server 13 to store information desired by the user (col. 3, lines 46-52). It is clear however that it is the server 13 (the server directly addressed by the user interface 15) that communicates with the user:

While the present invention will be described as using multimedia servers 13, 17, it should be understood that the servers could, more generally, be used to provide audio programs, video programs or electronic documents to the user. Multimedia server 13 can handle service requests from thousands of customers at the same time. Once a user's input selection is processed, the server 13 sends multimedia data or programs down to the interface unit 15, which displays it on the user's television (TV) receiver 16.

Wellner, col. 3 lines 65 through col. 4 line 6 (emphasis added).

The Examiner states in the rejection that Wellner discloses step (b) of former claim 1 (now step (c)):

accessing a database in the remote server

computer with the index, the database comprising a plurality of records that link an index to a pointer which identifies a remote information computer on the network²

In particular, the Examiner states that Wellner "disclosed accessing a database 13, 18, 17 ("database servers") (col. 5 lines 51-53) with the index ("an object code representing the read mark") (col. 6 lines 60-61)". It is respectfully submitted that this is an incorrect interpretation of the Wellner reference, which does not apply to the claim limitation above, in particular as amended.

The portion of Wellner cited by the Examiner merely states that other servers 17 may be "e.g. billing servers, name servers, object database servers". Wellner teaches nothing else in the specification about what exactly an "object database server" might be or how it might function. Moreover, Wellner states that this vague "object database server" might be the function of the other server 17, but he does not state that it may be a function of the server 13, which is the server that the user sends the scanned code to. In the claimed invention, the database of indexes:pointers resides in the remote server computer, which is the computer that the user computing device transmits the index to (see new step (b) added in this amendment). Applicant has clarified in this amendment that the index is transmitted to the remote server computer and that the database of indexes:pointers is in the remote server computer. Of course, this must be how the invention

² The amendments made herein are shown in underline, which clarify that the database resides at the remote server computer. Applicant also added new step (b), which clarifies that the index is transmitted to the remote server computer.

operates since the user computing device always sends the scanned bar code index to the same remote server computer, where the associated pointer (e.g. URL) is retrieved from the database and returned back to the user computing device as stated in the remainder of the claim.

Wellner, however, provides no teaching express or implied that there is a database of records comprising predetermined relationships that link an index to a pointer as expressly stated in claim 1. There is no explanation of what this "object database" in other server 17 may be, and therefore Wellner does not anticipate this claim limitation.

The Examiner also refers to Wellner's claim 1 at col. 6 lines 60-61 in this regard. Claim 1 clearly expresses how the object code (the index) is transmitted over the communications medium to the server (which can only be server 13 according to the teachings of the patent) "to select the information about the object itself from the multimedia service available from the server". Clearly, this states that the index is sent to the server (13) and that server (13) returns the desired multimedia information. Again, there is no teaching that a database resides on that server, which allows the lookup of a pointer as a function of the index, whereby the pointer is returned back to the user computing device, and the pointer is then used by the user device to establish communication directly with the remote information computer identified thereby (as set forth in the reminder of Applicant's claim 1).

It is underscored that in Wellner the bar code itself that is scanned contains the URL of the desired service:

3. The apparatus of claim 2, wherein at least one of said marks represents an Internet Universal Resource Locator (URL).

Wellner, claim 3. Since the mark (the scanned code) has the URL in it already, there would be no need to use a database to retrieve the URL as in the presently claimed invention. Thus, the "object database" vaguely referenced as part of other server 17 does not anticipate the present invention.

The Examiner also states in the rejection that Wellner discloses step (c) of former claim 1 (now step (d)):

extracting a pointer from the database as a function of the index

In particular, the Examiner states that Wellner disclosed extracting a pointer (matching text to keywords) as a function of the index (col. 4 lines 50-52). It is respectfully submitted that this is an incorrect interpretation of the Wellner reference, which does not apply to the claim limitation above.

The section in Wellner referenced by the Examiner merely states that

Another possibility is for the scanner pen 11 to scan alphanumeric characters. These characters could specify a unique identifier for a multimedia program, or they could be plain text

that relates to some multimedia documents stored in the ITV network 18. The servers 13, 17 could match this text to keywords that describe stored documents on the network using well-known information retrieval techniques. This would enable the servers to select the multimedia document(s) that best match the keywords that the user scans, and offer them for viewing.

Wellner, col. 4, lines 45-54 (emphasis added). What Wellner is describing is an embodiment in which the scanner pen reads characters (text), and not a bar code. By reading the text, the system would match the text to keywords preprogrammed into the system. One could only surmise that Wellner means you could scan the word "baseball" from paper, and that word would be match against other instances of the word "baseball", and then the server select those documents having the word "baseball". This is not what the Applicant has invented and claimed.

The Applicant's claim states that a pointer is extracted from the database as a function of the index. In particular, the records of the database comprise predetermined relationships that link an index to a pointer. That pointer is defined in the claim as identifying a remote information computer on the network. That pointer is also then returned to the user computing device over the network and used by the user computing device to establish communication directly with the information computer identified by the pointer. A typical example of a pointer is a network address (claim 18), a URL (claim 19), a name of a remote computer (claim 20), or an IP address (claim 21). A keyword would not be a pointer since it does not identify a remote information computer on

the network as set forth in claim 1. Therefore, this keyword scan embodiment of Wellner does not anticipate the present invention. Moreover, the search engine apparently referenced by the Examiner in Wellner does not utilize predetermined relationships between indexes and pointers.

The Examiner further asserts that the Applicant's claim limitation

using the pointer to establish communication with the remote computer identified thereby

is met by the matching of text to keywords to establish communication with the remote computer 13, 17, 18 identified thereby (col. 4, lines 7-10, 46-55). Although Applicant respectfully disagrees, Applicant has amended claim 1 to clarify that the pointer is returned to the user computing device over the network, and it is the user computing device that uses the pointer to establish communication with the information computer:

e) returning the pointer to the user computing device over the network; and

~~d)~~ f) the user computing device using the pointer to establish communication directly with the remote information computer identified thereby.

Thus, it is now clear that the pointer (e.g. the URL) is returned to the user computer so the user computer may connect to the information computer specified by the URL. In Wellner, the keywords are apparently used such that the

desired document is retrieved by the remote server itself and then sent to the user device.

It is therefore respectfully submitted that the Wellner reference does not anticipate or render obvious the invention as set forth in claim 1 as amended herein and that claim 1 is allowable.

The RFC 1738 Reference

The Examiner states that

In the alternative that the '193 [Wellner] patent fails to disclose extracting a pointer from the database as a function of the index and using the pointer to establish communication with the remote computer identified thereby Berners-Lee et al. disclosed the use of pointers and URLs for locating resources on the Internet ("URLs are used to locate resources that contain pointers to other resources") (Berners-Lee et al., page 4 section 2.3).

At the time the invention was made it would have been obvious for one of ordinary skill in the art to have included in the '193 patent a standard internet protocol for extracting a pointer from the database as a function of the index as disclosed by Berners-Lee et al. for accessing network resource.

Office action, pages 3-4. The Applicant respectfully disagrees and traverses. Applicant maintains that neither Berners-Lee alone or in combination with Wellner render the claimed invention obvious under 35 USC 103(a).

RFC 1738 (Berners-Lee) is a Request for Comments document that is one of many published by the Internet Engineering Task Force describing methods, behaviors, research or innovations applicable to the development and workings of

the Internet. In particular, RFC 1738 describes the Uniform Resource Locator (URL), the syntax and semantics of formalized information for location and access of resources via the Internet. See RFC 1738 Abstract, page 1. RFC 1738 is a very informative document that describes the workings of URLs in the Internet. It does not describe, however, the Applicant's invention as claimed in amended claim 1. Even if combined with Wellner (which combination would be improper as explained below), there is no teaching or suggestion of the invention in claim 1.

The section relied on in particular by the examiner merely states that URLs may be used to locate resources that may have pointers to other resources. The example given is when there are relative links embedded in a document. In that case the relative link is not a full URL - it only says that the second resource is in the same place as this one except with the following relative path. For example, if one is browsing a web page at the URL

`http://www.mainURL.com/main`

then there may be a link on that page that specifies a different part of that page, especially if it is large web page. That link may for example be

`http://www.mainURL.com/main#lowerpartofpage`

which specifies that the resource is found relative to the main URL, but the full URL need not be provided. Moreover, jumping from resource to resource by selecting links in any given resource is what may be considered the essence of web

surfing as it exists today.

This not relevant to the present invention. Applicant is not claiming to have invented URLs or jumping from resource to resource, but rather a method and system that enables a user to scan a bar code, send the bar code index data to a remote server, lookup a pointer such as a URL associated with that index in a database at the remote server, return the pointer back to the user, and have the user device connect to the resource specified by the returned pointer. This is not disclosed or suggested by RFC 1738, alone or in combination with Wellner.

In addition, in order for RFC 1738 to be properly combined with Wellner, the Examiner must show why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed. See KSR v. Teleflex, 127 S. Ct. 1727, 82 USPQ 2d 1385 (2007). The Examiner has made no showing as to why these two references may be combined (although even if they were combined the claimed invention would still not result).

Furthermore, the Examiner appears to be looking for instances of each limitation that may exist separately in the various cited prior art references. That is, the Examiner is not looking at the claimed invention as a whole. It is clear that in determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

As explained above, the claimed invention as a whole provides for the utilization of machine-readable codes such as bar code symbols to look up one or more previously-associated URL(s) in a remotely located database, and then use the looked-up URL to enable the user computer to connect directly to the remote computer designated by that URL. The cited Wellner reference teaches the use of a bar code symbol to encode the URL itself, and then connect directly to the resource designated in the bar code/ URL after scanning the bar code. That is, no index/lookup feature is used or even desired. As such Wellner teaches away from the use of an independently hosted lookup database to access pointers as a function of an index obtained from the scanning of a bar code, as in the present invention. Wellner instead teaches that it is desirable to encode the URL directly into the bar code. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Clearly, the use of bar encodes to encode a URL directly leads away from the present invention.

Nonetheless, the present inventors recognized the source of the problem caused by using bar codes to encode URLs directly:

In our copending application, we proposed to resolve these problems by allowing people to access published locations without having to manually enter the published address. In accordance with one embodiment

of the invention, the mnemonic address or verbal description of a network location is published along with the location's numeric address in bar code format. The user's computer is equipped with a bar code reader and browser software. The bar code reader is suitably interfaced to the computer's browser software to allow bar code input to be accepted as address information. When the user sees an interesting published address, he scans the associated bar code using the bar code reader, thereby loading the desired numeric address into the browser. The browser then accesses the Web or other site corresponding to that numeric address.

We are finding several problems with this and other approaches that have been tried. First, some URLs and other network addresses contain upwards of 20-30 characters, and therefore require very long bar code symbols, which can clutter advertising and packages, and may not be practical from either an esthetic or technical perspective. Second, placing URLs on printed material (whether or not in bar code format) requires manufacturers to redesign products, packaging and/or advertisements, and many manufacturers may be reluctant to do this. Third, [previous] proposal, if the network address is changed, the package needs to be redesigned, and packages already in the marketplace will have incorrect address information.

USP 6,199,048, col. 2, line 53 - col. 4 line 13 (emphasis added). Thus, the inventors of the '048 recognized the problems in using the "direct encode" system of Wellner. "[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the 'subject matter as a whole' which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103." *In re Spinnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). It is further emphasized that the inventors' recognition of this problem, as clearly delineated in the specification, is especially relevant.

That is, in accordance with MPEP 2141.02(IV), Applicants who allege they discovered the source of a problem must provide evidence substantiating the allegation, either by way of affidavits or declarations, or by way of a clear and persuasive assertion in the specification. *In re Wiseman*, 596 F.2d 1019, 201 USPQ 658 (CCPA 1979) (unsubstantiated statement of counsel was insufficient to show appellants discovered source of the problem). It is apparent that the Applicants here provided a clear and persuasive assertion in their specification how the prior art direct encode system suffers from numerous problems that are solved by their claimed invention.

Just as there is no reason from the Wellner reference to look to the RFC 1738 reference, there is no reason from the RFC 1738 reference to combine it with the teachings of Wellner. The portion relied on by the Examiner states simply that "in some cases, URLs are used to locate resources that may have pointers to other resources." Again, there is no index:pointer lookup table described here. This statement is taken out of context, and as discussed above describes the use of relative links "where the expression of the location of the second resource is in terms of 'in the same place as this one except with the following relative path'". There is no motivation or reason to combine the teachings of Wellner, which is a direct encode system, with RFC 1738, and even if one were to combine the two one would not arrive at the claimed invention. Most notable, there is no teaching or suggestion in either of these references to use "a database in the remote server computer with the index, the database comprising a plurality of records comprising predetermined

relationships that link an index to a pointer which identifies a remote information computer on the network" as set forth in claim 1 as amended herein.

The Patent Office Interview

As mentioned above, Applicant was granted the courtesy of an interview with the Examiner et al., for which the Applicant is thankful. During the interview, the undersigned discussed several of the arguments outlined herein with respect to the rejections based on Wellner and Berners-Lee. As indicated in the Interview Summary document issued by the Examiner, the Examiner responded by stating that

extracting a pointer from a database is inherently disclosed in the internet system of Berners-Lee wherein "URLs are used to locate resources that contain pointers to other resources"

Interview Summary, August 21, 2008.

Applicant maintains that even if extraction of a pointer from a database is inherent in Berners-Lee, this does not render the claimed invention obvious. Again, it is the claimed invention as a whole that must be examined. As clearly stated in amended claim 1, pointers are extracted from the database as a function of the index, wherein the index is first obtained by reading a data carrier and then sending the index to the remote server computer. There is no teaching in Berners-Lee that an index may be obtained from a data carrier in order to lookup a pointer from a database, and then returning the pointer to the client

device, as presently claimed. In addition, Wellner teaches away from looking up a pointer in a database as a function of the (scanned) index since Wellner's invention is the encoding of the URL (pointer) directly into the bar code. There is no teaching or suggestion that an index may be used in Wellner to lookup a pointer as in the claimed invention, and there is no motivation or reason provided in either reference to combine the teachings of the references to arrive at the presently claimed invention. The claims are therefore allowable.

The Baus Reference

The Baus patent relates to a system that allows a consumer to obtain information about a product that has a code such as bar code on it. With reference to Figure 1, the consumer scans the bar code 54 from a product 52 with a scanner 56. Bar code data is sent wirelessly (or via a cable) to a data processing unit 24, where the bar code data is used by coding units 64 to obtain an address that has previously been associated with the bar code. The address is then used to access a storage unit 30 such as a laser video disc unit, where further information about the product is obtained. That information is then passed on to an output unit 32 for viewing or listening by the consumer. Thus, the system enables a consumer to scan a bar code on a product, and information about that product is provided to the consumer for viewing or listening.

It is respectfully submitted that Baus does not anticipate or render obvious the present invention. Claim 1 of the Applicant is for :

A method of connecting a user computing device to one of a plurality of remote information computers available for communication over a network

The Examiner alleges that the storage units (30, 66) of Baus are the same as the remote information computers of the claimed invention. The Examiner also alleges that the wireless transmission system (transmitter 58 and receiver 60) of Baus is the same as the claimed network. However, as set forth in the claim, the user computing device must be connected to one of the remote information computers over the network. This is also positively recited in step (f) of amended claim 1:

f) the user computing device using the pointer to establish communication directly with the remote information computer identified thereby

In the claimed invention, the user computing device **connects directly** with the remote information computer to exchange information (e.g. download a web page). In Baus, the storage units do not connect directly with the storage units; rather, the information is retrieved from the storage units (the laser disc) and then is displayed on the output unit 32 for viewing. That is, the data processing unit contains both the coding units 64 as well as the storage unit 30 (see Figure 1), and instead of sending the retrieved address from the coding units to the user device, the retrieved address is used to access the laser disc directly, without any user device intervention or connection, and then that retrieved information from the laser disc is displayed to the user. This is in fact a

desired feature of the Baus system in that it is a self-contained system as explained in Baus:

In order to obtain a particularly simple assembly, it is proposed that the reading device be arranged stationarily, more particularly incorporated into the display unit. In this embodiment, the line coded products are moved past the stationary reading device. **It is expressly pointed out at this time that, according to this invention, the product information and display system is a complete unit consisting of a display unit for the products, a reading device, a data processing unit and an output unit.** The system is, so to speak, completely prepared, **requiring only that an electrical cable be plugged into a main connection.** This applies to all embodiments regardless of the transmission system between the reading device and the data processing unit. The system according to the invention can therefore be installed, without special prior knowledge, at any desired location in a department store or the like. **Costly assembly operations are avoided.**

Baus, col. 3 line 64 through col. 4 line 15 (emphasis added).

Thus, the present invention differs in at least this manner from Baus in that the present invention sends the bar code data to a database of addresses, and the address of the resource is returned to the client device to obtain the resource (the information) directly from the associated computer on the network). That is, the remote server that has the database of barcodes:URLs in the present invention does not itself lookup the resource information and return that information to the client computer as in Baus; rather, the server in the present invention returns the resource

address to the client, which then goes out on to the network to obtain the information.

In that manner, Baus does not teach the claimed limitation of "transmitting the index to a **remote server computer** over the network" as set forth in amended claim 1. As expressly taught in the specification, Baus's system is self contained and not distributed over a network. The "network" described by the Examiner is short-range wireless connection that, due to the self-contained nature of the Baus system, is simply not a network. In addition, the data processing unit of Baus is not a remote server computer connected by a network as presently claimed.

Claim 1 also specifies that the pointers in the database identify a **remote information computer on the network**. The pointers of Baus do not do this since there are no remote information computers on any network, Rather, the address that result from the coding units of Baus specify a location on the video disc (storage unit 30) but do not specify which remote computer should be accessed.

Most notably, and as explained above, Baus does not teach the steps of "returning the pointer to the user computing device over the network" and then "the user computing device using the pointer to establish communication directly with the remote information computer identified thereby." In Baus, the data processing unit determines the location on the video disc unit of the desired information, and then obtains that information for display to the user. The pointer is never returned to the user device as presently claimed. In addition, and because the pointer is

never returned to the user device, the user device never establishes communication with the remote computer identified by the pointer. The distributed nature of Applicant's invention - in which many different information servers computers on the Internet may be accessed directly by the user device after the associated address is returned from the server computer back to the user device - is not present nor even desired in Baus. Baus teaches a self-contained system in which the user is simply shown the images from the video disc referenced by the coding units. Baus therefore does not anticipate claim 1, and in fact teaches away from the functionality set forth therein.

Nor does any attempted combination of RFC 1738 with Baus render the claimed invention obvious. As described above, RFC 1738 is a document that explains the technical details of the URL protocol used in the Internet. There is no reason to combine these references since Baus desires a self-contained system in which the information from the video disc is played to the user. Baus considers the self-contained system to be an important feature of his invention. There would therefore be no motivation to use URLs of a distributed (networked) computer system in the Baus system since that would run counter to the desired functionality of Baus.

Moreover, even if one were to use URLs in Baus (that is, combine RFC 1738 with Baus), one would still not arrive at the claimed system. That is, there is no teaching or suggestion, or desirability, to have the URLs **returned from the database back to the user device** so that the user device may itself **directly connect** to the associated

information server over the network.

Therefore, it is respectfully submitted that claim 1 as amended is patentable over the cited prior art references.

Claims 2-14 and 17-35 depend from claim 1 and are patentable over the cited prior art for at least the same reasons as set forth above with respect to claim 1.

Claims 15 and 16 have been cancelled.

Claim 36 is an independent claim that recites

36. (Currently amended) A system comprising:
- a. a user computing device;
 - b. an input device associated with the user computing device, configured to read a data carrier modulated with an index;
 - c. a remote server computer selectively interconnected to the user computing device via a network, said remote server computer comprising means for storing a database comprising a plurality of records that link an index to a pointer which identifies a remote information computer;

wherein the user computing device comprises:

means for communicating over the network with the remote server computer to

(i) transmit the index to the remote server computer to enable the remote server computer to access the database to extract a pointer from the database as a function of the index, and

(ii) receive the pointer extracted from the database from the remote server computer; and

means for using the pointer to establish communication via the network with the remote information computer identified by the pointer thereby.

Claim 36 contains essentially the same limitations as method claim 1, but is for a system. The Examiner takes

the same position with respect to the prior art as was made for claim 1. Thus, the Applicant respectfully submits that the system claim 36, as presently amended, is patentable over the cited references for at least the same reasons as were set forth with respect to claim 1.

Claims 37-49 and 52-70 depend from claim 36 and are patentable over the cited prior art for at least the same reasons as set forth above with respect to claim 36.

Claims 50 and 51 have been cancelled.

Claim 71 is an independent claim that recites

71. (Currently amended) A user computing device comprising:

- a. an input device configured to read a data carrier modulated with an index; and
- b. computer processing means for executing a software program adapted to:
 - communicate over a network with a remote server computer to enable the remote server computer to
 - (i) transmit the index to the remote server computer to enable the remote server computer to utilize the index to access a database comprising a plurality of records that link an index to a pointer which identifies a remote information computer, and retrieve from the database a pointer as a function of the index;
 - (ii) receive from the remote server computer the pointer that was retrieved from the database;
 - and
 - (iii) use the pointer to establish communication via the network with the remote information computer identified by the pointer thereby.

Claim 71 contains essentially the same limitations as method claim 1 and system claim 36, but is for a user computing device. The Examiner takes the same position with respect to the prior art as was made for claims 1 and

36. Thus, the Applicant respectfully submits that the device claim 71, as presently amended, is patentable over the cited references for at least the same reasons as were set forth with respect to claims 1 and 36.

Claims 72-84 and 87-95 depend from claim 36 and are patentable over the cited prior art for at least the same reasons as set forth above with respect to claim 36.

Claims 85 and 86 have been cancelled.

Thus, all claims are allowable over the prior art of record. It is respectfully requested that these claims be allowed and pass to issue.

Date: August 29, 2008

Respectfully submitted,

/arbarkume/

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Hudetz et al.
Attorney Docket No.: 150-061REEX
Control No.: 90/008,779
Reexamined Patent: 6,199,048
Group Art Unit: 3900
Confirmation No.: 9814
Examiner: Anjan K. Deb

For: SYSTEM AND METHOD FOR AUTOMATIC ACCESS
OF A REMOTE COMPUTER OVER A NETWORK

CERTIFICATE OF SERVICE

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Sirs:

I, Anthony R. Barkume, hereby certify that a copy of the AMENDMENT that was filed in the above-referenced reexamination proceeding on August 29, 2008 was served today by first class mail, postage prepaid to Paul S. Grewal, Esq., Day Casebeer Madrid & Batchelder LLP, 20300 Stevens Creek Blvd., Suite 400, Cupertino, CA 95014, attorney of record for the Requester.

Respectfully submitted,
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