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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,577	07/31/2000	Fred B. Holt	030048003US	4317
25096	7590	11/05/2003	EXAMINER	
PERKINS COIE LLP			LAZARO, DAVID R	
PATENT-SEA			ART UNIT	
P.O. BOX 1247			2155	
SEATTLE, WA 98111-1247			PAPER NUMBER	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

EXHIBIT

Ex. 1024

Office Action Summary

Application No.

09/629,577

Applicant(s)

HOLT ET AL.

Examiner

David Lazaro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5 . 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, drawn to a method for determining a diameter of a broadcast channel, classified in class 709, subclass 238.
 - II. Claims 9-30, drawn to a method and computer-readable medium for disconnecting a first computer from a second computer with the first and second computer being connected to a broadcast channel, classified in class 709, subclass 227.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as determining the broadcast channel diameter. Invention II has separate utility such as disconnecting a first computer from a second computer when they are connected to a broadcast channel. See MPEP § 806.05(d).
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with Chun Ng of Perkins Coie LLP on 10/22/03 a provisional election was made without traverse to prosecute the invention of Group II, claims 9-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-8 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Papers Received

7. Oath/Declaration, basic filing fee, additional claim fee and late filing fee/oath or declaration surcharge were received on 11/06/00.

Information Disclosure Statement

8. IDS received on 4/23/02 has been considered by the examiner.

9. Supplemental IDS received on 6/19/02 has been considered by the examiner.

Specification

10. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 103

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

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

11. Claims 9, 10, 12, 15-18, 22-25 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,618,752 Moore et al. (Moore) in view of U.S. Patent 6,353,599 by Bi et al (Bi).

12. With respect to Claim 9, Moore teaches a method of disconnecting a first computer from a second computer, the first computer being connected to a broadcast channel, the method comprising when the first computer decides to disconnect from the second computer, the first computer sends a disconnect message to the second computer (Col. 10 lines 35-40). Moore does not disclose the second computer broadcasting a connection port search message to find a third computer to which it can connect. However it is well known in the art that a connection port search message can be broadcast to find a computer to connect to as shown by Bi (Col. 2, line 14-20, Bi) (Claim 13 lines 48-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Moore and modify as indicated by Bi with the step of when the second computer receives the disconnect message from the first computer, the second computer broadcasts a connection port search message to find a third computer to which it can connect. One would be motivated to do this as it provides

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an easy way to establish communications without previously knowing the specific port address (Col. 2 lines 34-37).

13. With respect to Claim 10, Moore in view of Bi further teaches the second computer receives a port connection message indicating the third computer is proposing that the third computer and the second computer connect (Col. 2 lines 51-55 of Bi).

14. With respect to Claim 12, Moore in view of Bi further teaches the broadcast channel is implemented using the Internet (Col. 4 lines 13-14 of Moore).

15. With respect to Claim 15, Moore in view of Bi further teaches the first computer and second computer are connect via a TCP/IP connection (Col. 4 lines 67 to Col. 5 line 2 of Moore).

16. With respect to Claim 16, Moore teaches a method for disconnecting a first computer from a second computer comprising connecting the first computer to a second computer, attempting to send a message from the first computer to the second computer and connecting to another computer when the communications fail (Col. 10 lines 48-52). Moore does not explicitly disclose broadcasting a connection port search message. However it is well known in the art that a connection port search message can be broadcast to find a computer to connect to as shown by Bi (Claim 13 lines 48-

see also col. 2, lines 14-20 of Bi, (M)
51) It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Moore and modify as indicated by Bi with the step of when the attempt to send the message is unsuccessful, broadcasting a connection port search message indicating that the first computer needs a connection. One would be motivated to do this as it provides an easy way to establish

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communications without previously knowing the specific port address (Col. 2 lines 34-37).

17. With respect to Claim 17, Moore in view of Bi further teaches when a third computer receives the connection port search message and the third computer also needs a connection, sending a message from the third computer to the first computer proposing that the first computer and third computer connect (Col. 2 lines 51-55 of Bi).

18. With respect to Claim 18, Moore in view of Bi further teaches the first computer receives the message proposing that the first computer and third computer connect, sending from the first computer to the third computer a message indicating that the first computer accepts the proposal to connect to the first computer to the third computer (Col. 10 lines 42-47 of Moore).

19. With respect to Claim 22, Moore in view of Bi further teaches the broadcasting includes sending the message to each computer to which the first computer is connected (Col. 10 lines 4-7 of Moore).

20. With respect to Claim 23, Moore teaches a computer readable medium containing instructions for controlling disconnecting of a computer from another computer, the computer and the other computer being connected to a broadcast channel comprising a component that when the computer decides to disconnect from the other computer, the computer sends a disconnect message to the other computer (Col. 10 lines 35-40). Moore does not explicitly disclose a component that broadcasts a connection port search message to find a computer to which it can connect. However it is well known in the art that a connection port search message can be broadcast to find

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a computer to connect to as shown by Bi (Claim 13 lines 48-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the computer-readable media containing instructions disclosed by Moore and modify it as indicated by Bi with a component when the computer receives a disconnect message from another computer, the computer broadcasts a connection port search message to find a computer to which it can connect. One would be motivated to do this as it provides an easy way to establish communications without previously knowing the specific port address (Col. 2 lines 34-37).

21. With respect to Claim 24, Moore in view of Bi further teaches a component that, when the computer receives a connection port search message and the computer needs to connect to another computer, sends to the computer that sent the connection port search message a port connection message indicating that the computer is proposing that the computer that sent the connection port search message connect to the computer (Col. 2 lines 51-55 or Bi).

22. With respect to Claim 25, Moore in view of Bi further teaches a component that, when the computer receives a port connection message, connecting to the computer that sent the port connection message (Col. 10 lines 4-7 of Moore).

23. With respect to Claim 28, Moore in view of Bi further teaches the computers are connected via a TCP/IP connection (Col. 4 lines 67 to Col. 5 line 2 of Moore).

24. With respect to Claim 29, Moore in view of Bi further teaches the computers that are connected to the broadcast channel are peers (Col. 3 line 52 to Col. 4 line 3 of Moore).

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25. With respect to Claim 30, Moore in view of Bi further teaches the broadcast channel is implemented using the Internet (Col. 4 lines 13-14 of Moore).

26. Claims 13, 14, 19-21, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Bi as applied to claims 9, 16 and 23 above, and further in view of "Graph Theory with Applications" by Bondy et al. (Bondy).

27. With respect to Claim 13, Moore in view of Bi teaches all the limitations of Claim 9 but does not explicitly disclose each computer connected to the broadcast channel network is connected to at least three other computers. However it is well known in the art that a communications network can be designed to be more reliable by increasing the connectivity and edge connectivity as shown in Bondy (Page 47-50 section 3.3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Moore in view of Bi and modify it as disclosed by Bondy with each computer connected to the broadcast channel is connected to at least three other computers. The larger amount of connectivity and edge connectivity, the more reliable the system becomes. Therefore the amount in terms of a reliable system is arbitrary. One would be motivated to have this as it provides reliability in a communications network where the failure of communications link can jeopardize communications of the system (Page 47-50 section 3.3).

28. With respect to Claim 14, Moore in view of Bi and in further view of Bondy further teach the computers and their connections form an m-regular graph for the same reason and motivation as described above in Claim 13.

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29. With respect to Claim 19, Moore in view of Bi teaches all the limitations of Claim 16 but does not explicitly disclose each computer connected to the broadcast channel network is connected to at least three other computers. However it is well known in the art that a communications network can be designed to be more reliable by increasing the connectivity and edge connectivity as shown in Bondy (Page 47-50 section 3.3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Moore in view of Bi and modify it as disclosed by Bondy with each computer connected to the broadcast channel is connected to at least three other computers. The larger amount of connectivity and edge connectivity, the more reliable the system becomes. Therefore the amount in terms of a reliable system is arbitrary. One would be motivated to have this as it provides reliability in a communications network where the failure of communications link can jeopardize communications of the system (Page 47-50 section 3.3).

30. With respect to Claim 20, Moore in view of Bi and in further view of Bondy further teach the computers and their connections form an m -regular graph for the same reason and motivation as described above in Claim 19.

31. With respect to Claim 21, Moore in view of Bi and in further view of Bondy further teach the computers and their connections form an m -connected graph for the same reason and motivation as described above in Claim 19.

32. With respect to Claim 26, Moore in view of Bi teaches all the limitations of Claim 23 but does not explicitly disclose each computer connected to the broadcast channel network is connected to at least three other computers. However it is well known in the

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art that a communications network can be designed to be more reliable by increasing the connectivity and edge connectivity as shown in Bondy (Page 47-50 section 3.3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the computer-readable medium disclosed by Moore in view of Bi and modify it as disclosed by Bondy with each computer connected to the broadcast channel is connected to at least three other computers. The larger amount of connectivity and edge connectivity, the more reliable the system becomes. Therefore the amount in terms of a reliable system is arbitrary. One would be motivated to have this as it provides reliability in a communications network where the failure of communications link can jeopardize communications of the system (Page 47-50 section 3.3).

33. With respect to Claim 27, Moore in view of Bi and in further view of Bondy further teach the computers and their connections form an m-regular graph for the same reason and motivation as described above in Claim 19.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

35. U.S. Patent 6,252,884 by Hunter "Dynamic Configuration of Wireless Networks" June 26, 2001.

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36. U.S. Patent 6,073,177 by Hebel et al. "Dynamic Method for Connecting a Client to a Server Application" June 6, 2000.
37. U.S. Patent 5,946,316 by Chen et al. "Dynamic Distributed Multicast Routing Protocol" August 31, 1999.
38. Yavatkar et al. "A Reliable Dissemination Protocol for Interactive Collaborative Applications" Proc. ACM Multimedia, 1995 p.333-344

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 703-305-4868. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



David Lazaro
October 31, 2003



HOSAIN ALAM
SUPERVISORY PATENT EXAMINER