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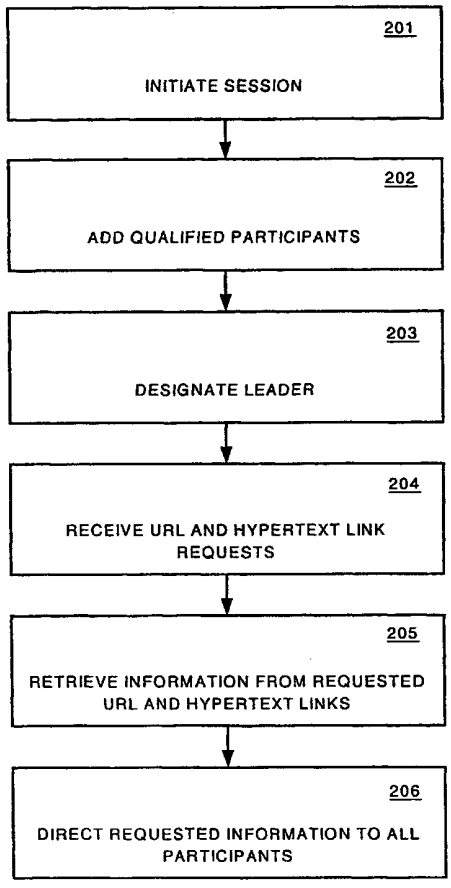
(54) Title: METHOD AND APPARATUS FOR PROVIDING CONCURRENT VIEWING OF INTERNET INFORMATION TO REMOTE COMMUNICATION SESSION PARTICIPANTS



(57) Abstract: A method for providing concurrent viewing of Internet information to remote communication session participants, comprising: receiving Internet requests from remote commuincation session participants (204); retrieving Internet information corresponding to the Internet requests (205); and directing the retrieved Internet information to the remote communication session participants so as to provide concurrent viewing of the Internet information to the remote communication session participants (206).

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METHOD AND APPARATUS FOR PROVIDING CONCURRENT VIEWING OF INTERNET INFORMATION TO REMOTE COMMUNICATION SESSION PARTICIPANTS

FIELD OF THE INVENTION

[0001] The present invention generally relates to Internet communication sessions and in particular, to a method and apparatus for providing concurrent viewing of Internet information to remote communication session participants.

BACKGROUND OF THE INVENTION

[0002] Participation in Internet chat rooms has grown dramatically as the Internet pervades our daily lives. In such chat rooms, people having common interests come together and voice their opinions on all types of subjects. To enhance their discussions, it would be useful at times to provide concurrent viewing of Internet information to all session participants.

OBJECTS AND SUMMARY OF THE INVENTION

[0003] Accordingly, it is an object of the present invention to provide a method and apparatus for providing concurrent viewing of Internet information to remote communication session participants.

[0004] This and additional objects are accomplished by the various aspects of the present invention, wherein briefly stated, one aspect of the invention is a method for providing concurrent viewing of Internet information to remote communication session participants, comprising: receiving Internet requests, such as URL and hypertext link requests, from remote communication session participants; retrieving Internet information, such as Internet website information, corresponding to the Internet requests; and directing the retrieved Internet information to the remote communication session participants so as to provide concurrent viewing of the Internet information to the remote communication session participants.

[0005] In another aspect of the invention, an apparatus for providing concurrent viewing of Internet information to remote communication session participants utilizing remote client computers, comprises a server computer that is programmed to receive URL and hypertext link requests from the remote client computers, retrieve Internet website information corresponding to the URL and hypertext link requests, and direct the retrieved Internet website information to the remote client computers so as to provide concurrent viewing of the Internet website information to remote communication session participants.

[0006] In yet another aspect of the invention, a system for providing concurrent viewing of Internet information to remote communication session participants, comprises: a plurality of remote client computers utilized by remote communication session participants during a communication session; and a server computer programmed for receiving URL and hypertext link requests from the plurality of remote client computers through the Internet, retrieving Internet website information corresponding to the URL and hypertext link requests from remote server computers through the Internet, and directing the retrieved Internet website information through the Internet to the plurality of remote client computers so as to provide concurrent viewing of the retrieved Internet website information to the remote communication session participants.

[0007] Additional objects, features and advantages of the various aspects of the present invention will become apparent from the following description of its preferred embodiments, which description should be taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 illustrates a block diagram of a system including an apparatus for providing concurrent viewing of Internet information to remote communication session participants, utilizing aspects of the present invention.

[0009] FIG. 2 illustrates a flow diagram of a method for providing concurrent viewing of Internet information to remote communication session participants, utilizing aspects of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[00010] Fig. 1 illustrates a block diagram of a system 10 including a server computer 30 providing concurrent viewing of Internet information, such as Internet website information, retrieved from remote server computers, such as remote server computers 41, 42 and 43, to remote communication session participants utilizing remote client computers, such as remote client computers 21, 22 and 23, via the Internet 50 during a communication session, such as an Internet relay chat (IRC) session or a conference call using Voice Over Internet protocol (VoIP).

[00011] The server computer 30 sponsors or coordinates the communication session between the remote communication participants. It is programmed to provide controlled access to the communication session. Access is typically controlled through an user identification code procedure and/or a communication session identification code. The server computer 30 is also programmed to designate one of the participants as the leader of the session. Initially, the first participant to join the communication session will be designated the leader. Leadership may subsequently be passed to another participant through a hand-off procedure, or a first-in, first-out protocol as the then current leader logs off the communication session.

[00012] The computer server 30 is further programmed for receiving Internet requests, such as Internet addresses or Universal Resource Locators (URLs) and hypertext link requests, from the remote client computers through the Internet 50, retrieving Internet information, such as Internet website information, corresponding to the Internet requests from remote server computers through the Internet 50, and directing the retrieved Internet information through the Internet 50 to the remote client computers so as to

provide concurrent viewing of the retrieved Internet information to the remote communication participants. Only Internet information corresponding to Internet requests from the leader are retrieved in order to avoid contention.

[00013] Fig. 2 illustrates a flow diagram of a method for providing concurrent viewing of Internet information to remote communication session participants. In 201, a communication session is initiated by a first participant specifying the URL of the server computer 30 on his remote client computer, logging on to the system with his user identification code and password after making a connection, and specifying a prespecified or user defined communication session indicator. In 202, subsequent participants join the communication session by also specifying the URL of the server computer 30 on their remote client computers, logging on to the system with their user identification codes and passwords after making connection, and specifying the same communication session indicator as the first participant. By verifying user identification codes, passwords and communication session indicators, the server computer 30 provides controlled access to the communication session for the remote communication session participants.

[00014] In 203, the server computer 30 designates a leader among the remote communication session participants. Since the first participant is initially designated as the leader, 203 precedes 202 the first time a leader is designated by the server computer 30. Subsequently, however, leadership may be passed between participants using a hand-off procedure wherein the then current leader passes leadership to another participant. Alternatively, leadership may be passed on to another participant selected by the server computer 30, if the then current leader logs off without handing off his leadership and before the communication session is over, as indicated by all participants having logged off. In this case, the server computer 30 designates the new leader using a first-in, first-out protocol wherein the earliest participant still logged on to the communication session is selected by the server computer 30.

[00015] In 204, the server computer 30 receives URL and hypertext link requests from remote communication session participants. In 205, the server computer 30 retrieves Internet website information corresponding to the URL and hypertext link requests of the leader. In 206, the server computer 30 directs the retrieved Internet website information to all remote communication session participants so as to provide concurrent viewing of the Internet website information to the remote communication session participants.

[00016] In one example of the method, a first participant logs on to the system and specifies a prespecified communication session indicator such as "shopping for computers." Subsequent participants also interested in that subject, log on and specify the same communication session indicator. The first participant leads the session by requesting URL and hypertext links to the server computer 30. The server computer 30 retrieves Internet website information corresponding to the URL and hypertext link requests, and directs the retrieved information to the remote communication session participants so as to provide concurrent viewing of the information to the remote participants. The participants can then discuss the information by voicing their opinions on the computer models or other computer information being concurrently displayed on their screens via a chat room format.

[00017] In another example of the method, a first participant logs on to the system and specifies a user defined communication session indicator by providing a communication session identification code that is only known to a select group. Other members of the select group, may then log on and gain entrance to the communication session by providing the proper communication session identification code to the server computer 30. The first participant leads the session by requesting URL and hypertext links to the server computer 30. The server computer 30 retrieves Internet website information corresponding to the URL and hypertext link requests, and directs the retrieved information to the remote communication session participants

so as to provide concurrent viewing of the information to the remote participants. The participants can then discuss the information being concurrently displayed on their screens via either a preselected chat room format or conference call via VoIP.

[00018] Although the various aspects of the present invention have been described with respect to a preferred embodiment, it will be understood that the invention is entitled to full protection within the full scope of the appended claims.

CLAIMS

We claim:

1. A method for providing concurrent viewing of Internet information to remote communication session participants, comprising:

receiving Internet requests from remote communication session participants;

retrieving Internet information corresponding to said Internet requests; and

directing said retrieved Internet information to said remote communication session participants so as to provide concurrent viewing of said Internet information to said remote communication session participants.

2. The method according to claim 1, wherein said Internet requests include URL and hypertext link requests, and said Internet information include Internet website information.

3. The method according to claim 2, further comprising providing controlled access to a communication session for said remote communication session participants.

4. The method according to claim 3, wherein said communication session is an IRC session.

5. The method according to claim 3, wherein said communication session is a VoIP session.

6. The method according to claim 2, further comprising designating a leader among said remote communication session participants.

7. The method according to claim 6, wherein said retrieving Internet website information corresponding to said URL and hypertext link requests, comprises retrieving only Internet website information corresponding to URL and hypertext link requests from said leader.

8. The method according to claim 2, wherein said directing includes retransmitting said retrieved Internet website information to said remote communication session participants so as to provide concurrent viewing of said Internet website information to said remote communication session participants.

9. An apparatus for providing concurrent viewing of Internet information to remote communication session participants utilizing remote client computers, comprising a server computer that is programmed to receive URL and hypertext link requests from the remote client computers, retrieve Internet website information corresponding to said URL and hypertext link requests, and direct said retrieved Internet website information to said remote client computers so as to provide concurrent viewing of said Internet website information to remote communication session participants.

10. The apparatus as recited in claim 9, wherein said server computer is further programmed to provide controlled access to a communication session for said remote communication session participants.

11. The apparatus according to claim 10, wherein said communication session is an IRC session.

12. The apparatus according to claim 10, wherein said communication session is a VoIP session.

13. The apparatus according to claim 9, wherein said server computer is further programmed to designate a leader among said remote communication session participants.

14. The apparatus according to claim 13, wherein said server computer is programmed to retrieve only Internet website information corresponding to URL and hypertext link requests from said leader.

15. A system for providing concurrent viewing of Internet information to remote communication session participants via the Internet, comprising:

a plurality of remote client computers utilized by remote communication session participants during a communication session; and

a server computer programmed for receiving URL and hypertext link requests from said plurality of remote client computers through the Internet, retrieving Internet website information corresponding to said URL and hypertext link requests from remote server computers through the Internet, and directing said retrieved Internet website information through the Internet to said plurality of remote client computers so as to provide concurrent viewing of said retrieved Internet website information to said remote communication session participants.

16. The system according to claim 15, wherein said server computer is further programmed to provide controlled access to said communication session for said remote communication session participants.

17. The system according to claim 16, wherein said communication session is an IRC session.

18. The system according to claim 16, wherein said communication session is a VoIP session.

19. The system according to claim 15, wherein said server computer is further programmed to designate a leader among said remote communication session participants.

20. The system according to claim 19, wherein said server computer is programmed to retrieve only Internet website information corresponding to URL and hypertext link requests from said leader.

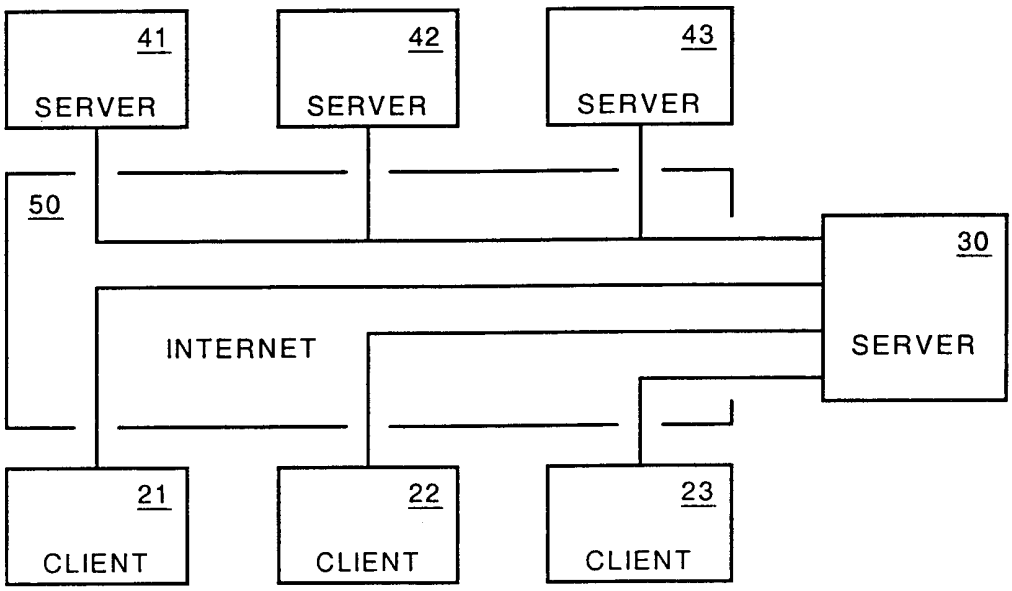
41
SERVER
42
SERVER
43
SERVER
50
30
INTERNET
SERVER
21
CLIENT
22
CLIENT
23
CLIENT

FIG.1

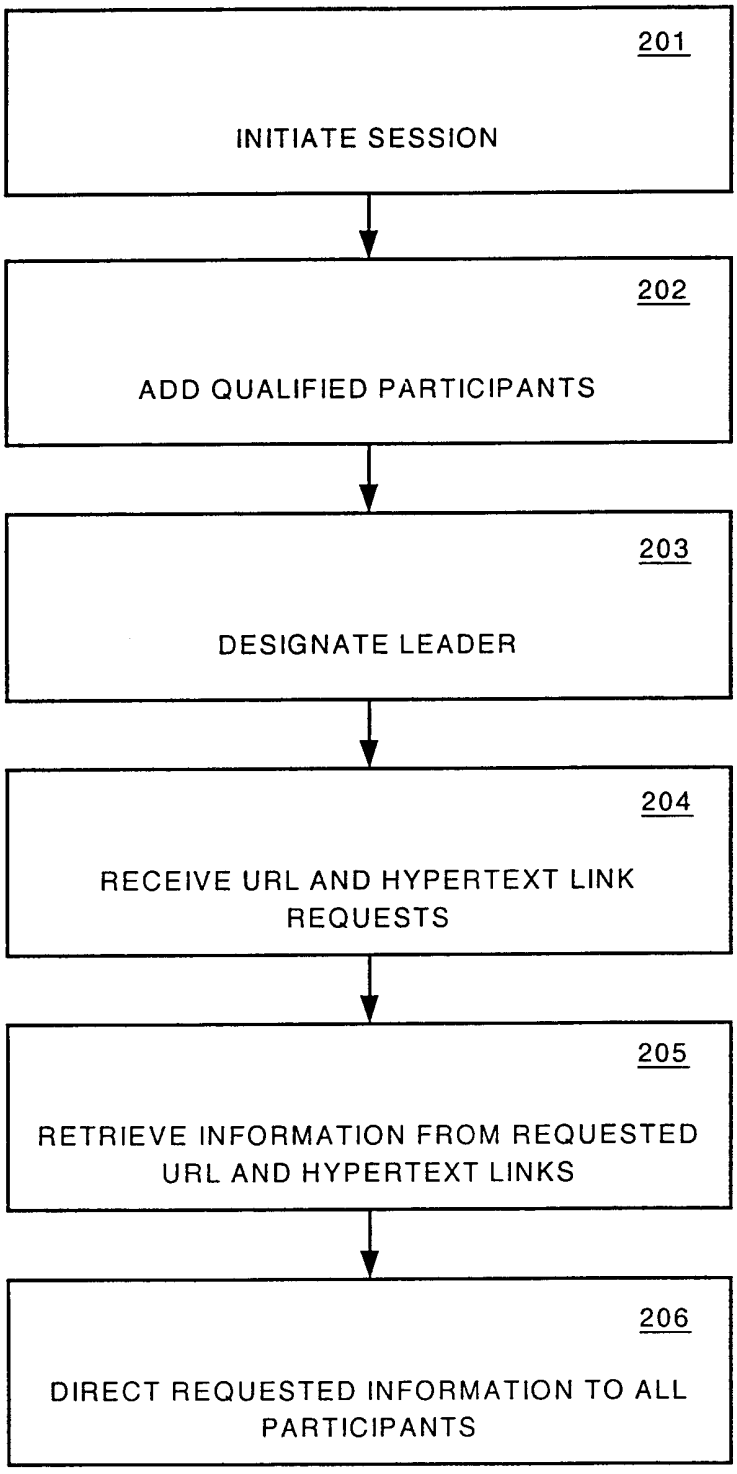
201
INITIATE SESSION
202
ADD QUALIFIED PARTICIPANTS
203
DESIGNATE LEADER
204
RECEIVE URL AND HYPERTEXT LINK REQUESTS
205
RETRIEVE INFORMATION FROM REQUESTED URL AND HYPERTEXT LINKS
206
DIRECT REQUESTED INFORMATION TO ALL PARTICIPANTS

FIG.2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/02212

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 15/16
US CL : 709/204, 205

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 709/204, 205

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,862,330 A (ANUPAM et al.) 19 January 1999 (19.01.1999), columns 1-5, especially column 4, lines 6-44.	1-6, 8-13, 15-19
X, E	US 6,181,689 B1 (Choung et al) 30 January 2001 (30.01.2001), columns 3-5.	1-20
A, P	US 6,070,185 A (ANUPAM et al) 30 May 2000 (30.05.2000), columns 1-12.	1-20
A	US 5,861,883 A (CUOMO et al) 19 January 1999 (19.01.1999), columns 1-6.	1-20
A	US 5,974,446 A (SONNENREICH et al) 26 October 1999 (26.10.1999), columns 1-10.	1-20

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
28 February 2001 (28.02.2001)	06 APR 2001
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Glen Burgess James R. Matthews Telephone No. 703-305-3900

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/02212

Continuation of B. FIELDS SEARCHED Item 3: ProQuest Direct, EAST

search terms: chat, conference, leader, synchronous, concurrent, url, request, web page, website