Client-Server Multitasking

by

HARVEY LUNENFELD

TABLE OF CONTENTS

Table of Contents 1

Background of the Invention 4

Field of the Invention 4

Background Art 4

Summary 13

Drawings 24

Description 41

I. System 41

A. Overview 41

B. Typical Service and/or Information Entry Request Forms 46

C. Typical Completed Service and/or Information Entry Request Forms 47

D. Typical Service and/or Information Response Forms 58

E. Optional Database 86

F. Additional Details 88

II. A Particular User, User Interface, and Client on the Network 92

A. Overview 92

B. Diagrammatic Regrouping 97

PETITIONERS
Exhibit 1003

III. A Particular Service and/or Information Request and Associated Service and/or Information Response on the Network 99
B. The Server PS (18) 99
C. Certain Ones of the Clients 108
D. Formulating Query Information Groups 119
IV Process 134
V. Additional Details 148
A. User Input 148
B. User Interface Details 151
C. Service and/or Information Request Details 162
D. Optional Instructions 170
E. Communicating the Service and/or Information Requests 174
F. Parsing, Processing, and/or Formatting the Service and/or Information Requests 174
G. Formulating the Requests 177
H. Determining Queries and Servers to Make the Requests Thereof 182
I. Grouping the Queries and Sorting/Grouping Criteria 186
J. Communicating the Requests to the Servers 198
K. Replies from the Servers 203
L. Parsing, Processing, Formatting, Sorting, Grouping, and Organizing Responses into Service and/or Information Responses 208
M. Additional Features and/or Other Considerations 219
Claims 242

Abstract 249

Client-Server Multitasking

by

HARVEY LUNENFELD

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates generally to clients and servers and more particularly to client-server multitasking.

BACKGROUND ART

Clients, servers, and client-server systems have been known. However there is a need for client-server multitasking. A client-server multitasking system and process are needed, which are capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

A requestor and/or user should be capable of making substantially multiple simultaneous same and/or different requests of same and/or different servers. The

client server-multitasking system and process should be capable of organizing responses from the servers into service and/or information responses, and communicating the service and/or information responses to the requestors and/or users substantially simultaneously, and on-the-fly.

The requestors and/or users should be capable of making substantially simultaneous service and/or information requests of the same and/or different ones of servers and/or clients, using the same and/or different queries, and/or the same and/or different instructions. The client-server multitasking system and process should be capable of retrieving substantially multiple simultaneous services and/or information having the same and/or different criteria from the same and/or different servers, sorting, grouping, and/or organizing the responses from the servers and/or the clients into information and/or services responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously. The same and/or different ones of uniform resource locators, target resources, and/or paths may be used.

The requestors and/or the users should be capable of making multiple simultaneous searches. The searches should be capable of having at least one or a plurality of same or different queries of the same and/or different servers and/or clients. The responses from the servers and/or the clients should be capable of being organized into the service and/or information response in a variety of formats. It should be possible to sort the responses within the service and/or information response, such as, for example, by category, query, group, page, order of importance, ascending and/or descending order,

alphabetically and/or numerically, or other characteristics, as determined by the requestor, and/or the user, and/or the client-server multitasking system, or to combine the responses within the service and/or information response, such as, for example, interleaving the responses one with the other, such as, for example, by order of relevance or other parameters. The responses should be capable of being grouped by search criteria, server, order of importance, or by numerical factors such as value, price, or other numerical quantifier. For example, the responses should be presentable, for example, in ascending or descending order in interleaved format, such as top ones, twos, threes, and so on, or presentable separately to the requestor and/or the user. The order may be order of importance or relevance related, or, for example, numerically valued, such as price or stock market value.

The client-server multitasking system and process should be capable of information and/or service retrieval from the same and/or different ones of the servers substantially simultaneously and on-the-fly, using the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process should be capable of substantially multiple simultaneous searching, using the same and/or different ones of queries of the same and/or different ones of the clients and/or servers, which may be search engines, and/or sites, and/or servers, and/or locations on the network, and additionally and/or alternatively building a client-server multitasking search engine and/or database. The client-server multitasking search engine and/or database should be capable of storing

the information and/or services retrieved therefrom the search engines, and/or sites, and/or servers, and/or locations being queried on the network therein, and building the client-server search engine and/or database. The client-server multitasking search engine should also be capable of being queried either directly and/or in combination therewith the substantially simultaneous searching, using the same and/or different queries of the same and/or different search engines, sites, servers, and/or databases. The client-server multitasking search engine and/or database should also be capable of updating information and/or services stored therein by querying sites, servers, search engines, and/or databases containing information and/or services referenced in client-server multitasking search engine and/or database.

The client-server multitasking system and process should also be capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks.

The client-server multitasking system and process should be capable of substantially simultaneous searching of the same and/or different ones of search engines and/or sites on the network substantially on-the-fly, with the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process should also be capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites,

in accordance with instructions from the requestors, and/or the users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system and process should also be capable drilling down and/or up to different levels within the search engines, sites, and/or servers being queried.

The client-server multitasking system and process should be capable of providing manual and/or timed updates. Such timed updates should allow for motion related presentation to the requestor and/or the user.

The client-server multitasking system and process should be capable of incorporating information and/or services thereinto a variety of user interfaces at different locations therein the user interfaces, grouping, and/or organizing the information and/or services, and optionally eliminating duplicate information and/or services.

The client-server multitasking system and process should be capable of incorporating links, graphics, video, text, and audio, and/or combinations thereof, and selective advertising, according to selectable search, query, sorting, and/or grouping criteria, and/or combinations thereof thereinto the information and/or services to be delivered thereto the user interfaces. The user should also be capable of placing orders, such as purchases, and/or other types of orders, payments, confirmations thereof, and/or combinations thereof, either directly and/or therethrough servers and/or sites thereon the network.

The client-server multitasking system should be capable of use in a variety of applications, and be capable of information comparison and/or trend analysis of information from the same and/or different sources substantially simultaneously. The client-server multitasking system should be capable of, for example, determining best query results, with respect to a plurality of search engine results; purchasing and/or price comparisons, viewing and/or reviewing prices/values and trends for different sites, determining lowest costs and lowest cost analyses for wholesale and retail purposes; product availability, e.g., airline tickets, pricing, and ticket availability, from different airlines to the same and/or different locations; purchasing of commodities and/or stocks form the same and/or different sites with updates every few seconds and/or minutes; obtaining prices and/or values in different stock markets substantially simultaneously; and searching for jobs on the same and/or different job sites, using the same and/or different job criteria, for example, on a daily basis, the job sites having changing job availability; and/or a combination thereof, all substantially simultaneously. The client-server multitasking system should be capable of presenting information and/or services for review and/or updating from the same and/or different ones of sites, servers, and/or applications substantially simultaneously, and trend analysis thereof, using a variety of sorting, grouping and/or organizing criteria, according to the needs of the requestor, and/or the user, and/or resident within the client-server multitasking system.

A client server-multitasking system and process are needed, which are capable of service and/or information retrieval from at least one server, organization, communication, and presentation of such services and/or information to at least one

requestor, and/or the user, and/or optional storage, and/or retrieval of such services and/or information from the optional storage. The client-server multitasking system and process should be capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof. The client-server multitasking system search engine and/or database having stored information and/or services therein should also be searchable, be capable of full text searches thereof, and be searchable by the servers and/or the clients on the network, either separately and/or in combination therewith the substantially simultaneous multiple same and/or different searches and/or queries of the same and/or different servers on the network. Information therein the client-server multitasking system search engine and/or database should also be searchable and/or retrievable, and should be capable of being incorporated therein the service and/or information responses delivered thereto the user interfaces, according to search criteria, selectively and/or automatically, by the requestor, and/or the user. The client-server multitasking system search engine and/or database should also be capable of spidering, and/or roboting, and/or querying sites, services and/or information to be stored therein and/or stored therein the client-server multitasking system search engine and/or database, and updating the services and/or information to be stored and/or stored therein the client-server multitasking system search engine and/or database.

The client-server multitasking system and process should be capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating

services and/or information therefrom the same and/or different ones of the servers and/or clients having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto user responses for delivery to and use by the requestors and/or users.

For the foregoing reasons, there is a need for a client-server multitasking system and process capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries of the same and/or different ones of the servers, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly, and communicating service and/or information responses to the requestors and/or users substantially simultaneously and on-the-fly. The client-server multitasking system and process should be capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks, and be capable of searching search engines and/or other sites substantially simultaneously and on-the-fly. The client-server multitasking system and process should be capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites, in accordance with instructions from the requestors, and/or the users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system should also be capable of use in a variety of applications, and capable of information comparison and/or trend analysis of information from the same and/or different sources

substantially simultaneously. The client-server multitasking system and process should also be capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof, be capable of being searched and/or queried, querying sites referenced therein the client-server multitasking system search engine and/or database, and updating information and/or services stored therein. The client-server multitasking system and process should be capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers and/or clients having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto user responses for delivery to and use by the requestors and/or users.

SUMMARY

The present invention is directed to a client-server multitasking system and process capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries of the same and/or different ones of the servers, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly, and communicating service and/or information responses to the requestors and/or users substantially simultaneously and on-the-fly. The client-server multitasking system and process is capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks, and be capable of searching search engines and/or other sites substantially simultaneously and on-the-fly.

The client-server multitasking system and process is capable of retrieving substantially multiple simultaneous services and/or information having the same and/or different criteria from the same and/or different servers, sorting, grouping, and/or organizing the responses from the servers and/or the clients into information and/or services responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously. The requestors and/or the users may make substantially simultaneous service and/or information requests of servers and clients, using the same and/or different queries, and/or the same and/or different instructions.

The same and/or different uniform resource locators, target resources, and/or paths may be used.

The client-server multitasking system and process is capable of making multiple substantially simultaneous same and/or different requests of same and/or different servers, organizing responses from the servers into service and/or information responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously.

The client-server multitasking system and process is also capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites, in accordance with instructions from the requestors and/or the users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system is capable of use in a variety of applications, and is capable of information comparison and/or trend analysis of information from the same and/or different sources substantially simultaneously. The client-server multitasking system and process is also be capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof, be capable of being searched and/or queried, querying sites referenced therein the client-server multitasking system search engine and/or database, and updating information and/or services stored therein.

The client-server multitasking system and process are capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

A requestor and/or user is capable of making substantially multiple simultaneous same and/or different requests of same and/or different servers. The client server-multitasking system and process is capable of organizing responses from the servers into service and/or information responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously, and on-the-fly.

The requestors and/or users are capable of making substantially simultaneous service and/or information requests of the same and/or different ones of servers and/or clients, using the same and/or different queries, and/or the same and/or different instructions. The client-server multitasking system and process is capable of retrieving substantially multiple simultaneous services and/or information having the same and/or different criteria from the same and/or different servers, sorting, grouping, and/or organizing the responses from the servers and/or the clients into information and/or services responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously. The same and/or different ones of uniform resource locators, target resources, and/or paths may be used.

The requestors and/or users are capable of making multiple simultaneous searches. The searches may have at least one or a plurality of same or different queries of the same and/or different servers and/or clients. The responses from the servers and/or the clients may be of being organized into the service and/or information response in a variety of formats. The responses may be sorted within the service and/or information response, such as, for example, by category, query, group, page, order of importance, ascending and/or descending order, alphabetically and/or numerically, or other characteristics, as determined by the requestor, and/or the user, and/or the client-server multitasking system, and/or the responses may be combined within the service and/or information response, such as, for example, interleaving the responses one with the other, such as, for example, by order of relevance or other parameters. The responses may also be capable of being grouped by search criteria, server, order of importance, or by numerical factors such as value, price, or other numerical quantifier. For example, the responses may be presentable, for example, in ascending or descending order in interleaved format, such as top ones, twos, threes, and so on, or presentable separately to the requestor and/or the user. The order may be order of importance or relevance related, or, for example, numerically valued, such as price or stock market value.

The client-server multitasking system and process is be capable of information and/or service retrieval from the same and/or different ones of the servers substantially simultaneously and on-the-fly, using the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process is capable of substantially multiple simultaneous searching, using the same and/or different ones of queries of the same and/or different ones of the clients and/or servers, which may be search engines, and/or sites, and/or servers, and/or locations on the network, and additionally and/or alternatively building a client-server multitasking search engine and/or database. The client-server multitasking search engine and/or database is capable of storing the information and/or services retrieved therefrom the search engines, and/or sites, and/or servers, and/or locations being queried on the network therein, and building the client-server search engine and/or database. The client-server multitasking search engine should is also capable of being queried either directly and/or in combination therewith the substantially simultaneous searching, using the same and/or different queries of the same and/or different search engines, sites, servers, and/or databases. The client-server multitasking search engine and/or database should is also capable of updating information and/or services stored therein by querying sites, servers, search engines, and/or databases containing information and/or services referenced in client-server multitasking search engine and/or database.

The client-server multitasking system and process is also capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks.

The client-server multitasking system and process are capable of substantially simultaneous searching of the same and/or different ones of search engines and/or sites

on the network substantially on-the-fly, with the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process are also capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites, in accordance with instructions from the requestors, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system and process are also capable drilling down and/or up to different levels within the search engines, sites, and/or servers being queried.

The client-server multitasking system and process are capable of providing manual and/or timed updates. Such timed updates allow for motion related presentation to the requestor and/or the user.

The client-server multitasking system and process are capable of incorporating information and/or services thereinto a variety of user interfaces at different locations therein the user interfaces, grouping, and/or organizing the information and/or services, and optionally eliminating duplicate information and/or services.

The client-server multitasking system and process are capable of incorporating links, graphics, video, text, and audio, and/or combinations thereof, and selective advertising, according to selectable search, query, sorting, and/or grouping criteria, and/or

combinations thereof thereinto the information and/or services to be delivered thereto the user interfaces. The requestor and/or the user may place orders, such as purchases, and/or other types of orders, payments, confirmations thereof, and/or combinations thereof, either directly and/or therethrough servers and/or sites thereon the network.

The client-server multitasking system is capable of use in a variety of applications, and is capable of information comparison and/or trend analysis of information from the same and/or different sources substantially simultaneously. The client-server multitasking system is capable of, for example, determining best query results, with respect to a plurality of search engine results; purchasing and/or price comparisons, viewing and/or reviewing prices/values and trends for different sites, determining lowest costs and lowest cost analyses for wholesale and retail purposes; product availability, e.g., airline tickets, pricing, and ticket availability, from different airlines to the same and/or different locations; purchasing of commodities and/or stocks form the same and/or different sites with updates every few seconds and/or minutes; obtaining prices and/or values in different stock markets substantially simultaneously; and searching for jobs on the same and/or different job sites, using the same and/or different job criteria, for example, on a daily basis, the job sites having changing job availability; and/or a combination thereof, all substantially simultaneously. The client-server multitasking system is capable of presenting information and/or services for review and/or updating from the same and/or different ones of sites, servers, and/or applications substantially simultaneously, and trend analysis thereof, using a variety of

sorting, grouping and/or organizing criteria, according to the needs of the requestor, and/or the user, and/or resident within the client-server multitasking system.

The client server-multitasking system and process are capable of service and/or information retrieval from at least one server, organization, communication, and presentation of such services and/or information to at least one requestor and/or user, and/or optional storage, and/or retrieval of such services and/or information from the optional storage. The client-server multitasking system and process are capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof. The client-server multitasking system search engine and/or database having stored information and/or services therein are also searchable, are capable of full text searches thereof, and are searchable by the servers and/or the clients on the network, either separately and/or in combination therewith the substantially simultaneous multiple same and/or different searches and/or queries of the same and/or different servers on the network. Information therein the client-server multitasking system search engine and/or database are also searchable and/or retrievable, and are capable of being incorporated therein the service and/or information responses delivered thereto the user interfaces, according to search criteria, selectively and/or automatically, by the requestor and/or the user. The client-server multitasking system search engine and/or database are capable of spidering, and/or roboting, and/or querying sites, services and/or information to be stored therein and/or stored therein the client-server multitasking system search engine and/or database, and updating the

services and/or information to be stored and/or stored therein the client-server multitasking system search engine and/or database.

The client-server multitasking system and process are capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers and/or clients having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto user responses for delivery to and use by the requestors and/or users.

The client-server multitasking system and process, then, are capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries of the same and/or different ones of the servers, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly, and communicating service and/or information responses to the requestors and/or users substantially simultaneously and on-the-fly. The client-server multitasking system and process are capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks, and are capable of searching search engines and/or other sites substantially simultaneously and on-the-fly. The client-server multitasking system and process are capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites,

in accordance with instructions from the requestors, and/or users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system is capable of use in a variety of applications, and capable of information comparison and/or trend analysis of information from the same and/or different sources substantially simultaneously. The client-server multitasking system and process are capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof, is capable of being searched and/or queried, querying sites referenced therein the client-server multitasking system search engine and/or database, and updating information and/or services stored therein. The client-server multitasking system and process are capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers and/or clients having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto user responses for delivery to and use by the requestors and/or users.

A multitasking process having features of the present invention comprises: parsing, processing, and/or formatting a service and/or information request thereinto a current request group; opening connections therewith and making at least one request thereof at least one server; parsing, processing, formatting, grouping, and/or organizing at least

one response therefrom the at least one server thereinto at least one addressable response information group; formulating information therefrom the current request group thereinto a request pointer/address group having at least one pointer/address; formulating at least one addressable query pointer/address group having at least one other pointer/address; incorporating information and/or services therefrom the at least one addressable response information group thereinto at least one addressable query information group; and incorporating the at least one addressable query information group thereinto a service and/or information response.

A client-server multitasking system having features of the present invention comprises: means for parsing, processing, and/or formatting a service and/or information request thereinto a current request group; means for opening connections therewith and making at least one request thereof at least one server; means for parsing, processing, formatting, grouping, and/or organizing at least one response therefrom the at least one server thereinto at least one addressable response information group; means for formulating information therefrom the current request group thereinto a request pointer/address group having at least one pointer/address; means for formulating at least one addressable query pointer/address group having at least one other pointer/address; means for incorporating information and/or services therefrom the at least one addressable response information group thereinto at least one addressable query information group; and means for incorporating the at least one addressable query information group thereinto a service and/or information response.

DRAWINGS

These and other features, aspects, and advantages of the present invention will become better understood with regard to the following description, appended claims, and accompanying drawings where:

FIG. 1 is a schematic representation of a client-server multitasking system, constructed in accordance with the present invention;

FIG. 2 is a more detailed schematic representation of the client-server multitasking system;

FIG. 3 is a schematic representation of user input $\mathbf{UI_n}$ from user $\mathbf{U_n}$ thereinto user interface $\mathbf{I_n}$ of the client-server multitasking system;

FIG. 4 is a schematic representation of a server $\mathbf{S_z}$ of the client-server multitasking system;

FIGS. 5A depicts a typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$, which the user $\mathbf{U_n}$ may communicate typical user input $\mathbf{UI_n}$ thereinto;

FIGS. 5B depicts the typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$ of FIG. 5B with reference alphanumerics;

FIGS. 6 depicts another typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$, which the user $\mathbf{U_n}$ may communicate other typical user input $\mathbf{UI_n}$ thereinto;

FIGS. 7 depicts another typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$, which the user $\mathbf{U_n}$ may communicate other typical user input $\mathbf{UI_n}$ thereinto;

FIGS. 8 depicts another typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$, which the user $\mathbf{U_n}$ may communicate other typical user input $\mathbf{UI_n}$ thereinto;

FIGS. 9 depicts another typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$, which the user $\mathbf{U_n}$ may communicate other typical user input $\mathbf{UI_n}$ thereinto;

FIGS. 10 depicts another typical service and/or information entry request form $\mathbf{IE_n}$ at the user interface $\mathbf{I_n}$, which the user $\mathbf{U_n}$ may communicate other typical user input $\mathbf{UI_n}$ thereinto;

FIG. 11 depicts a typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 12 depicts another typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 13 depicts another typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 14A depicts another typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 14B depicts another typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 14C depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 15 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 16 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 17 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 18 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 19 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 20 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 21 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 22 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 23 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 24 depicts another typical completed service and/or information entry request form IF_n at the user interface I_n;

FIG. 25 depicts another typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 26 depicts another typical completed service and/or information entry request form $\mathbf{IF_n}$ at the user interface $\mathbf{I_n}$;

FIG. 27 depicts a typical user response $\mathbf{UR_n}$, as a typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 28 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 29 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 30 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 31 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 32 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 33 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 34 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 35 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 36 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 37 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 38 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 39 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 40 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 41 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 42 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 43 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 44 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 45 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 46 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 47 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 48 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 49 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 50 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 51 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 52 depicts another typical user response $\mathbf{UR_n}$, as the typical service and/or information response form $\mathbf{IS_n}$ at the user interface $\mathbf{I_n}$, which may be communicated thereto the user $\mathbf{U_n}$;

FIG. 53A is a schematic representation of a server **PS** of the client-server multitasking system having an optional database;

FIG. 53B is a schematic representation of a client $\mathbf{C_n}$ of the client-server multitasking system having an optional database;

FIG. 54 is a schematic representation of a particular one of the clients $C_1 \ldots C_n$ of the client-server multitasking system, designated as the particular client C_n, communicating with ones of the servers $S_1 \ldots S_z$, in accordance with the designation scheme corresponding to the corresponding ones of the server designations $S_{n1} \ldots S_{nm}$, corresponding to the requests $Q_{n1} \ldots Q_{nm}$, therethrough the server **PS**;

FIG. 55 is a schematic representation of the particular client C_n of the client-server multitasking system communicating with ones of the servers $S_1 \ldots S_z$, in accordance with the designation scheme corresponding to the corresponding ones of the server designations $S_{n1} \ldots S_{nm}$, corresponding to the requests $Q_{n1} \ldots Q_{nm}$;

FIG. 56 is a schematic representation of the particular client C_n of the client-server multitasking system communicating with ones of the servers $S_1 \ldots S_z$, in accordance with the designation scheme corresponding to the corresponding ones of the server designations $S_{n1} \ldots S_{nm}$, corresponding to the requests $Q_{n1} \ldots Q_{nm}$, and also therethrough the server **PS**;

FIG. 57 is an alternate schematic representation of the client-server multitasking system of FIG.1, constructed in accordance with the present invention, regrouped diagrammatically and alternatively named for illustrative purposes only, to illustrate and visualize possible typical communication paths;

FIG. 58 is a schematic representation of a particular service and/or information request IQ_n;

FIG. 59 is a schematic representation of a particular service and/or information request $\mathbf{IQ_n}$ parsed, processed, and/or formatted into a current request group $\mathbf{QA_{nc}}$, request groups $\mathbf{QA_{n1}...QA_{nz}}$, and corresponding optional instructions $\mathbf{VJ_{n1}...VJ_{nk}}$, and utilization of information therefrom to make the requests $\mathbf{Q_{n1}...Q_{nm}}$, obtain the responses $\mathbf{R_{n1}...R_{nm}}$, and incorporate information therefrom into a particular service and/or information response $\mathbf{IR_n}$;

FIG. 60 is a schematic representation of the particular service and/or information request $\mathbf{IQ_n}$ parsed, processed, and/or formatted into a current request group $\mathbf{QA_{nc}}$, request groups $\mathbf{QA_{n1}...QA_{nz}}$, and corresponding optional instructions $\mathbf{VJ_{n1}...VJ_{nk}}$, and utilization of information therefrom to make the requests $\mathbf{Q_{n1}...Q_{nm}}$, obtain the responses $\mathbf{R_{n1}...R_{nm}}$, and incorporate information therefrom into the particular service and/or information response $\mathbf{IR_n}$, having other grouping/sorting that may be used additionally and/or alternatively to that of FIG. 59;

FIG. 61 is a schematic representation of the particular service and/or information response $\mathbf{IR_n}$ having a service and/or information group $\mathbf{G_n}$, additional request links $\mathbf{SL_{n1}...SL_{nw}}$, optional order form, optional additional advertisements and/or links, optional hidden information, and the optional service and/or information entry request form;

FIG. 62 is a schematic representation of a particular user service and/or information request $\mathbf{iq_n}$;

FIG. 63 is a schematic representation of a particular user service and/or information request $\mathbf{iq_n}$ parsed, processed, and/or formatted into the current request group

QA_{nc}, the request groups $QA_{n1}...QA_{nz}$, and the corresponding optional instructions $VJ_{n1}...VJ_{nk}$, and utilization of information therefrom to make the requests $Q_{n1}...Q_{nm}$, obtain the responses $R_{n1}...R_{nm}$, and incorporate information therefrom into the particular user service and/or information response ir_n;

FIG. 64 is a schematic representation of the particular user service and/or information request iq_n parsed, processed, and/or formatted into the current request group QA_{nc}, the request groups $QA_{n1}...QA_{nz}$, and the corresponding optional instructions $VJ_{n1}...VJ_{nk}$, and utilization of information therefrom to make the requests $Q_{n1}...Q_{nm}$, obtain the responses $R_{n1}...R_{nm}$, and incorporate information therefrom into the particular user service and/or information response ir_n, having other grouping/sorting that may be used additionally and/or alternatively to that of FIG. 63;

FIG. 65 is a schematic representation of the particular user service and/or information response ir_n having the service and/or information group G_n, the additional request links $SL_{n1}...SL_{nw}$, the optional order form, the optional additional advertisements and/or links, the optional hidden information, and the optional service and/or information entry request form;

FIG. 66A is a schematic representation of a response information group RG_{nm} having addressable individual information groups $LG_{nm1}...LG_{nmr}$ showing optional addressable pointer/address indices $IN_{nm1}...IN_{nmr}$ correspondingly associated therewith optional addressable individual information groups

$LG_{nm1}...LG_{nmr}$, which may be addressed/pointed therewith pointer/address PP_{nm1};

FIG. 66B is a schematic representation of the addressable response information group RG_{nm} having the addressable individual information groups $LG_{nm1}...LG_{nmr}$ showing the optional addressable pointer/address indices $IN_{nm1}...IN_{nmr}$ correspondingly associated therewith the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$, which may be addressed/pointed therewith the pointer/address PP_{nm2};

FIG. 66C is a schematic representation of the addressable response information group RG_{nm} having the addressable individual information groups $LG_{nm1}...LG_{nmr}$ showing the optional addressable pointer/address indices $IN_{nm1}...IN_{nmr}$ correspondingly associated therewith the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$, which may be addressed/pointed therewith the pointer/address PP_{nmr};

FIG. 67 is a schematic representation of the individual information groups $LG_{nm1}...LG_{nmr}$ having corresponding optional links $LD_{nm1}...LD_{nmr}$, and/or corresponding optional descriptions $DD_{nm1}...DD_{nmr}$, and/or corresponding optional prices/values $PD_{nm1}...PD_{nmr}$, and/or corresponding optional images $ID_{nm1}...ID_{nmr}$;

FIG. 68 is a schematic representation of a labelled individual information group LL_{nmr};

FIG. 69 is a schematic representation of an addressable query information group GI_{nz};

FIG. 70 is a schematic representation of steps of a client-server multitasking process of the present invention;

FIG. 70-1A is a schematic representation of a multitasking process of deriving the service and/or information response $\mathbf{IR_n}$ and/or the user service and/or information response $\mathbf{ir_n}$, with reference to FIGS. 59 and 63;

FIG. 70-1B is a schematic representation of a multitasking process of deriving the service and/or information response $\mathbf{IR_n}$ and/or the user service and/or information response $\mathbf{ir_n}$ having other grouping/sorting that may be used additionally and/or alternatively to that of FIGS. 59 and 63, as shown with reference to FIGS. 60 and 64;

FIG. 70-1-1 is a schematic representation of a step of the multitasking process of FIGS. 70-1A and 70-1B shown in more detail;

FIG. 70-1-2A is a schematic representation of another step of the multitasking process of FIG. 70-1A shown in more detail;

FIG. 70-1-2B is a schematic representation of another step of the multitasking process of FIG. 70-1B shown in more detail;

FIG. 70-2 is a schematic representation of user review of user response $\mathbf{UR_n}$ and/or selection of additional services and/or information;

FIG. 71 is a schematic representation of the user input $\mathbf{UI_n}$ thereinto the service and/or information entry request form $\mathbf{IE_n}$;

FIG. 72 is a schematic representation of the service and/or information entry request form $\mathbf{IE_n}$ showing fields, links, and elements of the service and/or information entry request form $\mathbf{IE_n}$;

FIG. 73 is a schematic representation of a completed service and/or information entry request form IF_n showing typical elements, values, and field names;

FIG. 74 is a schematic representation of the completed service and/or information entry request form IF_n, a user service and/or information request iq_n, and the client C_n of the client-server multitasking system;

FIG. 75 is a schematic representation of the user service an/or information request iq_n;

FIG. 76 is a schematic representation of the service an/or information request IQ_n;

FIG. 77 is an alternate schematic representation of the user service an/or information request iq_n of FIG. 75;

FIG. 78 is an alternate schematic representation of the service an/or information request IQ_n of FIG. 76;

FIG. 79 is a more detailed schematic representation of the service and/or information request IQ_n of FIGS. 76 and FIG. 78 showing typical field names and values;

FIG. 80 is an alternate more detailed schematic representation of the service and/or information request IQ_n of FIGS. 76 and 78;

FIG. 81 is a schematic representation showing queries $QQ_{n1}...QQ_{nm}$ and corresponding server addresses $AQ_{n1}...AQ_{nm}$;

FIG. 82 shows the schematic representation of FIG. 81 having typical values;

FIG. 83 shows the schematic representation of FIG. 81 having other typical values;

FIG. 84 shows the schematic representation of FIG. 81 having other typical values;

FIG. 85 shows the schematic representation of FIG. 81 having other typical values;

FIG. 86 is a schematic representation of information that may be used for formulating a typical particular one of the requests $Q_{n1}...Q_{nm}$, designated as the request Q_{nm}, and optional instructions $VJ_{nm1}...VJ_{nk}$ from the particular service and/or information request IQ_n and opening a connection OC_{nm};

FIG. 87 is a schematic representation of information that may be used for formulating the typical particular one of the requests $Q_{n1}...Q_{nm}$, designated as the request Q_{nm}, and the optional instructions $VJ_{nm1}...VJ_{nk}$ from the particular user service and/or information request iq_n and opening the connection OC_{nm};

FIG. 88 is an alternate schematic representation of information that may be used for formulating the typical particular one of the requests $Q_{n1}...Q_{nm}$, designated as the request Q_{nm}, and optional instructions $VJ_{nm1}...VJ_{nk}$ from the particular service and/or information request IQ_n and opening a connection OC_{nm} of FIG. 86;

FIG. 89 is an alternate schematic representation of information that may be used for formulating the typical particular one of the requests $Q_{n1}...Q_{nm}$, designated as the request Q_{nm}, and the optional instructions $VJ_{nm1}...VJ_{nk}$ from the particular user service and/or information request iq_n and opening the connection OC_{nm} of FIG. 87;

FIG. 90 is a schematic representation of queries $QQ_{n1}...QQ_{nm}$, corresponding server addresses $AQ_{n1}...AQ_{nm}$, and optional instructions $VJ_{nm1}...VJ_{nk}$ that may be parsed, processed, and/or formatted from the service and/or

information request $\mathbf{IQ_n}$ and/or the user service and/or information request $\mathbf{iq_n}$;

FIG. 91 is a schematic representation of a request pointer/address group $\mathbf{QZ_{ns}}$, having a particular one of query pointer/address groups $\mathbf{QG_{n1}...QG_{nz}}$, designated as the query pointer/address group $\mathbf{QG_{nz}}$, associated ones of the addressable response information group s $\mathbf{RG_{n1}...RG_{nm}}$, the pointers/addresses $\mathbf{PP_{n11}...PP_{nmr}}$, and the query information group $\mathbf{GI_{nz}}$ associated therewith the query pointer/address group $\mathbf{QG_{nz}}$;

FIG. 92 is a schematic representation of a sorting criteria addressing scheme having a particular query pointer/address group $\mathbf{QG_{nz}}$, associated ones of response information groups $\mathbf{RG_{nm}}$, and query information group $\mathbf{GI_{nz}}$ associated therewith the query pointer/address group $\mathbf{QG_{nz}}$;

FIG. 93 is a schematic representation of an alternate sorting criteria addressing scheme having a particular query pointer/address group $\mathbf{QG_{nz}}$, associated ones of response information groups $\mathbf{RG_{nm}}$, and query information group $\mathbf{GI_{nz}}$ associated therewith the query pointer/address group $\mathbf{QG_{nz}}$;

FIG. 94 is a schematic representation of typical ones of the query pointer/address groups $\mathbf{QG_{n1}...QG_{nz}}$, having the sorting criteria addressing scheme of FIG. 92, having typical ones of queries $\mathbf{QQ_{n1}...QQ_{nz}}$ and corresponding server addresses $\mathbf{AQ_{n1}...AQ_{nz}}$ associated therewith;

FIG. 95 is another schematic representation of the typical ones of the query pointer/address groups $\mathbf{QG_{n1}...QG_{nz}}$, having the sorting criteria addressing scheme of FIG. 92, having the typical ones of the of queries $\mathbf{QQ_{n1}...QQ_{nz}}$

and the corresponding ones of the server addresses $AQ_{n1}...AQ_{nz}$ of FIG. 94 associated therewith;

FIG. 96 is a generic schematic representation of the query pointer/address groups $QG_{n1}...QG_{nz}$, having the sorting criteria addressing scheme of FIG. 92, having the ones of queries $QQ_{n1}...QQ_{nz}$ and the corresponding ones of the server addresses $AQ_{n1}...AQ_{nz}$ associated therewith;

FIG. 97 is a schematic representation of a request Q_{nm} of the client-server multitasking system;

FIG. 98 is a schematic representation of a response R_{nm} of the client-server multitasking system;

FIG. 99 is a schematic representation of an entity body RH_{nm} of the response R_{nm} of FIG. 98 having optional response individual information groups $LS_{nm1}...LS_{nmr}$, and/or optional information LI_{nm};

FIG. 100 is a schematic representation of the addressable response information group RG_{nm} having the addressable individual information groups $LG_{nm1}...LG_{nmr}$ parsed, and/or processed, and/or formatted, and/or organized, and/or grouped thereinto the addressable response information group RG_{nm} therefrom the optional entity body RH_{nm} of FIG. 99;

FIG. 101 is a schematic representation of the optional response individual information group LS_{nmr} parsed, and/or processed, and/or formatted, and/or organized, and/or grouped thereinto the addressable individual information group LG_{nmr};

FIG. 102 is a schematic representation of the optional links $LD_{nm1}...LD_{nmr}$, and/or the optional descriptions $DD_{nm1}...DD_{nmr}$, and/or the optional prices/values $PD_{nm1}...PD_{nmr}$, and/or the optional images $ID_{nm1}...ID_{nmr}$ parsed individually and/or separately, and incorporated thereinto the addressable response information group RG_{nm} therefrom the optional entity body RH_{nm};

FIGS. 103 is a schematic representation of a typical one of the addressable query information group GI_{nz}, based upon certain sorting and/or grouping criteria, having the labelled individual information groups $LL_{nz1}...LL_{nzu}$, the optional database labelled individual information groups $RL_{nz1}...RL_{nzx}$, the optional query description QT_{nz}, the optional server descriptions and/or links $ST_{nz1}...ST_{nzf}$, and the optional advertisements and/or links $LT_{nz1}...LT_{nzt}$ incorporated thereinto certain typical ones of the typical service and/or information response forms IS_n of FIGS. 27-52.

FIGS. 104 is a another schematic representation of a typical one of the addressable query information group GI_{nz}, based upon certain sorting and/or grouping criteria, having the labelled individual information groups $LL_{nz1}...LL_{nzu}$, the optional database labelled individual information groups $RL_{nz1}...RL_{nzx}$, the optional query description QT_{nz}, the optional server descriptions and/or links $ST_{nz1}...ST_{nzf}$, and the optional advertisements and/or links $LT_{nz1}...LT_{nzt}$ incorporated thereinto certain typical ones of the typical service and/or information response forms IS_n of FIGS. 27-52.

DESCRIPTION

The preferred embodiments of the present invention will be described with reference to FIGS. 1-141 of the drawings. Identical elements in the various figures are identified with the same reference alphanumerics.

I. SYSTEM

A. OVERVIEW

FIGS. 1 and 2 show a client-server multitasking system **10** of the present invention, having requestors $U_1 \ldots U_n$ **(12)**, hereinafter called users $U_1 \ldots U_n$ **(12)**, corresponding user interfaces $I_1 \ldots I_n$ **(14)**, corresponding clients $C_1 \ldots C_n$ **(16)**, server **PS (18)**, servers $S_1 \ldots S_z$ **(20)**, and optional servers $SO_1 \ldots SO_p$ **(22)**, constructed in accordance with the present invention, which reside on a network **24**. Each of the users $U_1 \ldots U_n$ **(12)** communicate with the corresponding clients $C_1 \ldots C_n$ **(16)** therethrough the corresponding user interfaces $I_1 \ldots I_n$ **(14)**.

Each of the users $U_1 \ldots U_n$ **(12)** enter corresponding user inputs $UI_1 \ldots UI_n$ **(25)** having one or more same and/or different user requests $qu_{11} \ldots qu_{nu}$ **(26)** thereinto the corresponding user interfaces $I_1 \ldots I_n$ **(14)**, as shown in FIG. 3. The user requests $qu_{11} \ldots qu_{nu}$ **(26)** are communicated from the user interfaces $I_1 \ldots I_n$ **(14)** to the corresponding clients $C_1 \ldots C_n$ **(16)** within corresponding user service and/or information requests $iq_1 \ldots iq_n$ **(27)**, having the user requests $qu_{11} \ldots qu_{nu}$ **(26)** and

other optional information. The users $U_1...U_n$ **(12)** may enter the corresponding user inputs $UI_1...UI_n$ **(25)** at the same and/or different times.

Each of the user interfaces $I_1...I_n$ **(14)** communicate the user service and/or information requests $iq_1...iq_n$ **(27)** thereto the corresponding clients $C_1...C_n$ **(16)**, which optionally format the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** into corresponding service and/or information requests $IQ_1...IQ_n$ **(28)**, as required. Each of the service and/or information requests $IQ_1...IQ_n$ **(28)** have information therein that may be used to formulate one or more same and/or different requests $Q_{11}...Q_{nm}$ **(29)** to be made of one or more of the same and/or different ones of the servers $S_1...S_z$ **(20)**, which may hereinafter be called server designations $S_{11}...S_{nm}$ **(30)**, in accordance with a designation scheme which designates the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, as shown in FIGS. 2 and 4. FIG. 4 shows the server designations $S_{11}...S_{nm}$ **(30)** for typical ones of the requests $Q_{11}...Q_{nm}$ **(29)** and a typical one of the servers S_z **(20)**. Each of the requests $Q_{11}...Q_{nm}$ **(29)** may be the same and/or different one from the other and may be made of the same and/or different ones of the servers $S_1...S_z$ **(20)** at the same time and/or different times.

Each of the service and/or information requests $IQ_1...IQ_n$ **(28)** may be communicated thereto the server **PS (18)**, which parses, processes, and/or formats the service and/or information requests $IQ_1...IQ_n$ **(28)** into the requests $Q_{11}...Q_{nm}$ **(29)**.

The corresponding clients **$C_1...C_n$ (16)** may also and/or alternatively optionally parse, process, and/or format the corresponding user service and/or information requests **$iq_1...iq_n$ (27)** into one or more of the same and/or different requests **$Q_{11}...Q_{nm}$ (29)** to be made of one or more of the same and/or different ones of the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations **$S_{11}...S_{nm}$ (30)**, as required.

Certain ones of the clients **$C_1...C_n$ (16)** may communicate corresponding certain ones of the service and/or information requests **$IQ_1...IQ_n$ (28)** to the server **PS (18)**, which parses, processes and/or formats the certain ones of the service and/or information requests **$IQ_1...IQ_n$ (28)** into certain ones of the requests **$Q_{11}...Q_{nm}$ (29)**, as required, and communicates the certain ones of the requests **$Q_{11}...Q_{nm}$ (29)** to the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme corresponding to the corresponding certain ones of the server designations **$S_{11}...S_{nm}$ (30)**.

Alternate ones of the clients **$C_1...C_n$ (16)** may communicate corresponding alternate ones of the requests **$Q_{11}...Q_{nm}$ (29)** to corresponding alternate ones of the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme corresponding to the corresponding alternate ones of the server designations **$S_{11}...S_{nm}$ (30)**.

Other alternate ones of the clients **$C_1...C_n$ (16)** may communicate corresponding other alternate ones of the service and/or information requests **$IQ_1...IQ_n$ (28)** to the server **PS (18)**, which parses, processes and/or formats the other alternate ones of the service

and/or information requests $IQ_1...IQ_n$ **(28)** into other alternate ones of the requests $Q_{11}...Q_{nm}$ **(29)**, as required, communicates the other alternate ones of the requests $Q_{11}...Q_{nm}$ **(29)** to corresponding other alternate ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme corresponding to the corresponding other alternate ones of the server designations $S_{11}...S_{nm}$ **(30)**; and additionally the other alternate ones of the clients $C_1...C_n$ **(16)** may also parse, process, and/or format the user service and/or information requests $iq_1...iq_n$ **(27)** into one or more of the same and/or different yet other alternate ones of the requests $Q_{11}...Q_{nm}$ **(29)**, and communicate the yet other alternate ones of the requests $Q_{11}...Q_{nm}$ **(29)** to corresponding yet other alternate ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme corresponding to the corresponding yet other alternate ones of the server designations $S_{11}...S_{nm}$ **(30)**.

Each of the service and/or information requests $IQ_1...IQ_n$ **(28)** may, thus, be communicated therefrom the corresponding clients $C_1...C_n$ **(16)** to the server **PS (18)**. The requests $Q_{11}...Q_{nm}$ **(29)** may be communicated therefrom the server **PS (18)** and/or therefrom the corresponding clients $C_1...C_n$ **(16)** to the servers $S_1...S_z$ **(20)**, and may depend upon instructions from and/or generated by the corresponding users $U_1...U_n$ **(12)**, and/or the corresponding user interfaces $I_1...I_n$ **(14)** and/or the corresponding clients $C_1...C_n$ **(16)**, and/or information generated by the server **PS (18)** and/or the servers $S_1...S_z$ **(20)**, and/or ancillary instructions, a combination thereof, and/or other suitable means.

Each of the servers $S_1...S_z$ **(20)** corresponding to the designation scheme $S_{11}...S_{nm}$ **(30)** replies to the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**, accordingly, and communicates corresponding responses $R_{11}...R_{nm}$ **(32)**, associated with the requests $Q_{11}...Q_{nm}$ **(29)**, to the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** making the requests $Q_{11}...Q_{nm}$ **(29)**, as shown in FIG. 2 for typical ones of the requests $Q_{11}...Q_{nm}$ **(29)** and the corresponding responses $R_{11}...R_{nm}$ **(32)**.

The server **PS (18)** and/or the appropriate clients $C_1...C_n$ **(16)** parse, process, format, sort, group, and/or organize the responses $R_{11}...R_{nm}$ **(32)** into corresponding service and/or information responses $IR_1...IR_n$ **(34)**, having corresponding parsed, processed, formatted, sorted, grouped, and/or organized service and/or information groups $G_1...G_n$ **(35)** (shown later in FIGS. 27-52) acceptable to the corresponding clients $C_1...C_n$ **(16)** and the corresponding respective user interfaces $I_1...I_n$ **(14)**. The server **PS (18)** communicates the appropriate service and/or information responses $IR_1...IR_n$ **(34)** to the corresponding clients $C_1...C_n$ **(16)**.

The clients $C_1...C_n$ **(16)** format the service and/or information responses $IR_1...IR_n$ **(34)** into corresponding user service and/or information responses $ir_1...ir_n$ **(36)**, as required, and communicate the user service and/or information responses $ir_1...ir_n$ **(36)** thereto the corresponding user interfaces $I_1...I_n$ **(14)**. The user interfaces $I_1...I_n$ **(14)** incorporate the user service and/or information responses $ir_1...ir_n$ **(36)** into corresponding user responses $UR_1...UR_n$ **(37)**, which are derived at the user interfaces $I_1...I_n$ **(14)**, and communicated by the user interfaces $I_1...I_n$ **(14)** thereto the

corresponding users **$U_1...U_n$ (12)**. The users **$U_1...U_n$ (12)** review the corresponding user responses **$UR_1...UR_n$ (37)** at the user interfaces **$I_1...I_n$ (14)** and/or select additional services and/or information therefrom.

B. Typical Service and/or Information Entry Request Forms

FIGS. 5A, 5B, and 6-10 show typical ones of service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)**, which the users **$U_1...U_n$ (12)** may communicate typical ones of the user inputs **$UI_1...UI_n$ (25)** thereinto, as requests for information and/or services. The typical ones of the service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)** shown in FIGS. 5A, 5B, and 6-10 are typical examples of the service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)**, a much larger variety of which is possible. Names and/or links and/or other information are incorporated therein the typical ones of the service and/or information entry request forms **$IE_1...IE_n$ (38)** shown in FIGS. 5A, 5B, and 6-10 for illustrative purposes, and are not intended to limit the large variety of the service and/or information entry request forms **$IE_1...IE_n$ (38)** and the names and/or links and/or information that are possible, and that may be incorporated thereinto the service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)**.

C. Typical Completed Service and/or Information Entry Request Forms

FIGS. 11-26 show typical ones of completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**.

FIG. 11 shows a typical particular one of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)**, hereinafter designated the completed service and/or information entry request form **IF_n (230)**, at a particular one of the user interfaces **$I_1...I_n$ (14)**, hereinafter designated the user interface **I_n (14)**, having same and different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. Typical same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, are "Cat", "Dog", and "Mouse", which are different one from the other.

FIG. 12 shows the typical completed service and/or information entry request forms **IF_n (230)**, at the user interface **I_n (14)**, having same and different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. Typical same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** are "Cat", "Dog", and "Mouse", which are different one from the other. Typical same ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)** are "HotBot", "WebCrawler", and "Dejanews", which are different one from the other, and which are also different from "Yahoo" and "LookSmart". The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** have 5 "URL's per Search Engine", which instructs the

client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** having 5 "URL's per Search Engine", rather than 10 "URL's per Search Engine", as instructed in FIG. 11.

FIG. 13 shows the typical completed service and/or information entry request forms IF_n **(230)**, at the user interface I_n **(14)** having a single typical one of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)** as "Big Elephants".

FIGS. 14A, 14B, and 14C show the typical completed service and/or information entry request form IF_n **(230)**, at the user interface I_n **(14)**, having same and different ones of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)**, different ones of the typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, showing "Current Group" as "Group I", "Group II", and "Group III", in FIGS. 14A, 14B, and 14C, respectively. Typical same ones of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)** are "Catcher in the Rye", "Catcher", "Rye", "Sports", and "Rye Bread", which are different one from the other. The typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)** are different one from the other. The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** have a 5 second "Timeout (seconds) per Search Engine", rather than a 3 second "Timeout (seconds) per Search Engine" as in FIGS. 11-13. The "Timeout (seconds) per Search Engine" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** within a period of less than the "Timeout (seconds) per Search Engine"

specified in the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. It should be noted that response times of less than one second per search engine are typical., and response times of substantially less than one second are quite common. However, the "Timeout (seconds) per Search Engine" has been incorporated herein for the user **U_1 (12)** to specify in the event of slow ones of the responses **$R_{n1}...R_{nm}$ (32)** from certain ones of the servers **$S_1...S_z$ (20)**.

FIG. 15 shows the typical completed service and/or information entry request forms **IF_n (230)**, at the user interface **I_n (14)**, having same and different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. Typical same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** are "Charles Dickens", "A Tale of Two Cities", and "Oliver Twist", which are different one from the other. All blank entries beneath the entry above take on the characteristics of the completed entry above. Therefore, Searches 2, 3, and 4 take on the typical queries **$QQ_{n2}...QQ_{n4}$ (53)** of "Charles Dickens" of Search 1, above. Likewise, Searches 7, 8, and 9 take on the typical queries **$QQ_{n7}...QQ_{n9}$ (53)** of "Oliver Twist" of Search 6, above. Search 5 takes on the typical query **QQ_{n5} (53)** of "A Tale of Two Cities".

The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** of FIG. 15 have "Separate", which instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** in separate groups, i.e., grouped by the typical server addresses

$AQ_{n1}...AQ_{nm}$ (54), rather than interleaved one with the other, as instructed in FIGS. 11-14.

The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** "Interleaved" of FIGS. 11-14 instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** having information and/or services therein the responses **$R_{n1}...R_{nm}$ (32)** to be interleaved one with the other (or alternating one with the other) therein the appropriate addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**. The labelled individual information groups **$LL_{n11}...LL_{nzu}$ (86)** therein the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** are alternatingly interleaved one with the other and labelled and/or identified and associated correspondingly therewith the responses **$R_{n1}...R_{nm}$ (32)** therefrom the servers **$S_1...S_z$ (20)**. The "Interleaved" information and/or services may typically be incorporated therein the appropriate addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** in substantially the same sequence as the information and/or services are therein the responses **$R_{n1}...R_{nm}$ (32)** communicated therefrom the servers **$S_1...S_z$ (20)**. However, other sorting/grouping criteria may optionally be used, as will be discussed later.

The typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)** are different one from the other in FIG. 15. The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** also instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** having

"Searches per Group", rather than 3 "Searches per Group", as in FIGS. 11-14. The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** also instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** having 8 "URL's per Search Engine".

FIG. 16 shows the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)**, having the same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** have "URL Details" as "List", which instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** "List" format rather than "Summary" format, as instructed in FIGS. 11-15. The "URL Details" as "Summary" instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)** showing descriptions and/or other information and/or services, in addition to links, therein the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, while "URL Details" as "List" instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)** showing only links therein the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**.

The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** have 25 "URL's per Search Engine", which instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** having 25 "URL's per Search Engine". The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** also instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** having 9 "Searches per Group". The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** also instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** at "Page" 3 of the "Current Group", rather than "Page" 1 of the "Current Group", as in FIGS. 11-15. The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** also instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** to use a 2 second "Timeout (seconds) per Search Engine".

FIG. 17 shows another one of the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)**, having the same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** have 18 "URL's per Search Engine", which instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user

interface I_n **(14)** having 18 "URL's per Search Engine". The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** also instruct the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** at "Group" 2, having 4 "Searches per Group", at "Page" 2 of the "Current Group", with a 2 second "Timeout (seconds) per Search Engine", and to return the results "Separately".

FIG. 18 shows another one of the typical completed service and/or information entry request form IF_n **(230)**, at the user interface I_n **(14)**, having different ones of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)**, different ones of the typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**.

FIG. 19 shows another one of the typical completed service and/or information entry request form IF_n **(230)**, at the user interface I_n **(14)**, having different ones of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)**, as in FIG. 18, the same ones of the typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**.

FIG. 20 shows the typical completed service and/or information entry request forms IF_n **(230)**, at the user interface I_n **(14)** having a single typical one of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)** as "sports".

FIG. 21 show another one of the typical completed service and/or information entry request forms **IF_n (230)**, at the user interface **I_n (14)** having a single typical one of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** as "television".

FIG. 22 shows another one of the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)**, having different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, .i.e., "sports" and "television", different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**.

FIG. 23 shows another one of the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)**, having the same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, i.e., "weather", different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**.

FIG. 24 shows another one of the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)**, having different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, .i.e., "education", "universities," and "training", different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**.

FIG. 25 shows another one of the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)**, having different ones of the typical

queries **$QQ_{n1}...QQ_{nm}$ (53)**, .i.e., "weather", "climate," and "training", different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**.

FIG. 26 shows another one of the typical completed service and/or information entry request form **IF_n (230)**, at the user interface **I_n (14)** having a single typical one of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** as "weather".

The typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26 are typical examples of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**, a much larger variety of which is possible. Typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** therein the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26 are typical examples for illustrative purposes, and are not intended to limit the substantially infinite variety of the queries **$QQ_{n1}...QQ_{nm}$ (53)**, the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** that may be entered thereinto the service and/or information entry request forms **$IE_1...IE_n$ (38)**, to derive the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**. Likewise, names and/or links and/or other information are incorporated therein the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** shown in FIGS. 11-26 for

illustrative purposes, and are not intended to limit the large variety of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** and the names and/or links and/or information that are possible, and that may be incorporated thereinto the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**.

Any ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, any values within the ranges allowable for the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and any values allowable for the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** may be incorporated thereinto the typical ones of service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)** of FIGS. 5A, 5B, and 6-10 , which the users **$U_1...U_n$ (12)** enter to complete the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** of FIGS. 11-26

Any values within the ranges allowable for "Search Engine Results"; "URL's per Search Engine"; "URL Details"; "Timeout (seconds) per Search Engine"; "Page"; "Searches per Group"; and "Group" may be incorporated thereinto the typical ones of service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)** of FIGS. 5A, 5B, and 6-10 , which the users **$U_1...U_n$ (12)** enter to complete the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** of FIGS. 11-26.

The users $\mathbf{U_1 \ldots U_n}$ **(12)**, for example, may enter: the typical queries $\mathbf{QQ_{n1} \ldots QQ_{nm}}$ **(53)**; any values within the ranges allowable for the typical server addresses $\mathbf{AQ_{n1} \ldots AQ_{nm}}$ **(54)**; and any values allowable for the typical optional instructions $\mathbf{VJ_{n1} \ldots VJ_{nk}}$ **(52)**, such as, for example, any allowable "Search Engine Results"; "URL's per Search Engine"; "URL Details"; "Timeout (seconds) per Search Engine"; "Page"; "Searches per Group"; and "Group" thereinto the typical ones of service and/or information entry request forms $\mathbf{IE_1 \ldots IE_n}$ **(38)** at the user interfaces $\mathbf{I_1 \ldots I_n}$ **(14)** of FIGS. 5A, 5B, and 6-10 , which the users $\mathbf{U_1 \ldots U_n}$ **(12)** enter to complete the typical ones of the completed service and/or information entry request forms $\mathbf{IF_1 \ldots IF_n}$ **(230)** at the user interfaces $\mathbf{I_1 \ldots I_n}$ **(14)**. The typical ones of the user responses $\mathbf{UR_1 \ldots UR_n}$ **(37)**, as typical service and/or information response forms $\mathbf{IS_1 \ldots IS_n}$ **(39)** at the user interfaces $\mathbf{I_1 \ldots I_n}$ **(14)**, may then be communicated thereto the corresponding ones of the users $\mathbf{U_1 \ldots U_n}$ **(12)**, accordingly. FIGS. 27-52 show typical ones of the user responses $\mathbf{UR_1 \ldots UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_1 \ldots IS_n}$ **(39)** at the user interfaces $\mathbf{I_1 \ldots I_n}$ **(14)**, which may be communicated thereto the corresponding ones of the users $\mathbf{U_1 \ldots U_n}$ **(12)**. The scope of the client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, however, is not limited to such values. Use of such values herein is meant only for illustrative purposes, in teaching certain aspects of the multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104** by example.

D. Typical Service and/or Information Response Forms

FIGS. 27-52 show typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, which may be communicated thereto the corresponding ones of the users **$U_1...U_n$ (12)**.

A typical particular one of the user responses **$UR_1...UR_n$ (37)**, as a particular typical one of the service and/or information response forms **$IS_1...IS_n$ (39)** at the particular one of the user interfaces **$I_1...I_n$ (14)** may hereinafter be designated as the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**.

FIGS. 27-52 also show information therein each of the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, pertaining to the "Current Group", the "Previous Group", if appropriate, the "Next Group", if appropriate, and each "Group" by alphanumerics.

FIGS. 27-52 also show information therein each of the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interfaces **I_n (14)**, pertaining to links to additional selections, and/or links to previous selections, if appropriate, and/or links to future selections, if appropriate, that may be made by pointing to and clicking on the selections to be made.

FIGS. 27-29 show typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 11, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)**

incorporated therein, and incorporated thereinto Group I, Group II, and Group III, respectively.

The user U_n **(12)** may optionally select Group II, and/or Group III therefrom the typical one of the user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** of FIG. 27, and/or Group I and/or Group III at the user interface I_n **(14)** of FIG. 28, and/or Group I, and/or Group II at the user interface I_n **(14)** of FIG. 29. The user U_n **(12)** may also select Group I, and/or Group II, and/or Group III by entering such into the typical one of the service and/or information entry request form IE_n **(38)** at the user interfaces $I_1 \ldots I_n$ **(14)**, and completing the typical completed service and/or information entry request form IF_n **(230)**, at the user interface I_n **(14)** therewith the appropriate selections to be made.

The user U_n **(12)** may also make other selections by entering such into the typical one of the service and/or information entry request form IE_n **(38)** at the user interfaces $I_1 \ldots I_n$ **(14)**, and completing the typical completed service and/or information entry request form IF_n **(230)**, at the user interface I_n **(14)** therewith the appropriate selections to be made, and/or by making such selections therethrough the typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**. The user U_n **(12)** may typically make selections by pointing and clicking on the appropriate selections and/or by entering the desired information. Such information may be entered by any suitable means, including but not limited to mouse, keyboard entry, audible entry, and/or other suitable means.

FIGS. 27-29 show typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, having the service and/or information group G_n **(35)** having the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** therein, the labelled individual information groups $LL_{n11}...LL_{nzu}$ **(86)** therein the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, the additional request links $SL_{n1}...SL_{nw}$ **(71)**, the optional service and/or information entry request form IE_n **(38)**, and other information and/or services therein, resulting from the same and different ones of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)**, different ones of the typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**.

FIGS. 27-29 show typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, resulting from the typical ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)**, "Cat", "Mouse", and "Dog", the same ones of the typical queries $QQ_{n1}...QQ_{n3}$ **(53)** and QQ_{n9} **(53)** being "Cat", other same ones of the typical queries QQ_{n4} **(53)** and QQ_{n7} **(53)** being "Mouse", but different from "Cat", and other same ones of the typical queries QQ_{n5}, QQ_{n6} **(53)**, and QQ_{n8} **(53)** being "Dog", but different from "Cat" and/or "Mouse", the typical ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)**, "Cat", "Dog", and "Mouse", being different one from the other.

The typical same ones of the typical queries **QQ_{n1}...QQ_{n3} (53)** as "Cat" are incorporated thereinto the addressable query information groups **GI_{n1} (63)** of Group I.

The typical one of the queries **QQ_{n4} (53)** as "Mouse" is incorporated thereinto the addressable query information groups **GI_{n1} (63)** of Group II. The other same ones of the typical queries **QQ_{n5}** and **QQ_{n6} (53)** as "Dog are incorporated thereinto the addressable query information groups **GI_{n2} (63)** of Group II.

The typical one of the queries **QQ_{n7} (53)** as "Mouse" is incorporated thereinto the addressable query information groups **GI_{n1} (63)** of Group III. The typical one of the queries **QQ_{n8} (53)** as "Dog" is incorporated thereinto the addressable query information groups **GI_{n2} (63)** of Group III. The typical one of the queries **QQ_{n9} (53)** as "Cat" is incorporated thereinto the addressable query information groups **GI_{n3} (63)** of Group III.

FIGS. 27-29 show typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 11 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as I, II, and III, respectively, for FIGS. 27-29.

The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** "URL's per Search Engine" as "10" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** having substantially "10" ones of the typical labelled individual information groups $LL_{n11}...LL_{nzu}$ **(86)** per each one of the typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)** in the typical "Current Group", retrieved therefrom the responses $R_{n1}...R_{nm}$ **(32)**. In this case, the typical labelled individual information groups $LL_{n11}...LL_{nzu}$ **(86)** may be "Uniform Resource Locators", or "URL's" and/or other services and/or information associated therewith.

The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** "Searches per Group" as "3" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** having "3 Searches per Group" for the group selected, which is designated in the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** having "Group" as "1".

"Group I", which is the "Current Group: I", has the first three searches ("Searches per Group" designated as "3"), i.e., Search 1, Search 2, and Search 3, having the typical queries $QQ_{n1}...QQ_{n3}$ **(53)** of "Cat", "Cat", and "Cat" and the typical server addresses $AQ_{n1}...AQ_{n3}$ **(54)** of "WebCrawler", "Altavista", and "Lycos".

The "Next Group: II" and/or the "Group: III" may be selected therefrom the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at

the user interface I_n **(14)**. If the "Next Group: II" is selected, then Search 4, Search 5, and Search 6, having the typical queries $QQ_{n4}...QQ_{n6}$ **(53)** of "Mouse", "Dog", and "Dog" and the typical server addresses $AQ_{n4}...AQ_{n6}$ **(54)** of "Infoseek", "Excite", and "Yahoo" are selected and returned as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**. If the "Group: III" is selected, then Search 7, Search 8, and Search 9, having the typical queries $QQ_{n7}...QQ_{n9}$ **(53)** of "Mouse", "Dog", and "Cat" and the typical server addresses $AQ_{n7}...AQ_{n9}$ **(54)** of "LookSmart", "HotBot", and "Dejanews" are selected and returned as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**.

The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** having "URL's per Search Engine" as "10" and "Searches per Group" as "3", then returns substantially "10 URL's per Search Engine" multiplied by "3 Searches per Group", which is substantially "30 URL's per Group", and/or other services and/or information associated therewith, returned therein the "Current Group".

The actual number of the typical "URL's per Group" may vary from the number of the "URL's per Search Engine" multiplied by the number of the "Searches per Group", as duplicate ones of the "URL's" and/or other services and/or information associated therewith may typically be optionally discarded.

The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** "Page" as "1" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the

typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** having the first "10 URL's per Search Engine" which is substantially the first "30 URL's per Group", and/or other services and/or information associated therewith, therein the "Current Group".

The "Next Page" and/or other pages may be selected, which in this typical case may be Pages 1-25, therefrom the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**. If the "Next Page" is selected, then the next"10 URL's per Search Engine" which is substantially the next "30 URL's per Group", and/or other services and/or information associated therewith, therein the "Current Group" are selected and returned as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**. If, for example, the third "Page' is selected, then the third "10 URL's per Search Engine" which is substantially the third "30 URL's per Group", and/or other services and/or information associated therewith, therein the "Current Group" are selected and returned as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**.

The typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** of "Search Engine Results" as "Interleave" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** having ones of the typical labelled individual information groups $LL_{n11}...LL_{nzu}$ **(86)** and/or other services and/or information associated therewith the typical queries $QQ_{n1}...QQ_{nm}$ **(53)** and the typical server

addresses **$AQ_{n1}...AQ_{nm}$ (54)** in the typical "Current Group", portions of which have been retrieved therefrom the responses **$R_{n1}...R_{nm}$ (32)**, interleaved one with the other (or alternating one with the other) therein the appropriate addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**. The "Interleaved" information and/or services may typically be incorporated therein the appropriate addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** therein the "Current Group" in substantially the same sequence as the information and/or services are therein the responses **$R_{n1}...R_{nm}$ (32)** communicated therefrom the servers **$S_1...S_z$ (20)**. However, other sorting/grouping criteria may optionally be used, as will be discussed later. In this case, the typical labelled individual information groups **$LL_{n11}...LL_{nzu}$ (86)** may be "Uniform Resource Locators", or "URL's" and/or other services and/or information associated therewith.

"Separate" may be selected therefrom the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, which instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** in "Separate" groups, i.e., grouped by the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)** incorporated therein the appropriate addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** therein the "Current Group".

The typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** "URL Details" as "Summary" instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)** showing the typical labelled individual information groups **$LL_{n11}...LL_{nzu}$**

(86) showing descriptions and/or other information and/or services, in addition to links, and/or URL's therein the typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**.

"List" may be selected therefrom the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**, which instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** typically showing only links to URL's and/or other links therein the typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**.

The "Timeout (seconds) per Search Engine" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** within a period of less than the "Timeout (seconds) per Search Engine" specified in the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**. It should be noted that response times of less than one second per search engine are typical, and response times of substantially less than one second are quite common. However, the "Timeout (seconds) per Search Engine" has been incorporated herein for the user U_1 **(12)** to specify in the event of slow ones of the responses $R_{n1}...R_{nm}$ **(32)** from certain ones of the servers $S_1...S_z$ **(20)**.

If the time it takes to retrieve information from certain ones of the servers **$S_1...S_z$ (20)** having the typical ones of the queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)** is greater than the "Timeout" selected, then the client **C_n (16)** and/or the server **PS (18)** typically incorporate a message and/or messages, such as "No Results Found for 'Query 'x'' at 'Server Address 'y'' within "z" seconds!" for each of the non-responding certain ones of the servers **$S_1...S_z$ (20)**, as shown later in FIG. 44. Information and/or services only from those ones of the servers **$S_1...S_z$ (20)** responding within the "Timeout" period are then incorporated thereinto the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**.

FIGS. 30-32 show typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 12, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)** incorporated therein, and incorporated thereinto Group I, Group II, and Group III, respectively.

FIGS. 30-32 show typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, having the service and/or information group **G_n (35)** having the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** therein, the labelled individual information groups **$LL_{n11}...LL_{nzu}$ (86)** therein the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, the additional request links **$SL_{n1}...SL_{nw}$ (71)**, the optional service and/or information

entry request form **IE_n (38)**, and other information and/or services therein, resulting from the same and different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, and the same and different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**, rather than results just from different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)** as in FIGS. 27-29.

FIGS. 30-32 show the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, resulting from the typical ones of the queries **$QQ_{n1}...QQ_{nm}$ (53)**, "Cat", "Dog", and "Mouse", the same ones of the typical queries **QQ_{n1}**, **QQ_{n3} (53)**, and **QQ_{n9} (53)** being "Cat", other same ones of the typical queries **QQ_{n2} (53)**, **QQ_{n5} (53)**, **QQ_{n6} (53)**,and **QQ_{n8} (53)** being "Dog", but different from "Cat", and other same ones of the typical queries **QQ_{n4}** and **QQ_{n7} (53)** being "Mouse", but different from "Cat" and/or "Dog", the typical ones of the queries **$QQ_{n1}...QQ_{nm}$ (53)**, "Cat", "Dog", and "Mouse", being different one from the other.

FIGS. 30-32 also show the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, resulting from the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, "HotBot", "WebCrawler", "Yahoo", "LookSmart", and "Dejanews", the same ones of the typical server addresses **AQ_{n1}** and **AQ_{n2} (54)** being "HotBot", other same ones of the typical server addresses **$AQ_{n3}...AQ_{n5}$ (54)**, being "WebCrawler", but different from "HotBot", another one of the server addresses **AQ_{n6} (54)**, being "Yahoo", but different from

"HotBot" and/or "WebCrawler", another one of the server addresses **AQ_{n7} (54)**, being "LookSmart", but different from "HotBot" and/or "WebCrawler" and/or "Yahoo", and other same ones of the typical server addresses **AQ_{n8} (54)** and **QQ_{n9} (54)** being "Dejanews", but different from "HotBot" and/or "WebCrawler" and/or "Yahoo" and/or "LookSmart", the typical ones of the server addresses **AQ_{n1}...AQ_{nm} (54)**, "HotBot", "WebCrawler", "Yahoo", "LookSmart", and "Dejanews", being different one from the other.

The typical same ones of the typical queries **QQ_{n1}** and **QQ_{n3} (53)** as "Cat" are incorporated thereinto the addressable query information groups **GI_{n1} (63)** of Group I. The typical one of the queries **QQ_{n2} (53)** as "Cat" is incorporated thereinto the addressable query information groups **GI_{n2} (63)** of Group II.

The typical one of the queries **QQ_{n4} (53)** as "Mouse" is incorporated thereinto the addressable query information groups **GI_{n1} (63)** of Group II. The other same ones of the typical queries **QQ_{n5}** and **QQ_{n6} (53)** as "Dog are incorporated thereinto the addressable query information groups **GI_{n2} (63)** of Group II.

The typical one of the queries **QQ_{n7} (53)** as "Mouse" is incorporated thereinto the addressable query information groups **GI_{n1} (63)** of Group III. The typical one of the queries **QQ_{n8} (53)** as "Dog" is incorporated thereinto the addressable query information groups **GI_{n2} (63)** of Group III. The typical one of the queries **QQ_{n9} (53)** as

"Cat" is incorporated thereinto the addressable query information groups GI_{n3} **(63)** of Group III.

FIGS. 30-32 show typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 12 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "5"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "5"; and "Group" as I, II, and III, respectively, for FIGS. 30-32.

Now again, FIGS. 30-32 show the typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, resulting from the same and different ones of the typical queries $QQ_{n1}...QQ_{nm}$ **(53)**, the same and different ones of the typical server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, but which also result from the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** having 5 "URL's per Search Engine", which instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** having 5 "URL's per Search Engine", rather than 10 "URL's per Search Engine", as in FIGS. 27-29.

FIG. 33 show a typical one of the user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 13, having information and/or services therefrom the responses $R_{n1}...R_{nm}$ **(32)** incorporated therein, and incorporated thereinto Group I, having the typical ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** as "Big Elephants". The user U_n **(12)** may optionally select Group II, and/or Group III therefrom the typical one of the user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** of FIG. 33.

FIG. 33 shows the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 13 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as I. Groups I and/or II may be selected therefrom the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)** of FIG. 33.

FIGS. 34-36 show typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIGS. 14A, 14B, and 14C, respectively, having information and/or services therefrom the responses $R_{n1}...R_{nm}$ **(32)** incorporated therein, and incorporated thereinto Group I, Group II, and Group III, respectively. FIGS. 34-36 show the results

"Interleaved". Typical ones of links, prices, descriptions, savings, and shipping schedules are indicated for products in Group I. The prices may be compared, for example, one with the other for the same and/or different items, shipping schedules compared, and a decision can be made as to which items to order, as a result of the information provided therein the typical one of the user responses $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**. Typical similar items may have the same and/or similar titles, such as for example in book titles, but publication dates, for example, and/or editions may be the same and/or different, and shipping schedules may be the same and/or different. Prices, and cost savings may be traded off against shipping schedules, packaging (i.e., for example, hardcover and/or soft cover), author, publisher, for example, and/or other factors important to the user $\mathbf{U_n}$ **(12)**. The user $\mathbf{U_n}$ **(12)** may select the items and/or items to order therefrom such information that the user $\mathbf{U_n}$ **(12)** considers to be important. The user $\mathbf{U_n}$ **(12)** may place the order and/or orders directly therethrough the links and/or URL's therein the typical ones of the user responses $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**. The user $\mathbf{U_n}$ **(12)** may additionally and/or alternatively collect the order and/or orders therein a shopping cart and/or shopping carts associated with the typical ones of the user responses $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**, and place the order and/or orders therethrough the client $\mathbf{C_n}$ **(16)** and/or the server **PS (18)**.

Now again, FIGS. 34-36 show typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, having the service and/or information group **G_n (35)** having the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** therein, the labelled individual information groups **$LL_{n11}...LL_{nzu}$ (86)** therein the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, the additional request links **$SL_{n1}...SL_{nw}$ (71)**, the optional service and/or information entry request form **IE_n (38)**, and other information and/or services therein, resulting from the same and different ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, different ones of the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. Typical same ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** are "Catcher in the Rye", "Catcher", "Rye", "Sports", and "Rye Bread", which are different one from the other. The typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)** are different one from the other.

FIGS. 34-36 show typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIGS. 14A, 14B, and 14C having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "5"; "Page" as "1"; "Searches per Group as "3"; and "Group" as I, II, and III, respectively, for FIGS. 34-36.

Now again, the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** have a 5 second "Timeout (seconds) per Search Engine", rather than a 3 second "Timeout (seconds) per

Search Engine" as in FIGS. 27-33. The "Timeout (seconds) per Search Engine" instructs the client C_n **(16)** and/or the server **PS (18)** to return the typical user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)** within a period of less than the "Timeout (seconds) per Search Engine" specified in the typical optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**. It should be noted that response times of less than one second per search engine are typical, and response times of substantially less than one second are quite common. However, the "Timeout (seconds) per Search Engine" has been incorporated herein for the user U_1 **(12)** to specify in the event of slow ones of the responses $R_{n1}...R_{nm}$ **(32)** from certain ones of the servers $S_1...S_z$ **(20)**.

FIGS. 37-39 show typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 15, having information and/or services therefrom the responses $R_{n1}...R_{nm}$ **(32)** incorporated therein, and incorporated thereinto Group I, Group II, and Group III, respectively. Links, Prices, descriptions, savings, and shipping schedules are indicated for products in Group I, and Group II. FIG. 38 shows the results "Separately" for Group II, and FIG. 39 shows the results "Interleaved" for Group II. Links, Prices, descriptions, savings, and shipping schedules are indicated for products in Groups I and II in FIGS. 37-39.

FIGS. 37-39 show typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference

to FIG. 15 having: "Search Engine Results" as "Separate"; "URL's per Search Engine" as "8"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "1"; "Page" as "1"; "Searches per Group as "5"; and "Group" as I, II, and III, respectively for FIGS. 37-39.

Now again, the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** have "Separate", which instructs the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** in separate groups, i.e., grouped by the typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, rather than interleaved one with the other, as in FIGS. 27-36.

FIG. 40 show a typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 16, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)** incorporated therein, and incorporated thereinto a single Group.

FIG. 40 shows the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 16 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "25"; "URL Details" as "List"; "Timeout (seconds) per Search Engine" as "2"; "Page" as "3"; "Searches per Group as "9"; and "Group" as I. Groups I and/or II may be selected therefrom the typical one of the user response **UR_n (37)**, as the typical

service and/or information response forms **IS_n (39)** at the user interface **I_n (14)** of FIG. 40.

Now again, the "URL Details" as "Summary" instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)** showing descriptions and/or other information and/or services, in addition to links, therein the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, as in FIGS. 27-39, while "URL Details" as "List" instruct the client **C_n (16)** and/or the server **PS (18)** to return the typical user response **UR_n (37)** showing only links and/or URL's therein the typical ones of the user responses **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, as in FIG. 40.

FIG. 41 show a typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 17, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)** incorporated therein, and incorporated thereinto Group II.

FIG. 41 shows the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 17 having: "Search Engine Results" as "Separate"; "URL's per Search Engine" as "18"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "1"; "Page" as "2"; "Searches per Group as "4"; and "Group" as "2". Groups I and/or III

may be selected therefrom the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)** of FIG. 41.

FIG. 42 show a typical one of the user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 18, having information and/or services therefrom the responses $R_{n1}...R_{nm}$ **(32)** incorporated therein, and incorporated thereinto a single Group.

FIG. 42 shows the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 18 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "25"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "5"; "Page" as "1"; "Searches per Group as "9"; and "Group" as "1".

FIG. 43 show a typical one of the user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 19, having information and/or services therefrom the responses $R_{n1}...R_{nm}$ **(32)** incorporated therein, and incorporated thereinto a single Group.

FIG. 43 shows the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 19 having: "Search Engine Results" as "Interleave"; "URL's per Search

Engine" as "25"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "9"; and "Group" as "1".

FIG. 44 show a typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response form $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**, with reference to FIG. 20, having information and/or services therefrom the responses $\mathbf{R_{n1}...R_{nm}}$ **(32)** incorporated therein, and incorporated thereinto Group I. FIG. 44 also shows the results of a "Timeout" occurring.

FIG. 44 shows the typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**, with reference to FIG. 20 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as I. Groups I and/or II may be selected therefrom the typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)** of FIG. 44.

FIG. 45 show a typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response form $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**, with reference to FIG. 21, having information and/or services therefrom the responses $\mathbf{R_{n1}...R_{nm}}$ **(32)** incorporated therein, and incorporated thereinto Group I.

FIG. 45 shows the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 21 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as I. Groups I and/or II may be selected therefrom the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)** of FIG. 45.

FIG. 46 shows a typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 22, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)** incorporated therein, and incorporated thereinto Group I. FIG. 46 also shows the links/advertisements/images automatically inserted thereinto the typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, which may be associated therewith the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**. In the typical case shown in FIG. 46, links/advertisements/images associated therewith the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** of "sports" and "television" have been automatically inserted thereinto the typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**.

and 48, full text search results associated therewith the typical query $QQ_{n1}...QQ_{nm}$ **(53)** of "weather" have been automatically inserted thereinto the typical ones of the user responses UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, in addition to the typical queries $QQ_{n1}...QQ_{nm}$ **(53)** at the typical ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)**. The typical full text search results start and end with "Hotlist: Weather Science" in FIG. 47. The typical full text search results start with "Hotlist: Weather Science" and end with "search for: 'weather'" in FIG. 48.

FIGS. 47 and 48 show the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 23 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as "1". Next Group: I and/or Group: III may be selected therefrom the typical one of the user response UR_n **(37)**, as the typical service and/or information response forms IS_n **(39)** at the user interface I_n **(14)** of FIG. 47 and 48.

FIG. 49 shows a typical one of the user response UR_n **(37)**, as the typical service and/or information response form IS_n **(39)** at the user interface I_n **(14)**, with reference to FIG. 24, having information and/or services therefrom the responses $R_{n1}...R_{nm}$ **(32)** incorporated therein, and incorporated thereinto Group I. FIG. 49 also shows the typical results of the server **PS (18)** and/or the client C_n **(16)** automatically optionally

spidering the sites obtained as a result of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and incorporating the spidered results thereinto the optional database **41** and/or the optional database **42**. The spidered results incorporated thereinto the optional database **41** and/or the optional database **42** may be searched as in FIGS. 47 and 48 with reference to FIG. 23 and/or based upon other ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the full text search results may be obtained therefrom the additional optional responses **$RA_{n1}...RA_{nm}$ (40)**.

FIG. 49 also shows the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 24 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as "1". Next Group: I and/or Group: III may be selected therefrom the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)** of FIG. 49.

FIGS. 50 shows a typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 25, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)** incorporated therein, and incorporated thereinto Group I. FIG. 50 also shows the typical results of the server **PS (18)** and/or the client **C_n (16)** semi-automatically

optionally spidering the sites obtained as a result of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and incorporating the spidered results thereinto the optional database **41** and/or the optional database **42**. The spidered results incorporated thereinto the optional database **41** and/or the optional database **42** may also be searched as in FIGS. 47 and 48 with reference to FIG. 23 and/or based upon other ones of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the full text search results may be obtained therefrom the additional optional responses **$RA_{n1}...RA_{nm}$ (40)**.

The user **U_n (12)** may optionally select those sites to be spidered and incorporated thereinto the optional database **41** and/or the optional database **42**, as in the typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)** in FIG. 50. FIG. 51 shows the typical results of the server **PS (18)** and/or the client **C_n (16)** optionally spidering the sites obtained as a result of the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and input resulting therefrom user selection of sites to be spidered therefrom FIG. 50, and incorporating the spidered results thereinto the optional database **41** and/or the optional database **42**.

The results of the optional spidering typically obtained therefrom the typical process used therewith FIGS. 50 and 51 may be substantially the same as the typical process used therewith FIG. 49, if all the sites shown in FIG. 50 are selected for incorporation into the database **41** and/or the optional database **42**. The typical process of FIG. 49

offers an automatic approach to constructing the optional database **41** and/or the optional database **42**, and the typical process of FIGS. 50 and 51 offers the flexibility of weeding out and/or selecting sites to be incorporated thereinto the database **41** and/or the optional database **42**.

FIG. 50 also shows the typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**, with reference to FIG. 25 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "10"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "3"; and "Group" as "1". Next Group: I and/or Group: III may be selected therefrom the typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response forms $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)** of FIG. 50.

FIG. 52 shows a typical one of the user response $\mathbf{UR_n}$ **(37)**, as the typical service and/or information response form $\mathbf{IS_n}$ **(39)** at the user interface $\mathbf{I_n}$ **(14)**, with reference to FIG. 26, having information and/or services therefrom the additional optional responses $\mathbf{RA_{n1}...RA_{nm}}$ **(40)**. FIG. 52 shows the results solely of a full text search of the optional database **41** and/or the optional database **42**, which may be associated therewith the typical queries $\mathbf{QQ_{n1}...QQ_{nm}}$ **(53)**. The full text search results are incorporated therefrom the additional optional responses $\mathbf{RA_{n1}...RA_{nm}}$ **(40)**. The typical full text search results start with "Hotlist: Weather Science" and end with "High Plains Climate Center Home Page" in FIG. 52.

The typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 27-52 are typical examples of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, a much larger variety of which is possible. FIGS. 27-52 illustrate typical examples of typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)** to the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** having been entered therein the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26.

The typical examples of the typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)** are for illustrative purposes, and are not intended to limit the substantially infinite variety of the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, the queries **$QQ_{n1}...QQ_{nm}$ (53)**, the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** that may be entered thereinto the service and/or information entry request forms **$IE_1...IE_n$ (38)**, to derive the to the completed service and/or information entry request forms **$IF_1...IF_n$ (230)**, and which result in the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$**

(39) at the user interfaces $I_1...I_n$ **(14)**. Likewise, names and/or links and/or other information are incorporated therein the typical ones of the user responses $UR_1...UR_n$ **(37)**, as the service and/or information response forms $IS_1...IS_n$ **(39)** at the user interfaces $I_1...I_n$ **(14)**, shown in FIGS. 27-52 for illustrative purposes, and are not intended to limit the large variety of the user responses $UR_1...UR_n$ **(37)**, as the service and/or information response forms $IS_1...IS_n$ **(39)** at the user interfaces $I_1...I_n$ **(14)**, and the names and/or links and/or information that are possible, and that may be incorporated thereinto the user responses $UR_1...UR_n$ **(37)**, as the service and/or information response forms $IS_1...IS_n$ **(39)** at the user interfaces $I_1...I_n$ **(14)**.

F. OPTIONAL DATABASE

~~E. OPTIONAL DATABASE~~

The server **PS (18)** and/or the clients $C_1...C_n$ **(16)** may also incorporate corresponding additional optional responses $RA_{11}...RA_{nm}$ **(40)** into the service and/or information responses $IR_1...IR_n$ **(34)**, which may be obtained by accessing optional databases **41** and/or **42**, shown in FIGS. 53A and 53B, which may be optionally resident within the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**, respectively.

The server **PS (18)** and/or the clients $C_1...C_n$ **(16)** may optionally store the responses $R_{11}...R_{nm}$ **(32)** communicated therefrom the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme corresponding to the server designations $S_{11}...S_{nm}$ **(30)** in the optional databases **41** and/or **42**, optionally resident within the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**, respectively, which may be optionally retrieved from the

optional databases **41** and/or **42**, and/or optionally incorporated into the service and/or information responses $IR_1 \ldots IR_n$ **(34)**, and accessed as the additional optional responses $RA_{11} \ldots RA_{nm}$ **(40)**.

The server **PS (18)** and/or the clients $C_1 \ldots C_n$ **(16)** may optionally communicate with the optional servers $SO_1 \ldots SO_p$ **(22)**, and obtain information from each of the optional servers $SO_1 \ldots SO_p$ **(22)**, which may also be stored in the optional databases **41** and/or **42**, which may be optionally resident within the server **PS (18)** and/or the clients $C_1 \ldots C_n$ **(16)**, respectively, and which may be optionally incorporated into the service and/or information responses $IR_1 \ldots IR_n$ **(34)**, and accessed as the additional optional responses $RA_{11} \ldots RA_{nm}$ **(40)**.

Each of the users $U_1 \ldots U_n$ **(12)** may optionally communicate corresponding additional optional requests $q_{11} \ldots q_{np}$ **(44)** therethrough the corresponding user interfaces $I_1 \ldots I_n$ **(14)** and the corresponding clients $C_1 \ldots C_n$ **(16)** to the optional servers $SO_1 \ldots SO_p$ **(22)**, based upon information in the service and/or information responses $IR_1 \ldots IR_n$ **(34)** and/or other information presented to and/or available and/or known to the users $U_1 \ldots U_n$ **(12)** therethrough the corresponding user interfaces $I_1 \ldots I_n$ **(14)**. The optional servers $SO_1 \ldots SO_p$ **(22)** reply to the clients $C_1 \ldots C_n$ **(16)** with corresponding responses $r_{11} \ldots r_{np}$ **(46)**, which the clients $C_1 \ldots C_n$ **(16)** communicate therethrough the corresponding user interfaces $I_1 \ldots I_n$ **(14)** to the corresponding users $U_1 \ldots U_n$ **(12)**, as shown in FIG. 2 for typical ones of the requests $q_{11} \ldots q_{np}$ **(44)** and the corresponding responses $r_{11} \ldots r_{np}$ **(46)**.

6. ADDITIONAL DETAILS

~~F. ADDITIONAL DETAILS~~

Now, in more detail, the clients **$C_1...C_n$ (16)** and the servers **$S_1...S_z$ (20)** reside on the network **24**. The users **$U_1...U_n$ (12)** and the corresponding clients **$C_1...C_n$ (16)** communicate one with the other therethrough the corresponding user interfaces **$I_1...I_n$ (14)**. The user **U_1 (12)**, thus, communicates with the client **C_1 (16)**, one with the other, therethrough the user interface **I_1 (14)**; the user **U_2 (12)**, thus, communicates with the client **C_2 (16)**, one with the other, therethrough the user interface **I_2 (14)**; the user **U_n (12)**, thus, communicates with the client **C_n (16)**, one with the other, therethrough the user interface **I_n (14)**; and so on. Any particular user, designated user **U_n (12)**, thus, communicates with corresponding client **C_n (16)**, one with the other, through corresponding user interface **I_n (14)**, as best shown later in FIGS. 54-56. The user **U_n (12)** may be used to designate any one of the users **$U_1...U_n$ (12)**; the user interface **I_n (14)** may be used to designate any one of the user interfaces **$I_1...I_n$ (14)**; the client **C_n (16)** may be used to designate any one of the users clients **$C_1...C_n$ (16)**; and so on. The client-server multitasking system **10** may also have the server **PS (18)** and the optional servers **$SO_1...SO_p$ (22)** residing on the network **24**.

There may be **n** different or same the service and/or information requests **$IQ_1...IQ_n$ (28)** present on the network **24** at any time. Each of the service and/or information requests **$IQ_1...IQ_n$ (28)** may have one or more of the same and/or different requests **$Q_{11}...Q_{nm}$ (29)** to be made of one or more of the same and/or different ones of the

servers $S_1...S_z$ **(20)**, which are called server designations $S_{11}...S_{nm}$ **(30)**, in accordance with the designation scheme which designates the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**. The service and/or information request IQ_n **(28)** may be used to designate any particular one of the service and/or information requests $IQ_1...IQ_n$ **(28)**. Requests $Q_{n1}...Q_{nm}$ **(29)** may be used to designate the particular requests $Q_{11}...Q_{nm}$ **(29)** associated therewith and corresponding to the service and/or information request IQ_n **(28)**.

Each of the requests $Q_{11}...Q_{1m}$ from the client C_1 **(16)** may each be different one from the other or the same; each of the requests $Q_{21}...Q_{2m}$ from the client C_2 **(16)** may each be different one from the other or the same; and each of the requests $Q_{n1}...Q_{nm}$ **(29)** from the client C_n **(16)** may each be different one from the other or the same, and so on. The requests $Q_{11}...Q_{1m}$ **(29)**, the requests $Q_{21}...Q_{2m}$ **(29)**, and the requests $Q_{n1}...Q_{nm}$ **(29)**, thus, may each be different one from the other, or the same, and so on. The requests $Q_{11}...Q_{nm}$ **(29)** from the clients $C_1...C_n$ **(14)**, thus, may each be different, one from the other, or the same, and may be made of the same and/or different ones of the servers $S_1...S_z$ **(20)** at the same time and/or different times, in accordance with the corresponding server designations $S_{11}...S_{nm}$ **(30)**. There may be **m** different or same ones of the requests $Q_{n1}...Q_{nm}$ **(29)** from the client C_n **(16)** at any time, and **n** x **m** different and/or same ones of the requests $Q_{11}...Q_{nm}$ **(29)** of the same and/or different ones of the servers $S_1...S_z$ **(20)** present on the network **24** at any time.

This designation format, in which the first alphanumeric subscript after the parameter of interest, for example, as in the parameters $Q_{n1}...Q_{nm}$ representing the requests $Q_{n1}...Q_{nm}$ **(29)**, represents the particular parameters corresponding to the user U_n **(12)**, and the second alphanumeric subscript after the parameter of interest represents the 1st, 2nd, 3rd, through the mth one of the particular parameters, will be used as a designation scheme throughout. In this particular instance, for example, there are then **m** distinctly the same and/or different ones of the requests $Q_{n1}...Q_{nm}$ **(29)** associated with the nth user U_n, which is designated as the user U_n **(12)**. There are then the same and/or different m distinctly the same and/or different server designations $S_{n1}...S_{nm}$ **(30)** associated with the nth user U_n, which is designated as the user U_n **(12)**. The same and/or different requests $Q_{n1}...Q_{nm}$ **(29)**, then, may be made of the same and/or different ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme corresponding to the corresponding certain ones of the server designations $S_{n1}...S_{nm}$ **(30)**, associated with and corresponding to the user U_n **(12)**.

Each of the clients $C_1...C_n$ **(16)** may optionally also function as servers. Certain ones of the clients $C_1...C_n$ **(16)** may, therefore, function only as clients, while alternate ones of the clients $C_1...C_n$ **(16)** may function as clients and as servers. Each of the user interfaces $I_1...I_n$ **(14)** may be integral with the clients $C_1...C_n$ **(16)** or separate from the clients $C_1...C_n$ **(16)**. Therefore, certain ones of the user interfaces $I_1...I_n$ **(14)** may be integral with the clients $C_1...C_n$ **(16)**, while yet other ones of the user interfaces $I_1...I_n$ **(14)** may be separate from the clients $C_1...C_n$ **(16)**.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** are capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers $S_1...S_z$ **(20)**, and/or the optional servers $SO_1...SO_p$ **(22)**, and/or the clients $C_1...C_n$ **(16)**, having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto the user responses $UR_1...UR_n$ **(37)** for delivery to the user interfaces $I_1...I_n$ **(14)** and use by the users $U_1...U_n$ **(12)**.

Now, the user interfaces $I_1...I_n$ **(14)** may each be different, one from the other, or the same, and may change characteristics over time. Each of the user interfaces $I_1...I_n$ **(14)** may change characteristics as a function of time, information, and/or instructions, and/or other means, which may be derived by the users $U_1...U_n$ **(12)** and/or the clients $C_1...C_n$ **(16)** and/or the servers $S_1...S_z$ **(20)**, and/or the server **PS (18)**, and/or the optional servers $SO_1...SO_p$ **(22)**, and/or derived within the user interfaces $I_1...I_n$ **(14)**. The user interface $I_1...I_n$ **(14)** may change state.

The user interface $I_1...I_n$ **(14)** may also change as a function of optional timers and/or timed instructions associated therewith the user interfaces $I_1...I_n$ **(14)**, and/or associated therewith the clients $C_1...C_n$ **(16)** and/or associated therewith the servers $S_1...S_z$ **(20)**, and/or associated therewith the server **PS (18)**, and/or associated therewith the optional

servers **$SO_1 \ldots SO_p$ (22)**, and/or instructions from the user **$U_1 \ldots U_n$ (12)**. Changes in the user interface **I_n (14)** may appear continuous to the user **U_n (12)**, spaced in time, staccato, or static depending upon the optional timers and/or the timed instructions. Other conditions may change the user interface **$I_1 \ldots I_n$ (14)**, as well.

The user interfaces **$I_1 \ldots I_n$ (14)** may be updated continuously, intermittently, manually, randomly, semi-automatically, automatically, repetitively, non-repetitively, singly, plurally, multiplexed, and/or a combination thereof or other suitable manner.

The user interfaces **$I_1 \ldots I_n$ (14)** may be visual, such as graphical user interfaces, aural, and/or tactile, a combination thereof, and/or other suitable means. The user interfaces **$I_1 \ldots I_n$ (14)** may be integral with the clients **$C_1 \ldots C_n$ (16)** or separate.

II. A Particular User, User Interface, and Client on the Network

A. Overview

FIGS. 54-56 show typical particular ones of the users **U_n (12)**, the corresponding ones of the user interfaces **U_n (12)**, the corresponding ones of the clients **C_n (16)**, the server **PS (18)**, the servers **$S_1 \ldots S_z$ (20)** designated by the server designations **$S_{n1} \ldots S_{nm}$ (30)** corresponding to the requests **$Q_{n1} \ldots Q_{nm}$ (29)** associated with the corresponding ones of the users **U_n (12)**, and the optional servers **$SO_1 \ldots SO_p$ (22)** of the client-server multitasking system **10** of the present invention, which reside on the network **24**. The

user U_n **(12)** communicates with the corresponding client C_n **(16)** therethrough the corresponding user interface I_n **(14)**.

The user U_n **(12)** enters the corresponding user input UI_n **(25)** having one or more same and/or different user requests $qu_{n1}...qu_{nu}$ **(26)** thereinto the user interface I_n **(14)**. The user requests $qu_{n1}...qu_{nu}$ **(26)** are communicated from the user interface I_n **(14)** to the client C_n **(16)** within the user service and/or information request iq_n **(27)**, having the user requests $qu_{n1}...qu_{nu}$ **(26)** and other optional information.

The user interface I_n **(14)** communicates the user service and/or information request iq_n **(27)** therethrough to the client C_n **(16)**, which optionally formats the corresponding user service and/or information request iq_n **(27)** into the corresponding service and/or information request IQ_n **(28)**, as required. The service and/or information request IQ_n **(28)** may have one or more the same and/or different requests $Q_{n1}...Q_{nm}$ **(29)** to be made of the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)** at the same time.

The client C_n **(16)** may communicate the corresponding service and/or information request IQ_n **(28)** to the server **PS (18)**. The server **PS (18)** parses, processes and/or formats the service and/or information request IQ_n **(28)** received from the client C_n **(16)** into the certain requests $Q_{n1}...Q_{nm}$ **(29)**, and communicates the certain requests $Q_{n1}...Q_{nm}$ **(29)** to the corresponding certain ones of the servers $S_1...S_z$ **(20)**

designated by the server designations $S_{n1}...S_{nm}$ **(30)**, as shown for typical ones of the certain requests $Q_{n1}...Q_{nm}$ **(29)** in FIG. 54.

The client C_n **(16)** may alternatively parse, process and/or format the user service and/or information request iq_n **(27)** into the alternate requests $Q_{n1}...Q_{nm}$ **(29)**, and communicate the alternate requests $Q_{n1}...Q_{nm}$ **(29)** to the corresponding alternate ones of the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)**, as shown for typical alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)** in FIG. 55.

The client C_n **(16)** may alternatively communicate the corresponding other alternate one of the service and/or information request IQ_n **(28)** to the server **PS (18)**, which parses, processes and/or formats the other alternate one of the service and/or information request IQ_n **(28)** into the other alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)**, and communicates the other alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)** to the corresponding other alternate ones of the servers $S_{11}...S_{nm}$ **(30)**, and additionally the client C_n **(16)** may also parse, process and/or format the user service and/or information request iq_n **(27)** into yet other alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)**, and communicate the yet other alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)** to the corresponding yet other alternate ones of the servers $S_{n1}...S_{nm}$ **(30)**, as shown for typical other alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)** and typical yet other alternate ones of the requests $Q_{n1}...Q_{nm}$ **(29)** in FIG. 56.

Each of the servers $S_1 \ldots S_z$ **(20)** designated by the server designations $S_{n1} \ldots S_{nm}$ **(30)** replies to the server **PS (18)** and/or the client C_n **(16)**, in accordance with the designation scheme corresponding to the corresponding certain ones of the server designations $S_{11} \ldots S_{nm}$ **(30)**, accordingly, and communicates the corresponding responses $R_{n1} \ldots R_{nm}$ **(32)**, associated with the requests $Q_{n1} \ldots Q_{nm}$ **(29)**, to the server **PS (18)** and/or the client C_n **(16)**, accordingly. The server **PS (18)** and/or the client C_n **(16)** parse, format, process, group, and organize the responses $R_{n1} \ldots R_{nm}$ **(32)** into the corresponding service and/or information response IR_n **(34)** and/or the user service and/or information response ir_n **(36)** having the corresponding parsed, processed, formatted, grouped, and organized service and/or information group G_n **(35)** acceptable to the client C_n **(16)** and the user interface I_n **(14)**. The server **PS (18)** communicates the service and/or information response IR_n **(34)** to the client C_n **(16)**, as required.

The client C_n **(16)** formats the service and/or information responses $IR_1 \ldots IR_n$ **(34)** into the corresponding user service and/or information response ir_n **(36)**, as required, and communicates the user service and/or information responses ir_n **(36)** thereto the user interfaces I_n **(14)**. The user interface I_n **(14)** incorporates the user service and/or information response ir_n **(36)** into the user response UR_n **(37)**, which is communicated by the user interfaces I_n **(14)** thereto the user U_n **(12)**.

The server **PS (18)** and/or the client C_n **(16)** may optionally also incorporate the optional additional corresponding responses $RA_{n1} \ldots RA_{nm}$ **(40)** (shown later in FIGS. 59, 60, 63, and 64) into the service and/or information response IR_n **(34)**, which may

be obtained by accessing the optional databases **41** and/or **42**, which may be optionally resident within the server **PS (18)** and/or the client C_n **(16)**, respectively

The server **PS (18)** and/or the client C_n **(16)** communicate the service and/or information response IR_n **(34)** therethrough the user interface I_n **(14)** to the user U_n **(12)**.

The server **PS (18)** and/or the clients C_n **(16)** may optionally store the responses $R_{n1}...R_{nm}$ **(32)** communicated from the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)** in the optional databases **41** and/or **42**, optionally resident within the server **PS (18)** and/or the client C_n **(16)**, respectively, which may be optionally retrieved from the optional databases **41** and/or **42**, and/or optionally incorporated into the service and/or information response IR_n **(34)**, and accessed as the additional optional responses $RA_{n1}...RA_{nm}$ **(40)**.

The server **PS (18)** and/or the client C_n **(16)** may optionally communicate with the optional servers $SO_1...SO_p$ **(22)**, and obtain information from each of the optional servers $SO_1...SO_p$ **(22)**, which may also be stored in the optional databases **41** and/or **42**, which may be optionally resident within the server **PS (18)** and/or the client C_n **(16)**, respectively, and which may be optionally incorporated into the service and/or information response IR_n **(34)**, and accessed as the additional optional responses $RA_{n1}...RA_{nm}$ **(40)**.

The user U_n **(12)** may optionally communicate the corresponding additional optional requests $q_{n1}...q_{np}$ **(44)** therethrough the user interface I_n **(14)** and the client C_n **(16)** to the optional servers $SO_1...SO_p$ **(22)**, based upon information in the service and/or information response IR_n **(34)** and/or other information presented to and/or available and/or known to the user U_n **(12)** therethrough the user interface I_n **(14)**. The optional servers $SO_1...SO_p$ **(22)** reply to the client C_n **(16)** with the corresponding responses $r_{n1}...r_{np}$ **(46)**, which the client C_n **(16)** communicates therethrough the user interface I_n **(14)** to the user U_n **(12)**, as shown in FIGS. 54-56 for typical ones of the requests $q_{n1}...q_{np}$ **(44)** and the corresponding responses $r_{n1}...r_{np}$ **(46)**.

B. Diagrammatic Regrouping

Now, in more detail, FIG. 57 shows a schematic representation of ones of the users $U_1...U_n$ **(12)**, the corresponding user interfaces $I_1...I_n$ **(14)**, the corresponding clients $C_1...C_n$ **(16)**, the server **PS (18)**, the servers $S_1...S_z$ **(20)**, and the optional servers $SO_1...SO_p$ **(22)** of the client-server multitasking system **10** of the present invention, constructed in accordance with the present invention, which reside on the network **24**, regrouped diagrammatically and alternatively named for illustrative purposes only, to illustrate and visualize possible typical communication paths. Other than FIG. 57, the nomenclature previously described and utilized will be used throughout.

Now, as shown in FIG. 57, for illustrative purposes only, ones of the clients $C_1...C_n$ **(16)** communicating with the server **PS (18)**, as in FIG. 54, may optionally be

designated clients **CA_1...CA_w (16A)**, and so on. Ones of the clients **C_1...C_n (16)** communicating with the servers **S_1...S_z (20)**, as in FIG. 55, may optionally be designated clients **CB_1...CB_x (16B)**, and so on. Ones of the clients **C_1...C_n (16)** communicating with the server **PS (18)** and with the servers **S_1...S_z (20)**, as in FIG 56, may optionally be designated clients **CC_1...CC_y (16C)**, and so on.

The users **U_1...U_n (12)** and the corresponding user interfaces **I_1...I_n (14)** corresponding to the clients **C_1...C_n (16)** may, likewise, optionally be designated in FIG. 57 only: correspondingly to the clients **CA_1...CA_w (16A)**, as users **UA_1...UA_w (12A)** and user interfaces **IA_1...IA_w (14A)**, respectively; correspondingly to the clients **CB_1...CB_x (16B)**, as users **UB_1...UB_x (12B)** and user interfaces **IB_1...IB_x (14B)**, respectively; and correspondingly to the clients **CC_1...CC_y (16C)**, as users **UC_1...UC_y (12C)** and **IC_1...IC_y (14C)**, respectively.

The clients **C_1...C_n (16)** being accounted for, the total of the clients **CA_1...CA_w (16A)**, **CB_1...CB_x (16B)**, and **CC_1...CC_y (16C)** of FIG. 57 add up to n, where n may be any number greater or equal to one, such that the subscripts $w + x + y = n$.

III. A Particular Service and/or Information Request and Associated Service and/or Information Response on the Network

B. The Server PS (18)

FIG. 58 shows a typical particular one of the service and/or information requests $IQ_1...IQ_n$ **(28)**, designated as the service and/or information request IQ_n **(28)**, having queries $QQ_{n1}...QQ_{nm}$ **(53)**, corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**. The server addresses $AQ_{n1}...AQ_{nm}$ **(54)** and the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** may be optional, and may depend upon the user interface I_n **(14)**, and/or other information resident within the server **PS (18)**.

FIG. 59 shows the particular service and/or information request IQ_n **(28)** parsed, processed, and/or formatted into current request group QA_{nc} **(50)**, request groups $QA_{n1}...QA_{nz}$ **(51)**, and optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and utilization of information therefrom to make the requests $Q_{n1}...Q_{nm}$ **(29)**, obtain the responses $R_{n1}...R_{nm}$ **(32)**, and incorporate information therefrom into the particular service and/or information response IR_n **(34)**. The current request group QA_{nc} **(50)** may be any particular one the request groups $QA_{n1}...QA_{nz}$ **(51)**, which may be selected by the user U_n **(12)**.

Upon receipt of the service and/or information requests $IQ_1...IQ_n$ **(28)** at the server **PS (18)**, communicated therefrom the corresponding clients $C_1...C_n$ **(16)**, the server **PS (18)** parses, processes, and/or formats each of the service and/or information requests

$IQ_1 \ldots IQ_n$ **(28)** into the corresponding current request groups $QA_{1c} \ldots QA_{nc}$ **(50)** having corresponding queries $QQ_{11} \ldots QQ_{nm}$ **(53)** and corresponding server addresses $AQ_{11} \ldots AQ_{nm}$ **(54)** to open connections with and make the requests $Q_{11} \ldots Q_{nm}$ **(29)** thereof the servers $S_1 \ldots S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1 \ldots S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11} \ldots Q_{nm}$ **(29)** as the corresponding server designations $S_{11} \ldots S_{nm}$ **(30)**, shown for a particular one of the service and/or information requests IQ_n **(28)** in FIG. 59.

The server **PS (18)** also parses, processes, and/or formats each of the service and/or information requests $IQ_1 \ldots IQ_n$ **(28)** into the corresponding request groups $QA_{11} \ldots QA_{nz}$ **(51)** having corresponding other queries $QQ_{1a} \ldots QQ_{nz}$ **(55)** and corresponding other server addresses $AQ_{1a} \ldots AQ_{nz}$ **(56)**, and the corresponding optional instructions $VJ_{111} \ldots VJ_{nk}$ **(52)**, also shown for a particular one of the service and/or information requests IQ_n **(28)** in FIG. 59.

The server **PS (18)** opens connections with and makes the requests $Q_{n1} \ldots Q_{nm}$ **(29)** thereof the servers $S_1 \ldots S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1 \ldots S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1} \ldots Q_{nm}$ **(29)** as the corresponding server designations $S_{11} \ldots S_{nm}$ **(30)**, shown for the particular one of the service and/or information requests IQ_n **(28)** corresponding to the corresponding queries $QQ_{n1} \ldots QQ_{nm}$ **(53)** and the

corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** therein the current request group **QA_{nc} (50)**.

The servers **$S_1...S_z$ (20)** corresponding to the server designations **$S_{11}...S_{nm}$ (30)**, designated in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to be communicated with corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** as the corresponding server designations **$S_{11}...S_{nm}$ (30)**, respond to the requests **$Q_{n1}...Q_{nm}$ (29)** with the corresponding responses **$R_{n1}...R_{nm}$ (32)**.

The server **PS (18)** parses, and/or processes, and/or formats, and/or groups, and/or organizes each of the responses **$R_{n1}...R_{nm}$ (32)** received from the servers **$S_1...S_z$ (20)** corresponding to the server designations **$S_{n1}...S_{nm}$ (30)** into corresponding addressable response information groups **$RG_{n1}...RG_{nm}$ (57)**.

The server **PS (18)** may also make additional optional requests **$QP_{n1}...QP_{nm}$ (58)** of the optional database **41**, which may be optionally resident within the server **PS (18)**, and which may reply with the corresponding additional optional responses **$RA_{n1}...RA_{nm}$ (40)**. The server **PS (18)** parses, and/or processes, and/or formats, and/or groups, and/or organizes each of the additional optional responses **$RA_{n1}...RA_{nm}$ (40)** into corresponding response information groups **$RC_{n1}...RC_{nm}$ (59)**.

Information from the current request group **QA_{nc} (50)** having the corresponding queries **$QQ_{n1}...QQ_{nm}$ (53)** and the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** is

formulated into a corresponding request pointer/address group QZ_n **(60)** having pointers/addresses $PG_{n1}...PG_{nz}$ **(61)** associated therewith.

Each of the pointers/addresses $PG_{n1}...PG_{nz}$ **(61)** are directed to point/address corresponding addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** associated therewith, which aid in obtaining information and/or services therefrom certain ones of addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** to be incorporated thereinto addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**.

Grouping and/or sorting criteria may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, which may be entered thereinto the user interface I_n **(14)** therethrough the user input UI_n **(25)** by the user U_n **(12)**. Grouping and/or sorting criteria may additionally and/or alternatively be optionally resident within the server **PS (18)** and/or the client C_n **(16)**.

The grouping and/or sorting criteria gives the user U_n **(12)** the ability to formulate the query information groups $GI_{n1}...GI_{nz}$ **(63)** and the way in which information and/or services from the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is presented to the user U_n **(12)** therethrough the user interface I_n **(14)**.

Each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** are associated therewith the corresponding ones of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**. The addressable query pointer/address group QG_{n1} **(62)** is, thus,

associated therewith the addressable query information group GI_{n1} **(63)**; the addressable query pointer/address group QG_{n2} **(62)** is, thus, associated therewith the addressable query information group GI_{n2} **(63)**; the addressable query pointer/address group QG_{nz} **(62)** is, thus, associated therewith the addressable query information group GI_{nz} **(63)**, and so on.

Each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** is formulated based upon the grouping and/or sorting criteria, which may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and/or which may additionally and/or alternatively optionally be resident within the server **PS (18)** and/or the client C_n **(16)**, and/or information within the current request group QA_{nc} **(50)**.

Each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** has pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** directed to address/point information therein the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** based upon the grouping and/or sorting criteria, which may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and/or which may additionally and/or alternatively optionally be resident within the server **PS (18)** and/or the client C_n **(16)**, and/or the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)**, and/or the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** within the current request group QA_{nc} **(50)**.

Information and/or services within each of the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is addressed therewith the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**

therefrom the query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, and information and/or services therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is incorporated thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** corresponding to the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**, which are formulated by the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, in accordance with the grouping and/or sorting criteria.

The corresponding other queries $QQ_{na}...QQ_{nz}$ **(55)** and the corresponding other server addresses $AQ_{na}...AQ_{nz}$ **(56)** therein the corresponding request groups $QA_{n1}...QA_{nz}$ **(51)** may be used for other ones of the requests $Q_{n1}...Q_{nm}$ **(29)**, and may be incorporated into the service and/or information response IR_n **(34)**, as part of other information OI_n **(65)**, for future use.

Each of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** is incorporated thereinto the service and/or information group G_n **(35)**. The service and/or information group G_n **(35)** and the other information OI_n **(65)** are incorporated thereinto the service and/or information response IR_n **(34)**.

The optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** may be used by the server **PS (18)** in making the requests $Q_{n1}...Q_{nm}$ **(29)** and/or the additional optional requests $QP_{n1}...QP_{nm}$ **(58)** of the optional database **41**, and/or in processing, formatting, grouping, and organizing the responses $R_{n1}...R_{nm}$ **(32)** from the ones of the servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{n1}...S_{nm}$ **(30)**, and/or the

additional optional responses **$RA_{n1}...RA_{nm}$ (40)**, into the corresponding service and/or information responses **$IR_1...IR_n$ (34)**, for grouping and/or sorting criteria instructions, and/or may be used for other purposes.

FIG. 60 is a schematic representation of the particular service and/or information request **IQ_n (28)** parsed, processed, and/or formatted into a current request group **QA_n (50)**, request groups **$QA_{n1}...QA_{nz}$ (51)**, and corresponding optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**, and utilization of information therefrom to make the requests **$Q_{n1}...Q_{nm}$ (29)**, obtain the responses **$R_{n1}...R_{nm}$ (32)**, and incorporate information therefrom into the particular service and/or information response **IR_n (34)**, having simpler grouping/sorting that may be used additionally and/or alternatively to that of FIG. 59.

The user **U_n (12)** is typically given the option therethrough the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** as to the grouping and/or sorting criteria to be entered thereinto the user interface **I_n (14)** therethrough the user input **UI_n (25)** by the user **U_n (12)**. The user **U_n (12)** is typically given the choice as to the grouping and/or sorting criteria to be used as in FIG. 59, and/or the grouping and/or sorting criteria of FIG. 60.

Information from the current request group **QA_{nc} (50)** having the corresponding queries **$QQ_{n1}...QQ_{nm}$ (53)** and the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** is formulated into a corresponding request pointer/address group **QY_n (68)** having pointers/addresses **$PF_{n11}...PF_{nmr}$ (69)** associated therewith, as shown in FIG. 60.

Each of the pointers/addresses **$PF_{n11}...PF_{nmr}$ (69)** are directed to point/address the corresponding addressable response information groups **$RG_{n1}...RG_{nm}$ (57)**, and aid in obtaining information and/or services therefrom the corresponding addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** to be incorporated thereinto the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, as shown in FIG. 60.

The grouping and/or sorting criteria allow the user **U_n (12)** to direct the server **PS (18)** and/or the client **C_n (16)** to sort information and/or services therefrom the responses the responses **$R_{n1}...R_{nm}$ (32)** and/or the additional optional responses **$RA_{n1}...RA_{nm}$ (40)** therefrom the optional database **41**, such as, for example, by category, query, group, page, order of importance, ascending and/or descending order, alphabetically and/or numerically, value, price, and/or other characteristics, and/or to combine and/or interleave the information and/or services therefrom the responses the responses **$R_{n1}...R_{nm}$ (32)** and/or the additional optional responses **$RA_{n1}...RA_{nm}$ (40)** one with the other, such as, for example, by order of relevance and/or other parameters.

FIG. 61 shows the particular service and/or information response **IR_n (34)** having a service and/or information group **G_n (35)**, additional request links **$SL_{n1}...SL_{nw}$ (71)**, optional order form **72**, optional additional advertisements and/or links **73**, optional hidden information **74**, and the optional service and/or information entry request form **IE_n (38)**.

The service and/or information group G_n **(35)** has the query information groups $GI_{n1}...GI_{nz}$ **(63)**, optional database response groups **75**, and optional additional advertisements and/or links **76**.

The additional request links $SL_{n1}...SL_{nw}$ **(71)** allow the user U_n **(12)** to make additional optional selections, based upon information and/or services previously requested by the user U_n **(12)**. The additional request links $SL_{n1}...SL_{nw}$ **(71)**, which are optional, may typically have Current Group/Next Group/Previous Group/Group Number Links, Server Names in Each Group, Queries in Each Group, Current Page/Next Page/Previous Page/Page Number Links, Search Display/Link and/or Description Placement/Interleave/Separate, and Link Description Options/Summary/Minimize. Other additional ones of the additional requests links $SL_{n1}...SL_{nw}$ **(71)** and/or combinations thereof may also be incorporated thereinto the service and/or information response IR_n **(34)**.

The optional order form **72** allows direct placement and/or confirmation of orders and/or purchases therewith the servers $S_1...S_z$ **(20)** and/or the optional servers $SO_1...SO_p$ **(22)**, which reside on the network **24**. The user U_n **(12)** may enter the order placement thereinto the user interface I_n **(14)** therethrough the user input UI_n **(25)**, and receive order confirmation therethrough the user interface I_n **(14)**. The client C_n **(16)** may communicate the order placement therefrom the user interface I_n **(14)** thereto the server **PS (18)**, which may communicate the order placement thereto the servers $S_1...S_z$ **(20)** and/or the optional servers $SO_1...SO_p$ **(22)**. The server **PS (18)**

may alternatively and/or additionally communicate the order confirmation received therefrom the servers $S_1...S_z$ **(20)** and/or the optional servers $SO_1...SO_p$ **(22)** thereto the client C_n **(16)**, which may communicate the order confirmation thereto the user interface I_n **(14)** for presentation to the user U_n **(12)**. The order placement and/or the order confirmation may be stored within the server **PS (18)** and/or the client C_n **(16)**. The order placement and/or the order confirmation is typically secure, and may be encrypted, and is typically communicated using secure communications means.

C. Certain Ones of the Clients

Certain ones of the clients $C_1...C_n$ **(16)** may alternatively and/or additionally make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**, and formulate the corresponding user service and/or information response $ir_1...ir_n$ **(36)**, as previously described.

FIG. 62 shows a typical particular one of the user service and/or information requests $iq_1...iq_n$ **(27)**, designated as the user service and/or information request iq_n **(27)**, having the queries $QQ_{n1}...QQ_{nm}$ **(53)**, the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**. The server addresses $AQ_{n1}...AQ_{nm}$ **(54)** and the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** may be

optional, and may depend upon the user interface I_n **(14)**, and/or other information resident within the client C_n **(16)**.

FIG. 63 shows the particular user service and/or information request iq_n **(27)** parsed, processed, and/or formatted into the current request group QA_{nc} **(50)**, the request groups $QA_{n1}...QA_{nz}$ **(51)**, and the corresponding optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and utilization of information therefrom to make the requests $Q_{n1}...Q_{nm}$ **(29)**, obtain the responses $R_{n1}...R_{nm}$ **(32)**, and incorporate information therefrom into the particular user service and/or information response ir_n **(36)**;

The server **PS (18)** makes the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, as shown in FIG. 59, and certain ones of the clients $C_1...C_n$ **(16)** may additionally and/or alternatively make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, as shown in FIG. 63.

The clients C_n **(16)** may parse, process, and/or format the user service and/or information requests iq_n **(27)** and/or organize and/or group information and/or services therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** thereinto

the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** substantially the same as the server **PS (18)** parses, processes, and/or formats the service and/or information requests IQ_n **(28)** therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, except that the client C_n **(16)** may organize the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** thereinto the user service and/or information response ir_n **(36)**, as in FIG. 63, and the server **PS (18)** organizes the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** thereinto the corresponding service and/or information response IR_n **(34)**, as in FIG. 59.

Upon receipt of the user service and/or information requests $iq_1...iq_n$ **(27)** at the corresponding clients $C_1...C_n$ **(16)**, certain ones of the corresponding clients $C_1...C_n$ **(16)** may parse, process, and/or format the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** into the corresponding current request groups $QA_{1c}...QA_{nc}$ **(50)** having the corresponding queries $QQ_{11}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)** to open connections with and make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, shown for a particular one of the user service and/or information requests $iq_1...iq_n$ **(27)** in FIG. 63.

The corresponding clients $C_1...C_n$ **(16)** may also parse, process, and/or format the corresponding user service and/or information response $ir_1...ir_n$ **(36)** into the corresponding request groups $QA_{11}...QA_{nz}$ **(51)** having the corresponding other queries $QQ_{1a}...QQ_{nz}$ **(55)** and the corresponding other server addresses $AQ_{1a}...AQ_{nz}$ **(56)**, and the corresponding optional instructions $VJ_{111}...VJ_{nk}$ **(52)**, also shown for a particular one of the user service and/or information requests iq_n **(27)** in FIG. 63.

A particular one of the corresponding clients $C_1...C_n$ **(16)**, designated as the client C_n **(16)**, may open connections with and make the requests $Q_{n1}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, shown for the particular one of the user service and/or information requests iq_n **(27)** corresponding to the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** therein the current request group QA_{nc} **(50)**.

The servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{11}...S_{nm}$ **(30)**, designated in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, respond to the requests $Q_{n1}...Q_{nm}$ **(29)** with the corresponding responses $R_{n1}...R_{nm}$ **(32)**.

The client C_n **(16)** may parse, and/or process, and/or format, and/or group, and/or organize each of the responses $R_{n1}...R_{nm}$ **(32)** received from the servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{n1}...S_{nm}$ **(30)** into the corresponding addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**.

The client C_n **(16)** may also make additional optional requests $QP_{n1}...QP_{nm}$ **(58)** of the optional database **42**, which may be optionally resident within the client C_n **(16)**, and which may reply with the corresponding additional optional responses $RA_{n1}...RA_{nm}$ **(40)**. The client C_n **(16)** may parse, and/or process, and/or format, and/or group, and/or organize each of the additional optional responses $RA_{n1}...RA_{nm}$ **(40)** into the corresponding response information groups $RC_{n1}...RC_{nm}$ **(59)**.

Now again, for the client C_n **(16)**, information from the current request group QA_{nc} **(50)** having the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** is formulated into the corresponding request pointer/address group QZ_n **(60)** having the pointers/addresses $PG_{n1}...PG_{nz}$ **(61)** associated therewith.

Now again, for the client C_n **(16)**, each of the pointers/addresses $PG_{n1}...PG_{nz}$ **(61)** are directed to point/address the corresponding addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** associated therewith, which aid in obtaining information and/or services therefrom certain ones of the addressable response information groups

$RG_{n1}...RG_{nm}$ **(57)** to be incorporated thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**.

Yet again, for the client C_n **(16)**, grouping and/or sorting criteria may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, which may be entered thereinto the user interface I_n **(14)** therethrough the user input UI_n **(25)** by the user U_n **(12)**. Grouping and/or sorting criteria may additionally and/or alternatively optionally resident within the server **PS (18)** and/or the client C_n **(16)**.

Now again, the grouping and/or sorting criteria gives the user U_n **(12)** the ability to formulate the query information groups $GI_{n1}...GI_{nz}$ **(63)** and the way in which information from the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is presented to the user U_n **(12)** therethrough the user interface I_n **(14)**.

Now again, for the client C_n **(16)**, each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** are associated therewith the corresponding ones of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**. Each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** is formulated based upon the grouping and/or sorting criteria, which may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and/or which may additionally and/or alternatively optionally be resident within the server **PS (18)** and/or the client C_n **(16)**, and/or information within the current request group QA_{nc} **(50)**.

Now again, for the client C_n **(16)**, each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** has pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** directed to address/point services and/or information therein the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** based upon the grouping and/or sorting criteria, which may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and/or which may additionally and/or alternatively optionally be resident within the server **PS (18)** and/or the client C_n **(16)**, and/or the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)**, and/or the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** within the current request group QA_{nc} **(50)**.

Yet again, for the client C_n **(16)**, the information and/or services therein each of the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is addressed therewith the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** therefrom the query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, and information and/or services therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is incorporated thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** corresponding to the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**, which are formulated by the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, in accordance with the grouping and/or sorting criteria.

Yet again, for the client C_n **(16)**, the corresponding other queries $QQ_{na}...QQ_{nz}$ **(55)** and the corresponding other server addresses $AQ_{na}...AQ_{nz}$ **(56)** therein the corresponding request groups $QA_{n1}...QA_{nz}$ **(51)** may be used for other ones of the

requests $Q_{n1}...Q_{nm}$ **(29)**, and may be incorporated into the user service and/or information response ir_n **(36)**, as part of other information OI_n **(65)**, for future use.

Now again, for the client C_n **(16)**, each of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** is incorporated thereinto the service and/or information group G_n **(35)**. The service and/or information group G_n **(35)** and the other information OI_n **(65)** are incorporated thereinto the service and/or information response IR_n **(34)**.

The optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** may be used by the client C_n **(16)**, in making the requests $Q_{n1}...Q_{nm}$ **(29)** and/or the additional optional requests $QP_{n1}...QP_{nm}$ **(58)** of the optional database **42**, and/or in processing, formatting, grouping, and organizing the responses $R_{n1}...R_{nm}$ **(32)** from the ones of the servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{n1}...S_{nm}$ **(30)**, and/or the additional optional responses $RA_{n1}...RA_{nm}$ **(40)**, into user service and/or information response ir_n **(36)**, for grouping and/or sorting criteria instructions, and/or may be used for other purposes.

FIG. 64 is a schematic representation of the particular user service and/or information request iq_n **(27)** parsed, processed, and/or formatted into the current request group QA_{nc} **(50)**, the request groups $QA_{n1}...QA_{nz}$ **(51)**, and the corresponding optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and utilization of information therefrom to make the requests $Q_{n1}...Q_{nm}$ **(29)**, obtain the responses $R_{n1}...R_{nm}$ **(32)**, and incorporate information therefrom into the particular user service and/or information response ir_n

(36), having simpler grouping/sorting that may be used additionally and/or alternatively to that of FIG. 63.

The user U_n **(12)** is typically given the option therethrough the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** as to the grouping and/or sorting criteria to be entered thereinto the user interface I_n **(14)** therethrough the user input UI_n **(25)** by the user U_n **(12)**. The user U_n **(12)** is typically given the choice as to the grouping and/or sorting criteria of FIG. 63, and/or the grouping and/or sorting criteria of FIG. 64.

Now again, the client C_n **(16)** may parse, process, and/or format the user service and/or information requests iq_n **(27)** and/or organize and/or group information and/or services therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** substantially the same as the server **PS (18)** parses, processes, and/or formats the service and/or information requests IQ_n **(28)** therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, except that the client C_n **(16)** may organize the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** thereinto the user service and/or information response ir_n **(36)**, as in FIG. 64, and the server **PS (18)** organizes the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** thereinto the corresponding service and/or information response IR_n **(34)**, as in FIG. 60.

Now again, for the client C_n **(16)**, information from the current request group QA_{nc} **(50)** having the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** is formulated into the corresponding request pointer/address group QY_n **(68)** having the pointers/addresses $PF_{n11}...PF_{nmr}$ **(69)** associated therewith, as shown in FIG. 64.

Now again, for the client C_n **(16)**, each of the pointers/addresses $PF_{n11}...PF_{nmr}$ **(69)** are directed to point/address the corresponding addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**, and aid in obtaining information and/or services therefrom the corresponding addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** to be incorporated thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, as shown in FIG. 64.

Again, the grouping and/or sorting criteria allow the user U_n **(12)** to direct the server **PS (18)** and/or the client C_n **(16)** to sort information and/or services therefrom the responses the responses $R_{n1}...R_{nm}$ **(32)** and/or the additional optional responses $RA_{n1}...RA_{nm}$ **(40)** therefrom the optional database **41**, such as, for example, by category, query, group, page, order of importance, ascending and/or descending order, alphabetically and/or numerically, value, price, and/or other characteristics, and/or to combine and/or interleave the information and/or services therefrom the responses the responses $R_{n1}...R_{nm}$ **(32)** and/or the additional optional responses $RA_{n1}...RA_{nm}$ **(40)** one with the other, such as, for example, by order of relevance and/or other parameters.

FIG. 65 shows the particular user service and/or information response ir_n **(36)** having the service and/or information group G_n **(35)**, the additional request links $SL_{n1}...SL_{nw}$ **(71)**, the optional order form **72**, the optional additional advertisements and/or links **73**, the optional hidden information **74**, and the optional service and/or information entry request form IE_n **(38)**.

Now again, the service and/or information group G_n **(35)** has the query information groups $GI_{n1}...GI_{nz}$ **(63)**, the optional database response groups **75**, and the optional additional advertisements and/or links **76**.

Yet again, the additional request links $SL_{n1}...SL_{nw}$ **(71)** allow the user U_n **(12)** to make additional optional selections, based upon information and/or services previously requested by the user U_n **(12)**. The additional request links $SL_{n1}...SL_{nw}$ **(71)**, which are optional, may typically have Current Group/Next Group/Previous Group/Group Number Links, Server Names in Each Group, Queries in Each Group, Current Page/Next Page/Previous Page/Page Number Links, Search Display/Link and/or Description Placement/Interleave/Separate, and Link Description Options/Summary/Minimize. Other additional ones of the additional request links $SL_{n1}...SL_{nw}$ **(71)** and/or combinations thereof may also be incorporated thereinto the user service and/or information response ir_n **(36)**.

Now again, for the client C_n **(16)**, the optional order form **72** allows direct placement and/or confirmation of orders and/or purchases therewith the servers $S_1...S_z$ **(20)**

and/or the optional servers **SO_1...SO_p (22)**, which reside on the network **24**. The user **U_n (12)** may enter the order placement thereinto the user interface **I_n (14)** therethrough the user input **UI_n (25)**, and receive order confirmation therethrough the user interface **I_n (14)**. The client **C_n (16)** may communicate the order placement therefrom the user interface **I_n (14)** thereto the servers **S_1...S_z (20)** and/or the optional servers **SO_1...SO_p (22)**, and/or receive the order confirmation therefrom, and communicate the order confirmation therefrom the servers **S_1...S_z (20)** and/or the optional servers **SO_1...SO_p (22)** thereto the user interface **I_n (14)** for presentation to the user **U_n (12)**. The order placement and/or the order confirmation may be stored within the server **PS (18)** and/or the client **C_n (16)**. The order placement and/or the order confirmation is typically secure, and may be encrypted, and is typically communicated using secure communications means.

D. Formulating Query Information Groups

Each of the particular addressable response information groups **RG_{n1}...RG_{nm} (57)**, designated as the addressable response information group **RG_{nm} (57)**, has optional addressable individual information groups **LG_{nm1}...LG_{nmr} (80)**, which may be addressed therewith the pointers/addresses **PP_{nm1}...PP_{nmr} (64)**, as shown in FIGS. 59, 63, 66A, 66B, and 66C.

Each of the addressable response information groups **RG_{n1}...RG_{nm} (57)** and each of the optional addressable individual information groups **LG_{n11}...LG_{nmr} (80)** therein

each of the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** may be addressed therewith the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**.

Now again, the addressable response information group RG_{nm} **(57)** has the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)**, which may be addressed therewith the pointers/addresses $PP_{nm1}...PP_{nmr}$ **(64)**. Each of the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** therein the addressable response information group RG_{nm} **(57)** may be pointed/addressed by the server **PS (18)** and/or the client C_n **(16)** to retrieve all and/or a portion and/or combinations thereof of specific ones of the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)**, therefrom the addressable response information group RG_{nm} **(57)**, and incorporate information and/or services therefrom the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** thereinto certain ones of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, in accordance with the grouping and/or sorting criteria addressing scheme.

The addressable response information group RG_{nm} **(57)** having the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** may have optional addressable pointer/address indices $IN_{nm1}...IN_{nmr}$ **(81)** correspondingly associated therewith the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)**, which may be addressed/pointed therewith the pointers/addresses $PP_{nm1}...PP_{nmr}$ **(64)**, and which may be pointed/addressed by the server **PS (18)** and/or the client C_n **(16)** to retrieve all and/or a portion and/or combinations thereof of specific ones of the

addressable individual information groups **LG_{nm1}...LG_{nmr} (80)**, and incorporate information and/or services therefrom the addressable individual information groups **LG_{nm1}...LG_{nmr} (80)** thereinto the certain ones of the addressable query information groups **GI_{n1}...GI_{nz} (63)**, in accordance with the grouping and/or sorting criteria addressing scheme.

FIGS. 66A, 66B, and 66C show the addressable response information group **RG_{nm} (57)** having the addressable individual information groups **LG_{nm1}...LG_{nmr} (80)** showing the optional addressable pointer/address indices **IN_{nm1}...IN_{nmr} (81)** correspondingly associated therewith the optional addressable individual information groups **LG_{nm1}...LG_{nmr} (80)**, which may be addressed/pointed therewith the pointer/addresses **PP_{nm1} (64)**, **PP_{nm2} (64)**, and **PP_{nmr} (64)**, respectively.

The optional addressable pointer/address index **IN_{nm1} (81)** is correspondingly associated therewith the optional addressable individual information group **LG_{nm1} (80)**. The optional addressable pointer/address index **IN_{nm2} (81)** is correspondingly associated therewith the optional addressable individual information group **LG_{nm2} (80)**, and so on. The optional addressable pointer/address index **IN_{nmr} (81)** is, thus, correspondingly associated therewith the optional addressable individual information group **LG_{nm1} (80)**.

The pointers/addresses **PG_{n1}...PG_{nz} (61)** may be formulated as arrays and/or lists. The pointers/addresses **PP_{nm1}...PP_{nmr} (64)** and/or the pointers/addresses

$PF_{nm1}...PF_{nmr}$ **(69)** may be formulated as arrays and/or lists. The arrays may be multidimensional arrays, and the lists may be lists within lists.

The optional addressable individual information group LG_{nmr} **(80)** is associated therewith and corresponds to a particular one of the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** therein a particular one of the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**, designated as the addressable response information group RG_{nm} **(57)**. The first subscript of the optional addressable individual information groups LG_{nmr} **(80)** is associated therewith and corresponds to the particular service and/or information request IQ_n **(28)** and/or the user service and/or information request iq_n **(27)**. The second subscript of the optional addressable individual information groups LG_{nmr} **(80)** is associated therewith and corresponds to a particular one of "1" through "m" i.e., 1.....m, of the addressable response information group $RG_{n1}...RG_{nm}$ **(57)**. The third subscript of the optional addressable individual information groups LG_{nmr} **(80)** is associated therewith and corresponds to a particular one of "1" through "r" i.e., 1.....r, of the optional addressable individual information group $LG_{nm1}...LG_{nmr}$ **(80)** within the addressable response information group RG_{nm} **(57)**.

The subscripts of the optional addressable pointer/address indices $IN_{nm1}...IN_{nmr}$ **(81)** are correspondingly associated therewith the subscripts of the corresponding addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)**.

A number and variety of pointing/addressing schemes are possible, which may be used for a variety of grouping and sorting criteria schemes and addressing/pointing schemes.

For example, the pointers/addresses **PG_{n1}...PG_{nz} (61)** of the request pointer/address group **QZ_n (60)** may be pointed/addressed thereto certain ones of the addressable query pointer/address groups **QG_{n1}...QG_{nz} (62)**, in accordance with certain grouping and/or sorting criteria schemes and/or pointing/addressing schemes. The pointers/addresses **PP_{n11}...PP_{nmr} (64)** of each of the pointed/addressed addressable query pointer/address groups **QG_{n1}...QG_{nz} (62)** may be pointed thereto the pointer/address indices **IN_{n11}...IN_{nmr} (81)** of the optional addressable individual information groups **LG_{nm1}...LG_{nmr}**, i.e., 1.....r, and the pointers/addresses **PP_{n11}...PP_{nmr} (64)**, i.e., 1.....m, corresponding to the addressable response information groups **RG_{n1}...RG_{nm} (57)** formulated by the addressable query pointer/address groups **QG_{n1}...QG_{nz} (62)** may be pointed thereto certain ones of the addressable response information groups **RG_{n1}...RG_{nm} (57)**, in accordance with certain grouping and/or sorting criteria schemes and/or addressing schemes. This subprocess may be repeated until the information and/or services from the optional addressable individual information groups **LG_{nm1}...LG_{nmr}** from the addressable response information groups **RG_{n1}...RG_{nm} (57)** is incorporated thereinto the certain ones of the addressable query information groups **GI_{n1}...GI_{nz} (63)**, in accordance with the grouping and/or sorting criteria addressing scheme, as formulated by the addressable query pointer/address groups **QG_{n1}...QG_{nz} (62)** and the request pointer/address group **QZ_n (60)**.

Alternatively and/or additionally, the pointers/addresses **$PG_{n1}...PG_{nz}$ (61)** of the request pointer/address group **QZ_n (60)** may be incremented therethrough each of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**. The pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)** of each of the pointed/addressed addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** may be pointed to the pointer/address indices **$IN_{n11}...IN_{nmr}$ (81)** of the optional addressable individual information groups **$LG_{nm1}...LG_{nmr}$**, i.e., 1.....r, and incremented once, and then the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)**, i.e., 1.....m, corresponding to the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** formulated by the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** may be incremented therethrough each of the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)**. This subprocess may be repeated until the information and/or services from the optional addressable individual information groups **$LG_{nm1}...LG_{nmr}$** from the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** is incorporated thereinto the certain ones of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, in accordance with the grouping and/or sorting criteria addressing scheme, and as formulated by the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**.

Alternatively and/or additionally, the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)**, i.e., 1.....m, may be incremented, corresponding to the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** formulated by the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**, and then the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)**, i.e., 1.....r, pointing to the pointer/address indices **$IN_{n11}...IN_{nmr}$ (81)** of the optional addressable

individual information groups $LG_{nm1}...LG_{nmr}$ may then be incremented. This subprocess may be repeated until the information and/or services from the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ from the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** is incorporated thereinto the certain ones of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, in accordance with the grouping and/or sorting criteria addressing scheme, and as formulated by the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**.

Alternatively and/or additionally, the pointers/addresses $PF_{nm1}...PF_{nmr}$ **(69)**, i.e., 1.....m, may be incremented, corresponding to the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** formulated by the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, and then the pointers/addresses $PF_{nm1}...PF_{nmr}$ **(69)**, i.e., 1.....r, pointing to the pointer/address indices $IN_{n11}...IN_{nmr}$ **(81)** of the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ may then be incremented. This subprocess may be repeated until the information and/or services from the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ from the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** is incorporated thereinto the certain ones of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, in accordance with the grouping and/or sorting criteria addressing scheme, and as formulated by the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**.

The typical sorting and/or grouping criteria and the addressing/pointing schemes mentioned immediately above, for example, may group certain ones of the queries

$QQ_{n1}...QQ_{nm}$ **(53)** having the same and/or substantially the same values grouped therein a particular one of the query information groups $GI_{nz}...GI_{nz}$ **(63)**, designated as the query information group GI_{nz} **(63)**, as shown in certain ones of FIGS. 27-52.

The grouping and/or sorting criteria and schemes and the addressing/pointing schemes mentioned herein are but only a small portion of a much larger variety of grouping and/or sorting criteria and schemes and addressing/pointing schemes and/or combinations thereof that the client-server multitasking system **10** of the present invention may use and is capable of. The above mentioned examples are included herein to illustrate but a few examples of the capabilities of the client-server multitasking system **10** of the present invention.

The addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** are typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with the other, as the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** are incorporated thereinto the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** therefrom the responses $R_{n1}...R_{nm}$ **(32)**.

Alternatively and/or additionally the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** may be incorporated thereinto the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** therefrom the responses $R_{n1}...R_{nm}$ **(32)** in an as-is condition and/or in raw form.

The optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** therein the addressable response information group RG_{nm} **(57)**, having information and/or services parsed and/or processed, and/or formatted, and/or grouped therefrom the response R_{nm} **(32)**, may be correspondingly associated therewith the locations of the information and/or services therein the response R_{nm} **(32)**.

Each of the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** may have and/or be parsed, and/or processed, and/or formatted, and/or organized, and/or grouped into corresponding optional links $LD_{nm1}...LD_{nmr}$ **(82)**, and/or corresponding optional descriptions $DD_{nm1}...DD_{nmr}$ **(83)**, and/or corresponding optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, and/or corresponding optional images $ID_{nm1}...ID_{nmr}$ **(85)**, as shown in FIG. 67.

The optional links $LD_{nm1}...LD_{nmr}$ **(82)**, the corresponding optional descriptions $DD_{nm1}...DD_{nmr}$ **(83)**, the corresponding optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, and the corresponding optional images $ID_{nm1}...ID_{nmr}$ **(85)**, corresponding to the addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** are typically associated correspondingly one with the other.

The optional link LD_{nm1} **(82)**, the corresponding optional description DD_{nm1} **(83)**, the corresponding optional price/value PD_{nm1} **(84)**, and the corresponding optional image ID_{nm1} **(85)**, corresponding to the optional individual information group LG_{nm1} **(80)** are typically associated correspondingly one with the other. The optional link LD_{nm2} **(82)**,

the corresponding optional description **DD_{nm2} (83)**, the corresponding optional price/value **PD_{nm2} (84)**, and the corresponding optional image **ID_{nm2} (85)**, corresponding to the addressable individual information group **LG_{nm2} (80)** are typically associated correspondingly one with the other, and so on. The optional link **LD_{nmr} (82)**, the corresponding optional description **DD_{nmr} (83)**, the corresponding optional price/value **PD_{nmr} (84)**, and the corresponding optional image **ID_{nmr} (85)**, corresponding to the addressable individual information group **LG_{nmr} (80)** are, thus, typically associated correspondingly one with the other.

The addressable individual information groups **LG_{nm1}...LG_{nmr} (80)**, which may have the corresponding optional links **LD_{nm1}...LD_{nmr} (82)**, and/or the corresponding optional descriptions **DD_{nm1}...DD_{nmr} (83)**, and/or the corresponding optional prices/values **PD_{nm1}...PD_{nmr} (84)**, and/or the corresponding optional images **ID_{nm1}...ID_{nmr} (85)** are appended therewith labels/identifiers, as shown in FIG. 68, and incorporated thereinto certain ones of the addressable query information groups **GI_{n1}...GI_{nz} (63)**, depending upon the grouping and/or sorting criteria. FIG. 69 shows a particular one of the addressable query information groups **GI_{n1}...GI_{nz} (63)**, designated as the query information group **GI_{nz} (63)**.

Now again, the optional addressable individual information group **LG_{nmr} (80)** is associated therewith and corresponds to a particular one of the addressable individual information groups **LG_{nm1}...LG_{nmr} (80)** therein a particular one of the addressable response information group s **RG_{n1}...RG_{nm} (57)**, designated as the addressable

response information group **RG_{nm} (57)**. The first subscript of the optional addressable individual information groups **LG_{nmr} (80)** is associated therewith and corresponds to the particular service and/or information request **IQ_n (28)** and/or the user service and/or information request **iq_n (27)**. The second subscript of the optional addressable individual information groups **LG_{nmr} (80)** is associated therewith and corresponds to a particular one of "1" through "m" i.e., 1.....m, of the addressable response information group **$RG_{n1}...RG_{nm}$ (57)**. The third subscript of the optional addressable individual information groups **LG_{nmr} (80)** is associated therewith and corresponds to a particular one of "1" through "r", i.e., 1.....r, of the optional addressable individual information group **$LG_{nm1}...LG_{nmr}$ (80)** within the addressable response information group **RG_{nm} (57)**.

FIG. 68 shows a labelled individual information group **LL_{nzu} (86)** associated therewith a particular one of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, designated as the addressable query information group **GI_{nz} (63)**, having optional group identifier **GL_{nc} (87)**, optional query link identifier **LN_{ncu} (88)**, optional resource location identifier **SU_{nw} (89)**, optional server and/or query identifier **SI_{nm} (90)**, and/or optional server link identifier **LX_{nmr} (91)** appended thereto the addressable individual information group **LG_{nmr} (80)**.

The first alphanumeric subscript of the labelled individual information group **LL_{nzu} (86)** is associated therewith and corresponds to the service and/or information response **IR_n (34)** and/or the user service and/or information response **ir_n (36)**. The second

alphanumeric subscript of the labelled individual information group LL_{nzu} **(86)** is associated therewith and corresponds to a particular one of "1" through "z", i.e., 1.....z, of the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)**, designated as the addressable query information group GI_{nz} **(63)**, which the labelled individual information group LL_{nzu} **(86)** is incorporated therein. The third alphanumeric subscript of the labelled individual information group LL_{nzu} **(86)** is associated therewith and corresponds to a particular one of "1" through "u", i.e., 1.....u, of labelled individual information groups $LL_{nz1}...LL_{nzu}$ **(86)** within the addressable query information group GI_{nz} **(63)**.

The optional group identifier GL_{nc} **(87)** labels and/or identifies the current request group QA_{nc} **(50)**. The optional group identifier GL_{nc} **(87)** is associated therewith and corresponds to the current request group QA_{nc} **(50)**, which may be any particular one the request groups $QA_{n1}...QA_{nz}$ **(51)** selected by the user U_n **(12)**. The first alphanumeric subscript of the optional group identifier GL_{nc} **(87)** is associated therewith and corresponds to the service and/or information response IR_n **(34)** and/or the user service and/or information response ir_n **(36)**. The second subscript of the optional group identifier GL_{nc} **(87)** is associated therewith and corresponds to the particular one of the request groups $QA_{n1}...QA_{nz}$ **(51)** selected by the user U_n **(12)** as the current request group QA_{nc} **(50)**.

The optional query link identifier LN_{ncu} **(88)** is also associated therewith and corresponds to the current request group QA_{nc} **(50)**. The optional query link identifier

LN_{ncu} **(88)** labels and/or identifies the labelled individual information group LL_{nzu} **(86)**. The first alphanumeric subscript of the optional query link identifier LN_{ncu} **(88)** is associated therewith and corresponds to the service and/or information response IR_n **(34)** and/or the user service and/or information response ir_n **(36)**. The second subscript of the optional query link identifier LN_{ncu} **(88)** is also associated therewith and corresponds to the particular one of the request groups $QA_{n1}...QA_{nz}$ **(51)** selected by the user U_n **(12)** as the current request group QA_{nc} **(50)**. The third alphanumeric subscript of the optional query link identifier LN_{ncu} **(88)** is associated therewith and corresponds to a particular one of "1" through "u", i.e., 1.....u, of the labelled individual information groups $LL_{nz1}...LL_{nzu}$ **(86)** therein the addressable query information group GI_{nz} **(63)**.

The optional resource location identifier SU_{nw} **(89)** labels and/or identifies resource locations of information and/or services associated therewith and corresponding to the optional addressable individual information group LG_{nmr} **(80)** therein the labelled individual information group LL_{nzu} **(86)**. The optional resource location identifier SU_{nw} **(89)** indicates and is associated therewith and corresponds to resource locations of information and/or services associated therewith certain ones of the optional servers $SO_1...SO_p$ **(22)** and/or certain ones of the servers $S_1...S_z$ **(20)**. The optional resource location identifier SU_{nw} **(89)** may be obtained from certain information therein the optional addressable individual information group LG_{nmr} **(80)**. The first alphanumeric subscript of the optional resource location identifier SU_{nw} **(89)** is associated therewith and corresponds to the service and/or information response IR_n **(34)** and/or the user

service and/or information response $\mathbf{ir_n}$ **(36)**. The second alphanumeric subscript of the optional resource location identifier $\mathbf{SU_{nw}}$ **(89)** is associated therewith and corresponds to a particular one of "1" through "w", i.e., 1……w, of the optional resource location identifiers $\mathbf{SU_{n1}...SU_{nw}}$ **(89)** therein the labelled individual information group $\mathbf{LL_{nzu}}$ **(86)**.

The optional server and/or query identifier $\mathbf{SI_{nm}}$ **(90)** labels and/or identifies the query $\mathbf{QQ_{nm}}$ **(53)** and/or the corresponding server address $\mathbf{AQ_{nm}}$ **(54)** associated therewith and corresponding to the optional addressable individual information group $\mathbf{LG_{nmr}}$ **(80)** therein the corresponding labelled individual information group $\mathbf{LL_{nzu}}$ **(86)** of the current request group $\mathbf{QA_{nc}}$ **(50)**. The first alphanumeric subscript of the optional server and/or query identifier $\mathbf{SI_{nm}}$ **(90)** is associated therewith and corresponds to the service and/or information response $\mathbf{IR_n}$ **(34)** and/or the user service and/or information response $\mathbf{ir_n}$ **(36)**. The second alphanumeric subscript of the optional server and/or query identifier $\mathbf{SI_{nm}}$ **(90)** is associated therewith and corresponds to a particular one of "1" through "m", i.e., 1……m, of the optional server and/or query identifiers $\mathbf{SI_{n1}...SI_{nm}}$ **(90)**, which may be correspondingly associated therewith the corresponding ones of the queries $\mathbf{QQ_{n1}...QQ_{nm}}$ **(53)** and/or the corresponding ones of the server addresses $\mathbf{AQ_{n1}...AQ_{nm}}$ **(54)**.

The optional server link identifier $\mathbf{LX_{nmr}}$ **(91)** labels and/or identifies the location of the optional addressable individual information group $\mathbf{LG_{nmr}}$ **(80)** therein the corresponding addressable response information groups $\mathbf{RG_{nm}}$ **(57)**. The first

alphanumeric subscript of the optional server link identifier LX_{nmr} **(91)** is associated therewith and corresponds to the service and/or information response IR_n **(34)** and/or the user service and/or information response ir_n **(36)**. The second alphanumeric subscript of the optional server link identifier LX_{nmr} **(91)** is associated therewith and corresponds to the addressable response information group RG_{nm} **(57)**. The third alphanumeric subscript of the optional server link identifier LX_{nmr} **(91)** is associated therewith and corresponds to a particular one of "1" through "r", i.e., 1.....r, of the optional server link identifiers $LX_{nm1}...LX_{nmr}$ **(91)**, which may be correspondingly associated therewith the locations of certain ones of the optional addressable individual information group $LG_{nm1}...LG_{nmr}$ **(80)** therein the addressable response information groups RG_{nm} **(57)**. The certain ones of the optional addressable individual information groups $LG_{nm1}...LG_{nmr}$ **(80)** therein the addressable response information group RG_{nm} **(57)**, having information and/or services parsed and/or processed, and/or formatted, and/or grouped therefrom the response R_{nm} **(32)**, which are labelled and/or identified therewith the optional server link identifiers $LX_{nm1}...LX_{nmr}$ **(91)**, are correspondingly associated therewith the locations of the information and/or services therein the response R_{nm} **(32)**. The optional server link identifiers $LX_{nm1}...LX_{nmr}$ **(91)**, thus, identify and/or label the location of services and/or information therein the response R_{nm} **(32)**.

FIG. 69 shows the addressable query information group GI_{nz} **(63)** having the labelled individual information groups $LL_{nz1}...LL_{nzu}$ **(86)**, optional database labelled individual information groups $RL_{nz1}...RL_{nzx}$ **(92)**, optional query description QT_{nz} **(93)**, optional

FIG. 46 shows the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 22 having: "Search Engine Results" as "Interleave"; "URL's per Search Engine" as "15"; "URL Details" as "Summary"; "Timeout (seconds) per Search Engine" as "3"; "Page" as "1"; "Searches per Group as "5"; and "Group" as "1". Next Group: II may be selected therefrom the typical one of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)** of FIG. 46.

FIGS. 47 and 48 show a typical ones of the user response **UR_n (37)**, as the typical service and/or information response forms **IS_n (39)** at the user interface **I_n (14)**, with reference to FIG. 23, having information and/or services therefrom the responses **$R_{n1}...R_{nm}$ (32)** incorporated therein, and incorporated thereinto Group I. FIGS. 47 and 48 also shows the results of a full text search of the optional database **41** and/or the optional database **42**, which may be associated therewith the typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, and which additionally and/or alternatively may function as an internal search engine. The full text search results are incorporated therefrom the additional optional responses **$RA_{n1}...RA_{nm}$ (40)**. The results of the full text search of the optional database **41** and/or the optional database **42** may be additionally and/or alternatively automatically inserted thereinto the typical one of the user response **UR_n (37)**, as the typical service and/or information response form **IS_n (39)** at the user interface **I_n (14)**, in addition to the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** at the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**. In the typical case shown in FIGS. 47

server descriptions and/or links $ST_{nz1}...ST_{nzf}$ **(94)**, and optional advertisements and/or links $LT_{nz1}...LT_{nzt}$ **(95)**. The first and second subscripts of the optional database labelled individual information groups $RL_{nz1}...RL_{nzx}$ **(92)**, the optional query description QT_{nz} **(93)**, the optional server descriptions and/or links $ST_{nz1}...ST_{nzf}$ **(94)**, and the optional advertisements and/or links $LT_{nz1}...LT_{nzt}$ **(95)** are associated therewith and correspond to the addressable query information group GI_{nz} **(63)**. The third subscripts of the optional database labelled individual information groups $RL_{nz1}...RL_{nzx}$ **(92)**, the optional server descriptions and/or links $ST_{nz1}...ST_{nzf}$ **(94)**, and the optional advertisements and/or links $LT_{nz1}...LT_{nzt}$ **(95)** are associated therewith and correspond to ones of the optional database labelled individual information groups $RL_{nz1}...RL_{nzx}$ **(92)**, the optional server descriptions and/or links $ST_{nz1}...ST_{nzf}$ **(94)**, and the optional advertisements and/or links $LT_{nz1}...LT_{nzt}$ **(95)**, respectively.

IV PROCESS

FIG. 70 shows steps of a client-server multitasking process **99** of the present invention. The client-server multitasking process **99** is shown for the client-server multitasking system **10** for a particular one of the users $U...U_n$ **(12)**, designated as the user U_n **(12)**, the corresponding particular one of the user interfaces $I...I_n$ **(14)**, designated as the user interface I_n **(14)**, the corresponding particular one of the clients $C...C_n$ **(16)**, designated as the client C_n **(16)**, the server **PS (18)**, the servers $S_1...S_z$ **(20)**, and the optional servers $SO_1...SO_p$ **(22)**, which reside on the network **24**.

The client-server multitasking process **99** starts at step **101**. The user U_n **(12)** enters the user input UI_n **(25)** thereinto the user interface I_n **(14)** (step **102**). The user input UI_n **(25)** is formulated thereinto the user service and/or information request iq_n **(27)** at the user interface I_n **(14)** and communicated thereto the client C_n **(16)** (step **103**). The user service and/or information request iq_n **(27)** may be formulated thereinto the service and/or information request IQ_n **(28)** at the client C_n **(16)** and communicated thereto the server **PS (18)** (also step **103**).

The service and/or information response IR_n **(34)** and/or the user service and/or information response ir_n **(36)** are derived at the server **PS (18)** and/or the client C_n **(16)**, respectively, at step **104**, which in itself is a process, and may hereinafter be referred to as the multitasking process **104**. The multitasking process **104** will be discussed in more detail later with reference to FIGS. 70-1A and 70-1B.

Now, continuing with FIG. 70, the user service and/or information response ir_n **(36)** may be derived at the client C_n **(16)** (step **104**) therefrom the service and/or information response IR_n **(34)**, which may be communicated thereto the client C_n **(16)** therefrom the server **PS (18)** (also step **104**), and/or alternatively and/or additionally therefrom the responses $R_{n1}...R_{nm}$ **(32)**, which may be communicated thereto the client C_n **(16)** (step **104**).

Now, the client C_n **(16)** may communicate the service and/or information request IQ_n **(28)** thereto the server **PS (18)** (step **103**). The service and/or information response

IR_n (34) is then derived at the server **PS (18)** (step **104**) and communicated thereto the client **C_n (16)** (also step **104**). The user service and/or information response **ir_n (36)** may be derived therefrom the service and/or information response **IR_n (34)** (also step **104**).

Now, in more detail, if the service and/or information request **IQ_n (28)** is communicated thereto the server **PS (18)** (step **103**), then the server **PS (18)** makes the requests **$Q_{n1}...Q_{nm}$ (29)** and/or certain ones of the requests **$Q_{n1}...Q_{nm}$ (29)** thereof the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to be communicated with corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** as the corresponding server designations **$S_{n1}...S_{nm}$ (30)**, utilizing information therefrom the service and/or information request **IQ_n (28)**. The service and/or information response **IR_n (34)** is then derived at the server **PS (18)** (step **104**) therefrom the responses **$R_{n1}...R_{nm}$ (32)** received from the servers **$S_1...S_z$ (20)** corresponding to the server designations **$S_{n1}...S_{nm}$ (30)**, and communicated thereto the client **C_n (16)**. Now, again, the user service and/or information response **ir_n (36)** may be derived therefrom the service and/or information response **IR_n (34)** (also step **104**).

Now, also in more detail, alternatively and/or additionally, the client **C_n (16)** may make the requests **$Q_{n1}...Q_{nm}$ (29)** and/or certain other ones of the requests **$Q_{n1}...Q_{nm}$ (29)** thereof the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to be communicated with corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** as the corresponding server designations

$S_{n1}...S_{nm}$ **(30)**, utilizing information therefrom the user service and/or information request iq_n **(27)**. Now, again, the user service and/or information response ir_n **(36)** may also be derived at the client C_n **(16)** (step **104**) therefrom the responses $R_{n1}...R_{nm}$ **(32)** communicated thereto the client C_n **(16)** (step **104**) and/or alternatively and/or additionally therefrom the service and/or information response IR_n **(34)** communicated thereto the client C_n **(16)** therefrom the server **PS (18)** (also step **104**).

The user service and/or information response ir_n **(36)**, thus, may be derived therefrom the service and/or information response IR_n **(34)** communicated therefrom the server **PS (18)** thereto the client C_n **(16)** and/or alternatively and/or additionally therefrom the responses $R_{n1}...R_{nm}$ **(32)** communicated thereto the client C_n **(16)** (step **104**).

The user service and/or information response ir_n **(36)** is communicated thereto the user interface I_n **(14)** (step **105**) and incorporated thereinto the user response UR_n **(37)**.

The user U_n **(12)** reviews the user response UR_n **(37)** and/or selects additional services and/or information (step **106**). Step **106** will be discussed in more detail later with reference to FIG. 70-2. The process **99** ends at step **107**. The process **99** will be described in more detail with reference to ~~FIGS. 1-104~~ FIGS. 1-141 of the drawings.

The service and/or information response IR_n **(34)** and/or the user service and/or information response ir_n **(36)** are derived at the server **PS (18)** and/or the client C_n

(16), respectively, at step **104** in FIG. 70, and shown in more detail in FIGS. 70-1A and 70-1B.

FIG. 70-1A shows the multitasking process **104** of deriving the service and/or information response $\mathbf{IR_n}$ **(34)** and/or the user service and/or information response $\mathbf{ir_n}$ **(36)**, with reference to FIGS. 59 and 63. FIG. 70-1B shows the multitasking process **104** of deriving the service and/or information response $\mathbf{IR_n}$ **(34)** and/or the user service and/or information response $\mathbf{ir_n}$ **(36)** having other grouping/sorting that may be used additionally and/or alternatively to that of FIGS. 59 and 63, as shown with reference to FIGS. 60 and 64. The multitasking process **104** will also be described in more detail with reference to FIGS. 1-104 of the drawings.

The server **PS (18)** and/or the client $\mathbf{C_n}$ **(16)** parse, process, and/or format the service and/or information request $\mathbf{IQ_n}$ **(28)** and/or the user service and/or information request $\mathbf{iq_n}$ **(27)** into the current request group $\mathbf{QA_{nc}}$ **(50)**, the request groups $\mathbf{QA_{n1}...QA_{nz}}$ **(51)**, and the optional instructions $\mathbf{VJ_{n1}...VJ_{nk}}$ **(52)** (step **104-1**), as shown in FIGS. 70-1A and 70-1B.

Information therefrom the current request group $\mathbf{QA_{nc}}$ **(50)** and the optional instructions $\mathbf{VJ_{n1}...VJ_{nk}}$ **(52)** may be used to make the requests $\mathbf{Q_{n1}...Q_{nm}}$ **(29)**, obtain the responses $\mathbf{R_{n1}...R_{nm}}$ **(32)**, and incorporate information therefrom into the service and/or information response $\mathbf{IR_n}$ **(34)** and/or the user service and/or information response $\mathbf{ir_n}$ **(36)**, as shown in FIGS. 70-1A and 70-1B with reference to FIGS. 59, 60,

63, and 64. The current request group QA_{nc} **(50)** may be any particular one the request groups $QA_{n1}...QA_{nz}$ **(51)**, which may be selected by the user U_n **(12)**.

The current request group QA_{nc} **(50)** has the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** to open connections with and make the requests $Q_{n1}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{n1}...S_{nm}$ **(30)**, shown for the particular service and/or information request IQ_n **(28)** and/or the particular user service and/or information request iq_n **(27)**.

The server **PS (18)** and/or the client C_n **(16)** open connections with and make the requests $Q_{n1}...Q_{nm}$ **(29)** having the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)** therein the current request group QA_{nc} **(50)** thereof the servers $S_1...S_z$ **(20)** (step **104-2**) as shown in FIGS. 70-1A and 70-1B, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{n1}...S_{nm}$ **(30)**.

The servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{n1}...S_{nm}$ **(30)**, designated in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests

$Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, respond to the requests $Q_{n1}...Q_{nm}$ **(29)** with the corresponding responses $R_{n1}...R_{nm}$ **(32)**.

The server **PS (18)** and/or the client C_n **(16)** parse, and/or process, and/or format, and/or group, and/or organize each of the responses $R_{n1}...R_{nm}$ **(32)** received from the servers $S_1...S_z$ **(20)** (step **104-3**), as shown in FIGS. 70-1A and 70-1B with reference to FIGS. 99-101, corresponding to the server designations $S_{n1}...S_{nm}$ **(30)** thereinto the corresponding addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**.

The server **PS (18)** and/or the client C_n **(16)** may also make additional optional requests $QP_{n1}...QP_{nm}$ **(58)** of the optional databases **41** and/or **42** (also step **104-2** of FIGS. 70-1A and 70-1B), which may be optionally resident within the server **PS (18)** and/or the client C_n **(16)**, and which may reply with the corresponding additional optional responses $RA_{n1}...RA_{nm}$ **(40)**. The server **PS (18)** and/or the client C_n **(16)** parse, and/or process, and/or format, and/or group, and/or organize each of the additional optional responses $RA_{n1}...RA_{nm}$ **(40)** into the corresponding response information groups $RC_{n1}...RC_{nm}$ **(59)** (also step **104-3** of FIGS. 70-1A and 70-1B).

Now, step **104-3** of FIGS. 70-1A and 70-1B is shown in more detail in FIG. 70-1-1.

As discussed later, and shown in FIGS. 99-101, entity body RH_{nm} **(353)** of the response R_{nm} **(32)** has optional response individual information groups $LS_{nm1}...LS_{nmr}$ **(360)**.

Each of the optional response individual information groups **$LS_{n11}...LS_{nmr}$ (360)** and/or portions thereof therefrom the entity bodies **$RH_{n1}...RH_{nm}$ (353)** of the responses **$R_{n1}...R_{nm}$ (32)** may be optionally compared one with the other, and duplicate ones of the optional response individual information groups **$LS_{n11}...LS_{nmr}$ (360)** may be optionally discarded (step **104-3-1**), as shown in FIG. 70-1-1.

The remaining optional response individual information groups **$LS_{n11}...LS_{nmr}$ (360)** are parsed, and/or processed, and/or formatted, and/or organized, and/or grouped thereinto corresponding ones of the addressable individual information groups **$LG_{n11}...LG_{nmr}$ (80)** as the addressable individual information groups **$LG_{n11}...LG_{nmr}$ (80)** are incorporated thereinto the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** therefrom the responses **$R_{n1}...R_{nm}$ (32)** (step **104-3-2**), as shown in FIG. 70-1-1.

The addressable individual information groups **$LG_{n11}...LG_{nmr}$ (80)** are typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with the other, as the addressable individual information groups **$LG_{n11}...LG_{nmr}$ (80)** are incorporated thereinto the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** therefrom the responses **$R_{n1}...R_{nm}$ (32)**.

The server **PS (18)** and/or the client **C_n (16)** may formulate information from the current request group **QA_{nc} (50)** having the corresponding queries **$QQ_{n1}...QQ_{nm}$ (53)**

and the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** into the corresponding request pointer/address group **QZ_n (60)** having the pointers/addresses **$PG_{n1}...PG_{nz}$ (61)** associated therewith (step **104-4** of FIG. 70-1A with reference to FIGS. 59, 63, and 91). Alternatively and/or additionally, the server **PS (18)** and/or the client **C_n (16)** may formulate information from the current request group **QA_{nc} (50)** having the corresponding queries **$QQ_{n1}...QQ_{nm}$ (53)** and the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** into a corresponding request pointer/address group **QY_n (68)** having the pointers/addresses **$PF_{n11}...PF_{nmr}$ (69)** associated therewith (step **104-4** of FIG. 70-1B with reference to FIGS. 60 and 64).

The server **PS (18)** and/or the client **C_n (16)** may formulate the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** (step **104-5** of FIG. 70-1A with reference to FIGS. 59, 63, 91, 96, and typical ones of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** in FIGS. 92 and 93), depending upon the grouping and/or sorting criteria used. Each of the pointers/addresses **$PG_{n1}...PG_{nz}$ (61)** may be directed to point/address the corresponding addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** associated therewith, which aid in obtaining information and/or services therefrom certain ones of addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** to be incorporated thereinto addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**.

Each of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** has the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)** directed to address/point information therein the

addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** based upon the grouping and/or sorting criteria.

The grouping and/or sorting criteria may be incorporated thereinto the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**, which may be entered thereinto the user interface **I_n (14)** therethrough the user input **UI_n (25)** by the user **U_n (12)**. Grouping and/or sorting criteria may additionally and/or alternatively optionally resident within the server **PS (18)** and/or the client **C_n (16)**.

The grouping and/or sorting criteria gives the user **U_n (12)** the ability to formulate the query information groups **$GI_{n1}...GI_{nz}$ (63)** and the way in which information and/or services from the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** is presented to the user **U_n (12)** therethrough the user interface **I_n (14)**.

Information and/or services within each of the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** is addressed therewith the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)** therefrom the query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**, and information and/or services therefrom the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** is incorporated thereinto the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** corresponding to the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)** (step **104-6** of FIG. 70-1A), which are formulated by the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**, in accordance with the grouping and/or sorting criteria, as shown in FIG. 70-1A with reference to FIGS. 59, 63, 66A, 66B, 66C, 67 – 69, 91, 96, typical

ones of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** in FIGS. 92 and 93, and a typical one of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, designated as the addressable query information group **GI_{nz} (63)**, in FIG. 103.

Alternatively and/or additionally, each of the pointers/addresses **$PF_{n11}...PF_{nmr}$ (69)** may directed to point/address the corresponding addressable response information groups **$RG_{n1}...RG_{nm}$ (57)**, and aid in obtaining information and/or services therefrom the corresponding addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** to be incorporated thereinto the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** (step **104-6**) as shown FIG. 70-1B with reference to FIGS. 60, 64, 66A, 66B, 66C, 67 – 69, and another typical one of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, designated as the addressable query information group **GI_{nz} (63)**, in FIG. 104.

Now, step **104-6** of FIG. 70-1A is shown in more detail in FIG. 70-1-2A with reference to FIGS. 59, 63, 66A, 66B, 66C, 67 – 69, 91, 96, typical ones of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** in FIGS. 92 and 93, and a typical one of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, designated as the addressable query information group **GI_{nz} (63)**, in FIG. 103. Step **104-6** of FIG. 70-1B is shown in more detail in FIG. 70-1-2B with reference to FIGS. 60, 64, 66A, 66B, 66C, 67 – 69, and another typical one of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)**, designated as the addressable query information group **GI_{nz} (63)**, in FIG. 104.

The optional addressable individual information groups **LG_{n11}...LG_{nmr} (80)** therein each of the addressable response information groups **RG_{n1}...RG_{nm} (57)** may be addressed therewith the pointers/addresses **PP_{n11}...PP_{nmr} (64)** (step **104-6-1**) as shown FIG. 70-1-2A with reference to FIGS. 59 and 63 and FIG. 70-1A.

The optional addressable individual information groups **LG_{n11}...LG_{nmr} (80)** therein each of the addressable response information groups **RG_{n1}...RG_{nm} (57)** may alternatively and/or additionally be addressed therewith the pointers/addresses **PF_{n11}...PF_{nmr} (69)** (step **104-6-1**) as shown FIG. 70-1-2B with reference to FIGS. 60 and 64 and FIG. 70-1B.

The addressed optional addressable individual information groups **LG_{n11}...LG_{nmr} (80)** an/or portions thereof may be optionally labelled with labels and/or identifiers and incorporated thereinto the labelled individual information groups **LL_{nz1}...LL_{nzu} (86)** (step **104-6-2**), as shown in FIGS. 70-1-2A and 70-1-2B.

The labelled individual information groups **LL_{nz1}...LL_{nzu} (86)** may be incorporated thereinto certain ones of the addressable query information groups **GI_{n1}...GI_{nz} (63)**, depending upon the grouping and/or sorting criteria (step **104-6-3**), as shown in FIGS. 70-1-2A and 70-1-2B.

The addressed optional addressable individual information groups **LG_{n11}...LG_{nmr} (80)** an/or portions thereof are typically appended with the labels and/or identifiers, thus

creating the labelled individual information groups **LL_{nz1}...LL_{nzu} (86)**, as each of the labelled individual information groups **LL_{nz1}...LL_{nzu} (86)** are incorporated thereinto the certain ones of the addressable query information groups **GI_{n1}...GI_{nz} (63)**. The steps **104-6-2** and **104-6-3** are thus typically consolidated into a single step.

The addressable query information groups **GI_{n1}...GI_{nz} (63)** may then be incorporated thereinto the service and/or information response **IR_n (34)** (step **104-7**), as shown in FIGS. 70-1A and 70-1B with reference to FIG. 61, and/or the user service and/or information response **ir_n (36)** (also step **104-7**), as also shown in FIGS. 70-1A and 70-1B but with reference to FIG. 65.

The user **U_n (12)** reviews the user response **UR_n (37)** the user interface **I_n (14)** and/or selects additional services and/or information at step **106** in FIG. 70, and shown in more detail in FIG. 70-2. The step **106** will also be described in more detail with reference to FIGS. 1-141 ~~FIGS. 1-104~~ of the drawings.

The user **U_n (12)** selects additional services and/or information therethrough the user interface **I_n (14)** (step **106-1**) or exits to the end of the process **99** at step **107**. If the user **U_n (12)** selects additional services and/or information therethrough the user interface **I_n (14)** (step **106-1**), the user **U_n (12)** may optionally enter one or more orders thereinto an order form and/or order forms thereat and therethrough the user interface **I_n (14)** (step **106-2**). The order and/or orders may be, for example, for purchases, and/or instructions, and/or payment, and/or other information and/or services to be directed to

and/or requested thereof third parties, and/or combinations thereof, of the optional servers **$SO_1...SO_p$ (22)**, and/or the servers **$S_1...S_z$ (20)**, and/or other ones of the clients **$C_1...C_n$ (16)** therethrough the server **PS (18)** and/or the client **C_n (16)**. The order and/or orders may, thus, be placed therethrough and thereby the server **PS (18)** and/or the client **C_n (16)**, eliminating the need for the user **U_n (12)** to place separate ones of the orders with the third parties, the optional servers **$SO_1...SO_p$ (22)**, and/or the servers **$S_1...S_z$ (20)** separately and/or individually.

The server **PS (18)** and/or the client **C_n (16)** process the orders and/or communicate the orders to the third parties, the optional servers **$SO_1...SO_p$ (22)**, and/or the servers **$S_1...S_z$ (20)**, and/or other ones of the clients **$C_1...C_n$ (16)** (step **106-3**). The server **PS (18)** and/or the client **C_n (16)** confirm the order (step **106-4**). The user **U_n (12)** may select additional services and/or information therethrough the user interface **I_n (14)** (step **106-1**) or exit to the end of the process **99** at step **107**.

If the user **U_n (12)** selects additional services and/or information therethrough the user interface **I_n (14)** (step **106-1**), the user **U_n (12)** may alternatively and/or additionally optionally enter information and/or service requests of the optional servers **$SO_1...SO_p$ (22)**, and/or the servers **$S_1...S_z$ (20)** therethrough the user interface **I_n (14)** (step **106-5**) and/or exit to the end of the process **99** at step **107**.

If the user **U_n (12)** selects additional services and/or information therethrough the user interface **I_n (14)** (step **106-1**), the user **U_n (12)** may alternatively and/or additionally

optionally enter additional requests as the user input UI_n **(25)** thereat and therethrough the user interface I_n **(14)** (step **106-6**) and enter the process **99** at step **102**.

V. Additional Details

A. User Input

The user input UI_n **(25)**, which the user U_n **(12)** makes therethrough the user interface I_n **(14)**, may have one or a plurality of the same and/or different ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** to be made by the server **PS (18)** and/or the client C_n **(16)** of the same and/or different ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{n1}...S_{nm}$ **(30)** at the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**.

The server **PS (18)** and/or the client C_n **(16)** parse, process, format, sort, group, and/or organize each of the responses $R_{n1}...R_{nm}$ **(32)** to the corresponding requests $Q_{n1}...Q_{nm}$ **(29)**, received therefrom the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)**, and/or each of the additional optional responses $RA_{n1}...RA_{nm}$ **(40)** therefrom the server **PS (18)** and/or the client C_n **(16)**. The parsed, processed, formatted, sorted, grouped, and/or organized results therefrom the server **PS (18)** and/or the client C_n **(16)** are communicated thereto the user U_n **(12)** therethrough the user interface I_n **(14)** as the user response UR_n **(37)**, which the user U_n **(12)** may

review, interact therewith, and/or select additional services and/or information therefrom.

The user U_n **(12)** enters the user input UI_n **(25)** having one or more of the same and/or different user requests $qu_{n1}...qu_{nu}$ **(26)** thereinto user interface I_n **(14)**, as shown in FIG. 3. The user requests $qu_{n1}...qu_{nu}$ **(26)** are communicated from the user interface I_n **(14)** to the client C_n **(16)** within the user service and/or information request iq_n **(27)**, having the user requests $qu_{n1}...qu_{nu}$ **(26)** and other optional information.

The user U_n **(12)** may enter the user input UI_n **(25)** having one or more of the same and/or different user requests $qu_{n1}...qu_{nu}$ **(26)** thereinto the service and/or information entry request form IE_n **(38)** at the user interface I_n **(14)**, or thereinto the user interface I_n **(14)** therethrough other suitable means.

The user interfaces $I_1...I_n$ **(14)** have suitable input means and/or suitable presentation and/or display means, which allow the corresponding users $U_1...U_n$ **(12)** to communicate therewith the corresponding clients $C_1...C_n$ **(16)**. FIGS. 5A, 5B, and 6-10 show typical ones of the service and/or information entry request forms $IE_1...IE_n$ **(38)** at the user interfaces $I_1...I_n$ **(14)**, as graphical user interfaces (GUI's), which the users $U_1...U_n$ **(12)** may enter the corresponding user inputs $UI_1...UI_n$ **(25)** thereinto. FIGS. 71 and 72 are schematic representations of the service and/or information entry request form IE_n **(38)** showing fields, links, and elements of the service and/or information entry request form IE_n **(38)**.

The user U_n **(12)** may enter the user input UI_n **(25)** thereinto the service and/or information entry request form IE_n **(38)** at the user interface I_n **(14)**, as shown schematically in FIG. 71. The user input UI_n **(25)** may be entered as user input values thereinto fields or alternate request links of the service and/or information entry request form IE_n **(38)**.

The user U_n **(12)** may enter the user input UI_n **(25)** as one or more of the same and/or different user requests $qu_{n1}...qu_{nu}$ **(26)**, which may have the query values $QV_{n1}...QV_{nu}$ **(200)**, server name values $AV_{n1}...AV_{nu}$ **(201)**, optional instruction values $VV_{n1}...VV_{nv}$ **(202)**, and/or alternate request links $QL_{n1}...QL_{na}$ **(203)**, and/or server request links $UL_{n1}...UL_{ns}$ **(204)**, and/or the additional request links $SL_{n1}...SL_{nw}$ **(71)** thereinto the service and/or information entry request form IE_n **(38)**.

The user input UI_n **(25)**, thus, has one or more of the same and/or different user requests $qu_{n1}...qu_{nu}$ **(26)**, which may be entered as the query values $QV_{n1}...QV_{nu}$ **(200)** of the same and/or different servers $S_1...S_z$ **(20)**, designated in accordance with the designation scheme corresponding to the corresponding certain ones of the server designations $S_{11}...S_{nm}$ **(30)** having the corresponding server name values $AV_{n1}...AV_{nu}$ **(201)**, the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**, and/or the alternate request links $QL_{n1}...QL_{na}$ **(203)**, and/or the server request links $UL_{n1}...UL_{ns}$ **(204)**, and/or the additional request links $SL_{n1}...SL_{nw}$ **(71)** thereinto the service and/or information entry request form IE_n **(38)**.

Each of the different user requests $qu_{n1}...qu_{nu}$ **(26)** may be the same and/or different one from the other. Each of the query values $QV_{n1}...QV_{nu}$ **(200)** may be the same and/or different one from the other. The query values $QV_{n1}...QV_{nu}$ **(200)** may be entered for the same and/or different ones of the servers $S_1...S_z$ **(20)**. The optional instruction values $VV_{n1}...VV_{nv}$ **(202)** may be the same and/or different one from the other.

The user U_n **(12)** may also enter the user input UI_n **(25)** and request services and/or information therethrough one of the alternate request links $QL_{n1}...QL_{na}$ **(203)**, or one of the server request links $UL_{n1}...UL_{ns}$ **(204)**, or one of the additional request links $SL_{n1}...SL_{nw}$ **(71)** thereat the user interface I_n **(14)**.

B. User Interface Details

The client-server multitasking system **10** of the present invention may have any suitable user interface I_n **(14)** acceptable to and/or preferred by the user U_n **(12)**, and acceptable to the client C_n **(16)**. The user interface I_n **(14)** may be, for example, a graphical user interface, visual, aural, and/or tactile user interface, and/or combination thereof, or other suitable interface. The user interface I_n **(14)** may be integral with the client C_n **(16)** or separate therefrom.

The user interface I_n **(14)** may be hardware based, and/or computer based, and/or process based, and/or a combination thereof, and may be a graphical user interface, such as, for example, a browser and/or combinations thereof, varieties of which are commonly used on the internet.

The service and/or information entry request form IE_n **(38)** may be optionally available to the user U_n **(12)** at the user interface I_n **(14)**, or the user U_n **(12)** may optionally request the service and/or information entry request form IE_n **(38)** therethrough the user interface I_n **(14)**.

Now, as shown in FIGS. 5A, 5B, and 6-10 and schematically in FIGS. 71 and 72, the service and/or information entry request form IE_n **(38)** at the user interface I_n **(14)** has user client request fields $QD_{n1}...QD_{nu}$ **(206)** accessible to the user U_n **(12)** and hidden client request elements $HU_{n1}...HU_{nh}$ **(207)** hidden from the user U_n **(12)**. The user client request fields $QD_{n1}...QD_{nu}$ **(206)** accessible to the user U_n **(12)** has server requests portion **208**, optional instructions portion **209**, an optional execute request element **210**, and alternate requests portion **212**. The hidden client request elements $HU_{n1}...HU_{nh}$ **(207)** hidden from the user U_n **(12)** have optional server requests portion **214**, optional instructions portion **216**, and optional information element HE_n **(218)**.

The server requests portion **208** of the user client request fields $QD_{n1}...QD_{nu}$ **(206)** accessible to the user U_n **(12)** has server query fields $QF_{n1}...QF_{nu}$ **(220)**, which the

user U_n **(12)** may enter corresponding server query values $QV_{n1}...QV_{nu}$ **(200)** thereinto, as a portion of the user input UI_n **(25)**.

The user U_n **(12)** may also optionally enter the server name values $AV_{n1}...AV_{nu}$ **(201)** thereinto server name fields $AF_{n1}...AF_{nu}$ **(224)**. The user U_n **(12)** may enter the server name values $AV_{n1}...AV_{nu}$ **(201)** as another portion of the user input UI_n **(25)**.

The user U_n **(12)** may also optionally enter the optional instruction values $VV_{n1}...VV_{nv}$ **(202)** thereinto optional instruction fields $VF_{n1}...VF_{nv}$ **(228)** of the optional instructions portion **209** of the user client request fields $QD_{n1}...QD_{nu}$ **(206)** accessible to the user U_n **(12)**. The user U_n **(12)** may enter the optional instruction values $VV_{n1}...VV_{nv}$ **(202)** as yet another portion of the user input UI_n **(25)**.

Upon the user U_n **(12)** entering the user input UI_n **(25)** of the server query values $QV_{n1}...QV_{nu}$ **(200)** and/or the server name values $AV_{n1}...AV_{nu}$ **(201)** and/or the optional instruction values $VV_{n1}...VV_{nv}$ **(202)** thereinto the service and/or information entry request form IE_n **(38)** at the user interface I_n **(14)**, the completed service and/or information request form IF_n **(230)** results, shown schematically in FIGS. 73 and 74.

The user U_n **(12)** may instruct the user interface I_n **(14)** to communicate the user service and/or information requests iq_n **(27)**, shown in FIG. 74, having the server query values $QV_{n1}...QV_{nu}$ **(200)** and/or the server name values $AV_{n1}...AV_{nu}$ **(201)** and/or the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**, from the already completed service

and/or information request form **IF_n (230)** at the user interface **I_n (14)** thereto the client **C_n (16)** by entering the optional execute request element **210**, using a point and click device, such as a mouse, light pen, tactile monitor, by entering a carriage return, therethrough other user interface controls, or therethrough other suitable means. FIG. 75 shows a schematic representation of the user service and/or information request **iq_n (27)**.

The user **U_n (12)** may alternatively enter the alternate request links **$QL_{n1}...QL_{na}$ (203)** or the server request links **$UL_{n1}...UL_{ns}$ (204)** or the additional request links **$SL_{n1}...SL_{nw}$ (71)** thereinto the service and/or information entry request form **IE_n (38)** therewith a point and click device, such as a mouse, a light pen, tactile monitor, or therewith alternative and/or other user interface controls or other suitable means, and instruct the user interface **I_n (14)** to communicate the user service and/or information request **iq_n (27)**, having information associated with the alternate request links **$QL_{n1}...QL_{na}$ (203)** or the server request links **$UL_{n1}...UL_{ns}$ (204)** or the additional request links **$SL_{n1}...SL_{nw}$ (71)**, thereto the client **C_n (16)**.

The server name fields **$AF_{n1}...AF_{nu}$ (224)** and the optional instruction fields **$VF_{n1}...VF_{nv}$ (228)** of the service and/or information entry request form **IE_n (38)** may optionally have the server name values **$AV_{n1}...AV_{nu}$ (201)** and/or the optional instruction values **$VV_{n1}...VV_{nv}$ (202)** entered thereinto, respectively, as changeable and/or fixed pre-set or preselected values, drop down menu selections, and/or as blank fields, or a combination thereof. The preselected values may be replaced with values of

the user's U_n **(12)** choice or may remain fixed, depending upon choices offered therein the service and/or information entry request form IE_n **(38)**. The drop down menu selections may be changed to ones of a number of preselected choices offered in the drop down menu selections, which the user U_n **(12)** may optionally scroll through to determine which choice to make. Blank ones of the server name fields $AF_{n1}...AF_{nu}$ **(224)** and/or blank ones of the optional instruction fields $VF_{n1}...VF_{nv}$ **(228)** allow the user U_n **(12)** to optionally enter the server name values $AV_{n1}...AV_{nu}$ **(201)** and/or the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**, respectively, therein, accordingly.

The server query fields $QF_{n1}...QF_{nu}$ **(220)**, which the user U_n **(12)** enters the corresponding server query values $QV_{n1}...QV_{nu}$ **(200)** thereinto, therethrough the user input UI_n **(25)**, may also have changeable and/or fixed preselected values, drop down menu selections, and/or blank fields, or a combination thereof. However, the server query fields $QF_{n1}...QF_{nu}$ **(220)** may generally be presented to the user U_n **(12)** as blank fields, at least for the first user input UI_n **(25)**.

The alternate requests portion **212** of the user client request fields $QD_{n1}...QD_{nu}$ **(206)** accessible to the user U_n **(12)** has the alternate request links $QL_{n1}...QL_{na}$ **(203)**, the server request links $UL_{n1}...UL_{ns}$ **(204)**, and the additional request links $SL_{n1}...SL_{nw}$ **(71)**. The user U_n **(12)** may alternatively request services and/or information therethrough one of the alternate request links $QL_{n1}...QL_{na}$ **(203)**, or one of the server request links $UL_{n1}...UL_{ns}$ **(204)**, or one of the additional request links $SL_{n1}...SL_{nw}$ **(71)**.

The alternate request links **$QL_{n1}...QL_{na}$ (203)** allow the user **U_n (12)** to make the service and/or information request **$IQ_1...IQ_n$ (28)** with preconfigured optional default selections already placed therein the service and/or information request **$IQ_1...IQ_n$ (28)** for the user **U_n (12)**. The server request links **$UL_{n1}...UL_{nw}$ (204)** may be advertisements, advertising links, and/or links to ones of the optional servers **$SO_1...SO_p$ (22)**. The user **U_n (12)** may, for example, make requests for additional services and/or information therefrom ones of the optional servers **$SO_1...SO_p$ (22)**, using the server request links **$UL_{n1}...UL_{nw}$ (204)**. The additional request links **$SL_{n1}...SL_{nw}$ (71)** allow the user **U_n (12)** to make additional optional selections, based upon information and/or services previously requested by the user **U_n (12)**.

The optional server requests portion **214** of the hidden client request elements **$HU_{n1}...HU_{nh}$ (207)** hidden from the user **U_n (12)** has hidden query elements **$Qh_{n1}...Qh_{nh}$ (236)** and corresponding associated hidden server name elements **$Ah_{n1}...Ah_{nh}$ (238)**. The optional instructions portion **216** of the hidden client request elements **$HU_{n1}...HU_{nh}$ (207)** hidden from the user **U_n (12)** may have optional hidden instruction elements **$Vh_{n1}...Vh_{ni}$ (240)**. The hidden client request elements **$HU_{n1}...HU_{nh}$ (207)** hidden from the user **U_n (12)** may also have the hidden optional information element **HE_n (218)**, which may have optional information and/or statistics.

The user **U_n (12)** may, thus, request the services and/or information by completing entry of the server requests portion **208** and the optional instructions portion **209**

therewith the optional execute request element **210**, after entering the server query values **$QV_{n1}...QV_{nu}$ (200)** and/or the server name values **$AV_{n1}...AV_{nu}$ (201)** and/or the optional instruction values **$VV_{n1}...VV_{nv}$ (202)**, or by alternatively requesting the services and/or information therethrough one of the alternate request links **$QL_{n1}...QL_{na}$ (203)**, or one of the server request links **$UL_{n1}...UL_{ns}$ (204)**, or one of the additional request links **$SL_{n1}...SL_{nw}$ (71)**.

Upon completion of the user input **UI_n (25)**, the completed service and/or information request form **IF_n (230)**, as shown in FIGS. 73 and 74, has user client request elements **$QM_{n1}...QM_{nu}$ (246)** accessible to the user **U_n (12)** having server request elements **242** and optional instruction elements **$VE_{n1}...VE_{nv}$ (244)**; and/or alternate request elements **248** of the user client request elements **$QM_{n1}...QM_{nu}$ (246)** accessible to the user **U_n (12)**; and/or optional server request elements **250**, optional instruction elements **252**, and/or hidden client request elements **$HP_{n1}...HP_{nh}$ (256)** hidden from the user **U_n (12)**.

The user **U_n (12)** may instruct the user interface **I_n (14)** to communicate the user service and/or information request **iq_n (27)** derived from the service and/or information request form **IF_n (230)** to the client **C_n (16)**, as shown in FIG. 75, therewith the optional execute request element **210** or therewith the other suitable means; or the user **U_n (12)** may alternatively communicate the user service and/or information request **iq_n (27)** by entering the alternate request links **$QL_{n1}...QL_{na}$ (203)** or the server request links **$UL_{n1}...UL_{ns}$ (204)** or the additional request links **$SL_{n1}...SL_{nw}$ (71)** thereinto the

service and/or information entry request form **IE_n (38)** or thereinto the completed service and/or information request form **IF_n (230)** therewith a point and click device, such as a mouse, a light pen, tactile monitor, or therewith alternative and/or other user interface controls or other suitable means, and instruct the user interface **I_n (14)** to communicate the user service and/or information request **iq_n (27)**, having information associated with the alternate request links **$QL_{n1}...QL_{na}$ (203)** or the server request links **$UL_{n1}...UL_{ns}$ (204)** or the additional request links **$SL_{n1}...SL_{nw}$ (71)**, thereto the client **C_n (16)**.

FIGS. 73 and 74 are schematic representations of the completed service and/or information entry request form **IF_n (230)** showing typical elements, values, field names, name-value pairs, optional instructions, and alternate requests, resulting from the user **U_n (12)** entering the user input **UI_n (25)** of the server query values **$QV_{n1}...QV_{nu}$ (200)** and/or the server name values **$AV_{n1}...AV_{nu}$ (201)** and/or the optional instruction values **$VV_{n1}...VV_{nv}$ (202)** thereinto the service and/or information entry request form **IE_n (38)** at the user interface **I_n (14)**.

Now, the completed service and/or information entry request form **IF_n (230)** has the user client request elements **$QM_{n1}...QM_{nu}$ (246)** accessible to the user **U_n (12)** having the server request elements **242**, which has query elements **$QE_{n1}...QE_{nu}$ (258)** and corresponding associated server name elements **$AE_{n1}...AE_{nu}$ (260)**.

Each of the query elements **$QE_{n1}...QE_{nu}$ (258)** have query field names **$QN_{n1}...QN_{nu}$ (262)** of the associated corresponding server query fields **$QF_{n1}...QF_{nu}$ (220)** and the corresponding server query values **$QV_{n1}...QV_{nu}$ (200)** associated therewith, which the requests **$Q_{11}...Q_{nm}$ (29)** may be derived therefrom.

Each of the server name elements **$AE_{n1}...AE_{nu}$ (260)** have server field names **$AN_{n1}...AN_{nm}$ (264)** of the associated corresponding server name fields **$AF_{n1}...AF_{nu}$ (224)** and the corresponding server name values **$AV_{n1}...AV_{nu}$ (201)** associated therewith, which server addresses **$A_{n1}...A_{nu}$ (265)** may be derived therefrom.

The user client request elements **$QM_{n1}...QM_{nu}$ (246)** accessible to the user **U_n (12)** also have the optional instruction elements **$VE_{n1}...VE_{nv}$ (244)** having optional instruction field names **$VN_{n1}...VN_{nv}$ (266)** of the associated corresponding optional instruction fields **$VF_{n1}...VF_{nv}$ (228)** and the corresponding optional instruction values **$VV_{n1}...VV_{nv}$ (202)** associated therewith.

The user client request elements **$QM_{n1}...QM_{nu}$ (246)** accessible to the user **U_n (12)** also have the alternate request elements **246** having the alternate request links **$QL_{n1}...QL_{na}$ (203)**, or the server request links **$UL_{n1}...UL_{ns}$ (204)**, or the additional request links **$SL_{n1}...SL_{nw}$ (71)**.

The hidden client request elements **$HP_{n1}...HP_{nh}$ (256)** hidden from the user **U_n (12)** have the hidden query elements **$Qh_{n1}...Qh_{nh}$ (236)**, which may have hidden query

field names $Qn_{n1}...Qn_{nh}$ **(268)** and corresponding hidden query values $Qv_{n1}...Qv_{nh}$ **(270)** associated therewith. The hidden server name elements $Ah_{n1}...Ah_{nh}$ **(238)** may have hidden server field names $An_{n1}...An_{nh}$ **(272)** and corresponding server hidden request name values $Av_{n1}...Av_{nh}$ **(274)** associated therewith.

The hidden client request elements $HP_{n1}...HP_{nh}$ **(256)** hidden from the user U_n **(12)** may also have the optional hidden instruction elements $Vh_{n1}...Vh_{ni}$ **(240)**, which may have optional hidden instruction field names $Vn_{n1}...Vn_{ni}$ **(275)** and corresponding optional hidden instruction values $Vv_{n1}...Vv_{ni}$ **(276)** associated therewith. The hidden client request elements $HP_{n1}...HP_{nh}$ **(256)** hidden from the user U_n **(12)** may also have the hidden optional information element HE_n **(218)**, which may have optional hidden information element field name Jn_n **(277)** and optional hidden information element value Jv_n **(278)** associated therewith.

Now again, the user interfaces $I_1...I_n$ **(14)** may each be different, one from the other, or the same, and may change characteristics over time. Each of the user interfaces $I_1...I_n$ **(14)** may change characteristics as a function of time, information, and/or instructions, and/or other means, which may be derived by the users $U_1...U_n$ **(12)** and/or the clients $C_1...C_n$ **(16)** and/or the servers $S_1...S_z$ **(20)**, and/or the server **PS (18)**, and/or the optional servers $SO_1...SO_p$ **(22)**, and/or derived within the user interfaces $I_1...I_n$ **(14)**. The user interface $I_1...I_n$ **(14)** may change state.

The user interface $I_1...I_n$ **(14)** may also change as a function of optional timers and/or timed instructions associated therewith the user interfaces $I_1...I_n$ **(14)**, and/or associated therewith the clients $C_1...C_n$ **(16)** and/or associated therewith the servers $S_1...S_z$ **(20)**, and/or associated therewith the server **PS (18)**, and/or associated therewith the optional servers $SO_1...SO_p$ **(22)**, and/or instructions from the user $U_1...U_n$ **(12)**. Changes in the user interface I_n **(14)** may appear continuous to the user U_n **(12)**, spaced in time, staccato, or static depending upon the optional timers and/or the timed instructions. Other conditions may change the user interface $I_1...I_n$ **(14)**, as well.

The user interfaces $I_1...I_n$ **(14)** may be updated continuously, intermittently, manually, randomly, semi-automatically, automatically, repetitively, non-repetitively, singly, plurally, multiplexed, and/or a combination thereof or other suitable manner.

The user interfaces $I_1...I_n$ **(14)** may be visual, such as graphical user interfaces, aural, and/or tactile, a combination thereof, and/or other suitable means. The user interfaces $I_1...I_n$ **(14)** may be integral with the clients $C_1...C_n$ **(16)** or separate therefrom.

The user interfaces $I_1...I_n$ **(14)** may change in response to the user inputs $UI_1...UI_n$ **(25)**, the service and/or information entry request forms $IE_1...IE_n$ **(38)** at the user interfaces $I_1...I_n$ **(14)**, the completed service and/or information request forms IF_n **(230)**, the user service and/or information requests $iq_1...iq_n$ **(27)**, the optional execute request elements **210**, accessing the alternate request links $QL_{11}...QL_{1a}$ **(203)**, accessing the server request links $UL_{11}...UL_{1s}$ **(204)**, accessing the additional request

links **SL_{11}...SL_{1w} (71)**, the service and/or information responses **IR_1...IR_n (34)**, the service and/or information response forms **IS_1...IS_n (39)**. Other conditions may change the user interface **I_1...I_n (14)**, as well.

Portions of the user responses **UR_1...UR_n (37)** may be mapped into and/or onto different portions of the user interfaces **I_1...I_n (14)** to facilitate interaction with and the needs of each of the users **U_1...U_n (12)**. Such mappings may be optionally customized by the users **U_1...U_n (12)**.

C. Service and/or Information Request Details

Each of the users **U_1...U_n (12)** communicate the corresponding user service and/or information requests **iq_1...iq_n (27)** therethrough the corresponding user interfaces **I_1...I_n (14)** to the corresponding clients **C_1...C_n (16)**, which optionally format the corresponding user service and/or information requests **iq_1...iq_n (27)** into the corresponding service and/or information requests **IQ_1...IQ_n (28)**, as required.

Now, again, the user **U_n (12)** may instruct the user interface **I_n (14)** to communicate the user service and/or information requests **iq_n (27)**, having the server query values **QV_{n1}...QV_{nu} (200)** and/or the server name values **AV_{n1}...AV_{nu} (201)** and/or the optional instruction values **VV_{n1}...VV_{nv} (202)**, from the already completed service and/or information request form **IF_n (230)** at the user interface **I_n (14)** thereto the client **C_n (16)** by entering the optional execute request element **210**, using a point and click

device, such as a mouse, light pen, tactile monitor, by entering a carriage return, therethrough other user interface controls, or therethrough other suitable means. FIG. 75 shows a schematic representation of the user service and/or information request **iq_n (27)**.

The user **U_n (12)** may alternatively enter the alternate request links **$QL_{n1}...QL_{na}$ (203)** or the server request links **$UL_{n1}...UL_{ns}$ (204)** or the additional request links **$SL_{n1}...SL_{nw}$ (71)** thereinto the service and/or information entry request form **IE_n (38)** therewith a point and click device, such as a mouse, a light pen, tactile monitor, or therewith alternative and/or other user interface controls or other suitable means, and instruct the user interface **I_n (14)** to communicate the user service and/or information request **iq_n (27)**, having information associated with the alternate request links **$QL_{n1}...QL_{na}$ (203)** or the server request links **$UL_{n1}...UL_{ns}$ (204)** or the additional request links **$SL_{n1}...SL_{nw}$ (71)**, thereto the client **C_n (16)**.

The user service and/or information request **iq_n (27)** is communicated from the user interface **I_n (14)** to the client **C_n (16)**, which acts upon the user service and/or information request **iq_n (27)** to derive the service and/or information request **IQ_n (28)** therefrom. FIGS. 75-80 are schematic representations of the service and/or information request **IQ_n (28)** and/or the user service and/or information request **iq_n (27)**.

The service and/or information request **IQ_n (28)** has information and/or elements, which may be used by the server **PS (18)** to make the requests **$Q_{n1}...Q_{nm}$ (29)** of the

servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**. The client C_n **(16)** may additionally and/or alternatively make the requests $Q_{n1}...Q_{nm}$ **(29)** of the servers $S_1...S_z$ **(20)**, using information and/or elements within the user service and/or information request iq_n **(27)**.

The service and/or information request IQ_n **(28)** has user client requests $QC_{n1}...QC_{nu}$ **(280)** accessible to the user U_n **(12)** and hidden client requests $HC_{n1}...HC_{nh}$ **(281)** hidden from the user U_n **(12)**.

The user client requests $QC_{n1}...QC_{nu}$ **(280)** accessible to the user U_n **(12)** and/or the hidden client requests $HC_{n1}...HC_{nh}$ **(281)** hidden from the user U_n **(12)** have address and/or location information and/or instructions, and/or other information corresponding to information and/or services to be requested of the servers $S_1...S_z$ **(20)**, and/or information and/or instructions to be utilized by the server **PS (18)** and/or ones of the clients $C_1...C_n$ **(16)**.

The user client requests $QC_{n1}...QC_{nu}$ **(280)** accessible to the user U_n **(12)** have server requests portion SQ_n **(282)**, optional instructions portion V_n **(283)**, and alternate request portion AL_n **(284)**.

The hidden client requests $HC_{n1}...HC_{nh}$ **(281)** hidden from the user U_n **(12)** has optional hidden server requests portion HQ_n **(285)**, optional hidden instructions portion HO_n **(286)**, and optional hidden information portion J_n **(287)**.

The server requests portion SQ_n **(282)** of the service and/or information request IQ_n **(28)** has queries $QS_{n1}...QS_{nu}$ **(288)**, which may be derived from the query field names $QN_{n1}...QN_{nu}$ **(262)** and the corresponding server query values $QV_{n1}...QV_{nu}$ **(200)** of the query elements $QE_{n1}...QE_{nu}$ **(258)**.

The server requests portion SQ_n **(282)** of the service and/or information request IQ_n **(28)** may also have the server addresses $A_{n1}...A_{nu}$ **(265)**, which may be derived from the server field names $AN_{n1}...AN_{nm}$ **(264)** and the corresponding server name values $AV_{n1}...AV_{nu}$ **(201)** of the server name elements $AE_{n1}...AE_{nu}$ **(260)**.

The optional instructions portion VO_n **(283)** of the user client requests $QC_{n1}...QC_{nu}$ **(280)** accessible to the user U_n **(12)** of the service and/or information request IQ_n **(28)** may have optional instructions $V_{n1}...V_{nv}$ **(289)**, which may be derived from the optional instruction field names $VN_{n1}...VN_{nv}$ **(266)** and the corresponding optional instruction values $VV_{n1}...VV_{nv}$ **(202)**. The optional instructions $V_{n1}...V_{nv}$ **(289)** may optionally be used by the client C_n **(16)** and/or the server **PS (18)**, and/or incorporated into the requests $Q_{n1}...Q_{nm}$ **(29)** to be made of the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)**, corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** associated with the user U_n **(12)**.

The alternate request portion **AL_n (284)** of the user client requests **$QC_{n1}...QC_{nu}$ (280)** accessible to the user **U_n (12)** of the service and/or information request **IQ_n (28)** may be derived from one of the alternate request links **$QL_{n1}...QL_{na}$ (203)**, or one of the server request links **$UL_{n1}...UL_{ns}$ (204)**, or one of the additional request links **$SL_{n1}...SL_{nw}$ (71)**.

The optional hidden server requests portion **$HQ_{n1}...HQ_{nh}$ (281)** of the hidden client requests **$HC_{n1}...HC_{nh}$ (281)** hidden from the user **U_n (12)** may have hidden queries **$QH_{n1}...QH_{nh}$ (290)** and corresponding hidden server addresses **$AH_{n1}...AH_{nh}$ (291)**.

The hidden queries **$QH_{n1}...QH_{nh}$ (290)** of the optional hidden server requests portion **$HQ_{n1}...HQ_{nh}$ (281)** of the service and/or information request **IQ_n (28)** may be derived from the hidden query field names **$Qn_{n1}...Qn_{nh}$ (268)** and the corresponding hidden query values **$Qv_{n1}...Qv_{nh}$ (270)**.

The hidden server addresses **$AH_{n1}...AH_{nh}$ (291)** of the optional hidden server requests portion **$HQ_{n1}...HQ_{nh}$ (281)** of the service and/or information request **IQ_n (28)** may be derived from the hidden server field names **$An_{n1}...An_{nh}$ (272)** and the corresponding server hidden server name values **$Av_{n1}...Av_{nh}$ (274)**.

The hidden queries **$QH_{n1}...QH_{nh}$ (290)** may optionally be appended to the queries **$QS_{n1}...QS_{nu}$ (288)** to be made of the servers **$S_1...S_z$ (20)**. The hidden server

addresses $AH_{n1}...AH_{nh}$ **(291)** may optionally be appended to the server addresses $A_{n1}...A_{nu}$ **(265)**. The appended queries $QS_{n1}...QS_{nu}$ **(288)** may then be made of the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)**, corresponding to the resulting appended requests $Q_{n1}...Q_{nm}$ **(29)** associated with the user U_n **(12)**, in accordance with the appended server addresses $A_{n1}...A_{nu}$ **(265)**.

The appended requests $Q_{n1}...Q_{nm}$ **(29)** will hereinafter be used synonymously with the requests $Q_{n1}...Q_{nm}$ **(29)**, the appended queries $QS_{n1}...QS_{nu}$ **(288)** will hereinafter be used synonymously with the queries $QS_{n1}...QS_{nu}$ **(288)**, and the appended server addresses $A_{n1}...A_{nu}$ **(265)** will hereinafter be used synonymously with the server addresses $A_{n1}...A_{nu}$ **(265)**.

The optional hidden instructions portion HO_n **(286)** of the hidden client requests $HC_{n1}...HC_{nh}$ **(281)** hidden from the user U_n **(12)** of the service and/or information request IQ_n **(28)** have optional hidden instructions $H_{n1}...H_{ni}$ **(292)**, which may be derived from the hidden instruction field names $Vn_{n1}...Vn_{ni}$ **(275)** and the corresponding optional hidden instruction values $Vv_{n1}...Vv_{ni}$ **(276)**. The optional hidden instructions $H_{n1}...H_{ni}$ **(292)** may optionally be appended to the optional instructions $V_{n1}...V_{nv}$ **(289)** and/or may optionally be used by the client C_n **(16)** and/or the server **PS (18)**, and/or incorporated into the requests $Q_{n1}...Q_{nm}$ **(29)** to be made of the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)**, corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** associated with the user U_n **(12)**. The

appended instructions $V_{n1}...V_{nv}$ **(289)** will hereinafter be used synonymously with the instructions $V_{n1}...V_{nv}$ **(289)**.

The optional hidden information portion J_n **(287)** of the hidden client requests $HC_{n1}...HC_{nh}$ **(281)** hidden from the user U_n **(12)** of the service and/or information request IQ_n **(28)** may be derived from the optional hidden information element field name Jn_n **(277)** and the optional hidden information element value Jv_n **(278)**, and may optionally be used by the client C_n **(16)** and/or the server **PS (18)**, and/or incorporated into the requests $Q_{n1}...Q_{nm}$ **(29)** to be made of the servers $S_1...S_z$ **(20)** designated by the server designations $S_{n1}...S_{nm}$ **(30)**, corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** associated with the user U_n **(12)**.

Now, again, each of the users $U_1...U_n$ **(12)** communicate the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** therethrough the corresponding user interfaces $I_1...I_n$ **(14)** to the corresponding clients $C_1...C_n$ **(16)**, which optionally format the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** into the corresponding service and/or information requests $IQ_1...IQ_n$ **(28)**, as required.

The user service and/or information requests $iq_1...iq_n$ **(27)** may be communicated therefrom the completed service and/or information entry request forms $IF_1...IF_n$ **(230)** at the user interfaces $I_1...I_n$ **(14)** thereto the clients $C_1...C_n$ **(16)** or alternatively therefrom the service and/or information entry request forms $IE_1...IE_n$ **(38)** at the corresponding the user interfaces $I_1...I_n$ **(14)** therethrough the alternate request links

$QL_{11}...QL_{na}$ **(203)** or the server request links $UL_{11}...UL_{ns}$ **(204)** or the additional request links $SL_{11}...SL_{nw}$ **(71)**.

The user service and/or information requests $iq_1...iq_n$ **(27)** may be communicated as the elements, values, field names, optional instructions, and/or alternate requests entered thereinto the completed service and/or information entry request form IF_n **(230)** therefrom the corresponding user interfaces $I_1...I_n$ **(14)** to the corresponding clients $C_1...C_n$ **(16)**.

The users $U_1...U_n$ **(12)** may, thus, communicate the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** to the clients $C_1...C_n$ **(16)** therethrough the user interfaces $I_1...I_n$ **(14)**, upon entering the corresponding user inputs $UI_1...UI_n$ **(25)** thereinto the corresponding service and/or information entry request forms $IE_1...IE_n$ **(38)** at the corresponding the user interfaces $I_1...I_n$ **(14)**. The completed service and/or information entry request forms $IF_1...IF_n$ **(230)** are derived therefrom the user inputs $UI_1...UI_n$ **(25)** having the corresponding user service and/or information requests $iq_1...iq_n$ **(27)**, which may be entered as values or alternate requests thereinto the corresponding service and/or information entry request forms $IE_1...IE_n$ **(38)**.

The user $U_1...U_n$ **(12)** may alternatively communicate the user service and/or information requests $iq_1...iq_n$ **(27)** by entering the alternate request links $QL_{11}...QL_{na}$ **(203)** or the server request links $UL_{11}...UL_{ns}$ **(204)** or the additional request links $SL_{11}...SL_{nw}$ **(71)** thereinto the service and/or information entry request form $IE_1...IE_n$

(38) or thereinto the completed service and/or information request form $IF_1...IF_n$ **(230)**.

The server **PS (18)** and/or the C_n **(16)** may alternatively and/or additionally use information resident within the server **PS (18)** and/or the client C_n **(16)**, such as default information, and/or information communicated therefrom the user U_n **(12)** therethrough the user interface I_n **(14)** to the client C_n **(16)** to make the requests $Q_{n1}...Q_{nm}$ **(29)** of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**.

FIG. 81 is a schematic representation showing queries $QQ_{n1}...QQ_{nm}$ **(53)** and corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**. FIGS. 82-85 shows the schematic representation of FIG. 81 having typical values.

D. Optional Instructions

Typically, information within the optional instructions $V_{11}...V_{nv}$ **(289)**, and/or the optional hidden instructions $H_{11}...H_{ni}$ **(292)**, and/or the optional hidden information portion J_n **(287)** are used by the server **PS (18)** and/or specific ones of the clients $C_1...C_n$ **(16)**, but may also be used by the servers $S_1...S_z$ **(20)**.

Now, in yet more detail, the user inputs **$UI_1...UI_n$ (25)** may have one or more of the same and/or different optional instruction values **$VV_{11}...VV_{nv}$ (202)**. The optional instruction values **$VV_{11}...VV_{nv}$ (202)** may typically have instructions, which may be used by the server **PS (18)** and/or the clients **$C_1...C_n$ (16)**, such as, for example, as instructions on how to request, organize, present and/or display, and/or retrieve services and/or information from the servers **$S_1...S_z$ (20)** and/or other suitable instructions.

Typical information that may be incorporated into the optional instruction values **$VV_{n1}...VV_{nv}$ (202)** may include, for example, Searches per Group **311** and Group **312**, shown in FIGS. 5A, 5B, and 6-10 for a particular one of the service and/or information entry request forms **IE_n (38)** at the user interface **I_n (14)** shown in FIGS. 75-80.

The Searches per Group **311** is considered to be the number of the server query values **$QV_{n1}...QV_{nu}$ (200)**, associated therewith corresponding ones of the server name values **$AV_{n1}...AV_{nu}$ (201)**, corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** to make of the servers **$S_1...S_z$ (20)**. The Group **312** is considered to be the group of the server query values **$QV_{n1}...QV_{nu}$ (200)** to communicate thereto ones of the servers **$S_1...S_z$ (20)** associated therewith the corresponding ones of the server name values **$AV_{n1}...AV_{nu}$ (201)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations **$S_{n1}...S_{nm}$ (30)**, corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)**.

Page **313**, which includes certain service and/or information location information, which may be incorporated into the requests $Q_{n1}...Q_{nm}$ **(29)** to be made of the associated corresponding ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations $S_{n1}...S_{nm}$ **(30)**, may also be typically incorporated into the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**.

Timeout per Search Engine **314**, which is substantially the maximum time for the server **PS (18)** and/or the particular client C_n **(16)** making the requests $Q_{n1}...Q_{nm}$ **(29)** to wait for each of the responses $R_{n1}...R_{nm}$ **(32)** therefrom certain ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{n1}...S_{nm}$ **(30)**, may also be typically incorporated into the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**.

URL's per Search Engine **315**, which is the number of links and/or descriptions to be returned to the user interface I_n **(14)** from each of the responses $R_{n1}...R_{nm}$ **(32)**, may also be typically incorporated into the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**. Search Engine Results **316** and URL Details **317**, each of which designate different presentation and/or display schemes to be presented at the user interface I_n **(14)**, may also be typically incorporated into the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**.

In those instance in which, for example, the service and/or information entry request form IE_n **(38)** at the user interface I_n **(14)** has only one entry field for one of the requests Q_{n1} **(29)**, as in FIGS. 6, 8, and 10, and the optional instruction values $VV_{11}...VV_{nv}$ **(202)** are not visible, the server **PS (18)** and/or the particular client C_n **(16)** may then have default values resident therein for the Searches per Group **311**, and/or the Group **312**, and/or the Page **313**, and/or the Timeout per Search Engine **314**, and/or the URL's per Search Engine **315**, and/or the Search Engine Results **316**, and/or the URL Details **317**, and/or other suitable ones of the optional instruction values $VV_{11}...VV_{nv}$ **(202)**, and/or the server **PS (18)** and/or the particular client C_n **(16)** may establish the default values, and/or the default values may be incorporated into the optional hidden instruction values $Vv_{n1}...Vv_{ni}$ **(276)**.

The server **PS (18)** and/or the particular client C_n **(16)** may make the requests $Q_{n1}...Q_{nm}$ **(29)** of the servers $S_1...S_z$ **(20)**, according to the designation scheme corresponding to the corresponding ones of the server designations $S_{n1}...S_{nm}$ **(30)**, and the optional instruction values $VV_{n1}...VV_{nv}$ **(202)**, typically having the Searches per Group **311**, and/or the Group **312**, and/or the Page **313**, and/or the Timeout per Search Engine **314**, and/or the URL's per Search Engine **315**, and/or the Search Engine Results **316**, and/or the URL Details **317**, and/or the default values which may be established or be resident within the server **PS (18)** and/or the particular client C_n **(16)**, and/or the optional hidden instruction values $Vv_{n1}...Vv_{ni}$ **(276)**, and/or other information incorporated into the hidden client request elements $HP_{n1}...HP_{nh}$ **(256)** hidden from the user U_n **(12)**.

E. Communicating the Service and/or Information Requests

Now, each of the users $U_1...U_n$ **(12)** communicate the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** therethrough the corresponding user interfaces $I_1...I_n$ **(14)** to the corresponding clients $C_1...C_n$ **(16)**, which optionally format the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** into the corresponding service and/or information requests $IQ_1...IQ_n$ **(28)**. The clients $C_1...C_n$ **(16)** communicate the corresponding service and/or information requests $IQ_1...IQ_n$ **(28)** thereto the server **PS (18)** and/or use the corresponding user service and/or information requests $iq_1...iq_n$ **(27)** internally to formulate the requests $Q_{11}...Q_{nm}$ **(29)**.

F. Parsing, Processing, and/or Formatting the Service and/or Information Requests

The server **PS (18)** and/or the clients $C_1...C_n$ **(16)** parse, process, and/or format the service and/or information requests $IQ_1...IQ_n$ **(28)** into the requests $Q_{11}...Q_{nm}$ **(29)**, the optional instructions $VJ_{11}...VJ_{nk}$ **(52)**, and information to open connections $OC_{11}...OC_{nm}$ **(323)**. FIG. 86 shows a particular one of the requests Q_{nm} **(29)**, the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, and the information to open connections $OC_{11}...OC_{nm}$ **(323)**, which may be parsed, processed, and/or formatted from a particular one of the service and/or information requests IQ_n **(28)**. The clients $C_1...C_n$ **(16)** may alternatively and/or additionally parse, process, and/or format the user service

and/or information requests $iq_1...iq_n$ **(27)** directly into the requests $Q_{11}...Q_{nm}$ **(29)**, and/or the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** and the information required to open the connections $OC_{11}...OC_{nm}$ **(323)**, as required.

Upon receipt of the service and/or information requests $IQ_1...IQ_n$ **(28)** at the server **PS (18)**, communicated therefrom the clients $C_1...C_n$ **(16)**, the server **PS (18)** parses, processes, and/or formats each of the corresponding service and/or information requests $IQ_1...IQ_n$ **(28)** into the corresponding queries $QQ_{11}...QQ_{nm}$ **(53)**, the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)** to open connections $OC_{11}...OC_{nm}$ **(323)** with and make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**, and/or the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** to be used by the server **PS (18)** in making the requests $Q_{11}...Q_{nm}$ **(29)** and/or in processing, formatting, grouping, and organizing the responses $R_{11}...R_{nm}$ **(32)** from the ones of the servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{11}...S_{nm}$ **(30)**, and/or the additional optional responses $RA_{11}...RA_{nm}$ **(40)**, into the corresponding service and/or information responses $IR_1...IR_n$ **(34)**, as shown in FIG. 86.

Alternatively and/or additionally, upon receipt of the user service and/or information requests $iq_1...iq_n$ **(27)** at the corresponding clients $C_1...C_n$ **(16)**, the corresponding clients $C_1...C_n$ **(16)** may parse, process, and/or format each of the user service and/or information requests $iq_1...iq_n$ **(27)** into corresponding queries $QQ_{11}...QQ_{nm}$ **(53)**,

corresponding server addresses **$AQ_{11}...AQ_{nm}$ (54)** to open connections **$OC_{11}...OC_{nm}$ (323)** with and make the requests **$Q_{11}...Q_{nm}$ (29)** thereof the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to be communicated with corresponding to the requests **$Q_{11}...Q_{nm}$ (29)**, and/or the optional instructions **$VJ_{11}...VJ_{nk}$ (52)** to be used by the corresponding clients **$C_1...C_n$ (16)** in making the requests **$Q_{11}...Q_{nm}$ (29)** and/or in processing, formatting, grouping, and organizing the responses **$R_{11}...R_{nm}$ (32)** from the ones of the servers **$S_1...S_z$ (20)** corresponding to the server designations **$S_{11}...S_{nm}$ (30)**, and/or the additional optional responses **$RA_{11}...RA_{nm}$ (40)**, into the corresponding user service and/or information responses **$ir_1...ir_n$ (36)**.

The server **PS (18)** parses, processes, and/or formats each of the service and/or information requests **$IQ_1...IQ_n$ (28)** into queries, server addresses to make the queries of, query groups and/or server groups, and instructions to be used by the server **PS (18)**, typically when the server **PS (18)** makes the requests **$Q_{11}...Q_{nm}$ (29)** of the servers **$S_1...S_z$ (20)** corresponding to the server designations **$S_{11}...S_{nm}$ (30)** and/or the server **PS (18)** processes, formats, groups, and organizes the responses **$R_{11}...R_{nm}$ (32)** from the ones of the servers **$S_1...S_z$ (20)** corresponding to the server designations **$S_{11}...S_{nm}$ (30)** at the server **PS (18)**. Otherwise, the clients **$C_1...C_n$ (16)** may parse, process, and/or format each of the user service and/or information requests **$iq_1...iq_n$ (27)** into queries, server addresses to make the queries of, query groups and/or server groups, and instructions, typically when the clients **$C_1...C_n$ (16)** make the requests **$Q_{11}...Q_{nm}$ (29)** of the servers **$S_1...S_z$ (20)** corresponding to the server designations

$S_{11}...S_{nm}$ **(30)** and/or the clients $C_1...C_n$ **(16)** process, format, group, and organize the responses $R_{11}...R_{nm}$ **(32)** from the ones of the servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{11}...S_{nm}$ **(30)** at the corresponding clients $C_1...C_n$ **(16)**. Choice as to whether the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** makes the requests $Q_{11}...Q_{nm}$ **(29)** of the servers $S_1...S_z$ **(20)** corresponding to the server designations $S_{11}...S_{nm}$ **(30)** and/or process, format, group, and organize the responses $R_{11}...R_{nm}$ **(32)** are dependent on processing capabilities of the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** and other factors.

Ones of the requests $Q_{11}...Q_{nm}$ **(29)** may require further formatting and/or processing by the server **PS (18)** and/or the corresponding clients $C_1...C_n$ **(16)**, and/or other ones of the requests $Q_{11}...Q_{nm}$ **(29)** may already be formatted in accordance with requirements with respect to communications protocols, the service and/or information requests $IQ_1...IQ_n$ **(28)**, the servers $S_1...S_z$ **(20)**, and/or the optional servers $SO_1...SO_p$ **(22)**, and/or the server **PS (18)**, and/or other requirements of the network **24** of the client-server multitasking system **10**. The server **PS (18)** and/or the clients $C_1...C_n$ **(16)** parse, process, and/or format the requests $Q_{11}...Q_{nm}$ **(29)**, as required.

G. Formulating the Requests

Each of the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** is typically parsed, and/or processed, and/or formatted, and/or grouped, and/or organized into particular ones of the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** for use by the server **PS (18)** and/or particular ones of

the clients $C_1...C_n$ **(16)**, a particular one of the clients $C_1...C_n$ **(16)** being designated as the client C_n **(16)**.

Each of the alternate request links $QL_{n1}...QL_{na}$ **(203)** and the additional request links $SL_{11}...SL_{nw}$ **(71)** are also typically parsed, and/or processed, and/or formatted, and/or grouped, and/or organized for use by the server **PS (18)** and/or particular ones of the clients $C_1...C_n$ **(16)**, a particular one of the clients $C_1...C_n$ **(16)** being designated as the client C_n **(16)**.

The alternate request links $QL_{n1}...QL_{na}$ **(203)** allow the user U_n **(12)** to make the service and/or information request $IQ_1...IQ_n$ **(28)** with preconfigured optional default selections already placed therein the service and/or information request $IQ_1...IQ_n$ **(28)** for the user U_n **(12)**. The additional request links $SL_{n1}...SL_{nw}$ **(71)** allow the user U_n **(12)** to make additional optional selections, based upon information and/or services previously requested by the user U_n **(12)**.

Typical ones of the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** and the additional request links $SL_{n1}...SL_{nw}$ **(71)** that may be parsed, processed, and/or formatted from the service and/or information request IQ_n **(28)** and/or the user service and/or information request iq_n **(27)** are shown in FIG. 90.

The requests $Q_{11}...Q_{nm}$ **(29)** may be made by the server **PS (18)** and/or the corresponding clients $C_1...C_n$ **(16)** of the associated corresponding ones of the servers

$S_1...S_z$ **(20)**, according to the designation scheme corresponding to the corresponding ones of the server designations $S_{11}...S_{nm}$ **(30)**, in accordance with the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** and/or default values for the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** resident within the server **PS (18)** and/or the corresponding clients $C_1...C_n$ **(16)**.

The service and/or information responses $IR_1...IR_n$ **(34)** and/or the corresponding user service and/or information responses $ir_1...ir_n$ **(36)** may be formulated by the server **PS (18)** and/or the corresponding clients $C_1...C_n$ **(16)**, in accordance with the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** and/or default values for the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** resident within the server **PS (18)** and/or the corresponding clients $C_1...C_n$ **(16)**.

The optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** and the additional request links $SL_{11}...SL_{nw}$ **(71)** for a particular one of the service and/or information requests IQ_n **(28)** may typically have Searches per Group **326**, and/or Group **327**, and/or Page **328A** and/or Page **328B**, and/or Timeout per Search Engine **329**, and/or URL's per Search Engine **330**, and/or Search Engine Results **331A** and/or Search Display **331B**, and/or URL Details **332A** and/or Description and/or List **332B**, as shown in FIG. 90. Default values may additionally and/or alternatively be established or be resident for any and/or all of the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** within the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**.

The Searches per Group **326** are typically considered to be the number of the queries **$QQ_{n1}...QQ_{nm}$ (53)** to make of the servers **$S_1...S_z$ (20)** thereof at the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to make the requests **$Q_{n1}...Q_{nm}$ (29)** thereof as the corresponding ones of the server designations **$S_{n1}...S_{nm}$ (30)**.

The Group **327** is considered to be the group of the queries **$QQ_{n1}...QQ_{nm}$ (53)** to make of the servers **$S_1...S_z$ (20)** thereof at the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to make the requests **$Q_{n1}...Q_{nm}$ (29)** thereof as the corresponding ones of the server designations **$S_{n1}...S_{nm}$ (30)**.

The Page **328A** and the Page **328B** have certain service and/or information location information, which may be incorporated into the requests **$Q_{n1}...Q_{nm}$ (29)** to be made of the associated corresponding ones of the servers **$S_1...S_z$ (20)** thereof, at the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations **$S_{n1}...S_{nm}$ (30)**.

The Timeout per Search Engine **329** is considered to be substantially the maximum time for the server **PS (18)** and/or the particular client **C_n (16)** making the requests **$Q_{n1}...Q_{nm}$ (29)** to wait for each of the responses **$R_{n1}...R_{nm}$ (32)** therefrom certain ones of the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme which

designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)** as the corresponding server designations $S_{n1}...S_{nm}$ **(30)**.

The URL's per Search Engine **330**, is considered to be the number of links, and/or descriptions, and/or prices/values, and/or images to be returned to the user interface I_n **(14)** from each of the responses $R_{n1}...R_{nm}$ **(32)**.

The Search Engine Results **331A** and the Search Display **331B** each designate presentation and/or display schemes to be presented at the user interface I_n **(14)**. The URL Details **332A** and the Description and/or List **332B** each also designate presentation and/or display schemes to be presented at the user interface I_n **(14)**.

The optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** may also typically have Next Group **333** and Previous Group **334**, which are considered to be the next group and the previous group, respectively, to make the queries $QQ_{n1}...QQ_{nm}$ **(53)** thereof at the next and previous ones of the corresponding groups of the queries $QQ_{n1}...QQ_{nm}$ **(53)** to make of the servers $S_1...S_z$ **(20)** thereof at the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to make the requests $Q_{n1}...Q_{nm}$ **(29)** thereof as the corresponding ones of the server designations $S_{n1}...S_{nm}$ **(30)**. Information about Current Group **337** having the queries $QQ_{n1}...QQ_{nm}$ **(53)** and the server addresses $AQ_{n1}...AQ_{nm}$ **(54)** is also shown. Current Page Number **338** is also indicated.

The optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** for a particular one of the service and/or information requests IQ_n **(28)** may also typically have Next Page **335** and Previous Page **336**, each of which has certain different service and/or information location information, which may be incorporated into the requests $Q_{n1}...Q_{nm}$ **(29)** to be made of the associated corresponding ones of the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations $S_{n1}...S_{nm}$ **(30)**.

H. Determining Queries and Servers to Make the Requests Thereof

The server **PS (18)** and/or the clients $C_1...C_n$ **(16)** evaluate the optional instructions $VJ_{11}...VJ_{nk}$ **(52)**, determine the queries $QQ_{11}...QQ_{nm}$ **(53)** and the servers $S_1...S_z$ **(20)** to make the requests $Q_{11}...Q_{nm}$ **(29)** thereof at the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with as the server designations $S_{11}...S_{nm}$ **(30)**, corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**, and group the queries $QQ_{11}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)** associated therewith.

FIG. 90 shows typical ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)**, the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** that may

be parsed, processed, and/or formatted from the service and/or information request $\mathbf{IQ_n}$ **(28)** and/or the user service and/or information request $\mathbf{iq_n}$ **(27)**.

The queries $\mathbf{QQ_{11}...QQ_{nm}}$ **(53)** and the servers $\mathbf{S_1...S_z}$ **(20)** to make the requests $\mathbf{Q_{11}...Q_{nm}}$ **(29)** thereof are typically based upon the values designated therein and parsed from the queries $\mathbf{QQ_{11}...QQ_{nm}}$ **(53)** and the values designated therein and parsed from the corresponding server addresses $\mathbf{AQ_{11}...AQ_{nm}}$ **(54)**, in accordance with the designation scheme which designates the certain ones of the servers $\mathbf{S_1...S_z}$ **(20)** to be communicated with as the server designations $\mathbf{S_{11}...S_{nm}}$ **(30)**, corresponding to the requests $\mathbf{Q_{11}...Q_{nm}}$ **(29)**, and the Searches per Group **326**, the Group **327**, the Page **328A** and/or the Page **328B** within the optional instructions $\mathbf{VJ_{11}...VJ_{nk}}$ **(52)**.

The server **PS (18)** and/or the clients $\mathbf{C_1...C_n}$ **(16)** evaluate the values therein the Group **327**, the Searches per Group **326**, the queries $\mathbf{QQ_{11}...QQ_{nm}}$ **(53)**, the corresponding server addresses $\mathbf{AQ_{11}...AQ_{nm}}$ **(54)**, and determine the servers $\mathbf{S_1...S_z}$ **(20)** corresponding to the corresponding server addresses $\mathbf{AQ_{11}...AQ_{nm}}$ **(54)** within the Group **327**, in accordance with the designation scheme which designates the certain ones of the servers $\mathbf{S_1...S_z}$ **(20)** to be communicated with as the server designations $\mathbf{S_{11}...S_{nm}}$ **(30)** to make the requests $\mathbf{Q_{11}...Q_{nm}}$ **(29)** thereof, and the Page **328A** and/or the Page **328B**.

The Group **327** and the Searches per Group **326** are used to determine which of the servers $\mathbf{S_1...S_z}$ **(20)** to make the requests $\mathbf{Q_{11}...Q_{nm}}$ **(29)** thereof.

The server **PS (18)** and/or the clients $C_1...C_n$ **(16)** determine the size of the Group **327** from the Searches per Group **326** and the Group **327**, and the servers $S_1...S_z$ **(20)** associated with the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)** within the Group **327**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with as the server designations $S_{11}...S_{nm}$ **(30)**.

The Searches per Group **326** and the Group **327** are used to formulate the current request groups $QA_{1c}...QA_{nc}$ **(50)** having the corresponding queries $QQ_{11}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)** to open connections with and make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** thereof as the server designations $S_{11}...S_{nm}$ **(30)**, corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**, for corresponding ones of the service and/or information requests $IQ_1...IQ_n$ **(28)** and/or the user service and/or information requests $iq_1...iq_n$ **(27)**.

The queries $QQ_{11}...QQ_{nm}$ **(53)**, the server addresses $AQ_{11}...AQ_{nm}$ **(54)**, and the Page **328A** and/or the Page **328B** provide the location of information and/or services to the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** within the Group **327**, in accordance with the Searches per Group **326**, to make the requests $Q_{11}...Q_{nm}$ **(29)** thereof, in accordance with the designation scheme which designates the ones of the servers

$S_1...S_z$ **(20)** to make the requests $Q_{11}...Q_{nm}$ **(29)** thereof as the server designations $S_{11}...S_{nm}$ **(30)**, corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**.

The URL's per Search Engine **330** determine whether the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** communicate additional ones of the requests $Q_{11}...Q_{nm}$ **(29)** of the servers $S_1...S_z$ **(20)**, depending upon the number of the links, and/or descriptions, and/or prices/values, and/or images requested by ones of the user $U_1...U_n$ **(12)** to be returned to the user interfaces $I_1...I_n$ **(14)**, and the number of links, and/or descriptions, and/or prices/values, and/or images available within each of the corresponding ones of the responses $R_{11}...R_{nm}$ **(32)**. If insufficient ones of the links, and/or descriptions, and/or prices/values, and/or images are not available within the responses $R_{11}...R_{nm}$ **(32)** to satisfy delivery of the number of the URL's per Search Engine **330** requested by certain ones the users $U_1...U_n$ **(12)**, the server **PS (18)** and/or the clients $C_1...C_n$ **(16)** may yet make additional ones of the requests $Q_{11}...Q_{nm}$ **(29)** of the servers $S_1...S_z$ **(20)**, in order deliver the number of the links, and/or descriptions, and/or prices/values, and/or images requested in the number of the URL's per Search Engine **330** to the user interfaces $I_1...I_n$ **(14)** requested by certain ones of the user $U_1...U_n$ **(12)**.

If the optional instructions do not indicate which ones of the servers $S_1...S_z$ **(20)** to make the requests $Q_{11}...Q_{nm}$ **(29)** thereof, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with as the server designations $S_{11}...S_{nm}$ **(30)**, corresponding to the requests $Q_{11}...Q_{nm}$

(29), default values may be used. The default values may be resident within the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**.

If all and/or a portion of the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** are absent and/or are not communicated thereto the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**, default values may be used. The default values may be resident within the server **PS (18)** and/or the clients $C_1...C_n$ **(16)**.

I. Grouping the Queries and Sorting/Grouping Criteria

Upon receipt of the service and/or information requests $IQ_1...IQ_n$ **(28)** at the server **PS (18)**, communicated therefrom the corresponding clients $C_1...C_n$ **(16)**, the server **PS (18)** parses, processes, and/or formats each of the service and/or information requests $IQ_1...IQ_n$ **(28)** into the corresponding current request groups $QA_{1c}...QA_{nc}$ **(50)** having the corresponding queries $QQ_{11}...QQ_{nm}$ **(53)** and the corresponding server addresses $AQ_{11}...AQ_{nm}$ **(54)** to open connections with and make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, shown for a particular one of the service and/or information requests IQ_n **(28)** in FIG. 59. The process **104** of deriving the service and/or information response IR_n **(34)** for the grouping and/or sorting criteria of FIG. 59 is shown in FIG. 70-1A.

The server **PS (18)** also parses, processes, and/or formats each of the service and/or information requests $\mathbf{IQ_1...IQ_n}$ **(28)** into the corresponding request groups $\mathbf{QA_{11}...QA_{nz}}$ **(51)** having the corresponding other queries $\mathbf{QQ_{1a}...QQ_{nz}}$ **(55)** and the corresponding other server addresses $\mathbf{AQ_{1a}...AQ_{nz}}$ **(56)**, and the corresponding optional instructions $\mathbf{VJ_{11}...VJ_{nk}}$ **(52)**, also shown for a particular one of the service and/or information requests $\mathbf{IQ_n}$ **(28)** in FIG. 59.

Certain ones of the clients $\mathbf{C_1...C_n}$ **(16)** may alternatively and/or additionally make the requests $\mathbf{Q_{11}...Q_{nm}}$ **(29)** thereof the servers $\mathbf{S_1...S_z}$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $\mathbf{S_1...S_z}$ **(20)** to be communicated with corresponding to the requests $\mathbf{Q_{11}...Q_{nm}}$ **(29)** as the corresponding server designations $\mathbf{S_{11}...S_{nm}}$ **(30)**, and formulate the corresponding user service and/or information response $\mathbf{ir_1...ir_n}$ **(36)**, as previously described, as shown in FIG. 63. The process **104** of deriving the user service and/or information response $\mathbf{ir_n}$ **(36)** for the grouping and/or sorting criteria of FIG. 59 is shown in FIG. 70-1A.

Upon receipt of the user service and/or information requests $\mathbf{iq_1...iq_n}$ **(27)** at the corresponding clients $\mathbf{C_1...C_n}$ **(16)**, certain ones of the corresponding clients $\mathbf{C_1...C_n}$ **(16)** may parse, process, and/or format the corresponding user service and/or information requests $\mathbf{iq_1...iq_n}$ **(27)** into the corresponding current request groups $\mathbf{QA_{1c}...QA_{nc}}$ **(50)** having the corresponding queries $\mathbf{QQ_{11}...QQ_{nm}}$ **(53)** and the corresponding server addresses $\mathbf{AQ_{11}...AQ_{nm}}$ **(54)** to open connections with and make

the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**, shown for a particular one of the user service and/or information requests iq_n **(27)** in FIG. 63. The corresponding clients $C_1...C_n$ **(16)** may also parse, process, and/or format the corresponding user service and/or information response $ir_1...ir_n$ **(36)** into the corresponding request groups $QA_{11}...QA_{nz}$ **(51)** having the corresponding other queries $QQ_{1a}...QQ_{nz}$ **(55)** and the corresponding other server addresses $AQ_{1a}...AQ_{nz}$ **(56)**, and the corresponding optional instructions $VJ_{11}...VJ_{nk}$ **(52)**, also shown for a particular one of the user service and/or information requests iq_n **(27)** in FIG. 63.

The server **PS (18)** makes the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, as shown in FIG. 59, and certain ones of the clients $C_1...C_n$ **(16)** may additionally and/or alternatively make the requests $Q_{11}...Q_{nm}$ **(29)** thereof the servers $S_1...S_z$ **(20)**, in accordance with the designation scheme which designates the certain ones of the servers $S_1...S_z$ **(20)** to be communicated with corresponding to the requests $Q_{11}...Q_{nm}$ **(29)** as the corresponding server designations $S_{11}...S_{nm}$ **(30)**, as shown in FIG. 63.

The Searches per Group **326** and the Group **327** are used to formulate the current request group QA_{nc} **(50)** having the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** and the

corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** to open connections with and make the requests **$Q_{n1}...Q_{nm}$ (29)** thereof the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to be communicated with corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** thereof as the server designations **$S_{11}...S_{nm}$ (30)**, corresponding to the requests **$Q_{11}...Q_{nm}$ (29)**, for the service and/or information request **IQ_n (28)** and/or the user service and/or information request **iq_n (27)**.

Information from the current request group **QA_{nc} (50)** having the corresponding queries **$QQ_{n1}...QQ_{nm}$ (53)** and the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** is formulated into the corresponding request pointer/address group **QZ_n (60)** having the pointers/addresses **$PG_{n1}...PG_{nz}$ (61)** associated therewith, as shown in FIGS. 59 and 63.

Each of the pointers/addresses **$PG_{n1}...PG_{nz}$ (61)** are directed to point/address the corresponding addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** associated therewith, which aid in obtaining services and/or information therefrom the certain ones of the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** to be incorporated thereinto the query information groups **$GI_{n1}...GI_{nz}$ (63)**.

Ones of the addressable query information groups **$GI_{n1}...GI_{nz}$ (63)** may be associated therewith corresponding ones of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**.

Each of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** associated with the service and/or information request IQ_n has the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** directed to address/point services and/or information therein the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**, based upon the grouping and/or sorting criteria.

Information and/or services therein the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is addressed therewith the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** therefrom the query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, and information and/or services therefrom the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)** is incorporated thereinto the addressable query information groups $GI_{n1}...GI_{nz}$ **(63)** corresponding to the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**, which are formulated by the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, in accordance with the grouping and/or sorting criteria.

FIGS. 59 and 63 show the request pointer/address group QZ_n **(60)**, the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**, associated ones of the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**, and the query information group GI_{nz} **(63)** associated therewith the query pointer/address group QG_{nz} **(62)**. FIGS. 59 and 63 show the rth pointers/addresses $PP_{n1r}...PP_{nmr}$ **(64)**, which point to the rth optional addressable pointer/address indices

$IN_{nmr}...IN_{nmr}$ **(81)** of the corresponding rth individual information groups $LG_{n1r}...LG_{nmr}$ **(80)** of the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** associated therewith the query pointer/address group QG_{nz} **(62)** and the associated query information group GI_{nz} **(63)**.

FIG. 91 shows the request pointer/address group QZ_n **(60)**, a particular one of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, designated as the query pointer/address group QG_{nz} **(62)**, the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**, associated ones of the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)**, and the query information group GI_{nz} **(63)** associated therewith the query pointer/address group QG_{nz} **(62)**.

The addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** each have corresponding ones of query information groups $GI_{n1}...GI_{nz}$ **(63)** associated therewith. Each of the query information groups $GI_{n1}...GI_{nz}$ **(63)** have information and/or services therein, which are derived therefrom information and/or services obtained from the certain ones of the addressable response information groups $RG_{n1}...RG_{nm}$ **(57)**, which are addressed to provide such information therewith the aid of the corresponding pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)**. Each of the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** are directed to point/address information and/or services therein the corresponding response information groups $RG_{n1}...RG_{nm}$ **(57)** associated therewith, which the information and/or services incorporated into the ones of the query information groups

$GI_{n1}...GI_{nz}$ **(63)** associated therewith the corresponding addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** is obtained therefrom.

The addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** may be used to aid in formulating the query information groups $GI_{n1}...GI_{nz}$ **(63)**, having information obtained the addressable response information group s RG_{nm} **(57)**, resulting from certain ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** grouped one with the other and/or the associated ones of the corresponding server addresses $AQ_{n1}...AQ_{nm}$ **(54)**. The query information groups $GI_{n1}...GI_{nz}$ **(63)** may be presented thereto the user U_n **(12)** therethrough the user interface I_n **(14)**. The addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** may be derived therefrom query criteria in the optional instructions $VJ_{11}...VJ_{nk}$ **(52)** and/or using default criteria resident within the server **PS (18)** and/or the client C_n **(16)**.

Query grouping criteria giving the user U_n **(12)** the ability to formulate the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** may be incorporated thereinto the optional instructions $VJ_{11}...VJ_{nk}$ **(52)**, which may be entered thereinto the user interface I_n **(14)** therethrough the user input UI_n **(25)** by the user U_n **(12)**. Typically, however, the queries $QQ_{n1}...QQ_{nm}$ **(53)** having the same and/or substantially the same values are grouped one with the other therein individual ones of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**. Default criteria may be resident within the server **PS (18)** and/or the client C_n **(16)**.

The size of the request pointer/address group QZ_n **(60)** and which particular ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)** to use therein the requests $Q_{n1}...Q_{nm}$ **(29)**, and thus construction and/or formulation of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** to incorporate thereinto the particular request pointer/address group QZ_n **(60)**, and, thus, delivery of information therein the query information groups $GI_{n1}...GI_{nz}$ **(63)** is determined by the current request groups $QA_{1c}...QA_{nc}$ **(50)**, which may be determined from the Group **327** and the Searches per Group **326**, the queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)** therein.

Certain ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** may be grouped one with the other in the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, which have the certain ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** and the corresponding ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)** associated therewith, and the corresponding pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** associated therewith the certain ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)**, the corresponding ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and certain ones of response information groups $RG_{n1}...RG_{nm}$ **(57)**.

Typical sorting and/or grouping criteria, for example, may group certain ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)** having the same and/or substantially the same values grouped therein a particular one of the query information groups $GI_{nz}...GI_{nz}$ **(63)**,

designated as the query information group GI_{nz} **(63)**, as shown in FIG. 92 and in certain ones of FIGS. 27-52.

Alternatively and/or additionally, other typical sorting and/or grouping criteria, for example, may group certain ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, having the same and/or substantially the same values grouped therein a particular one of the query information groups $GI_{nz}...GI_{nz}$ **(63)**, designated as the query information group GI_{nz} **(63)**, as shown in FIG. 93.

FIGS. 91-93 show the rth pointers/addresses PP_{ner} **(64)**, PP_{nrr} **(64)**, and PP_{nwr} **(64)**, which point to the rth optional addressable pointer/address indices IN_{ner} **(81)**, IN_{nrr} **(81)**, and IN_{nwr} **(81)** of the corresponding rth individual information groups LG_{ner} **(80)**, LG_{nrr} **(80)**, and LG_{nwr} **(80)** of the addressable response information group s RG_{ne} **(57)**, RG_{nr} **(57)**, and RG_{nw} **(57)** associated therewith the query pointer/address group QG_{nz} **(62)** and the associated query information group GI_{nz} **(63)**.

Alternatively and/or additionally, the user U_n **(12)** may select query grouping criteria, which simply provides information to the user interface I_n **(14)**, separately with respect to the individual server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, as shown in FIGS. 60 and 64 and in certain ones of FIGS. 27-52. For example, the query information groups $GI_{n1}...GI_{nz}$ **(63)**, may alternatively and/or additionally be correspondingly associated with the server address $AQ_{n1}...AQ_{nm}$ **(54)**, and, thus, may be correspondingly associated with the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)**. The query

information group **GI_{n1} (63)** may, thus, be associated therewith the server address **AQ_{n1} (54)**, the addressable response information group **RG_{n1} (57)**, and the query information group **GI_{n1} (63)**; the query information group **GI_{n2} (63)** may, thus, be associated therewith the server address **AQ_{n2} (54)**, the addressable response information group **RG_{n2} (57)**, and the query information group **GI_{n2} (63)**, and so on; and the query information group **GI_{nz} (63)** may, thus, be associated therewith the server address **AQ_{nz} (54)**, the addressable response information group **RG_{n2} (57)**, and the query information group **GI_{nz} (63)**, as shown in FIGS. 60 and 64. The process **104** of deriving the service and/or information response **IR_n (34)** and/or the user service and/or information response **ir_n (36)** for the grouping and/or sorting criteria of FIGS. 60 and 64 is shown in FIG. 70-1B.

The pointing/addressing scheme of FIGS. 60 and 64 is, of course, a much simpler pointing/addressing scheme than the pointing/addressing scheme of FIGS. 59 and 63, and does not require incorporating the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** thereinto the request pointer/address group **QZ_n (60)**. Each of the pointers/addresses **$PF_{n11}...PF_{nmr}$ (69)**, of FIGS. 60 and 64, may then be directed to point/address the corresponding response information groups **$RG_{n1}...RG_{nm}$ (57)** directly therefrom the request pointer/address group **QY_{ns} (68)**, to obtain information therefrom the corresponding response information groups **$RG_{n1}...RG_{nm}$ (57)** and incorporation thereinto corresponding ones of the corresponding query information groups **$GI_{n1}...GI_{nz}$ (63)**, as shown in FIGS. 60 and 64. In this case, the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** may be bypassed and/or eliminated

completely, thus simplifying the process. Of course, then, in this case, the resulting sorting and grouping is not as sophisticated, and allows for such simplification.

The above sorting criteria addressing schemes are meant only as typical examples of sorting criteria addressing schemes that may be used. Yet other sorting criteria addressing schemes and/or combinations thereof may be used.

FIG. 94 shows typical ones of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)** having the typical ones of the queries **$QQ_{n1}...QQ_{nm}$ (53)**, the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the corresponding ones of typical ones of the pointers/addresses **$PP_{n11}...PP_{nmr}$ (64)** having the same ones of the queries **$QQ_{n1}...QQ_{nm}$ (53)** grouped one with the other therein individual ones of the addressable query pointer/address groups **$QG_{n1}...QG_{nz}$ (62)**.

More particularly, FIG. 94 shows the query pointer/address group **QG_{n1} (62)**, the query pointer/address group **QG_{n2} (62)**, and the query pointer/address group **QG_{n3} (62)**. The query pointer/address group **QG_{n1} (62)** of FIG. 94 has the same ones of the queries **QQ_{n1} (53)**, **QQ_{n2} (53)**, **QQ_{n3} (53)**, and **QQ_{n9} (53)**, the ones of the server addresses **AQ_{n1} (54)**, **AQ_{n2} (54)**, **AQ_{n3} (54)**, and **AQ_{n9} (54)**, and the ones of the pointers/addresses **PP_{n1r} (64)**, **PP_{n2r} (64)**, **PP_{n3r} (64)**, and **PP_{n9r} (64)** associated therewith. The query pointer/address group **QG_{n2} (62)** of FIG. 94 has the same ones of the queries **QQ_{n4} (53)** and **QQ_{n7} (53)**, the ones of the server addresses **AQ_{n4} (54)** and **AQ_{n7} (54)** the ones of the pointer/addresses **PP_{n4r} (64)** and **PP_{n7r} (64)** associated

therewith. The query pointer/address group QG_{n3} **(62)** of FIG. 94 has the same ones of the query values QQ_{n5} **(53)**, QQ_{n6} **(53)**, and QQ_{n8} **(53)**, the ones of the server addresses AQ_{n5} **(54)**, AQ_{n6} **(54)**, and AQ_{n8} **(54)** and the ones of the pointers/addresses PP_{n5r} **(64)**, PP_{n6r} **(64)**, and PP_{n8r} **(64)** associated therewith.

The addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)**, however, may alternatively and/or additionally be grouped, for example, by the server addresses $AQ_{n1}...AQ_{nm}$ **(54)** and have the corresponding query values $QQ_{n1}...QQ_{nm}$ **(53)** associated therewith. Ones of the same and/or substantially the same ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, for example, having the corresponding queries $QQ_{n1}...QQ_{nm}$ **(53)** associated therewith may be used as the grouping criteria.

FIG. 95 shows another schematic representation of the typical ones of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** having the typical ones of the queries $QQ_{n1}...QQ_{nm}$ **(53)**, the typical ones of the server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the typical the ones of the pointer/addresses $PP_{n11}...PP_{nmr}$ **(64)** of FIG. 94 associated therewith.

FIG. 96 is a generic schematic representation of the addressable query pointer/address groups $QG_{n1}...QG_{nz}$ **(62)** having the queries $QQ_{n1}...QQ_{nm}$ **(53)**, the server addresses $AQ_{n1}...AQ_{nm}$ **(54)**, and the pointers/addresses $PP_{n11}...PP_{nmr}$ **(64)** associated therewith.

Certain information therein the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** may be associated with the corresponding queries **$QQ_{n1}...QQ_{nm}$ (53)** and/or the corresponding server addresses **$AQ_{n1}...AQ_{nm}$ (54)** within the current request group **QA_{nc} (50)**, and may optionally be used by the server **PS (18)** and/or the client **C_n (16)**.

Certain information therein the addressable response information groups **$RG_{n1}...RG_{nm}$ (57)** may also be incorporated thereinto the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)**. Such information may be incorporated thereinto the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** may also be additionally and/or alternatively optionally resident within the server **PS (18)** and/or the client **C_n (16)**.

J. Communicating the Requests to the Servers

The server **PS (18)** and/or the clients **$C_1...C_n$ (16)** contact and open the connections **$OC_{11}...OC_{nm}$ (323)** with ones of the servers **$S_1...S_z$ (20)**, according to the server designations **$S_{11}...S_{nm}$ (30)** at the corresponding server addresses **$A_{11}...A_{nu}$ (265)** at corresponding ports **$W_{11}...W_{nm}$ (343)**. The server **PS (18)** and/or the clients **$C_1...C_n$ (16)** communicate the requests **$Q_{11}...Q_{nm}$ (29)** of one or more of the same and/or different ones of the servers **$S_1...S_z$ (20)**, designated within the Group **327** and the Searches per Group **326** to make the requests **$Q_{11}...Q_{nc}$ (29)** thereof, in accordance with the designation scheme corresponding to the corresponding ones of the server designations **$S_{11}...S_{nm}$ (30)**, corresponding to the requests **$Q_{11}...Q_{nm}$ (29)**. If the

Group **327** is not specified and/or the Searches per Group **326** are not specified by the users $U_1 \ldots U_n$ **(12)**, default values may additionally and/or alternatively values be used.

A particular one of the requests $Q_{11} \ldots Q_{nm}$ **(29)**, hereinafter designated as the request Q_{nm} **(29)**, corresponding to one request within the requests $Q_{n1} \ldots Q_{nm}$ **(29)** corresponding to the user U_n **(12)**, is shown schematically in FIG. 97.

Information **344** that may be used for formulating a typical particular one of the requests Q_{nm} **(29)** from the service and/or information request IQ_n **(28)**, and parsing, processing, and/or formatting the optional instructions $VJ_{n1} \ldots VJ_{nk}$ **(52)**, and opening the connection OC_{nm} **(323)** is shown in FIGS. 86-89.

Now, in more detail, the request Q_{nm} **(29)** may have a corresponding request line L_{nm} **(345)**, corresponding optional request header fields $JH_{n1} \ldots JH_{ns}$ **(346)**, and a corresponding optional entity body EH_{nm} **(347)**. The request line L_{nm} **(345)** may have a corresponding method M_{nm} **(348)**, a corresponding target resource P_{nm} **(349)**, which may have information associated with the corresponding query QQ_{nm} **(53)**, and corresponding protocol B_{nm} **(350)**.

The user U_n **(12)**, the server **PS (18)** and/or the client C_n **(16)** may optionally specify the port W_{nm} **(343)** to communicate the request Q_{nm} **(29)** therethrough, and/or the method M_{nm} **(348)**, and/or the protocol B_{nm} **(350)**. The port W_{nm} **(343)**, and/or the method M_{nm} **(348)**, and/or the protocol B_{nm} **(350)** may optionally be resident within

the server **PS (18)** and/or the client C_n **(16)**. Default values may also be used for the port W_{nm} **(343)** and/or the protocol B_{nm} **(350)**.

Typically, information within or from any and/or all or a portion of the queries QQ_{nm} **(53)** may be incorporated into the corresponding ones of the target resources $P_{11}...P_{nm}$ **(349)** and/or the corresponding ones of the optional entity bodies $EH_{11}...EH_{nm}$ **(347)**, and may in certain instances depend upon the method $M_{11}...M_{nm}$ **(348)**.

However, information that may be used for opening the connections $OC_{11}...OC_{nm}$ **(323)** and formulating the requests $Q_{11}...Q_{nm}$ **(29)** from the service and/or information requests $IQ_1...IQ_n$ **(28)** may be derived from any and/or all or a portion of the user client requests $QC_{11}...QC_{nu}$ **(280)** accessible to the users $U_1...U_n$ **(12)** and/or the hidden client requests $HC_{n1}...HC_{nh}$ **(281)** hidden from the users $U_1...U_n$ **(12)**, and/or a combination thereof, and/or may also have information and/or instructions to be utilized by the server **PS (18)** and/or ones of the clients $C_1...C_n$ **(16)**.

Alternatively information from the alternate request links $QL_{11}...QL_{na}$ **(203)**, and/or the server request links $UL_{11}...UL_{ns}$ **(204)**, and/or the additional request links $SL_{11}...SL_{nw}$ **(71)**, and/or a combination thereof, may be used by the server **PS (18)** and/or ones of the clients $C_1...C_n$ **(16)** to formulate the requests $Q_{11}...Q_{nm}$ **(29)**.

There may be **m** different or same ones of the requests $Q_{n1}...Q_{nm}$ **(29)** from the client C_n **(16)** at any time, and **n** x **m** different and/or same ones of the requests $Q_{11}...Q_{nm}$

(29) of the same and/or different ones of the servers $S_1 \ldots S_z$ **(20)** present on the network **24** at any time.

The queries $QQ_{n1} \ldots QQ_{nm}$ **(53)** may each be different, one from the other, or the same. The queries $QS_{n1} \ldots QS_{nu}$ **(288)** accessible to the user U_n **(12)** may each be different, one from the other, or the same. The hidden queries $QH_{n1} \ldots QH_{nh}$ **(290)** may each be different, one from the other, or the same. The number of the queries $QQ_{n1} \ldots QQ_{nm}$ **(53)** "**m**" may be substantially the sum of the queries $QS_{n1} \ldots QS_{nu}$ **(288)** accessible to the user U_n **(12)** and the hidden queries $QH_{n1} \ldots QH_{nh}$ **(290)**, i.e., $\mathbf{m} = \mathbf{u} + \mathbf{h}$.

There may be **m** different or same ones of the queries $QQ_{n1} \ldots QQ_{nm}$ **(53)** corresponding to the requests $Q_{n1} \ldots Q_{nm}$ **(29)** from the client C_n **(16)** at any time, and **n** x **m** different and/or same ones of the queries $QQ_{11} \ldots QQ_{nm}$ **(53)** corresponding to the requests $Q_{11} \ldots Q_{nm}$ **(29)** of the same and/or different ones of the servers $S_1 \ldots S_z$ **(20)** present on the network **24** at any time.

The server addresses $AQ_{n1} \ldots AQ_{nm}$ **(54)** may each be different, one from the other, or the same. The server addresses $A_{n1} \ldots A_{nu}$ **(265)** accessible to the user U_n **(12)** may each be different, one from the other, or the same. The hidden server addresses $AH_{n1} \ldots AH_{nh}$ **(291)** may each be different, one from the other, or the same. The number of the server addresses $AQ_{n1} \ldots AQ_{nm}$ **(54)** "**m**" may be substantially the sum of the server addresses $A_{n1} \ldots A_{nu}$ **(265)** accessible to the user U_n **(12)** and the hidden server addresses $AH_{n1} \ldots AH_{nh}$ **(291)**, i.e., $\mathbf{m} = \mathbf{u} + \mathbf{h}$.

There may be **m** different or same ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)** corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** from the client **C_n (16)** at any time, and **n** x **m** different and/or same ones of the server addresses **$AQ_{11}...AQ_{nm}$ (54)** corresponding to the requests **$Q_{11}...Q_{nm}$ (29)** of the same and/or different ones of the servers **$S_1...S_z$ (20)** present on the network **24** at any time.

The optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** may each be different, one from the other, or the same. The optional instructions **$V_{n1}...V_{nv}$ (289)** accessible to the user **U_n (12)** may each be different, one from the other, or the same. The optional hidden instructions **$H_{n1}...H_{ni}$ (292)** may each be different, one from the other, or the same. The number of the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** "**k**" may be substantially the sum of the optional instructions **$V_{n1}...V_{nv}$ (289)** accessible to the user **U_n (12)** and The optional hidden instructions **$H_{n1}...H_{ni}$ (292)**, i.e., **k** = **v** + **i**.

There may be **m** x **k** different or same ones of the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** corresponding to the requests **$Q_{n1}...Q_{nm}$ (29)** from the client **C_n (16)** at any time, and **n** x **m** x **k** different and/or same ones of the optional instructions **$VJ_{11}...VJ_{nk}$ (52)** corresponding to the requests **$Q_{11}...Q_{nm}$ (29)** of the same and/or different ones of the servers **$S_1...S_z$ (20)** present on the network **24** at any time.

The requests **$Q_{11}...Q_{nm}$ (29)** of the servers **$S_1...S_z$ (20)** may be made at the same and/or different times. One or more of the requests **$Q_{11}...Q_{nm}$ (29)** may be made of

each of the servers **$S_1...S_z$ (20)** by the same/and or different ones of the clients **$C_1...C_n$ (16)** and/or the server **PS (18)** at the same and/or different times.

The server **PS (18)** and/or the client **C_n (16)** may make one or more of the requests **$Q_{n1}...Q_{nm}$ (29)** of the same and/or different ones of the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations **$S_{n1}...S_{nm}$ (30)**, in order to fulfill the services and/or information requirements of the user **U_n (12)**.

K. Replies from the Servers

Each of the servers **$S_1...S_z$ (20)** communicated therewith replies to the server **PS (18)** and/or the clients **$C_1...C_n$ (16)**, in accordance with the designation scheme which designates the servers **$S_1...S_z$ (20)** being communicated with corresponding to the requests **$Q_{11}...Q_{nm}$ (29)** as the corresponding server designations **$S_{11}...S_{nm}$ (30)**, and communicates the corresponding responses **$R_{11}...R_{nm}$ (32)**, associated therewith the requests **$Q_{11}...Q_{nm}$ (29)**, to the server **PS (18)** and/or the clients **$C_1...C_n$ (16)** making the requests **$Q_{11}...Q_{nm}$ (29)**.

Now, ones of the servers **$S_1...S_z$ (20)** having been contacted by the server **PS (18)** and/or the clients **$C_1...C_n$ (16)** and the connections opened **$OC_{11}...OC_{nm}$ (323)** therewith, corresponding to the requests **$Q_{11}...Q_{nm}$ (29)**, according to the server designations **$S_{11}...S_{nm}$ (30)** at the corresponding server addresses **$A_{11}...A_{nu}$ (265)** at

the corresponding ports $W_{11}...W_{nm}$ **(343)** reply to the server **PS (18)** and/or the contacting clients $C_1...C_n$ **(16)** with the corresponding responses $R_{11}...R_{nm}$ **(32)**.

A particular one of the responses $R_{n1}...R_{nm}$ **(32)**, hereinafter designated as the response R_{nm} **(32)**, corresponding to one response within the responses $R_{n1}...R_{nm}$ **(32)**, the response R_{nm} **(32)** corresponding to the request Q_{nm} **(29)**, and the responses $R_{n1}...R_{nm}$ **(32)** corresponding to the requests $Q_{n1}...Q_{nm}$ **(29)**, is shown schematically in FIG. 98.

Now, the response R_{nm} **(32)** may have a corresponding response header line LR_{nm} **(351)**, corresponding optional response header fields $JR_{n1}...JR_{nt}$ **(352)**, and a corresponding optional entity body RH_{nm} **(353)**. The optional entity body RH_{nm} **(353)** typically has links, and/or descriptions, and/or other information. The request header line LR_{nm} **(351)** may have a corresponding protocol BR_{nm} **(354)**, a corresponding status SR_{nm} **(355)**, and a corresponding status explanation SE_{nm} **(356)**.

Ones of the connections may be closed after ones of the responses $R_{11}...R_{nm}$ **(32)** are communicated to the **PS (18)** and/or to the requesting corresponding ones of the clients $C_1...C_n$ **(16)**.

Again, the Timeout per Search Engine **329** is considered to be substantially the maximum time for the server **PS (18)** and/or the particular client C_n **(16)** making the requests $Q_{n1}...Q_{nm}$ **(29)** to wait for each of the responses $R_{n1}...R_{nm}$ **(32)** therefrom

certain ones of the servers **$S_1...S_z$ (20)**, in accordance with the designation scheme which designates the certain ones of the servers **$S_1...S_z$ (20)** to be communicated with corresponding to the requests **$Q_{11}...Q_{nm}$ (29)** as the corresponding server designations **$S_{11}...S_{nm}$ (30)**.

If certain ones of the servers **$S_1...S_z$ (20)** do not open connections **$OC_{11}...OC_{nm}$ (323)** therewith and/or communicate the responses **$R_{11}...R_{nm}$ (32)** thereto the server **PS (18)** and/or the clients **$C_1...C_n$ (16)**, and/or if certain other ones of the servers **$S_1...S_z$ (20)** do not communicate the responses **$R_{11}...R_{nm}$ (32)** thereto the server **PS (18)** and/or the clients **$C_1...C_n$ (16)** once connections therewith may have been opened **$OC_{11}...OC_{nm}$ (323)**, corresponding to the requests **$Q_{11}...Q_{nm}$ (29)**, according to the server designations **$S_{11}...S_{nm}$ (30)**, within the timeout set by the Timeout per Search Engine **329**, the certain ones of requests **$Q_{n1}...Q_{nm}$ (29)** of such nonresponding ones of the servers **$S_1...S_z$ (20)** may then be cancelled by the server **PS (18)** and/or the clients **$C_1...C_n$ (16)**. Information about such ones of the nonresponding ones of the servers **$S_1...S_z$ (20)** may then be communicated therefrom the server **PS (18)** and/or the clients **$C_1...C_n$ (16)** therethrough the corresponding ones of the user interfaces **$I_1...I_n$ (14)** thereto the corresponding ones of the users **$U_1...U_n$ (12)**, according to the server designations **$S_{11}...S_{nm}$ (30)** corresponding to the certain ones of requests **$Q_{n1}...Q_{nm}$ (29)** of such nonresponding ones of the servers **$S_1...S_z$ (20)**.

In certain instances, the server **PS (18)** and/or certain ones of the clients **$C_1...C_n$ (16)** may contact certain ones of the servers **$S_1...S_z$ (20)** and open the connections

$OC_{11}...OC_{nm}$ **(323)** therewith, corresponding to the requests $Q_{11}...Q_{nm}$ **(29)**, according to the server designations $S_{11}...S_{nm}$ **(30)**, one or more additional times, in order to satisfy the needs of the users $U_1...U_n$ **(12)**, and/or certain requirements within the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, such as, for example, the URL's per Search Engine **330**, and/or as a result of certain information communicated to the **PS (18)** and/or certain ones of the clients $C_1...C_n$ **(16)** within the responses $R_{11}...R_{nm}$ **(32)**.

If, for example, less links, and/or descriptions, and/or prices/values, and/or images are returned within certain ones of the responses $R_{11}...R_{nm}$ **(32)**, which may be considered to be first ones of the responses $R_{11}...R_{nm}$ **(32)**, than are requested by certain ones of the users $U_1...U_n$ **(12)** within certain ones of the URL's per Search Engine **330**, the server **PS (18)** and/or certain ones of the clients $C_1...C_n$ **(16)** may contact certain ones of the servers $S_1...S_z$ **(20)**, open the connections $OC_{11}...OC_{nm}$ **(323)** therewith, and make additional ones of the requests $Q_{11}...Q_{nm}$ **(29)**, according to the server designations $S_{11}...S_{nm}$ **(30)**, one or more additional times, in order to satisfy the needs of the users $U_1...U_n$ **(12)**. The links, and/or the descriptions, and/or the images returned within and/or parsed therefrom additional ones of the responses $R_{11}...R_{nm}$ **(32)** thereto the additional ones of the requests $Q_{11}...Q_{nm}$ **(29)** may then be appended thereto the corresponding ones of the links, and/or the corresponding ones of the descriptions, and/or the corresponding ones of the images returned within and parsed therefrom the first ones of the responses $R_{11}...R_{nm}$ **(32)**

The servers **$S_1...S_z$ (20)** communicate the responses **$R_{11}...R_{nm}$ (32)** to the requests **$Q_{11}...Q_{nm}$ (29)** thereto the server **PS (18)** and/or specific ones of the clients **$C_1...C_n$ (16)**, in accordance with the designation scheme corresponding to the corresponding ones of the server designations **$S_{11}...S_{nm}$ (30)**. Alternatively, and/or additionally, in certain instances, certain ones of the servers **$S_1...S_z$ (20)**, corresponding to certain ones of the server designations **$S_{11}...S_{nm}$ (30)**, may request additional information of the server **PS (18)** and/or specific ones of the clients **$C_1...C_n$ (16)**, prior to communicating the responses **$R_{11}...R_{nm}$ (32)** to the requests **$Q_{11}...Q_{nm}$ (29)**. Upon receiving such additional information from the server **PS (18)** and/or the specific ones of the clients **$C_1...C_n$ (16)**, the certain ones of the servers **$S_1...S_z$ (20)**, corresponding to the certain ones of the server designations **$S_{11}...S_{nm}$ (30)**, may then communicate the responses **$R_{11}...R_{nm}$ (32)** to the requests **$Q_{11}...Q_{nm}$ (29)** thereto the server **PS (18)** and/or the specific ones of the clients **$C_1...C_n$ (16)**.

In such certain instances, in more detail, the server **PS (18)** and/or certain ones of the clients **$C_1...C_n$ (16)** may contact certain ones of the servers **$S_1...S_z$ (20)** and open the connections **$OC_{11}...OC_{nm}$ (323)** therewith, corresponding to the requests **$Q_{11}...Q_{nm}$ (29)**, according to the server designations **$S_{11}...S_{nm}$ (30)**, one or more additional times, as a result of certain information communicated to the **PS (18)** and/or certain ones of the clients **$C_1...C_n$ (16)** within the responses **$R_{11}...R_{nm}$ (32)**, such as, for example, information obtained from and/or parsed from the responses **$R_{11}...R_{nm}$ (32)**. This information is typically within certain ones of the response header fields **$JR_{11}...JR_{nt}$**

(352), but may also be within the corresponding optional entity bodies **RH_{11}...RH_{nm} (353)** and/or the corresponding response header lines **LR_{11}...LR_{nm} (351)**.

Now, in such certain instances, the certain ones of the servers **S_1...S_z (20)** request the information from the server **PS (18)** and/or certain ones of the clients **C_1...C_n (16)**, prior to communicating the responses **R_{11}...R_{nm} (32)** thereto the server **PS (18)** and/or the certain ones of the clients **C_1...C_n (16)**. The server **PS (18)** and/or the certain ones of the clients **C_1...C_n (16)** being requested such information may then respond to the requests for such information, by communicating the requested information to the ones of the requesting servers **S_1...S_z (20)**. Upon receipt of the requested information at the ones of the requesting servers **S_1...S_z (20)**, the requesting ones of the servers **S_1...S_z (20)** reply thereto the server **PS (18)** and/or the certain ones of the clients **C_1...C_n (16)** with the responses **R_{11}...R_{nm} (32)**. Such requests for information from the servers **S_1...S_z (20)** may occur not at all, and/or one or more times.

L. Parsing, Processing, Formatting, Sorting, Grouping, and Organizing Responses into Service and/or Information Responses

A particular one of the optional entity bodies **RH_{11}...RH_{nm} (353)**, designated as the entity body **RH_{nm} (353)**, of a particular one of the responses **R_{11}...R_{nm} (32)**, designated as the response **R_{nm} (32)**, may have optional response individual information groups **LS_{nm1}...LS_{nmr} (360)** and optional information **LI_{nm} (361)**, as shown in FIG. 99.

Each of the optional response individual information groups **LS_{nm1}...LS_{nmr} (360)** may have and/or be parsed into corresponding optional response links **LK_{nm1}...LK_{nmr} (362)**, and/or corresponding optional response descriptions **DK_{nm1}...DK_{nmr} (363)**, and/or corresponding optional response prices/values **PK_{nm1}...PK_{nmr} (364)**, and/or corresponding optional response images **IK_{nm1}...IK_{nmr} (365)**, as shown in FIG. 99.

The optional response links **LK_{nm1}...LK_{nmr} (362)**, the corresponding optional response descriptions **DK_{nm1}...DK_{nmr} (363)**, the corresponding optional response prices/values **PK_{nm1}...PK_{nmr} (364)**, and the corresponding optional response images **IK_{nm1}...IK_{nmr} (365)**, corresponding to the optional response individual information groups **LS_{nm1}...LS_{nmr} (360)** are typically associated correspondingly one with the other.

The optional response link **LK_{nm1} (362)**, the corresponding optional response description **DK_{nm1} (363)**, the corresponding optional response price/value **PK_{nm1} (364)**, and the corresponding optional response image **IK_{nm1} (365)**, corresponding to the optional response individual information group **LS_{nm1} (360)** are typically associated correspondingly one with the other. The optional response link **LK_{nm2} (362)**, the corresponding optional response description **DK_{nm2} (363)**, the corresponding optional response price/value **PK_{nm2} (364)**, and the corresponding optional response image **IK_{nm2} (365)**, corresponding to the optional response individual information group **LS_{nm2} (360)** are typically associated correspondingly one with the other, and so on. The optional response link **LK_{nmr} (362)**, the corresponding optional

response description **DK_{nmr} (363)**, the corresponding optional response price/value **PK_{nmr} (364)**, and the corresponding optional response image **IK_{nmr} (365)**, corresponding to the optional response individual information group **LS_{nmr} (360)** are, thus, typically associated correspondingly one with the other.

The optional information **LI_{nm} (361)** may have additional links, and/or additional descriptions, and/or additional images, and/or prices/values, and/or other information, and/or services, and/or media, all and/or a portion of which may be used and/or discarded by the server **PS (18)** and/or the clients **$C_1...C_n$ (16)**. The optional information **LI_{nm} (361)** is typically filtered from the optional entity body **RH_{nm} (353)** and discarded, and/or other unwanted information and/or media is also typically filtered from the response **R_{nm} (32)**, and/or the optional entity body **RH_{nm} (353)**, and discarded.

The optional response individual information groups **$LS_{nm1}...LS_{nmr}$ (360)** are typically parsed and/or processed and/or formatted therefrom the entity body **RH_{nm} (353)** of the response **R_{nm} (32)**, and/or parsed, and/or processed, and/or formatted, and/or organized, and/or grouped thereinto the addressable individual information groups **$LG_{nm1}...LG_{nmr}$ (80)** of the addressable response information group **RG_{nm} (57)**, correspondingly associated therewith the response **R_{nm} (32)**, as shown in FIGS. 100 and 101.

FIG. 100 shows the addressable response information group **RG_{nm} (57)** having the addressable individual information groups **$LG_{nm1}...LG_{nmr}$ (80)** parsed, and/or processed, and/or formatted, and/or organized, and/or grouped thereinto the addressable response information group **RG_{nm} (57)** therefrom the optional entity body **RH_{nm} (353)** of FIG. 99.

FIG. 101 shows a particular one of the optional response individual information groups **$LS_{nm1}...LS_{nmr}$ (360)**, designated as the optional response individual information group **LS_{nmr} (360)**, parsed, and/or processed, and/or formatted, and/or organized, and/or grouped thereinto a particular one of the addressable individual information groups **$LG_{nm1}...LG_{nmr}$ (80)**, designated as the addressable individual information group **LG_{nmr} (80)**.

The addressable individual information groups **$LG_{nm1}...LG_{nmr}$ (80)** are typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with the other, as the addressable individual information groups **$LG_{nm1}...LG_{nmr}$ (80)** are incorporated thereinto the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** therefrom the responses **$R_{n1}...R_{nm}$ (32)**.

Alternatively and/or additionally the addressable individual information groups **$LG_{nm1}...LG_{nmr}$ (80)** may be incorporated thereinto the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** therefrom the responses **$R_{n1}...R_{nm}$ (32)** in an as-is condition and/or in raw form.

The optional response links $LK_{nm1}...LK_{nmr}$ **(362)** are typically parsed, and/or processed, and/or formatted thereinto the corresponding optional links $LD_{nm1}...LD_{nmr}$ **(82)**. The optional response descriptions $DK_{nm1}...DK_{nmr}$ **(363)** are typically parsed, and/or processed, and/or formatted thereinto the optional descriptions $DD_{nm1}...DD_{nmr}$ **(83)**. The optional response prices/values $PK_{nm1}...PK_{nmr}$ **(364)** are typically parsed, and/or processed, and/or formatted thereinto the corresponding optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**. The optional response images $IK_{nm1}...IK_{nmr}$ **(365)** are typically parsed, and/or processed, and/or formatted thereinto the corresponding optional images $ID_{nm1}...ID_{nmr}$ **(85)**.

Each of the optional links $LD_{m1}...LD_{mr}$ **(82)** are also typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with the other. Alternatively and/or additionally the optional links $LD_{nm1}...LD_{nmr}$ **(82)** may be retained in an as-is condition and/or in raw form.

Each of the optional descriptions $DD_{nm1}...DD_{nmr}$ **(83)** are also typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with the other. Alternatively and/or additionally the optional links optional descriptions $DD_{nm1}...DD_{nmr}$ **(83)** may be retained in an as-is condition and/or in raw form.

Each of the optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)** are also typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with

the other. Alternatively and/or additionally the optional prices/values **$PD_{nm1}...PD_{nmr}$ (84)** may be retained in an as-is condition and/or in raw form.

Each of the optional images **$ID_{nm1}...ID_{nmr}$ (85)** are also typically parsed, and/or processed, and/or formatted for consistency of presentation and/or appearance one with the other. Alternatively and/or additionally the optional images **$ID_{nm1}...ID_{nmr}$ (85)** may be retained in an as-is condition and/or in raw form.

The optional links **$LD_{nm1}...LD_{nmr}$ (82)**, and/or the optional descriptions **$DD_{nm1}...DD_{nmr}$ (83)**, and/or the optional prices/values **$PD_{nm1}...PD_{nmr}$ (84)**, and/or the optional images **$ID_{nm1}...ID_{nmr}$ (85)**, correspondingly associated therewith the response **R_{nm} (32)**, may additionally and/or alternatively be parsed individually and/or separately, and incorporated thereinto the addressable response information group **RG_{nm} (57)** therefrom the optional entity body **RH_{nm} (353)**, as shown in FIG. 102.

The response header line **LR_{nm} (351)** and/or the optional response header fields **$JR_{n1}...JR_{nt}$ (352)** may also have information, which the server **PS (18)** and/or the clients **$C_1...C_n$ (16)** may use.

The optional information **LI_{nm} (361)** and/or certain information and/or media within the response **R_{nm} (32)**, particularly within the optional entity body **RH_{nm} (353)**, may be optionally used by the server **PS (18)** and/or the clients **$C_1...C_n$ (16)**, and/or

optionally incorporated thereinto the addressable response information group **RG_{nm} (57)**.

Each of the optional response individual information groups **$LS_{nm1}...LS_{nmr}$ (360)** therefrom each of the responses **$R_{n1}...R_{nm}$ (32)** may be compared one with the other, and duplicate ones of the of the optional response individual information groups **$LS_{nm1}...LS_{nmr}$ (360)** may be discarded.

Alternatively and/or additionally, each of the optional addressable individual information groups **$LG_{n11}...LG_{nmr}$ (80)** therefrom each of the addressable response information group s **$RG_{n1}...RG_{nm}$ (57)** may be compared one with the other, and duplicate ones of the optional addressable individual information groups **$LG_{n11}...LG_{nmr}$ (80)** may be discarded.

Each of the optional response individual information groups **$LS_{111}...LS_{nmr}$ (360)** and/or portions thereof therefrom the entity bodies **$RH_{11}...RH_{nm}$ (353)** of the responses **$R_{11}...R_{nm}$ (32)** may also be optionally compared one with the other, and duplicate ones of the of the optional response individual information groups **$LS_{111}...LS_{nmr}$ (360)** may be optionally discarded.

Alternatively and/or additionally, each of the optional links **$LK_{n11}...LK_{nmr}$ (362)**, and/or the optional descriptions **$DK_{n11}...DK_{nmr}$ (363)**, and/or the optional prices/values **$PD_{nm1}...PD_{nmr}$ (365)**, and/or the optional images **$IK_{n11}...IK_{nmr}$ (365)**,

therefrom each of the responses $R_{n1}...R_{nm}$ **(32)** may be compared one with the other of like kind, and duplicate ones of the optional links $LK_{n11}...LK_{nmr}$ **(362)**, and/or the optional descriptions $DK_{n11}...DK_{nmr}$ **(363)**, and/or the optional prices/values $PK_{nm1}...PK_{nmr}$ **(364)**, and/or the optional images $IK_{n11}...IK_{nmr}$ **(364)**, and/or a combination thereof may be discarded.

Alternatively and/or additionally, each of the optional links $LD_{n11}...LD_{nmr}$ **(82)**, and/or the optional descriptions $DD_{n11}...DD_{nmr}$ **(83)**, and/or the optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, and/or the optional images $ID_{n11}...ID_{nmr}$ **(85)** therefrom each of the addressable response information group s $RG_{n1}...RG_{nm}$ **(57)** may be compared one with the other of like kind, and duplicate ones of the optional links $LD_{n11}...LD_{nmr}$ **(82)**, and/or the optional descriptions $DD_{n11}...DD_{nmr}$ **(83)**, and/or the optional prices/values $PD_{nm1}...PD_{nmr}$ **(85)**, and/or the optional images $ID_{n11}...ID_{nmr}$ **(85)**, and/or a combination thereof may be discarded.

The optional links $LK_{n11}...LK_{nmr}$ **(362)** are typically compared one with the other, and duplicate ones of the corresponding optional links $LK_{n11}...LK_{nmr}$ **(362)**, and/or the corresponding optional descriptions $DK_{n11}...DK_{nmr}$ **(363)**, and/or the corresponding optional images $IK_{n11}...IK_{nmr}$ **(364)**, and/or the corresponding optional prices/values $PK_{nm1}...PK_{nmr}$ **(365)** are discarded, leaving only one of any ones of the duplicate optional links $LK_{n11}...LK_{nmr}$ **(362)** and/or the corresponding optional descriptions $DK_{n11}...DK_{nmr}$ **(363)**, and/or the corresponding optional images $IK_{n11}...IK_{nmr}$ **(364)**, and/or the optional prices/values $PK_{nm1}...PK_{nmr}$ **(365)** remaining.

The optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)** and/or the corresponding optional links $LD_{n11}...LD_{nmr}$ **(82)** and/or the corresponding optional descriptions $DD_{n11}...DD_{nmr}$ **(83)**, and/or the corresponding optional images $ID_{n11}...ID_{nmr}$ **(85)** may be sorted with respect to the optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, in accordance with sorting criteria in the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)** and/or in accordance with default criteria resident within the server **PS (18)** and/or the client C_n **(16)**.

The optional links $LD_{n11}...LD_{nmr}$ **(82)**, and/or the corresponding optional descriptions $DD_{n11}...DD_{nmr}$ **(83)**, and/or the corresponding optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, and/or the corresponding optional images $ID_{n11}...ID_{nmr}$ **(85)** may be sorted, for example, in ascending order with respect to the optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)** having the lowest price therein being presented to the user U_n **(12)** at the user interface I_n **(14)** first and the highest price therein last.

Alternatively and/or additionally, the optional links $LD_{n11}...LD_{nmr}$ **(82)**, and/or the corresponding optional descriptions $DD_{n11}...DD_{nmr}$ **(83)**, and/or the corresponding optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, and/or the corresponding optional images $ID_{n11}...ID_{nmr}$ **(85)** may be sorted, for example, in ascending or descending alphabetical order with respect to the optional links $LD_{n11}...LD_{nmr}$ **(82)** and/or the corresponding optional descriptions $DD_{n11}...DD_{nmr}$ **(83)** being presented to the user U_n **(12)** at the user interface I_n **(14)**.

Other sorting criteria may be used for the optional links $LD_{n11}...LD_{nmr}$ **(82)**, and/or the optional descriptions $DD_{n11}...DD_{nmr}$ **(83)**, and/or the optional prices/values $PD_{nm1}...PD_{nmr}$ **(84)**, and/or the optional images $ID_{n11}...ID_{nmr}$ **(85)**, and may depend upon needs of the user U_n **(12)**. The sorting criteria may be determined by the user U_n **(12)**.

Sorting criteria gives the user U_n **(12)** the ability to formulate how information is presented to the user U_n **(12)** at the user U_n **(12)**, and may be incorporated thereinto the optional instructions $VJ_{n1}...VJ_{nk}$ **(52)**, which may be entered thereinto the user interface I_n **(14)** therethrough the user input UI_n **(25)** by the user U_n **(12)**. The sorting criteria may additionally and/or alternatively be resident within the server **PS (18)** and/or the client C_n **(16)**.

Now again, the labelled individual information group LL_{nzu} **(86)** associated therewith the addressable query information group GI_{nz} **(63)** has the optional group identifier GL_{nc} **(87)**, the optional query link identifier LN_{ncu} **(88)**, the optional resource location identifier SU_{nw} **(89)**, the optional server and/or query identifier SI_{nm} **(90)**, and/or the optional server link identifier LX_{nmr} **(91)** appended thereto the addressable individual information group LG_{nmr} **(80)**, as shown in FIG. 68.

FIGS. 103 and 104 show typical ones of the addressable query information group GI_{nz} **(63)**, based upon certain sorting and/or grouping criteria, having the labelled individual information groups $LL_{nz1}...LL_{nzu}$ **(86)**, the optional database labelled individual

information groups **RL_{nz1}...RL_{nzx} (92)**, the optional query description **QT_{nz} (93)**, the optional server descriptions and/or links **ST_{nz1}...ST_{nzf} (94)**, and the optional advertisements and/or links **LT_{nz1}...LT_{nzt} (95)** incorporated thereinto certain typical ones of the typical service and/or information response forms **IS_n (39)** of FIGS. 27-52.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, the server **PS (18)** and/or the clients **C_1...C_n (16)**, then, are capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers **S_1...S_z (20)**, and/or the optional servers **SO_1...SO_p (22)**, and/or the clients **C_1...C_n (16)**, having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto the user responses **UR_1...UR_n (37)** for delivery to the user interfaces **I_1...I_n (14)** and use by the users **U_1...U_n (12)**.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, the server **PS (18)** and/or the clients **C_1...C_n (16)**, then, are capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of each of the optional response individual information groups **LS_{111}...LS_{nmr} (360)**, and/or the optional response links **LK_{111}...LK_{nmr} (362)**, and/or the optional response descriptions **DK_{111}...DK_{nmr} (363)**, and/or the optional

response prices/values $PK_{111}...PK_{nmr}$ **(364)**, and/or the optional response images $IK_{nm1}...IK_{nmr}$ **(365)** therefrom the entity bodies $RH_{11}...RH_{nm}$ **(353)** of the responses $R_{11}...R_{nm}$ **(32)**, having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto the user responses $UR_1...UR_n$ **(37)** for delivery to the user interfaces $I_1...I_n$ **(14)** and use by the users $U_1...U_n$ **(12)**.

M. Additional Features and/or Other Considerations

The present invention is directed to a client-server multitasking system and process capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries of the same and/or different ones of the servers, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly, and communicating service and/or information responses to the requestors and/or users substantially simultaneously and on-the-fly. The client-server multitasking system and process is capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks, and be capable of searching search engines and/or other sites substantially simultaneously and on-the-fly.

The client-server multitasking system and process is capable of retrieving substantially multiple simultaneous services and/or information having the same and/or different criteria from the same and/or different servers, sorting, grouping, and/or organizing the responses from the servers and/or the clients into information and/or services responses, and communicating the service and/or information responses to the requestors and/or users substantially simultaneously. The requestors and/or the users may make substantially simultaneous service and/or information requests of servers and clients, using the same and/or different queries, and/or the same and/or different instructions. The same and/or different uniform resource locators, target resources, and/or paths may be used.

The client-server multitasking system and process is capable of making multiple substantially simultaneous same and/or different requests of same and/or different servers, organizing responses from the servers into service and/or information responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously.

The client-server multitasking system and process is also capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites, in accordance with instructions from the requestors, and/or the users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system is capable of use in a variety of applications, and is capable of information comparison and/or trend analysis of information from the same and/or

different sources substantially simultaneously. The client-server multitasking system and process is also be capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof, be capable of being searched and/or queried, querying sites referenced therein the client-server multitasking system search engine and/or database, and updating information and/or services stored therein.

The client-server multitasking system and process are capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

A requestor and/or user is capable of making substantially multiple simultaneous same and/or different requests of same and/or different servers. The client server-multitasking system and process is capable of organizing responses from the servers into service and/or information responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously, and on-the-fly.

The requestors and/or users are capable of making substantially simultaneous service and/or information requests of the same and/or different ones of servers and/or clients, using the same and/or different queries, and/or the same and/or different instructions.

The client-server multitasking system and process is capable of retrieving substantially multiple simultaneous services and/or information having the same and/or different criteria from the same and/or different servers, sorting, grouping, and/or organizing the responses from the servers and/or the clients into information and/or services responses, and communicating the service and/or information responses to the requestors and/or the users substantially simultaneously. The same and/or different ones of uniform resource locators, target resources, and/or paths may be used.

The requestors and/or users are capable of making multiple simultaneous searches. The searches may have at least one or a plurality of same or different queries of the same and/or different servers and/or clients. The responses from the servers and/or the clients may be of being organized into the service and/or information response in a variety of formats. The responses may be sorted within the service and/or information response, such as, for example, by category, query, group, page, order of importance, ascending and/or descending order, alphabetically and/or numerically, or other characteristics, as determined by the requestor, and/or the user, and/or the client-server multitasking system, and/or the responses may be combined within the service and/or information response, such as, for example, interleaving the responses one with the other, such as, for example, by order of relevance or other parameters. The responses may also be capable of being grouped by search criteria, server, order of importance, or by numerical factors such as value, price, or other numerical quantifier. For example, the responses may be presentable, for example, in ascending or descending order in interleaved format, such as top ones, twos, threes, and so on, or presentable separately

to the requestor and/or the user. The order may be order of importance or relevance related, or, for example, numerically valued, such as price or stock market value.

The client-server multitasking system and process is be capable of information and/or service retrieval from the same and/or different ones of the servers substantially simultaneously and on-the-fly, using the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process is capable of substantially multiple simultaneous searching, using the same and/or different ones of queries of the same and/or different ones of the clients and/or servers, which may be search engines, and/or sites, and/or servers, and/or locations on the network, and additionally and/or alternatively building a client-server multitasking search engine and/or database. The client-server multitasking search engine and/or database is capable of storing the information and/or services retrieved therefrom the search engines, and/or sites, and/or servers, and/or locations being queried on the network therein, and building the client-server search engine and/or database. The client-server multitasking search engine should is also capable of being queried either directly and/or in combination therewith the substantially simultaneous searching, using the same and/or different queries of the same and/or different search engines, sites, servers, and/or databases. The client-server multitasking search engine and/or database should is also capable of updating information and/or services stored therein by querying sites, servers, search engines,

and/or databases containing information and/or services referenced in client-server multitasking search engine and/or database.

The client-server multitasking system and process is also capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks.

The client-server multitasking system and process are capable of substantially simultaneous searching of the same and/or different ones of search engines and/or sites on the network substantially on-the-fly, with the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process are also capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites, in accordance with instructions from the requestors and/or the users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system and process are also capable drilling down and/or up to different levels within the search engines, sites, and/or servers being queried.

The client-server multitasking system and process are capable of providing manual and/or timed updates. Such timed updates allow for motion related presentation to the requestor and/or the user.

The client-server multitasking system and process are capable of incorporating information and/or services thereinto a variety of user interfaces at different locations therein the user interfaces, grouping, and/or organizing the information and/or services, and optionally eliminating duplicate information and/or services.

The client-server multitasking system and process are capable of incorporating links, graphics, video, text, and audio, and/or combinations thereof, and selective advertising, according to selectable search, query, sorting, and/or grouping criteria, and/or combinations thereof thereinto the information and/or services to be delivered thereto the user interfaces. The requestor and/or the user may place orders, such as purchases, and/or other types of orders, payments, confirmations thereof, and/or combinations thereof, either directly and/or therethrough servers and/or sites thereon the network.

The client-server multitasking system is capable of use in a variety of applications, and is capable of information comparison and/or trend analysis of information from the same and/or different sources substantially simultaneously. The client-server multitasking system is capable of, for example, determining best query results, with respect to a plurality of search engine results; purchasing and/or price comparisons, viewing and/or reviewing prices/values and trends for different sites, determining lowest costs and lowest cost analyses for wholesale and retail purposes; product availability, e.g., airline tickets, pricing, and ticket availability, from different airlines to the same and/or different locations; purchasing of commodities and/or stocks form the

same and/or different sites with updates every few seconds and/or minutes; obtaining prices and/or values in different stock markets substantially simultaneously; and searching for jobs on the same and/or different job sites, using the same and/or different job criteria, for example, on a daily basis, the job sites having changing job availability; and/or a combination thereof, all substantially simultaneously. The client-server multitasking system is capable of presenting information and/or services for review and/or updating from the same and/or different ones of sites, servers, and/or applications substantially simultaneously, and trend analysis thereof, using a variety of sorting, grouping and/or organizing criteria, according to the needs of the requestor, and/or the user, and/or resident within the client-server multitasking system.

The client server-multitasking system and process are capable of service and/or information retrieval from at least one server, organization, communication, and presentation of such services and/or information to at least one requestor and/or user, and/or optional storage, and/or retrieval of such services and/or information from the optional storage. The client-server multitasking system and process are capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof. The client-server multitasking system search engine and/or database having stored information and/or services therein are also searchable, are capable of full text searches thereof, and are searchable by the servers and/or the clients on the network, either separately and/or in combination therewith the substantially simultaneous multiple same and/or different searches and/or queries of the

same and/or different servers on the network. Information therein the client-server multitasking system search engine and/or database are also searchable and/or retrievable, and are capable of being incorporated therein the service and/or information responses delivered thereto the user interfaces, according to search criteria, selectively and/or automatically, by the requestor and/or the user. The client-server multitasking system search engine and/or database are capable of spidering, and/or roboting, and/or querying sites, services and/or information to be stored therein and/or stored therein the client-server multitasking system search engine and/or database, and updating the services and/or information to be stored and/or stored therein the client-server multitasking system search engine and/or database.

The client-server multitasking system and process, then, are capable of information and/or service retrieval from the same and/or different ones of servers substantially simultaneously and on-the-fly, using the same and/or different ones of queries of the same and/or different ones of the servers, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly, and communicating service and/or information responses to the requestors and/or users substantially simultaneously and on-the-fly. The client-server multitasking system and process are capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks, and are capable of searching search engines and/or other sites substantially simultaneously and on-the-fly. The client-server multitasking system and process are capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites,

in accordance with instructions from the requestors, and/or users, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system are capable of use in a variety of applications, and capable of information comparison and/or trend analysis of information from the same and/or different sources substantially simultaneously. The client-server multitasking system and process are capable of building a client-server multitasking system search engine and/or database therefrom responses returned from the servers, search engines, and/or sites being queried and/or searched, and/or having requests made thereof, is capable of being searched and/or queried, querying sites referenced therein the client-server multitasking system search engine and/or database, and updating information and/or services stored therein.

The client-server multitasking system and process are capable of retrieving, parsing, processing, formatting, organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers and/or clients having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto user responses for delivery to and use by the requestors and/or users.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, the server **PS (18)** and/or the clients $C_1 \ldots C_n$ **(16)**, then, are capable of retrieving, parsing, processing, formatting,

organizing, grouping, sorting, and consolidating services and/or information therefrom the same and/or different ones of the servers **$S_1...S_z$ (20)**, and/or the optional servers **$SO_1...SO_p$ (22)**, and/or the clients **$C_1...C_n$ (16)**, having the same and/or different structures, formats, organizations, groupings, and/or data structures, and incorporating the parsed, processed, formatted, organized, grouped, sorted, and consolidated services and/or information thereinto the user responses **$UR_1...UR_n$ (37)** for delivery to the user interfaces **$I_1...I_n$ (14)** and use by the users **$U_1...U_n$ (12)**.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, which in itself is a process, the user interfaces **$I_1...I_n$ (14)**, and/or the clients **$C_1...C_n$ (16)**, and/or the server **PS (18)**, and/or the servers **$S_1...S_z$ (20)**, and/or the optional servers **$SO_1...SO_p$ (22)** may be constructed of hardware, firmware, software, machines, and/or operating systems, and/or combinations thereof, and/or other suitable means, and/or other components and/or systems, and/or combinations thereof. Such hardware, firmware, software, machines, and/or operating systems, and/or combinations thereof, other components and/or systems, and/or other suitable means, and/or combinations thereof may have therein and/or be resident therein, but are not limited to computer components and/or systems, television and/or telecommunications components and/or systems, merger of television and computer systems, and/or merger of television and/or computer and/or telecommunications systems, networks, simulators, interactive technologies and/or systems, cybernetics and/or cybernetic systems, and/or combinations thereof.

The clients $C_1...C_n$ **(16)**, the server **PS (18)**, the servers $S_1...S_z$ **(20)**, and/or the optional servers $SO_1...SO_p$ **(22)** may be search engines, and/or sites, and/or servers, and/or clients, and/or URL's, and/or databases, and/or locations on the network, and/or other suitable components and/or systems, and/or other suitable means, and/or combinations thereof, which may be capable of communicating on the network **24**. The scope of the client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, however, is not limited to search engines, and/or sites, and/or servers, and/or clients, and/or URL's, and/or databases, and/or locations on the network, and/or other suitable components and/or systems, and/or other suitable means, and/or combinations thereof, which may be capable of communicating on the network **24**, as it is recognized that other components, systems, technologies, and/or operating systems exist and/or emerge that may make use of the benefits of the present invention, and are either on the horizon and/or are recognized to be forthcoming.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, which in itself is a process, the user interfaces $I_1...I_n$ **(14)**, and/or the clients $C_1...C_n$ **(16)**, and/or the server **PS (18)**, and/or the servers $S_1...S_z$ **(20)**, and/or the optional servers $SO_1...SO_p$ **(22)**, may then be hardware, firmware, software, and/or machines, and/or operating systems, and/or other suitable means, and/or combinations thereof, and may have and/or be resident within general purpose computers, special purpose computers, televisions, computer-television combinations, telecommunications systems, networks, mergers of

computer and/or television technology and/or telecommunications technology and/or network technology, media, film, entertainment, interactive technologies and/or systems, cybernetics and/or cybernetic systems and/or technology, components, and/or systems, and/or other suitable means, and/or combinations thereof, and may be integrated one with the other and/or with other components and/or systems of one another, and may each be substantially the same and/or different one from the other.

The client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, which in itself is a process, the user interfaces $I_1 \ldots I_n$ **(14)**, and/or the clients $C_1 \ldots C_n$ **(16)**, and/or the server **PS (18)**, and/or the servers $S_1 \ldots S_z$ **(20)**, and/or the optional servers $SO_1 \ldots SO_p$ **(22)** may each have the same and/or different hardware, firmware, software, and/or ones of operating systems, and/or other suitable means, and/or combinations thereof. The optional databases **41** and/or **42** may also be hardware, firmware, software, and/or machine based, and/or other suitable means, and/or a combinations thereof, have the same and/or different ones of operating systems and/or combinations thereof, and may have memory components associated therewith.

The client-server multitasking system and process is capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area networks, wide area networks, and local area networks. Such networks may be Earth based, satellite based, and/or space based, and/or other suitable means, and/or combinations thereof.

The scope of the client-server multitasking system **10** of the present invention, the client-server multitasking process **99**, and the multitasking process **104**, however, is not limited to such components, systems, technologies, operating systems and/or networks, as other components, systems, technologies, and/or operating systems exist and/or emerge that may make use of the benefits of the present invention, and are either on the horizon and/or are recognized to be forthcoming.

Determination as to whether the server **PS (18)** performs the multitasking process **104**, and/or whether particular ones of the clients $C_1 \ldots C_n$ **(16)** perform the multitasking process **104**, may optionally be made at the particular ones of the clients $C_1 \ldots C_n$ **(16)** and/or the server **PS (18)**. Such determination may optionally be made by the users $U_1 \ldots U_n$ **(12)**, and/or be based upon processing power, capabilities, and/or configurations of the particular ones of the clients $C_1 \ldots C_n$ **(16)**, the server **PS (18)**, and the network **24** considerations (traffic, load, and/or other considerations).

The client-server multitasking search engine and/or database is capable of updating information and/or services stored therein by querying sites, servers, search engines, and/or databases containing information and/or services referenced in client-server multitasking search engine and/or database.

The client-server multitasking system and process is capable of use on a variety of networks, such as global area networks, and in particular the internet, metropolitan area

networks, wide area networks, and local area networks, and is capable of searching search engines and/or other sites substantially simultaneously and on-the-fly.

The client-server multitasking system and process is capable of substantially simultaneous searching of the same and/or different ones of search engines and/or sites on the network substantially on-the-fly, with the same and/or different ones of the queries, and sorting, grouping, and/or organizing responses therefrom substantially on-the-fly.

The client-server multitasking system and process is also capable of sorting, grouping, and/or organizing results therefrom the servers, search engines, and/or sites, in accordance with instructions from the requestors, and/or instructions resident within the client-server multitasking system and/or process. The client-server multitasking system and process is also capable drilling down and/or up to different levels within the search engines, sites, and/or servers being queried.

Now again, the typical ones of the service and/or information entry request forms **$IE_1 \ldots IE_n$ (38)** at the user interfaces **$I_1 \ldots I_n$ (14)** shown in FIGS. 5A, 5B, and 6-10 are typical examples of the service and/or information entry request forms **$IE_1 \ldots IE_n$ (38)** at the user interfaces **$I_1 \ldots I_n$ (14)**, a much larger variety of which is possible. Names and/or links and/or other information are incorporated therein the typical ones of the service and/or information entry request forms **$IE_1 \ldots IE_n$ (38)** shown in FIGS. 5A, 5B, and 6-10 for illustrative purposes, and are not intended to limit the large variety of the

service and/or information entry request forms **$IE_1...IE_n$ (38)** and the names and/or links and/or information that are possible, and that may be incorporated thereinto the service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)**.

Now again, The typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26 are typical examples of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**, a much larger variety of which is possible. Typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** therein the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26 are typical examples for illustrative purposes, and are not intended to limit the substantially infinite variety of the queries **$QQ_{n1}...QQ_{nm}$ (53)**, the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** that may be entered thereinto the service and/or information entry request forms **$IE_1...IE_n$ (38)**, to derive the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**. Likewise, names and/or links and/or other information are incorporated therein the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** shown in FIGS. 11-26 for illustrative purposes, and are not intended to limit the large variety of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** and the names and/or links and/or information that are possible, and that may be incorporated thereinto the

completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)**.

Now again, the typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 27-52 are typical examples of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, a much larger variety of which is possible. FIGS. 27-52 illustrate typical examples of typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)** to the typical queries typical queries **$QQ_{n1}...QQ_{nm}$ (53)**, the typical ones of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the typical optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** having been entered therein the typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26.

The typical examples of the typical ones of the user responses **$UR_1...UR_n$ (37)**, as typical service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)** are for illustrative purposes, and are not intended to limit the substantially infinite variety of the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, the queries **$QQ_{n1}...QQ_{nm}$ (53)**, the server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, and the optional instructions **$VJ_{n1}...VJ_{nk}$ (52)** that may be entered thereinto the service and/or

information entry request forms **$IE_1...IE_n$ (38)**, to derive the to the completed service and/or information entry request forms **$IF_1...IF_n$ (230)**, and which result in the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**. Likewise, names and/or links and/or other information are incorporated therein the typical ones of the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, shown in FIGS. 27-52 for illustrative purposes, and are not intended to limit the large variety of the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, and the names and/or links and/or information that are possible, and that may be incorporated thereinto the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**.

The server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, such as WebCrawler, Altavista, Lycos, Infoseek, Excite, Yahoo, LookSmart, HotBot, Dejanews, Amazon, Borders, BarnesandNoble, and/or others that may have been used herein are for illustrative purposes, to illustrate typical ones of the service and/or information entry request forms **$IE_1...IE_n$ (38)** at the user interfaces **$I_1...I_n$ (14)** shown in FIGS. 5A, 5B, and 6-10, typical ones of the completed service and/or information entry request forms **$IF_1...IF_n$ (230)** at the user interfaces **$I_1...I_n$ (14)** shown in FIG. 11-26, and/or typical ones of the user responses **$UR_1...UR_n$ (37)**, as the service and/or information response forms **$IS_1...IS_n$ (39)** at the user interfaces **$I_1...I_n$ (14)**, shown in FIGS. 27-52, and other examples used herein, are used merely to illustrate typical examples of the server

addresses **$AQ_{n1}...AQ_{nm}$ (54)** and results therefrom that may be possible. The examples shown in FIGS. 5A, 5B, and 6-10, 11-26, and FIGS. 27-52, and other examples used herein, are examples of the substantially infinite variety of the server addresses **$AQ_{n1}...AQ_{nm}$ (54)** that may be used with the client-server multitasking system **10** of the present invention and the results that may be obtained therefrom. The typical server addresses **$AQ_{n1}...AQ_{nm}$ (54)**, such as WebCrawler, Altavista, Lycos, Infoseek, Excite, Yahoo, LookSmart, HotBot, Dejanews, Amazon, Borders, BarnesandNoble, and/or others that may have been used herein are for illustrative purposes only and are not intended to limit the scope of the client-server multitasking system **10** of the present invention.

It should also be obvious that the typical queries **$QQ_{n1}...QQ_{nm}$ (53)** used in the examples shown in FIGS. 5A, 5B, and 6-10, 11-26, and FIGS. 27-52 and other examples used herein are for illustrative purposes and are merely typical examples of the substantially infinite variety of the queries **$QQ_{n1}...QQ_{nm}$ (53)** that may be used with the client-server multitasking system **10** of the present invention and the results that may be obtained therefrom, and are not intended to limit the substantially infinite variety of the queries **$QQ_{n1}...QQ_{nm}$ (53)** that may be used with the client-server multitasking system **10** of the present invention and the results that may be obtained therefrom. The typical queries **$QQ_{n1}...QQ_{nm}$ (53)** used in the examples shown in FIGS. 5A, 5B, and 6-10, 11-26, and FIGS. 27-52 and other examples used herein are for illustrative purposes only and are not intended to limit the scope of the client-server multitasking system **10** of the present invention.