

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

EHIERARCHY LLC)
)
Plaintiff,)
) Civil Action No. 1:20-cv-887-ER
v.)
) JURY TRIAL DEMANDED
VERIZON MEDIA, INC.)
)
Defendant.)
_____)

AMENDED COMPLAINT

For its Complaint, Plaintiff eHierarchy LLC ("eHierarchy"), by and through the undersigned counsel, alleges as follows:

THE PARTIES

1. eHierarchy is a Texas limited liability company with a place of business located at 312 W 8th Street, Dallas, Texas 75208.
2. Defendant Verizon Media, Inc. is a company with, upon information and belief, a place of business located at 770 Broadway, New York, New York 10003.

JURISDICTION AND VENUE

3. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*
4. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.
5. Upon information and belief, Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in this district.

6. Venue is proper in this district pursuant to § 1400(b).

THE PATENTS-IN-SUIT

7. On October 2, 2012, U.S. Patent No. 8,280,932 (the "'932 patent"), entitled "Computer System For Automatic Organization, Indexing and Viewing Multiple Objects From Multiple Sources," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '932 patent is attached hereto as Exhibit A.

8. On November 1, 2016, U.S. Patent No. 9,483,169 (the "'169 patent"), entitled "Computer System For Automatic Organization, Indexing and Viewing of Information From Multiple Sources," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '169 patent is attached hereto as Exhibit B.

9. The '932 patent and '169 patent (collectively, the "patents-in-suit") have the same specifications, except for the Cross-Reference to Related Applications section, and both claim priority to the same provisional patent application filed on July 16, 2002 (Provisional App. No. 60/396,439) and are continuations from U.S. Patent Application No. 10/621,689, which was filed on July 16, 2003 and issued as U.S. Patent No. 7,275,063.

10. The claims of the patents-in-suit, including the asserted claims, when viewed as a whole, including as ordered combinations, are not merely the recitation of well-understood, routine, or conventional technologies or components. The claimed inventions were not well-known, routine, or conventional at the time of the invention, over approximately 18 years ago, and represent specific improvements over the prior art and prior existing systems and methods.

11. At the time of the patented inventions, "differences in the nature and manner in which content data is stored in individual [computer] files and in proprietary databases, and the lack of useful metadata about the files or the database content data, makes them closed and

partitioned. This closed and portioned nature of files and databases poses numerous, significant organizational, archival and retrieval problems." '932 patent at 2:15-21; '169 patent at 2:12-18.

12. As explained in the patents-in-suit, there were several drawbacks with then existing computer information management systems.

13. For example,

[T]here is no general software mechanism (program) in contemporary operating systems to link or group information from diverse independent sources when they are managed by separate applications. This problem with presently available operating systems and application programs was succinctly set forth by Mr. Mundie of Microsoft as follows (referring to Bill Gates):

The scenario is the dream, not something defined in super-gory detail," says Mundie. "It's what Bill and I focus on more than the business plans or P&Ls. For a project as big as Longhorn, there could have been 100 scenarios, but Bill does this thing with his mind where he distills the list down to a manageable set of factors that we can organize developer groups around." Gates' scenarios usually take the form of surprisingly simple questions that customers might have. Here's a sampling from our interviews: "Why are my document files stored one way, my contacts another way, and my e-mail and instant-messaging buddy list still another, and why aren't they related to my calendar or to one another and easy to search en masse? "

(Quote from Fortune Magazine, available on the Internet at: <http://www.fortune.com/fortune/ceo/articles/0,15114,371336-3,00.html>)

In addition, data stored in computer systems does not have, as a fundamental aspect, relationship information other than the most trivial of forms. For example, files may be grouped together within folders or directories, or they may be labeled with a color, but otherwise there is very little functionality to allow the grouping or linking of disparate pieces of information within the system.

In particular, when a file or other piece of information is logically involved in multiple groupings, linking, cross-referencing or relating the groupings is cumbersome at best with current systems. For example, where a given file "myCarFinances.doc" logically should be grouped in both a "Finances" group and an "Autos" group, there are no truly easy choices for accomplishing such multiple grouping. Either a copy of the file must be made in two separate "Finances" and "Autos" folders, in which case the user must be careful to update both files when changes are made; or a shortcut or alias file must be created and placed in these folders. Both currently available approaches involve tedious, repetitive manual effort to create and manage that becomes exponentially more difficult as the number of groupings or cross-references increases.

Because of this, cross-referencing and filing objects in multiple locations is difficult, error-prone, and time-consuming. If copies are made for each location, valuable disk space is wasted, and the user is left with having to manage changes by making new copies whenever the original is modified and remembering every location of every copy. Many cross-references require many copies, further complicating the task. And even if the user decides to create alias files instead of making actual copies, the alias files still take up space, and the management issue is equally complex and time-consuming.

'932 patent at 2:28-3:15; '169 patent at 2:25-3:14.

14. Among other things, the inventor of the patents-in-suit wanted to create a computer system having "a simple-to-use data structure and operating mechanism to link information together in a dynamic, memory-and-space-efficient manner, without modifying the original information or propagating numerous, storage-space-robbing duplicates, each of which individually must be updated as new versions arise." '932 patent at 3:25-30; '169 patent at 3:24-30.

15. Indeed, as explained in the specification, quoted above:

cross-referencing and filing objects in multiple locations is difficult, error-prone, and time-consuming. If copies are made for each location, valuable disk space is wasted, and the user is left with having to manage changes by making new copies whenever the original is modified and remembering every location of every copy. Many cross-references require many copies, further complicating the task. And even if the user decides to create alias files instead of making actual copies, the alias files still take up space, and the management issue is equally complex and time-consuming.

'932 patent at 3:6-15; '169 patent at 3:4-14. There was thus a need to improve computer information management systems, and existing technology did not permit linking or grouping information from diverse independent sources when they are managed by separate applications.

'932 patent at 2:28-31; '169 patent at 2:25-28.

16. Moreover, the inventor concluded:

Accordingly, there is a long felt need in the art to provide a truly open computer system having data structures, input interfaces, displays and operational systems that permits the organization of information, as data objects, in a wide variety of files and databases, which computer system is independent of the source of the

information objects, is dynamic and automatic, permitting faster archiving, retrieval and viewing of the information and providing more meaningful and useful links for better organization and indexing of the information. What is needed is a simple-to-use data structure and operating mechanism to link information together in a dynamic, memory-and-space-efficient manner, without modifying the original information or propagating numerous, storage-space-robbing duplicates, each of which individually must be updated as new versions arise.

'932 patent at 3:16-30; '169 patent at 3:15-30.

17. The asserted claims of the patents-in-suit are directed to specific improvements in computer information management systems. Among other things, the asserted claimed inventions improve functionality of computers and computer information management systems and methods. Including as noted in the patents-in-suit, the claimed technologies comprise innovative systems and processes that provide memory-and-space-efficiency and result in a better user experience over then-existing technologies. The patents-in-suit thus provided concrete applications that improved computers and computer information systems.

18. Additionally, the inventions of the asserted claims of the patents-in-suit comprise improvements in computers, including improving memory efficiency and storage.

19. Accordingly, the patents-in-suit describe "a computer data processing system, described in more detail below, that includes a central processing unit configured with operating system and applications software, the latter which includes a novel integrated computer control software system for the management of informational objects including recognizing, organizing, creating and viewing relationships between multiple objects. The overall inventive computer control system, given the shorthand term 'MFS' for metadata filing system, includes one or more novel software applications that provide both a user-interface and underlying component architecture, including an object-oriented database structure, or object store, and a metadata database structure, or catalog, for the management and rendering of these objects to a display

viewable by a user in response to user input, regardless of the source or nature of the object."

'932 patent at 5:33-47; '169 patent at 5:32-47.

20. Further, as explained in the patents-in-suit:

The inventive MFS computer data processing system for automatic organization, indexing and viewing of information objects from multiple sources is characterized by: at least one central processing unit configured with client operating system and applications software; (and/or in the case of Internet operations the MFS system is configured with server software to host a site on the Internet including the serving of both static, generally informational Web pages, and dynamic Web pages, of information to individuals including information that may be generated on the fly in response to individual requests, routers and interfaces including at least one client and/or network interface to at least one network data communication device for exchange of data among computers, routers and input devices); and peripheral input and output devices linked to said client/server central processing unit in an architecture so as to provide client and/or site operation and functionality; said central processor unit includes at least one memory coupled to a bus; said memory including selected program structures stored therein, including an operating system program structure, at least one client and/or server system management program structure, at least one hierarchical data storage management system program structure, and selected application program code structures including the novel MFS code structure described herein; said central processing unit reading data input so as to implement system functionality selected from operational, computational, archival, sorting, screening, classification, formatting, rendering, printing and communication functions and processes; and data record structures selectably configurable in object, metadata, relational or hierarchical databases and which data records are selectably associatable, correlatable and callable; said central processing unit reading from user, network or Internet server input devices data relating to objects received by, created by or selected by individual users, and processing such data in said central processing unit so as to generate and manage informational objects by special metadata linking to reference objects created, received or selected and/or input by users, and so as to provide information management tools that facilitate communication to generate, transmit and receive, archive, search, order, retrieve and render objects, including information organization personalized for each individual user based on preferences selected by the user.

'932 patent at 5:48-6:25; '169 patent at 5:48-6:23.

21. These noted improvements over the prior art represent meaningful limitations and/or inventive concepts based upon the state of the art over a decade ago. Further, including in view of these specific improvements, the inventions of the asserted claims, when such claims are

viewed as a whole and in ordered combination, are not routine, well-understood, conventional, generic, existing, commonly used, well known, previously known, typical, and the like over approximately eighteen years ago, including because, until the inventions of the asserted claims of the patents-in-suit, the claimed inventions were not existing or even considered in the field.

22. The asserted claims, including as a whole and where applicable in ordered combination, comprise, *inter alia*, a non-conventional and non-generic arrangement with an integrated computer control software system for the management of informational objects including recognizing, organizing, creating and viewing relationships between multiple objects, which includes one or more novel software applications that provide both a user-interface and underlying component architecture, including an object-oriented database structure, or object store, and a metadata database structure, or catalog, for the management and rendering of these objects to a display viewable by a user in response to user input.

23. The claimed inventions are necessarily rooted in computer technology, i.e., a computer data processing system that includes a central processing unit configured with operating system and applications software and an integrated computer control software system for the management of informational objects including recognizing, organizing, creating and viewing relationships between multiple objects and comprise improvement over prior technologies in order to overcome the problems, including those noted above, specifically arising in the realm of computer data processing systems. The claimed solutions amount to an inventive concept for resolving the particular problems and inefficiencies noted above.

24. As the patents-in-suit note, the inventions have significant industrial applicability computer-related technology and improve that technology:

The inventive data storage organization, archiving, retrieval and presentation system architecture and technology can be used in a wide variety of

applications; the primary being desktop file organization and server data management. The inventive system is remarkably robust, yet is a relatively small application program that can function with any type of Operating System: Microsoft Windows, Windows NT, Windows 2000, and Windows XP; Apple Macintosh OS 9 and OSX; BSD Unix, HP-UX, Sun Solaris, Linux, and the like. Currently the inventive technology is preferably implemented in its current best mode in a form that is executable on the Apple Macintosh OS9 and OSX operating systems.

As to Desktop Organization, the invention is useful as an improved desktop organization application for all types of data, limited only by the domains that can be conceived-of. Domains may be easily created to extend the MFS capabilities to new areas of expertise.

As to File Organization, similar to the Apple Macintosh Finder or Microsoft Windows Explorer, the inventive MFS system provides basic disk navigation and display features. In addition, the File domain allows additional properties to be specified for files, including: a due date; a file species (e.g. an application, a bookmark, a text-readable file, an image file, a font file, etc.); and a file path. Folders have additional properties that are maintained automatically: the size of the contents of the folder; and the depth of the folder from the root directory of the disk, among others.

As to Image Cataloging, image asset management is easily implemented as an extension of the MFS File domain. A domain that can extract relevant information from images found on disk (e.g. size, type of image, colors used, resolution, and so on) is created as a representative object within MFS that has the given properties. Users can then view and select the images that satisfy certain collection criteria. Comments on the objects can also be used to describe and/or define the content of the images, and collections can be created to organize all images based on their described/defined content.

As to Personal Information Management the inventive MFS system is useful for scheduling, organization and tracking of appointments, contacts, events, notes, projects, and tasks as typical kinds of objects that are defined by the PIM (Personal Information Management) domain. What makes the inventive system of particular interest to industry is that the PIM Domain functionality provides a new feature: the ability to organize information objects by person and by project.

As to EMail, a basic embodiment of the inventive MFS system provides basic EMail client services. The objects that the basic EMail domain defines include: mailboxes, email messages, and signatures. This can be expanded to include all types of e-business trust services, including: signature legalization; payment transfers; electronic record retention and verification; electronic filing of documents, including formal/legal documents, applications, forms and the like; privacy and confidentiality guards; identity verification and authentication; access guards; time verification and authentication, including times of sending, acceptance, receipt and performance; and the like.

As to EMail Notification, the inventive MFS system permits the user to watch all postings and create emails describing when a message will be classified into a given collection (automatic forum). This results from the functionality of

the classifier; as it is data-driven, it classifies all collections simultaneously. When a key phrase is found it lists all collections from all users that specify that phrase. The phrases can be defined in Boolean search terms for the broadest inclusive categorization and inclusion.

As to Custom Desktop Client, the inventive MFS system includes, by way of example, the useful functionality of Portfolio management by which the user, as a customer of a financial services site, such as Marketocracy.com, can communicate with the site server to synchronize data, e.g., to provide automatic portfolio updates, stock quote display, market, sector and stock performance graphing, and the like.

As to Personal Finance, a personal finance domain may be implemented in MFS to provide objects for checks, checkbooks, receipts, invoices, stocks, funds, and so on. The normal accounting principles apply; the value propagation feature mechanism is used to ensure that the checkbook properties (e.g. balance) are computed from the check properties (e.g. amount of check). Stocks and funds can be updated over the network and their values displayed in MFS.

'932 patent at 36:46-37:61; '169 patent at 37:10-38:27.

25. eHierarchy is the assignee and owner of the right, title and interest in and to the patents-in-suit, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,280,932

26. eHierarchy repeats and realleges the allegations of paragraphs 1 through 25 as if fully set forth herein.

27. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant has infringed and continues to infringe at least claim 1 of the '932 patent by making, using, offering for sale, and/or selling systems and methods of management of informational objects by a computer system, including, but not limited to, Yahoo Mail, because each and every element is met either literally or equivalently.

28. Yahoo Mail satisfies each and every element of each asserted claim of the '932 patent, either literally or under the doctrine of equivalents. An exemplary preliminary claim

chart illustrating infringement of claim 1 is attached hereto as Exhibit C, and incorporated herein by reference.

29. eHierarchy is entitled to recover from Defendant the damages sustained by eHierarchy as a result of Defendant's infringement of the '932 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,483,169

30. eHierarchy repeats and realleges the allegations of paragraphs 1 through 29 as if fully set forth herein.

31. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant has infringed and continues to infringe at least claim 6 of the '169 patent by making, using, offering for sale, and/or selling systems and methods of management of informational objects by a computer system, including, but not limited to, Yahoo Mail, because each and every element is met either literally or equivalently.

32. Yahoo Mail satisfies each and every element of each asserted claim of the '169 patent, either literally or under the doctrine of equivalents. An exemplary preliminary claim chart illustrating infringement of claim 6 is attached hereto as Exhibit D, and incorporated herein by reference.

33. eHierarchy is entitled to recover from Defendant the damages sustained by eHierarchy as a result of Defendant's infringement of the '169 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

WILLFULNESS AND INDIRECT INFRINGEMENT

34. eHierarchy repeats and realleges the allegations of paragraphs 1 through 33 as if fully set forth herein.

35. eHierarchy's original complaint was filed on January 31, 2020.

36. Defendant was served the original Complaint.

37. Defendant has been on notice of the '932 and '169 patents and its infringements of the '932 and '169 patents since, at the latest, the date it was served the original Complaint.

38. Defendant has had knowledge, based on the original Complaint in this matter or this amended Complaint, that making and using systems and methods of management of informational objects by a computer system, including use of Yahoo Mail by Defendant and Defendant's customers and end-users, infringes claims of the '932 and '169 patents.

39. Upon information and belief, Defendant has not altered its infringing conduct or sought to prevent its customers and end-users infringing conduct since receiving the original Complaint or this amended complaint.

40. eHierarchy contends that Defendant's continued infringement despite its knowledge of the '932 and '169 patents and the accusations of infringement has been objectively reckless and willful.

41. eHierarchy further contends that Defendant has induced infringement of the '932 and '169 patents by its customers' and under-users' use of Defendant's systems and methods of management of informational objects by a computer system, including but not limited to Yahoo Mail.

42. On information and belief, in order to generate profits and revenues, Defendant markets and promotes, e.g., through its websites, advertising and sales personnel, the use of

its products that infringe the '932 and '169 patents when used as intended by Defendant's customers and end-users. Defendant's customers and end-users use such products (including, e.g., Yahoo Mail), which (as illustrated by Exhibits C and D) results in infringement of the '932 and '169 patents.

43. Defendant instructs and encourages its customers and end-users to use its products (e.g., Yahoo Mail) in a manner that infringe the '932 and '169 patents (e.g., through on-line technical documentation, instructions, and technical support). In particular, Defendant instructs its customers and end-users through at least on-line support instructions and documentation over the Internet how to use Yahoo Mail.

44. Defendant further instructs its customers and end-users to infringe the '932 and '169 patents through the products themselves, e.g., by providing computer software and systems that when used by customers and end-users results in infringement.

45. Defendant still further makes such products (e.g., Yahoo Mail) accessible to its customers and end-users via the Internet, thus enabling and encouraging its customers and end-users to use such products to infringe the '932 and '169 patents.

46. On information and belief, even though Defendant has been aware of the '932 and '169 patents and that its customers and end-users infringe the '932 and '169 patents since no later than the date it was served the original Complaint and Defendant has neither made any changes to the functionality, operations, marketing, sales, technical support, etc. of such products (e.g., Yahoo Mail) to avoid infringing the '932 and '169 patents nor informed its customers or end-users how to avoid infringing the '932 and '169 patents. To date, Defendant has not identified a single action that it has taken to avoid infringement (e.g., by designing around or notifying its customers or end-users how to avoid infringement) by itself or its

customers or end-users since it became aware of the '932 and '169 patents and their infringements.

47. On information and belief, Defendant itself is unaware of any legal or factual basis that its actions solely, or in combination with the actions of its customers and end-users, do not constitute direct or indirect infringement of the '932 and '169 patents. To date, Defendant has not produced any opinion of counsel, request for opinion of counsel relating to the scope, interpretation, construction, enforceability, unenforceability, or the infringement or potential infringement of any claim of the '932 and '169 patents. In addition, Defendant has not produced any complete evaluation, analysis, or investigation relating to the validity of the '932 and '169 patents.

48. As such, on information and belief, despite the information Defendant obtained from the original Complaint in this action, Defendant continues to specifically intend for and encourage its customers and end-users to use its products (e.g., Yahoo Mail) in a manner that infringes the claims of the '932 and '169 patents. In addition, since at least the filing of the original Complaint in this action, Defendant has deliberately avoided taking any actions (e.g., designing around, or providing notice to its customers) to avoid confirming that its actions continue to specifically encourage its customers and end-users to use their products in a manner that infringes the claims of the '932 and '169 patents.

49. Defendant's actions of, *inter alia*, making, importing, using, offering for sale, and/or selling such products (e.g., Yahoo Mail) constitute an objectively high likelihood of infringement of the '932 and '169 patents, which were duly issued by the United States Patent and Trademark Office and are presumed valid. Since at least the filing of the original Complaint, Defendant is aware that there is an objectively high likelihood that its actions

constituted, and continue to constitute, infringement of the '932 and '169 patents and that the '932 and '169 patents are valid. Despite Defendant's knowledge of that risk, on information and belief, Defendant has not made any changes to the relevant operation of its accused products and has not provided its users and/or customers with instructions on how to avoid infringement of the '932 and '169 patents. Instead, Defendant has continued to, and still is continuing to, among other things, make, use, offer for sale, and/or sell products and/or services patented under the '932 and '169 patents. As such, Defendant willfully, wantonly and deliberately infringed and is infringing the '932 and '169 patents in disregard of eHierarchy's rights under the '932 and '169 patents.

JURY DEMAND

eHierarchy hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, eHierarchy requests that this Court enter judgment against Defendant as follows:

- A. An adjudication that Defendant has infringed the '932 and '169 patents;
- B. A judgment that Defendant has induced infringement of the '932 and '169 patents;
- C. An award of damages to be paid by Defendant adequate to compensate eHierarchy for Defendant's past infringement of the '932 and '169 patents and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

D. An award of enhanced damages pursuant to 35 U.S.C. § 284 for Defendant's willful infringement of the '932 and '169 patents subsequent to the date of its notice of the '932 and '169 patents;

E. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of eHierarchy's reasonable attorneys' fees; and

F. An award to eHierarchy of such further relief at law or in equity as the Court deems just and proper.

Dated: February 27, 2020

STAMOULIS & WEINBLATT LLC

/s/ Richard C. Weinblatt

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