

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION**

TEXAS SECURE AUTHENTICATION, LLC,

Plaintiff,

v.

**FIFTH THIRD BANK, NATIONAL
ASSOCIATION,**

Defendant

Civil Action No.: 4:24-cv-00931

TRIAL BY JURY DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

COMES NOW, Plaintiff TEXAS SECURE AUTHENTICATION, LLC (“TSA”), for its Complaint against Defendant FIFTH THIRD BANK, NATIONAL ASSOCIATION (“Defendant” or “Fifth Third Bank”), alleges as follows:

THE PARTIES

1. Plaintiff Texas Secure Authentication, LLC is a limited liability company organized under the laws of the State of Texas, having its registered address at 4300 W. Waco Drive, Suite 2, Building B, Waco, Texas 76710.

2. On information and belief, Defendant Fifth Third Bank, National Association is a corporation organized and existing under the laws of the District of Columbia that maintains an established place of business in this district at 6715 Tippecanoe Road, Canfield, Ohio 44406. Fifth Third Bank has regular and established places of business in this District.

3. TSA is further informed and believes, and on that basis alleges, that Fifth Third Bank operates and has operated websites, including at <http://www.53.com>, which have provided a web interface through which users have accessed Fifth Third Bank’s Online Banking services

via the secure authentication methods claimed by TSA's patent. Fifth Third Bank has derived a significant portion of its revenue from customers utilizing its Online Banking services, which have been accessed on, using at least, but not limited to, the Internet websites located at <http://www.53.com>, and/or functionalities available thereon, and incorporated and/or related systems (collectively the "Accused Instrumentality"). TSA is informed and believes, and on that basis alleges, that, at all times relevant hereto, Fifth Third Bank has done and continues to do business in this judicial district, including, but not limited to, providing products/services to customers located in this judicial district by way of the Accused Instrumentality.

JURISDICTION AND VENUE

4. This is an action for patent infringement in violation of the Patent Act of the United States, 35 U.S.C. §§ 1 *et seq.*

5. This Court has original and exclusive subject matter jurisdiction over the patent infringement claims for relief under 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over Fifth Third Bank because it maintains regular and established places of business within this judicial district. On information and belief, Fifth Third Bank has transacted and is continuing to transact business in this District that includes, but is not limited to, committing acts of patent infringement giving rise to this action by use of products and systems that practice the subject matter claimed in the patents involved in this action.

7. Venue is proper in this District under 28 U.S.C. § 1400(b) because Fifth Third Bank maintains regular and established places of business in this District, and thus resides in this District under the Supreme Court's opinion in *TC Heartland LLC v. Kraft Foods Group Brands LLC*, 137 S. Ct. 1514 (2017). Further, upon information and belief, Fifth Third Bank has committed acts of infringement in this District and a regular and established place of business in this District.

FACTS

8. On January 18, 2011, United States Patent No. 7,873,682 entitled “System and method for creating and manipulating information containers with dynamic registers,” was duly and legally issued to Incandescent, Inc. as assignee with a priority date of January 30, 1998, and later assigned to TSA. A true and correct copy of United States Patent No. 7,873,682 (“the ‘682 Patent”) is attached hereto as Exhibit A and incorporated herein by this reference.

9. TSA is the assignee of the entire right, title, and interest in and to the ‘682 Patent, including all rights to enforce the ‘682 Patent and to recover for infringement.

10. The ‘682 Patent claims priority to U.S. Provisional Pat. App. No. 60/073,209, filed on January 30, 1998.

11. The ‘682 Patent expired on February 25, 2019.

12. The ‘682 Patent claims an unconventional method of determining identification information using unconventional software structures—including dynamic “registers,” as claimed in the ‘682 Patent—in order to upgrade the utility of, and develop intelligence in, a computer network and to enable the dynamic governance of information. *See Ex. A at 1:22-31.*

13. At the time of filing in 1998, dynamic “registers” as claimed in the ‘682 Patent did not exist in the prior art. Conventional “registers” prevailing in the prior art of the time were hardware structures and were built directly into CPU architectures as temporary storage areas for storing data. However, in 1998, so-called “metadata” (as information about information) was limited to inert fixed labels, and there were no software registers of the kind claimed in the ‘682 Patent capable of updating data dynamically through gateways from sources external to the computer network, such as GPS listening devices, or from sources associated with other Web container operations on the network. At the time, there was no World Wide Web Consortium

(“W3C”) published specification for Web containers, and such structures lacked unique identifiers and could not interact with the conventional registers of the prior art.

14. Thus, one of the inventive concepts of the ‘682 Patent is its use of unconventional software structures—among them, the dynamic “registers” as claimed in the ‘682 Patent—that enabled new functionality not possible using the conventional hardware “registers” of the prior art, such as the dynamic modification of metadata or content on a computer network. For example, the dynamic “registers” claimed in the ‘682 Patent were capable of interacting with other software structures claimed as “containers,” and of governing the interaction of such containers with other containers or with container gateways. *See* Ex. A at 9:20-28. By contrast, conventional hardware registers of the prior art could not function as software registers to establish certain parameters in interaction with other containers or gateways, or to govern the interaction of containers with other containers, as explicated and claimed in the ‘682 Patent. *Id.* at 9:26-28.

15. Thus, in 1998, conventional hardware registers could not address many of the technical limitations overcome by the ‘682 Patent. As the ‘682 Patent explains at length, the functionality of existing computer systems and computer networks was limited in 1998 because such systems lacked software structures enabling the dynamic modification of metadata or content on a computer network. *See* Ex. A, 1:33-3:8. For example, as the ‘682 Patent notes, “on a wide area or public network, specific content such as a document remains inert, except by the direct intervention of users, and is modified neither by patterns or history of usage on the network, or the existence of other content on the network.” *Id.* at 2:1-5. Using conventional computer systems and software available at the time of filing in 1998, such content had “no possibility of evolution” without the direct intervention of users. *Id.* at 2:29. As explained in the ‘682 Patent, “one problem” in the prior art “is that on a wide area or public network, specific content such as a document

remains inert, except by the direct intervention of users, and is modified neither by patterns or history of usage on the network, or the existence of other content on the network.”

16. To achieve the “possibility of evolution” of metadata or content on a computer network without the direct intervention of the user, it was necessary to overcome the technical limitations of the prior art with unconventional software structures, and unconventional methods employing such structures, that would enable the dynamic governance of information. As the ‘682 Patent explains:

“there is a need for a system and methods for creating and manipulating information containers with dynamic interactive registers...in order to manufacture information on, **upgrade the utility of, and develop intelligence in, a computer network by providing a searching user the means to utilize the searches of other users or the historically determined and compiled searches of the system,** [and] a means to containerize information with multiple registers governing the interaction of that container...”

Ex. A [‘682 Patent] at 2:61-3:4 (emphasis added).

17. The ‘682 Patent addressed and overcame the technical limitations of the prior art by disclosing and claiming methods that “upgrad[ed] the utility of and develop[ed] intelligence in” computer networks in a way that enabled, among other things, the dynamic modification of metadata or content on a computer network. *Id.* For example, ‘682 Patent explains that the invention’s “value evolving container registers” used “in conjunction with gateways” “allows the container to establish and evolve its own identity on the system,” thus enabling the “dynamic governance of information”—a function that was “**utilized for the first time**” in the ‘682 Patent. *Id.* at 12:49-13:50 (emphasis added). The ‘682 Patent explains that registers, as claimed, “are unique in that their internal values evolve through interaction with other containers,” among other things. *Id.* at 13:12-14. As such, the claimed method employs an unconventional arrangement of unconventional components (including dynamic “registers,” as claimed) to improve computer

functionality and “upgrade the utility of, and develop intelligence in, a computer network” and to enable the “dynamic governance of information” that was “utilized for the first time” in various aspects in the ‘682 Patent. *Id.* at 2:61-3:4; 13:43-14:2.

18. The use of unconventional dynamic software “registers” enabled the “dynamic governance of information” in a way that did not require direct user modification of content on a computer network, in contrast to the mere holding of information by conventional hardware registers. Software structures interacting to enable the dynamic governance of information were “utilized for the first time” in the ‘682 Patent, which is replete with examples in which information may be dynamically governed via the use of unconventional dynamic software “registers.” Ex. A, 13:43-14:2.

19. In particular, the method of Claim 1 contains inventive concepts in its steps of:

determining whether an interaction between the first container and the second container can occur using the first gateway and a first register of the first container;

determining whether the interaction between the first container and the second container can occur using the second gateway and a second register of the second container;

Among the inventive concepts claimed in these steps was the use of unconventional software structures governing the interaction of containers with other containers—namely, a “first register of the first container” and a “second register of the second container”—in order to determine whether an interaction between containers can occur. Further, the interaction of the “first register” and “first container” (as well as the interaction of the “second register” and “second container,” respectively) was an unconventional arrangement, in light of the fact that conventional registers of the prior art were hardware components that did not interact with software containers, nor did they govern the interaction of containers with other containers.

20. The method of Claim 1 contains an additional inventive concept in the step of:

performing the interaction between the first and second containers prescribed by the first gateway and the first register of the first container if the interaction between the first container and the second container can occur, wherein the first gateway and the second gateway collect and store register information from the first container and the second container, the register information including container interaction information.

As explained in the '682 Patent, this step permitted the “dynamic governance of information according to its unique history of interaction as an identity on a network,” which was a “unique aspect[] of information about information” that was “utilized for the first time” in the '682 Patent. Ex. A, at 12:49-13:50.

21. The method of Claim 6 contains an additional inventive concept in its step of “adding the new third register to the first container.” This claimed step allows a container to be updated with a “new third register,” to dynamically modify information, e.g., to prevent re-use of an expired or invalid login code, where the database is first searched and then updated via the claimed method. The claimed method thus allows a computer network to become “progressively more responsive,” and “learn[] to become more useful,” via the “dynamic governance of information” (here, for example, the determination whether to update a database with a “new third register”). Ex. A, 13:35-14:2. By employing a method that progressively updates the gateway storage, registers, container-register interaction history and information stored in the new identified software structure, the computer network becomes more useful than one that merely employs a static, permanent username/password. As illustrated in FIG. 5 of the '682 Patent below, a register may be added and modified to a container to achieve the dynamic modification of information:

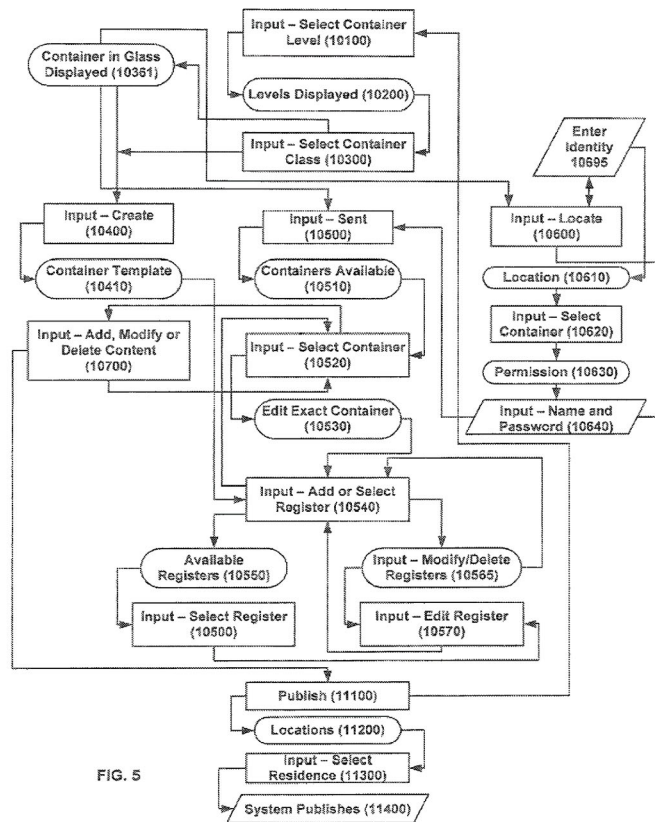


FIG. 5

22. The method of Claim 7 contains an additional inventive concept in its step of “modifying the first gateway of the first container based on the interaction between the first container and the second container.” This claimed step allows the updating of information stored in the unconventional software structures claimed in the ‘682 Patent, for example, to prevent re-use of an expired or invalid password, based on the successful login attempt using both the username/password combination and the one-time passcode itself. The claimed method thus allows a computer network utilizing the unconventional software structures claimed in the ‘682 Patent to become “progressively more responsive,” and “learn[] to become more useful,” via the “dynamic governance of information.” Ex. A, 13:35-14:2.

23. TSA is the assignee of the entire right, title, and interest in and to the ‘682 Patent, including all rights to enforce the ‘682 Patent and to recover for infringement. The ‘682 Patent is valid and expired on February 25, 2019.

24. As more fully laid out below, Fifth Third Bank has infringed the ‘682 Patent, in this judicial district and elsewhere, by providing its Online Banking services using the claimed methods for determining identification information and securely authenticating its users, which activities, individually or in combination, incorporate and/or use subject matter claimed by the ‘682 Patent.

CLAIM FOR RELIEF

(Direct Infringement of the ‘682 Patent, in Violation of 35 U.S.C. § 271(a))

25. TSA refers to and incorporates herein by reference paragraphs 1-24.

26. The Federal Financial Institutions Examination Council (“FFIEC”) on June 29, 2011 issued a Supplement to its “Authentication in an Internet Banking Environment” recommending that member “institutions offer multifactor authentication to their business customers.” [https://www.ffiec.gov/pdf/Auth-ITS-Final%206-22-11%20\(FFIEC%20Formatted\).pdf](https://www.ffiec.gov/pdf/Auth-ITS-Final%206-22-11%20(FFIEC%20Formatted).pdf)

27. During the term of the ‘682 Patent prior to expiration, Fifth Third Bank offered users a “Fifth Third app, which offers multi-factor authentication to prevent logins from unrecognized devices.” <https://www.53.com/content/fifth-third/en/financial-insights/personal/financial-education/protect-finances.html> (dated June 18, 2017).

28. On information and belief, during the term of the ‘682 Patent prior to expiration, Fifth Third Bank had directly infringed by practicing at least the methods claimed by Claims 1, 6, and 7 of the ‘682 Patent in this judicial district and elsewhere in the state of Texas and the United States, employing multi-factor authentication methods at least by operation of the “Password,”

“Online Banking PIN,” and multi-factor authentication functions of its Online Banking services at its Internet websites located at <https://www.53.com> (the “Fifth Third Bank Website”) and Fifth Third app, through which users have accessed its Online Banking services, and the incorporated and/or related systems conducted on and using at least, but not limited to, the Fifth Third Bank Website functionality.

29. The Fifth Third Bank Website functionalities referenced above are or employ the claimed method(s) of determining identification information using dynamic interactive registers in order to upgrade the utility of, and develop intelligence in, a computer network and to enable the dynamic governance of information, practicing the asserted claims of the ‘682 Patent.

30. By way of example only, and without limitation, on information and belief, during the term of the ‘682 Patent the Accused Instrumentality had infringed at least Claims 1, 6, and 7 of the ‘682 Patent in that the Fifth Third Bank Website’s functionality and supporting server(s) have utilized a method of multi-factor authentication practicing all of the limitations at least Claims 1, 6, and 7 on the website through which Fifth Third Bank provides its Fifth Third Bank Online Banking Services. TSA has outlined a sample of Fifth Third Bank’s infringement of Claims 1, 6, and 7 in the claim chart attached as Exhibit B and hereby incorporated by this reference.

31. Further, on information and belief, Fifth Third Bank’s Website exerted control over use of the claimed methods via its website. On information and belief, when users have accessed Fifth Third Bank’s Website, Fifth Third Bank’s server had caused the browser to place a “cookie” on the user’s computer. On information and belief, Fifth Third Bank had used “cookies” via its Fifth Third Bank Website prior to the expiration of the ‘682 patent.

32. Fifth Third Bank, on information and belief, has also been engaged in internal use of the claimed methods, by developing and testing systems and/or methods utilizing the claimed methods on its own computers.

33. Fifth Third Bank, therefore, by the acts complained of herein, has made, used, sold, or offered for sale in the United States, including in this District, products and/or services utilizing the invention, and has in the past infringed the '682 Patent, either literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271(a).

34. By reason of the acts of Fifth Third Bank alleged herein, TSA has suffered damage in an amount to be proved at trial.

PRAYER FOR RELIEF

WHEREFORE, TSA prays for relief as follows:

A. Judgment that Fifth Third Bank has directly infringed the '682 Patent either literally and/or under the doctrine of equivalents;

B. Judgment awarding TSA general and/or specific damages, including a reasonable royalty and/or lost profits, in amounts to be fixed by the Court in accordance with proof, including enhanced and/or exemplary damages, as appropriate, as well as all of Fifth Third Bank's profits or gains of any kind from its acts of patent infringement from six years prior to the filing of the complaint until February 25, 2019;

C. Judgment awarding TSA all of its costs, including its attorneys' fees, incurred in prosecuting this action, including, without limitation, pursuant to 35 U.S.C. § 285 and other applicable law;

D. Judgment awarding TSA pre-judgment and post-judgment interest; and

E. Judgment awarding TSA such other and further relief as the Court may deem just and proper.

JURY DEMAND

Pursuant to Federal Rule of Civil Procedure 38(b), TSA hereby demands a trial by jury on all issues triable to a jury.

Dated: May 28, 2024

Respectfully submitted,

SAND, SEBOLT & WERNOW CO., LPA

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