# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

TEXTILE COMPUTER SYSTEMS, INC.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO.
	§	
FORT WORTH CITY CREDIT UNION,	§	
,	§	
Defendant.	§	JURY TRIAL DEMANDED

## ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Textile Computer Systems, Inc., Plaintiff in the above entitled and numbered action, by and through the undersigned attorneys, files this Original Complaint for Patent Infringement against Defendant, Fort Worth City Credit Union, and as claim for relief shows as follows:

#### **NATURE OF THE ACTION**

1. This is an action for patent infringement under the Patent Laws of the United States, Title 35 United States Code ("U.S.C.") to prevent and enjoin Defendant Fort Worth City Credit Union from infringing U.S. Patent No. 8,505,079 (the "'079 patent") and U.S. Patent No. 8,533,802 (the "'802 patent") pursuant to 35 U.S.C. § 271, and to recover damages, injunctive relief, attorney's fees and costs.

#### THE PARTIES

- 2. Plaintiff Textile Computer Systems, Inc. is a Texas corporation with its principal place of business located at 3400 Varsity Drive, Suite 1708, Tyler, Texas 75701.
- 3. Upon information and belief, Defendant Fort Worth City Credit Union (hereinafter "FWCCU" or "Defendant") is a member owned and operated financial cooperative having a principal place of business located at 2309 Montgomery Street, Fort Worth, Texas 76107

and may be served with summons at that address.

## **JURISDICTION AND VENUE**

- 4. This Court has exclusive subject matter jurisdiction over this action pursuant to 28 U.S.C. §§1331 and 1338(a) because this action arises under the Patent Law of the United States, 35 U.S. C. §1, *et seq*.
- 5. This Court has personal jurisdiction over Defendant by virtue of its systematic and continuous contacts with this jurisdiction, as alleged herein, as well as because the injury to Textile occurred in the state of Texas and the cause of action possessed by Textile against Defendant for that injury arose in the state of Texas.
- 6. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business activities in this forum, including: (i) at least a portion of the infringements alleged herein; and (ii) by 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 the state of Texas and in this judicial district.
- 7. Defendant transacts business in the Eastern District of Texas and, upon information and belief, has committed acts of patent infringement in the Eastern District of Texas.

  Accordingly, venue lies in this judicial district pursuant to 28 U.S.C. §§1391 and 1400(b).

# **FACTUAL ALLEGATIONS**

- 8. Plaintiff Textile Computer Systems, Inc. realleges and incorporates by reference the allegations set forth in paragraphs 1 to 7 of this complaint.
- 9. Gopal Nandakumar is a Texas-based entrepreneur, software engineer and prolific inventor with over 30 years of experience in the field of Information Management Systems. In

1987, after receiving Masters Degrees from both the University of Madras, India and the Georgia Institute of Technology, Mr. Nandakumar formed Textile Computer Systems, Inc. ("Textile").

- 10. On August 6, 2013, the United States Patent and Trademark Office ("USPTO") duly and legally issued U.S. Patent No. 8,505,079 ("the '079 patent"), entitled "Authentication System and Related Method" to the named inventor, Gopal Nandakumar, after a full and fair examination. A copy of the '079 patent is attached as Exhibit A.
- 11. On September 10, 2013, the United States Patent and Trademark Office ("USPTO") duly and legally issued U.S. Patent No. 8,533,802 ("the '802 patent"), entitled "Authentication System and Related Method" to the named inventor, Gopal Nandakumar, after a full and fair examination. A copy of the '802 patent is attached as Exhibit B.
- 12. Textile is the owner of the '079 patent and the '802 patent, having received all right, title and interest in and to these patents from the USPTO. Textile possesses all rights of recovery under the '079 patent and the '802 patent, including the exclusive right to recover for past infringement.
- 13. The '079 patent contains two (2) independent claims and eighteen (18) dependent claims. Upon information and belief, Defendant commercializes, *inter alia*, systems and methods that meet all of the elements of at least claims 1, 3, 6, 7, 8, 9, 11, 13, 16, 17, 18 and 19 of the '079 patent.
- 14. The '802 patent contains two (2) independent claims and eighteen (18) dependent claims. Defendant commercializes, inter alia, methods and systems that meet all of the elements of at least claims 1, 2, 5, 6, 7, 9, 11, 12, 15, 16, 17 and 19 of the '802 patent.
- 15. The invention claimed in the '079 patent comprises a system and method whereby the identity of a person, entity, device or the like attempting to gain access to a secured resource

may be securely authenticated. The system receives from a requester purporting to be the authorized resource user, *e.g.*, an FWCCU card holder, a request for access by an unauthorized user (such as, for example, a retail store, a service station, an on-line service provider or merchandiser, a healthcare provider, a medical insurer, an information consumer or the like) to the secured resource (the cardholder's account); determines a key string adapted to provide a basis for authenticating the identity of the requester; receives an authentication credential associated with the request for access; and evaluates the authentication credential to authenticate the identity of the requester. Neither the key string nor the authentication credential reveal the cardholder's card number.

16. The invention claimed in the '802 patent comprises a system and method whereby the identity of a person, entity, device or the like attempting to gain access to a secured resource may be securely authenticated. The system receives from a requester purporting to be the authorized resource user, *e.g.*, an FWCCU card holder, a request for access by an unauthorized user (such as, for example, a retail store, a service station, an on-line service provider or merchandiser, a healthcare provider, a medical insurer, an information consumer or the like) to the secured resource (the cardholder's account); generates and communicates to the authorized user a key string adapted to provide a basis for authenticating the identity of the requester; receives an authentication credential associated with the requester. Neither the key string nor the authentication credential reveal the cardholder's card number.

#### **DEFENDANT'S PRODUCTS**

17. Textile realleges and incorporates by reference the allegations set forth in paragraphs 1 to 16 of this complaint.

- 18. Defendant offers debit and credit cards, such as the FWCCU Debit Card or the FWCCU Credit Card, that are used with an authentication system that authenticates the identity of an FWCCU card holder in a request to pay a particular merchant for a specific transaction (the "Accused Instrumentality"). The FWCCU card authentication system is implemented, in part, via EMVCo compliant tokens that are used in the transaction instead of the user's credit card number so that the user's credit card number is never transmitted or otherwise provided to the merchant thereby preventing the user's credit card number from being deliberately or unintentionally transferred from the merchant to a third-party such as through hacking, spoofing or other man-inthe-middle vulnerabilities. The requests are initiated by account holders via their smartphones, typically at an NFC (near field communication) merchant terminal and use these tokens, which are generated and communicated to the user's smartphone by the system, and wherein each account held by the user has its own token.
- 19. The Accused Instrumentality includes an authentication system for authenticating the identity of a requester of access by an unauthorized service client to a secured resource. For example, an FWCCU account holder initiates a request for payment of a specific merchant for a specific transaction using his or her smartphone when near the NFC merchant terminal at a checkout counter. In initiating the request, the account holder's smartphone receives certain transaction specific information from the merchant terminal which is incorporated, along with the token for the account selected by the user to be charged for the transaction, into a cryptogram generated by the smartphone that it transmits to the merchant's terminal, along with the token value, for forwarding to a messaging gateway. Before forwarding the request with the cryptogram to the FWCCU authentication system, the merchant terminal inputs the same transaction specific information, *e.g.*, the merchant ID, invoice number, invoice amount, and a date/timestamp "in the

clear" into the request to accompany the cryptogram. The merchant also inputs into the request "in the clear" the token value that was transmitted from the user's smartphone to the merchant's terminal using NFC. Thus, the request messages will include both the transaction specific cryptogram as well as token and transaction specific information sent "in the clear" that was used in making the cryptogram.

- 20. The Accused Instrumentality comprises a messaging gateway having a first set of instructions embodied in a computer readable medium, said first set of instructions operable to receive from a requester purporting to be an authorized user of a secured resource a request for access by an unauthorized service client to said secured resource. For example, the Accused Instrumentality includes a message gateway that is programmed to receive requests initiated by FWCCU card account holders for payment to be made to a specific merchant in a specific amount for a specific transaction from a specific FWCCU card account of the account holder. The secured resource is the money or credit in the account to be used for payment if the account holder's request for payment is approved by FWCCU. This message gateway is either hosted directly by FWCCU or through an agent with whom FWCCU has contracted to receive the messages.
- 21. The Accused Instrumentality includes a server in secure communication with said messaging gateway, said server having a second set of instructions embodied in a computer readable medium operable to determine, generate and communicate a key string known to both said secured resource and the authorized user said requestor purports to be, said key string being adapted to provide a basis for authenticating the identity of said requester. In particular, this key string is the token value for the account. For example, behind the firewall of the message gateway and in secure communication therewith is an authentication server that processes the received request to identify the token value sent "in the clear" for the account selected to be charged that

was passed from the authorized user to the merchant terminal via the NFC communication link, and that was previously generated and communicated to the authorized user. The authentication server is either hosted directly by FWCCU or through an agent with whom FWCCU has contracted to provide the authentications services.

- 22. The Accused Instrumentality includes a service user interface in communication with said server, said service user interface having a third set of instructions embodied in a computer readable medium operable to receive input from said unauthorized service client. For example, the authentication server includes programming instructions to also identify within the payment authorization request the transaction specific information that was input into the request "in the clear" by the merchant, *e.g.*, the merchant ID, invoice number, invoice amount, and date/timestamp.
- 23. The Accused Instrumentality includes a second set of instructions further operable to receive an authentication credential from said unauthorized service client associated with said request for access, said authentication credential having been provided to said unauthorized service client by end user. For example, the authentication server is also programmed to identify within the payment authorization request the cryptogram that was passed by the user to the merchant and the authentication server will use the cryptogram to authenticate that the request originated with the actual account holder.
- 24. The Accused Instrumentality includes a second set of instructions further operable to evaluate said authentication credential to authenticate the identity of said requestor. For example, the authentication server uses the token value received "in the clear" to look up the decryption key for the cryptogram and uses the decryption key to decrypt the cryptogram. With the cryptogram decrypted, the authentication server determines whether the decrypted token

contained within the decrypted cryptogram matches the token value sent "in the clear" in the request message. If a match exists, the server authenticates the identity of requestor as the actual account holder. The authentication server also determines whether a match exists between the transaction specific information contained within the decrypted cryptogram and the transaction specific information sent "in the clear" in the request message. If a match exists, the system considers the transaction to be authentic.

- 25. The second set of instructions is further operable to determine from among a plurality of secured resources associated with said authorized user the identity of a single secured resource to which said requester requests access. For example, if the cardholder has multiple accounts, the system can determine which account the request is directed from the key string and/or the authentication credential provided in the request. More particularly, the token can be used to look up the specific credit card account of the authorized user associated with that particular token and to charge that account with the transaction amount.
- 26. The second set of instructions includes instructions operable to invalidate the authentication credential based upon passage of time. For example, the authentication server compares the decrypted transaction specific information obtained from the cryptogram with the transaction specific information sent "in the clear" in the request message. If the match does not take place in a specific amount of time relative to the time/date stamp in the message, it invalidates the transaction on the basis of transaction time-out.
- 27. The second set of instructions is operable to conduct for the benefit of said unauthorized service client a transaction reliant upon access to said secured resource. For example, the authentication server subsequently uses the received token to look up the corresponding primary account number (*i.e.*, credit card number or "PAN") of the account holder to chart that

account for the transaction. Thus, the request from the account holder can be forwarded via the merchant without the merchant obtaining or transmitting the credit card number of the account holder, minimizing the probability of credit card fraud and identity theft, conferring a financial benefit also upon FWCCU.

- 28. The second set of instructions are further operable to generate a receipt for the transaction and transmit the receipt to said authorized user. The system for example will send a confirmation of the transaction to the cardholder.
- 29. Moreover, Plaintiff alleges that each of these elements are present in the Accused Instrumentality either literally or under the doctrine of equivalents if anywhere determined not to be literally present. For example, if a function literally claimed to be performed by a given element, such as a particular server or set of instructions, is conducted in the accused system by another server or another set of instructions, Plaintiff alleges that this would be an infringement under the doctrine of equivalents because the two would be substantially the same and would be performing the same function in the same way to arrive at the same result.
- 30. The elements described in paragraphs 18-28 are covered by and infringe upon at least claims 1, 3, 6, 7, 8, 9, 11, 13, 16, 17, 18, and 19 of the '079 patent and claims 1, 2, 5, 6, 7, 9, 11, 12, 15, 16, 17 and 19 of the '802 patent. Thus, Defendant's use, manufacture, sale, and/or offer for sale of the Accused Instrumentality is enabled by the system described in the '079 and '802 patents.

## **DEFENDANT'S INFRINGEMENT OF THE '079 PATENT**

- 31. Textile realleges and incorporates by reference the allegations set forth in paragraphs 1 to 30 of this complaint.
  - 32. Defendant has directly infringed and continues to directly infringe (either literally

or under the doctrine of equivalents) at least claims 1, 3, 6, 7, 8, 9, 11, 13, 16, 17, 18, and 19 of the '079 patent, in violation of 35 U.S.C. § 271(a), by making, using, importing, offering for sale, and/or selling the Accused Instrumentality without authority in the United States and will continue to do so unless enjoined by this Court.

- 33. Defendant has indirectly infringed and continues to indirectly infringe (either literally or under the doctrine of equivalents) at least claims 1, 3, 6, 7, 8, 9, 11, 13, 16, 17, 18, and 19 of the '079 patent, in violation of 35 U.S.C. § 271(b), by actively inducing the infringement of the '079 patent by others and Defendant will continue to do so unless enjoined by this Court. Defendant's deliberate and/or willfully blind actions include, but are not limited to, actively marketing to, supplying, causing the supply to, encouraging, recruiting, and instructing others such as consumers, businesses, distributors, agents, sales representatives, end-users, account holders and customers to use, make available for another's use, promote, market, distribute, import, sell and/or offer to sell the Accused Instrumentality. These actions, individually and/or collectively, have induced and continue to induce the direct infringement of the '079 patent by others such as consumers, businesses, distributors, agents, sales representatives, end-users, account holders and customers. Defendant knew and/or was willfully blind to the fact that the induced parties' use, making available for another's use, promotion, marketing, distributing, importing, selling and/or offering to sell the Accused Instrumentality would infringe the '079 patent.
- 34. Defendant continues to make, use, make available for another's use, or sell or offer to sell, the Accused Instrumentality, and/or continues to induce others such as consumers, businesses, distributors, agents, sales representatives, account holders, end users and customers to infringe one or more claims of the '079 patent.
  - 35. Defendant has indirectly infringed and continues to indirectly infringe (either

literally or under the doctrine of equivalents) at least claims 1, 3, 6, 7, 8, 9, 11, 13, 16, 17, 18, and 19 of the '079 patent, in violation of 35 U.S.C. § 271(c), by contributing to the direct infringement of the '079 patent by others, such as consumers, businesses, distributors, agents, sales representatives, end-users, account holders and customers, by offering to sell or selling within the United States the Accused Instrumentality which is a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

- 36. Defendant has committed these acts of infringement without license or authorization.
- 37. By engaging in the conduct described herein, Defendant has caused injury to Textile and Textile has been damaged and continues to be damaged as result thereof and Defendant is thus liable to Textile for infringement of the '079 patent, pursuant to 35 U.S.C. § 271.
- 38. As a direct and proximate result of Defendant's infringement of the '079 patent, Textile has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate Textile for Defendant's past infringement pursuant to 35 U.S.C. § 284, but in no event less than a reasonable royalty, together with interest and costs.
- 39. In addition, the infringing acts and practices of Defendant have caused, are causing, and, unless such acts or practices are enjoined by the Court, will continue to cause immediate and irreparable harm and damage to Textile for which there is no adequate remedy at law, and for which Defendant is entitled to injunctive relief pursuant to 35 U.S.C. § 283. As such, Textile is entitled to compensation for any continuing and/or future infringement up until the date that

Defendant is finally and permanently enjoined from further infringement.

# **DEFENDANT'S INFRINGEMENT OF THE '802 PATENT**

- 40. Textile realleges and incorporates by reference the allegations set forth in paragraphs 1 to 30 of this complaint.
- 41. Defendant has directly infringed and continues to directly infringe (either literally or under the doctrine of equivalents) at least claims 1, 2, 5, 6, 7, 9, 11, 12, 15, 16, 17 and 19 of the '802 patent, in violation of 35 U.S.C. § 271(a), by making, using, importing, offering for sale, and/or selling the Accused Instrumentality without authority in the United States and will continue to do so unless enjoined by this Court.
- 42. Defendant has indirectly infringed and continues to indirectly infringe (either literally or under the doctrine of equivalents) at least claims 1, 2, 5, 6, 7, 9, 11, 12, 15, 16, 17 and 19 of the '802 patent, in violation of 35 U.S.C. § 271(b), by actively inducing the infringement of the '802 patent by others and Defendant will continue to do so unless enjoined by this Court. Defendant's deliberate and/or willfully blind actions include, but are not limited to, actively marketing to, supplying, causing the supply to, encouraging, recruiting, and instructing others such as consumers, businesses, distributors, agents, sales representatives, end-users, account holders and customers to use, make available for another's use, promote, market, distribute, import, sell and/or offer to sell the Accused Instrumentality. These actions, individually and/or collectively, have induced and continue to induce the direct infringement of the '802 patent by others such as consumers, businesses, distributors, agents, sales representatives, end-users, account holders and customers. Defendant knew and/or was willfully blind to the fact that the induced parties' use, making available for another's use, promotion, marketing, distributing, importing, selling and/or offering to sell the Accused Instrumentality would infringe the '802 patent.
  - 43. Defendant continues to make, use, make available for another's use, or sell or offer

to sell, the Accused Instrumentality, and/or continues to induce others such as consumers, businesses, distributors, agents, sales representatives, account holders, end users and customers to infringe one or more claims of the '802 patent.

- 44. Defendant has indirectly infringed and continues to indirectly infringe (either literally or under the doctrine of equivalents) at least claims 1, 2, 5, 6, 7, 9, 11, 12, 15, 16, 17 and 19 of the '802 patent, in violation of 35 U.S.C. § 271(c), by contributing to the direct infringement of the '802 patent by others, such as consumers, businesses, distributors, agents, sales representatives, end-users, account holders and customers, by offering to sell or selling within the United States the Accused Instrumentality which is a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 45. Defendant has committed these acts of infringement without license or authorization.
- 46. By engaging in the conduct described herein, Defendant has caused injury to Textile and Textile has been damaged and continues to be damaged as result thereof and Defendant is thus liable to Textile for infringement of the '802 patent, pursuant to 35 U.S.C. § 271.
- 47. As a direct and proximate result of Defendant's infringement of the '802 patent, Textile has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate Textile for Defendant's past infringement pursuant to 35 U.S.C. § 284, but in no event less than a reasonable royalty, together with interest and costs.
  - 48. In addition, the infringing acts and practices of Defendant have caused, are causing,

and, unless such acts or practices are enjoined by the Court, will continue to cause immediate and irreparable harm and damage to Textile for which there is no adequate remedy at law, and for which Defendant is entitled to injunctive relief pursuant to 35 U.S.C. § 283. As such, Textile is entitled to compensation for any continuing and/or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement.

### **DEMAND FOR JURY TRIAL**

49. Pursuant to Rule 38 of the Federal Rules of Civil Procedure and Local Rule 38(a) Textile demands a trial by jury on all issues so triable.

### PRAYER FOR RELIEF

WHEREFORE, Textile prays for the following relief:

- a. A judgment that Defendant has directly infringed the '079 and '802 patents (either literally or under the doctrine of equivalents), contributorily infringed the '079 and '802 patents, and/or induced the infringement of the '079 and '802 patents;
- b. A preliminary and permanent injunction preventing Defendant and its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, attorneys, licensees, successors, and assigns, and those persons in active concert or participation with any of them, from directly infringing the '079 and '802 patents (either literally or under the doctrine of equivalents), contributorily infringing the '079 and '802 patents, and/or inducing the infringement of the '079 and '802 patents;
- c. A judgment and order requiring Defendant to pay Textile an award of damages pursuant to 35 U.S.C. §284 sufficient to compensate Textile for Defendant's past infringement, including enhanced damages as provided by 35 U.S.C. § 284, and supplemental damages for any continuing post-verdict infringement up until entry of the final judgment with an accounting, as

needed; as well as damages for any continuing or future infringement up until the date that

Defendant is finally and permanently enjoined from further infringement;

d. A judgment and order requiring Defendant to pay Textile pre-judgment and post-

judgment interest on all damages awarded

e. A judgment and order requiring Defendant to Textile the costs of this action

(including all disbursements);

f. A ruling that this case be found to be exceptional pursuant to 35 U.S.C. § 285, and

judgment awarding Textile its attorneys' fees and costs;

g. A judgment and order requiring that in the event a permanent injunction

preventing future acts of infringement is not granted, that Textile be awarded a compulsory

ongoing licensing fee; and

h. That Textile have such other and further relief, either at law or in equity, as this

Court may deem just and proper.

Dated: September 23, 2016

Respectfully submitted,

Stafford Davis (Lead Attorney)

Texas State Bar No. 24054605

The Stafford Davis Firm, PC

The People's Petroleum Building

102 North College Avenue, Suite 1300

sermission of Seal Altorney

Tyler, Texas 75702

Phone: (903) 593-7000

Fax: (903) 705-7369

Email: sdavis@stafforddavisfirm.com

Sandy Seth Texas State Bar No. 18043000 Seth Law Two Allen Center 1200 Smith Street, Suite 1600 Houston, Texas 77002 Phone: 713-244-5017

Fax: 713-244-5018 Email: ss@sethlaw.com

Andy Tindel Texas State Bar No. 20054500 MT <sup>2</sup> Law Group Mann | Tindel | Thompson 112 East Line Street, Suite 304 Tyler, Texas 75702

Tel: (903) 596-0900 Fax: (903) 596-0909

Email: atindel@andytindel.com

ATTORNEYS FOR PLAINTIFF TEXTILE COMPUTER SYSTEMS, INC.