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

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff, RFCyber Corp. ("RFCyber" or "Plaintiff"), files this Complaint against Defendant Costco Wholesale Corporation. ("Costco" or "Defendant"), for patent infringement under 35 U.S.C. § 271 and alleges as follows:

## THE PARTIES

- 1. RFCyber is a Texas corporation with a place of business at 7700 Windrose Avenue, Suite G300, Plano, Texas 75024. RFCyber is the exclusive licensee with the right to sue, for U.S. Patent No. 8,448,855 (the "Patent-in-Suit" or "Asserted Patent").
- 2. Defendant Costco is a corporation organized and existing under the laws of Washington, with one or more regular and established places of business in this District at least at 11220 Dallas Parkway, Frisco, Texas 75034; 3800 North Central Expressway, Plano, Texas 75074; 1701 Dallas Parkway, Plano, Texas 75093; 3650 West University Drive, McKinney, Texas 75071. Costco may be served with process through its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

## **JURISDICTION AND VENUE**

- 3. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq*. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1332, 1338, and 1367.
- 4. This Court has specific and personal jurisdiction over Defendant consistent with the requirements of the Due Process Clause of the United States Constitution and the Texas Long Arm Statute. Upon information and belief, Defendant has sufficient minimum contacts with the forum because Defendant has physical locations and transacts substantial business in the State of Texas and in this Judicial District. Further, Defendant has, directly or through subsidiaries or intermediaries, committed and continues to commit acts of patent infringement in the State of Texas and in this Judicial District as alleged in this Complaint, as alleged more particularly below.
- 5. Venue is proper in this Judicial District pursuant to 28 U.S.C. §§ 1391 and 1400(b). Costco is registered to do business in Texas and, upon information and belief, Costco has transacted business in this Judicial District, has committed acts of direct and indirect infringement in this Judicial District, and has regular and established places of business in this Judicial District as set forth above. Costco is subject to personal jurisdiction in this Judicial District and has committed acts of patent infringement in this Judicial District. On information and belief, Costco through its own acts and/or through the acts of others, makes, uses, sells, offers to sell, and/or imports infringing products within this Judicial District, regularly does and solicits business in this Judicial District, and has the requisite minimum contacts with the Judicial District such that this venue is a fair and reasonable one. Further, upon information and belief, Costco has admitted or not contested proper venue in this Judicial District in other patent infringement actions.

## **PATENT-IN-SUIT**

- 6. On May 28, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,448,855 (the "'855 Patent") entitled "Method and Apparatus For Funding An Electronic Purse." A true and correct copy of the '855 Patent is attached as Exhibit A.
- 7. RFCyber is the exclusive licensee with the right to sue for the '855 Patent, and holds the exclusive right to take all actions necessary to enforce its rights to the Patent-in-Suit, including the filing of this patent infringement lawsuit. RFCyber also has the right to recover all damages for past, present, and future infringement of the Patent-in-Suit and to seek injunctive relief as appropriate under the law.

### INFRINGEMENT ALLEGATIONS

- 8. The technologies of the Patent-in-Suit were variously invented by Liang Seng Koh, Hsin Pan, Futong Cho, and Fuliang Cho. The Patent-in-Suit generally covers apparatus and methods for enabling secure contactless payment with a portable device. In one exemplary embodiment, a device may contactlessly emulate a payment card. For example, users may select one of a plurality of payment cards stored in a memory, and carry out a contactless transaction at a point of service ("POS"). In another embodiment, the device may securely conduct transactions over an open network with a payment server. By contactless payments, the inventions of the Patent-in-Suit provide significant time-savings, particularly in situations where a payment process would otherwise involve more than one contact between a merchant and consumer.
- 9. Costco has manufactured, used, marketed, distributed, sold, offered for sale, and exported from and imported into the United States devices and software that infringe the Patent-in-Suit. Costco has distributed variants of the Costco App that have included functionality to make contactless payments at Costco locations on any Android or iOS mobile device (*e.g.*, Costco Pay

functionality) since at least 2022. The current and previous versions of the Costco App, and the hardware and software supporting the Costco App (including Costco servers) are non-limiting instances of the Accused Products. The Accused Products practice the claims of the Patent-in-Suit to improve the shopping experience of its users, and to improve Costco's position in the market.

Mobile Payment

# Step 1 Set up your Costco Digital Membership Card

- 1 Install (or update) the Costco app from the App Store® or the Google Play<sup>™</sup> store.
- 2 Launch the app and tap the Account icon at the bottom of the screen. The login page will appear.
- 3 Follow instructions on the login page to sign in with an existing Costco website account. Or, create a new website
- \* To help prevent unauthorized or fraudulent use of your identity.

- 4 For your security, you may be asked to confirm your identity through a series of questions. If you already have a Costco.com account, you may still be prompted to verify your identity.\*
- 5 After successful verification, the Digital Membership Card will appear on your screen.
- 6 Launch the app when you enter the warehouse and to begin checkout at the register.

## Step 2 Add Payment to your Digital Membership 2 **Digital Membership Card**

Only available with the Costco Anywhere Visa® Card by Citi

- 1 Launch the Costco app
- 2 Select the Account icon.
- 3 Tap Add Payment.
- 4 Select your Costco Anywhere Visa® Card by Citi as your default payment. If you have multiple Costco Anywhere Visa® Cards, tap Set as Default under the card you wish to use. Tap Save.
- 5 Enter the credit card information for the card you selected. Tap Save.
- 6 Your Costco Anywhere Visa® Card can now be used as payment on your Costco app at the registers inside U.S. Costco warehouses, including Puerto Rico. New Costco Anywhere Visa® cardmembers must wait to receive their cards in the mail before adding it as payment to their Digital Membership Cards.

Not currently available at Costco Food Courts.

https://www.costco.com/costco-app.html

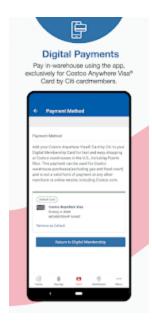
10. RFCyber has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patent-in-Suit. On information and belief, any prior assignees and licensees have also complied with the marking provisions of 35 U.S.C. § 287.

## **COUNT I** (Infringement of the '855 Patent)

- 11. Paragraphs 1 through 10 are incorporated herein by reference as if fully set forth in their entireties.
- 12. RFCyber has not licensed or otherwise authorized Costco to make, use, offer for sale, sell, or import any products that embody the inventions of the '855 Patent.
- 13. Costco infringes, contributes to the infringement of, and/or induces infringement of the '855 Patent by making, using, selling, offering for sale, distributing, exporting from, and/or importing into the United States products and/or methods covered by one or more claims of the '855 Patent including, but not limited to, at least the Accused Products.
- 14. Costco has directly infringed and continues to directly infringe the '855 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '855 Patent. Upon information and belief, these products include the Accused Products that practice the methods and systems covered by the '855 Patent, including, for example, contactless payment functionality implemented by the Costco App. For example, the Costco App infringes at least Claim 9 of the '855 Patent.
- 15. For example, Costco has and continues to directly infringe at least Claim 9 of the '855 Patent by making, using, offering to sell, selling, and/or importing into the United States products that practice a method for funding an e-purse, the method comprising: receiving a request

from a portable device; verifying the request with an account in a bank across a network; initiating a fund transfer request by a server with a financial institution administrating the e-purse when the request is successfully verified; sending commands to the portable device to cause an emulator in the portable device to update a transaction log in the portable device after an authenticity of the commands is verified by a midlet in the portable device, and wherein the request is a response composed by an e-purse applet after the e-purse applet receives an initial request from the midlet in the portable device and an PIN is entered by a user of the portable device and verified, the request is sent over a wireless network to the server, and wherein the e-purse in the portable device has been personalized by operations including: establishing an initial security channel between the card module and an e-purse security authentication module (SAM) external to the card module to install and personalize the e-purse applet in the card module, and creating a security channel on top of the initial security channel to protect subsequent operations of the card module with the e-purse SAM, wherein any subsequent operation of the emulator is conducted over the security channel via the e-purse applet.

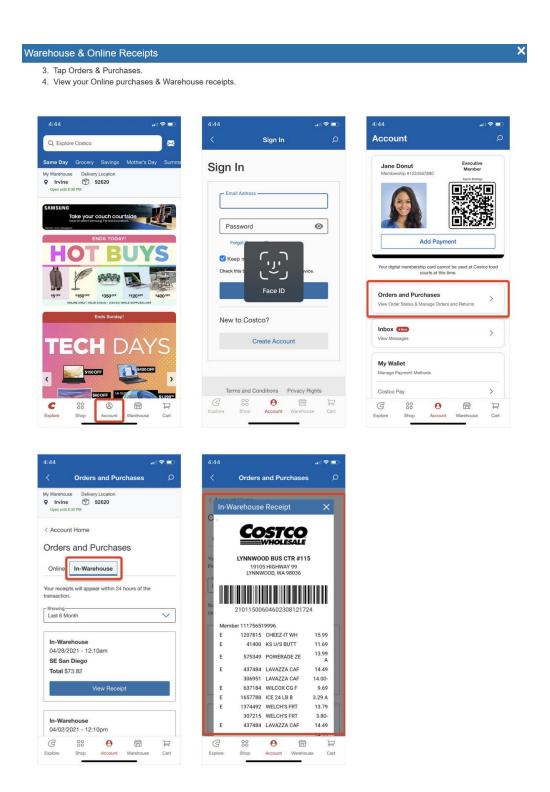
16. The Accused Products practice a method comprising receiving a request from a portable device. For example, Costco servers receive a request from mobile devices running the Costco App when performing a contactless or online purchase with a saved payment method and/or accrued rewards points.



https://www.Costco.com/cp/Costco-pay/3205993

- 17. The Accused Products further practice a method of verifying the request with an account in a bank across a network. For example, upon verifying a request for funds (*e.g.*, to complete a transaction with a saved payment card, gift card value, or with Costco Cash), the Costco App servers (administering the Costco App) initiate a fund transfer request for the requested funds with the institution administering the user's Costco credit card account.
- 18. The Accused Products further practice a method of initiating a fund transfer request by a server with a financial institution administrating the e-purse when the request is successfully verified. For example, upon verifying a request for funds (e.g., to complete a transaction with a saved payment card and/or with Costco points), the Costco App servers (administering the Costco App) initiate a fund transfer request for the requested funds with the institution administering the user's account.
- 19. The Accused Products practice a method of sending commands to the portable device to cause an emulator in the portable device to update a transaction log in the portable device after an authenticity of the commands is verified by a midlet in the portable device. For example,

upon information and belief, the servers supporting the Costco App send commands to a phone running the Costco Application to cause an emulator (*e.g.*, a portion of the Costco Application and/or associated APIs including functionality for logging transactions, rendering cards, and rendering QR/bar codes) to update a transaction log (*e.g.*, purchase history) after the authenticity of commands is verified by a midlet (*e.g.*, the Costco application), such as via SSL/TLS certificate.



https://www.costco.com/costco-app.html

20. The Accused Products practice a method wherein the request is a response composed by an e-purse applet after the e-purse applet receives an initial request from the midlet

in the portable device and a PIN is entered by a user of the portable device and verified, the request is sent over a wireless network to the server. For example, the request to a server supporting the Costco Application (*e.g.*, to load a card and/or complete a transaction) is a response composed by an e-purse applet (*e.g.*, the software representation of a Costco card and/or other saved payment methods) after the e-purse applet receives an initial request from the midlet (*e.g.*, the Costco App) and a PIN (*e.g.*, a face ID, 4-digit PIN, password, fingerprint) entered by the user is verified.

- 21. The Accused Products practice a method wherein the e-purse in the portable device has been personalized by operations including: establishing an initial security channel between the card module and an e-purse security authentication module (SAM) external to the card module to install and personalize the e-purse applet in the card module. For example, upon information and belief, saving a card in the Costco App comprises establishing an initial security channel (e.g., SSL/TLS connection) between the card module (e.g., a secure memory area in which sensitive card information is saved) and an e-purse security authentication module external to the card module (e.g., a server security module) to install and personalize the software representation of a user's saved card.
- 22. The Accused Products practice a method wherein the e-purse in the portable device has been personalized by operations including: creating a security channel on top of the initial security channel to protect subsequent operations of the card module with the e-purse SAM, wherein any subsequent operation of the emulator is conducted over the security channel via the e-purse applet. For example, upon information and belief, personalization further includes creating a security channel on top of the initial security channel, *e.g.*, via an additional layer of encryption such as a user device fingerprint and/or key used to encrypt transmitted card data, to protect any subsequent operation of the card module with the security module of the Costco servers. For

example, upon information and belief, any subsequent operation of the emulator portion of the Costco App (*e.g.*, to load funds or conduct transactions with a given card applet) are protected by such fingerprints, keys, and/or certificates.

- 23. Costco has indirectly infringed and continues to indirectly infringe one or more claims of the '855 Patent, as provided by 35 U.S.C. § 271(b), by inducing infringement by others, such as Costco's customers and end-users, in this District and elsewhere in the United States. For example, Costco's customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the inventions claimed in the '855 Patent. Costco induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting that they use the Accused Products in an infringing manner, including technical support, marketing, product manuals, advertisements, and online documentation. Because of Costco's inducement, Costco's customers and end-users use Accused Products in a way Costco intends and directly infringe the '855 Patent. Costco performs these affirmative acts with knowledge of the '855 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '855 Patent.
- 24. Costco has indirectly infringed and continues to indirectly infringe one or more claims of the '855 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement by others, such as customers and end-users, in this District and elsewhere in the United States. Costco's affirmative acts of selling and offering to sell the Accused Products in this District and elsewhere in the United States and causing the Accused Products to be manufactured, used, sold, and offered for sale contributes to others' use and manufacture of the Accused Products such that the '855 Patent is directly infringed by others. The accused components within the Accused

Products are material to the invention of the '855 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Costco to be especially made or adapted for use in the infringement of the '855 Patent. Costco performs these affirmative acts with knowledge of the '855 Patent and with intent, or willful blindness, that they cause the direct infringement of the '855 Patent.

- 25. Because of Costco's direct and indirect infringement of the '855 Patent, RFCyber has suffered, and will continue to suffer, damages in an amount to be proved at trial.
- 26. Because of Costco's direct and indirect infringement of the '855 Patent, RFCyber has suffered, and will continue to suffer, irreparable harm for which there is no adequate remedy at law, unless Costco's infringement is enjoined by this Court.

## **DEMAND FOR JURY TRIAL**

27. Plaintiff hereby demands a jury for all issues so triable.

## **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff prays for relief against Defendant as follows:

- a. Entry of judgment declaring that Defendant infringes one or more claims of each of the Patent-in-Suit;
- b. Entry of judgment declaring that Defendant's infringement of the Patent-in-Suit is willful;
- c. An order awarding damages sufficient to compensate Plaintiff for Defendant's infringement of the Patent-in-Suit, but in no event less than a reasonable royalty, including supplemental damages post-verdict, together with pre-judgment and post-judgment interest and costs;
  - d. Enhanced damages pursuant to 35 U.S.C. § 284;

- e. Entry of judgment declaring that this case is exceptional and awarding Plaintiff its costs and reasonable attorney fees pursuant to 35 U.S.C. § 285;
  - f. An accounting for acts of infringement;
- g. Such other equitable relief which may be requested and to which the Plaintiff is entitled; and
  - h. Such other and further relief as the Court deems just and proper.

Dated: July 18, 2024 Respectfully submitted,

## /s/ Alfred R. Fabricant

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