UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE, INC.
Petitioner

v.

RFCYBER CORP.,
Patent Owner

Inter Partes Review Case No. IPR2022-01239
U.S. Patent No. 10,600,046

DECLARATION OF GERALD W. SMITH IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 10,600,046

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

TABLE OF CONTENTS

I. INTRODUCTION AND QUALIFICATIONS 11
A. Educational Background 12
B. Professional Experience 12
II. METHODOLOGY; MATERIALS CONSIDERED 16
III. OVERVIEW AND LEGAL STANDARDS 18
A. Person of Ordinary Skill in the Art 18
B. Obviousness 19
C. Analogous Art 24
D. Claim Construction 25
IV. Level of a Person of Ordinary Skill 25
V. OVERVIEW OF THE TECHNOLOGY 27
A. Smart Cards 27
B. Smart Card Security 34
C. Mobile Payments 36
VI. OVERVIEW OF THE '218 PATENT 44
VII. Claim Construction for the '046 Patent 46
VIII. OPINIONS REGARDING THE COMBINATION OF LARACEY AND JOGU 47
A. Overview of Laracey 47
B. Overview of Jogu 49
IX. OPINIONS REGARDING GROUND 1—THE COMBINATION OF LARACEY AND JOGU 50
A. Claim 1 50
1. Claim 1(a): "causing a mobile device to capture data directly from a tag physically presented thereto," 50
2. Claim 1(c): "the data embedded in the tag includes an electronic invoice and settlement information with a merchant associated with the POS device," 60
3. Claim 1(d): "extracting the electronic invoice from the captured data in the mobile device;" 62

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

4. Claim 1(h): "calculating a total amount by adding the additional amount to the amount in the electronic invoice;" 63
5. Claim 1(i): "generating a payment request in the mobile device in response to the electronic invoice after the user has chosen an electronic purse (e-purse) maintained locally in the mobile device;" 65
6. Claim 1(k): "verifying the total amount with a balance in the e-purse, wherein said verifying the total amount with a balance in the e-purse is performed within the mobile device without sending a payment request to a payment gateway;" 73
7. Claim 1(m): "sending the payment request from the mobile device to the payment gateway, wherein the balance is sufficient to honor the payment request;" 84
8. Claim 1(o): "displaying a confirmation in the mobile device that the balance in the e-purse has been reduced by the total amount" 84

C. Claim 2: "The method recited in claim 1, wherein said causing a mobile device to capture data directly from a tag physically presented thereto includes placing the mobile device near the tag." 89

D. Claim 3: "The method as recited in claim 2, wherein the POS device provides security and authentication to generate the electronic bill and transfer the data to the tag." 90

E. Claim 5: "The method as recited in claim 1, further comprising: causing the mobile device to execute an installed module upon detecting the POS device in a near field of the mobile device, wherein the installed module is executed to receive the data directly from the tag carrying the electronic invoice and the settlement information." 92

X. OPINIONS REGARDING THE COMBINATION OF LARACEY, JOGU, AND TANG 93

A. Overview of Tang 93

B. Claim 17: "The method as recited in claim 12, wherein data exchange between the mobile device and the payment gateway is conducted in a secured channel established between the mobile device and the payment gateway." 94

XI. OPINIONS REGARDING THE COMBINATION OF LARACEY, JOGU, AND DORSEY 99

A. Overview of Dorsey 99

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

B. Claim 18(f): "the additional amount is added optionally by the user, after the user of the mobile device verifies the electronic invoice displayed on the mobile device and authorizes a payment to the electronic invoice,"..... 100

XII. CONCLUSION..... 107

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

CHALLENGED CLAIMS LISTING

Claim 1:

Claim 1[Pre] A method for mobile payment, the method comprising:

1(a) causing a mobile device to capture data directly from a tag physically presented thereto,

1(b) wherein the tag receives the data directly from a POS device and allows the mobile device to capture the data,

1(c) the data embedded in the tag includes an electronic invoice and settlement information with a merchant associated with the POS device,

1(d) extracting the electronic invoice from the captured data in the mobile device;

1(e) displaying the electronic invoice on a display of the mobile device to show an amount to be paid by a user of the mobile device,

1(f) wherein the mobile device is configured to execute an installed application therein to capture the data from the tag;

1(g) receiving an entry by the mobile device, the entry including the amount for the invoice and optionally an additional amount from the user;

1(h) calculating a total amount by adding the additional amount to the amount in the electronic invoice;

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.