

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

IN RE: MAXIM INTEGRATED	)	Master Docket
PRODUCTS, INC. MDL No. 2354	)	Misc. No. 12-244
	)	MDL No. 2354
This Document Relates to: All Actions	)	CONTI, District Judge
_____	)	

**DECLARATION OF DR. STUART G. STUBBLEBINE IN SUPPORT OF OPPOSING  
PARTIES' RESPONSIVE CLAIM CONSTRUCTION BRIEF**

**Table of Contents**

I. Background..... 4

II. Claim Construction..... 8

III. Claim Terms For Which The Opposing Parties Have Proposed a Construction..... 9

    A. “math coprocessor . . . for processing encryption calculations” (510, claim 1); “math coprocessor . . . for handling complex mathematics of encryption and decryption” (013, claim 1); “modular exponentiation accelerator circuit . . . for performing encryption and decryption calculations” (013, claim 9)..... 9

        (a) “distinct from” requirement..... 11

        (b) “works concurrently with” requirement..... 16

        (c) “dedicated” requirement..... 18

        (d) “to handling the complex mathematics of modular exponentiation”..... 20

        (e) “for encryption and decryption”..... 22

    B. “real time clock circuit” (510, claim 1); “real time clock” (013, claim 1); “clock circuit” (013, claim 9); “timing circuit” (095, claim 1)..... 25

    C. “storing” (880, claim 1); (095, claims 1, 5); “store” (095, claim 1); “storing” (013 patent, claim 9)..... 28

    D. “challenge number” (095 patent, claim 1)..... 30

    E. “adjust said first data object according to said second data object” (095 patent, claim 1)..... 34

    F. “time stamp” (013, claim 9); (095, claim 1)..... 36

    G. “time stamping data transactions” (510, claim 1)..... 43

    H. “certificate” (095, claim 1)..... 45

    I. “packet” (702, claim 1); (510, claim 3)..... 53

IV. Terms Identified by Opposing Parties as Indefinite..... 56

    A. “store a transaction script, the transaction script including at least a representation of the time stamp generated by the timing circuit” (095, claim 1)..... 56

B. “substantially unique electronically readable identification number” (510,  
claim 1) ..... 58

C. “responsive to a verification signal from said electronic device” (095,  
claim 1) ..... 61

D. “time stamping a predetermined function” (013, claim 1) ..... 62

I, Stuart G. Stubblebine, hereby declare under penalty of perjury:

1. Counsel for the Opposing Parties<sup>1</sup> have retained me as an expert in connection with an ongoing litigation in the Western District of Pennsylvania to offer opinions regarding certain claim construction issues for U.S. Patent Nos. 5,805,702 (“the 702 patent”), 5,940,510 (“the 510 patent”), 5,949,880 (“the 880 patent”), 6,105,013 (“the 013 patent”), and 6,237,095 (“the 095 patent”).

2. If called to testify at a deposition, hearing, or trial in this matter, I anticipate providing the opinions summarized in this declaration, as well as responding to positions taken by any and all expert witnesses or fact witnesses called by Maxim Integrated Products, Inc. (“Maxim”).

3. I submit this declaration based on my personal knowledge and in support of the Opposing Parties’ Claim Construction Brief. If called upon as a witness, I could competently testify to the truth of each statement herein.

#### **I. Background**

4. I am a research scientist and consultant and Stubblebine Consulting, LLC and Stubblebine Research Labs, LLC, where I specialize in computer and network security, evaluations, detailed design, and formal analysis.

5. I earned a B.S. in Computer Science & Mathematics as a double major from Vanderbilt University in 1983, a M.S. in Electrical Engineering with a focus on Computer Engineering from the University of Arizona in 1988, and a Ph.D. in Electrical Engineering from the University of Maryland in 1992 with focus on Computer Engineering.

---

<sup>1</sup> Dr. Stubblebine submits this Declaration on behalf of all Opposing Parties. Certain Opposing Parties have also filed further briefing regarding the “certificate” term. Vanguard joins except to the extent any positions set forth herein differ from the positions set forth in Vanguard’s Responsive Claim Construction Brief.

6. A copy of my curriculum vitae is attached to this Declaration. My CV includes a list of publications I have authored or co-authored. I have experience in smart card technology, electronic payment and credit card processing, cryptographic protocols, software engineering, computer networks and their protocols, computer and network security, and among other technical areas.

7. Through Stubblebine Research Labs, LLC, I have conducted fundamental research under the sponsorship of the National Science Foundation. My funded research includes work in the area of authenticating users subject to automated password guessing attacks, and I also worked in the area of location privacy and digital rights management.

8. In addition to founding Stubblebine Consulting, LLC and Stubblebine Research Labs, LLC, I have previously worked at the University of California-Davis as a professional researcher, a full professor level position, in the areas of security, cryptography, and secure software engineering.

9. I was the Vice President and Cryptographer at CertCo, Inc., where I designed banking protocols involving the use of smart cards for authenticating and authorizing user initiated transactions involving multiple party banking transactions using public key technology. My work further involved conducting research, design, and analysis of public key cryptography protocols, smart cards, and authentication and authorization protocols.

10. While a Principal Member of the technical staff at AT&T Labs, formerly Bell labs, I consulted extensively with developers and business units on the security design and analysis of electronic commerce applications. This work included provisioning phone service using security hardware embedded in set top boxes. I also led the design and analysis of internet-based credit card processing technology involving multi-party protocols involving consumer,

# 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.