

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RPX CORPORATION.
Petitioner,

v.

VIRNETX, INC. AND SCIENCE APPLICATIONS INTERNATIONAL
CORPORATION,
Patent Owners

Patent No. 7,418,504

Issued: Aug. 26, 2008

Filed: Nov. 18, 2003

Inventors: Victor Larson, *et al.*

Title: AGILE NETWORK PROTOCOL FOR SECURE COMMUNICATIONS
USING SECURE DOMAIN NAMES

Inter Partes Review No. IPR2014-00176

Declaration of Michael Fratto Regarding

U.S. Patent No. 7,418,504

I, Michael Fratto, do hereby declare and state, that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: November 20, 2013


Mike Fratto 11/20/13

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	Engagement	1
B.	Background and Qualifications	1
C.	Compensation and Prior Testimony	4
D.	Information Considered.....	4
II.	LEGAL STANDARDS FOR PATENTABILITY	5
A.	Anticipation	7
B.	Obviousness.....	8
III.	THE '504 PATENT	13
A.	Effective Filing Date of the '504 Patent	13
B.	Prosecution History Of The '504 Patent	16
C.	The Person Of Ordinary Skill In The Art.....	16
D.	Overview of the Claims of the '504 Patent	17
E.	Description of the Background Technology Relevant to the '504 Patent.....	17
1.	The Open Internet	17
2.	Domain Names and the Domain Name System (DNS).....	19
a.	The DNS System	19
b.	Domain Names and URIs	22
c.	Domain Name Resolution	24
3.	Encryption, Tunnels, and Data Security	30
d.	Encryption.....	30
e.	Authentication.....	32
f.	IPSec – RFC 2401	36
g.	Tunneling	37
4.	VPNs	40
5.	Connection Indicators	41
IV.	GENERAL ISSUES RELATED TO MY PATENTABILITY ANALYSIS.....	45

A.	The Claims of the '504 Patent I Am Addressing in this Report	45
B.	Interpretation of Certain Claim Terms	57
6.	Domain Name (Claims 1-3, 5-8 and 14-60)	58
7.	Domain Name Service System (Claims 1-3, 5-8 and 14-60)	59
8.	Indication (Claims 1-3, 5-8, and 14-60)	61
9.	Secure Communication Link (Claims 1-3, 5-8 and 14-60)	62
10.	Secure Name (Claims 3, 24, 25, 48, and 49)	65
C.	Prior Art References	66
11.	Exhibit 1007 – Aventail Connect v3.01/2.51 Administrator’s Guide (“Aventail”)	66
12.	Exhibit 1008 – U.S. Patent 6,557,037 to Provino.....	68
13.	Exhibit 1009 – U.S. Patent 6,496,867 to Beser	68
14.	Request for Comment (RFC) Publications	68
V.	PATENTABILITY ANALYSIS OF CLAIMS 1-3, 5-8, AND 14-60 OF THE '504 PATENT	71
A.	Aventail Connect v3.01/2.5 Administrator’s Guide	71
15.	Overview of Aventail.....	71
16.	Comparison of Aventail to Claims 1-3, 5-8, and 14-60 of the '504 Patent	119
a.	Claims 1, 36 and 60	119
1.	Connection to Communication Network	119
2.	Storage of Plurality of Domain Names and Corresponding Network Addresses.....	122
3.	Receiving Query For a Network Address	124
4.	Indication that the Domain Name Service System Supports Establishing a Secure Communication Link.....	125
b.	Claims 2 and 37	129
c.	Claim 3.....	131
d.	Claim 5.....	133
e.	Claim 6.....	134

f.	Claim 7.....	135
g.	Claim 8.....	137
h.	Claims 14 and 38	138
i.	Claims 15 and 39	139
j.	Claims 16 and 40	141
k.	Claims 17 and 41	145
l.	Claims 18 and 42	147
m.	Claims 19 and 43	148
n.	Claims 20 and 44	150
o.	Claims 21 and 45	151
p.	Claims 22 and 46	152
q.	Claims 23 and 47	153
r.	Claims 24 and 48	154
s.	Claims 25 and 49	156
t.	Claims 26 and 50	156
u.	Claims 27 and 51	157
v.	Claims 28 and 52	159
w.	Claims 29 and 53	160
x.	Claims 30 and 54	161
y.	Claims 31 and 55	163
z.	Claims 32 and 56	165
aa.	Claims 33 and 57	167
bb.	Claims 34 and 58	168
cc.	Claims 35 and 59	169
17.	Aventail in view of Kiuchi Renders Obvious Claim 3	171
dd.	Claim 3.....	175
B.	U.S. Patent No. 6,557,037 to Provino.....	179
18.	Overview of Provino.....	179

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.