

EXPERT REPORT OF AVIEL D. RUBIN

I. INTRODUCTION

1. I have been retained as an independent expert in this lawsuit by the law firm of Irell & Manella LLP on behalf of Juniper Networks, Inc. (“Juniper”). I have been asked to provide an opinion related to whether Claim 10 of U.S. Patent No. 8,677,494 (“the ‘494 Patent”) contains an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application. As discussed in further detail in this declaration, it is my opinion that Claim 10 does not contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application.

2. In addition to opinions outlined in this report, I may also provide testimony (1) in rebuttal to Finjan’s positions, including opinions of its experts and materials they discuss or rely upon, (2) based on any Orders from the Court, (3) based on documents, contentions, or other discovery that Finjan or others have not yet produced or were produced too late to be considered before my report was due, and/or (4) based on witness testimony which has not been given or was given too late to be considered before my report was due. I reserve the right to supplement or amend my opinions as further documentation and information is received.

3. If called to testify in this matter, I may use as exhibits various documents produced in this matter that refer or relate to the matters discussed in this report. I have not yet selected the particular exhibits that may be used. In addition, I may create or assist in the creation of certain demonstrative exhibits or summaries of my findings and opinions to assist me in testifying. Such exhibits have not yet been created.

II. BACKGROUND AND QUALIFICATIONS

4. I am being paid at my customary rate of \$775 per hour for time spent on this case. I am also being reimbursed for reasonable and customary expenses. My compensation is not dependent in any way on the results of the lawsuit or the substance of my testimony.

5. I provide below an overview of my background and qualifications. Additional details of my education and employment history, professional service, patents, publications, and other testimony are set forth in my current curriculum vitae (CV), which can be found here:

similar reasoning in holding that the '494 Patent claims were abstract. I agree with the holdings and reasoning by these courts that the '494 Patent (including Claim 10) is directed to an abstract idea.

VIII. CLAIM 10 DOES NOT CONTAIN AN INVENTIVE CONCEPT

26. Considering the elements of Claim 10 both individually and as an ordered combination, it is my opinion that Claim 10 does not have a transformative inventive concept. Instead, each of the components found in the claim were well understood, routine, and conventional activities previously known to the industry prior to the time of the purported invention, and the combination of the elements is also well understood, routine, and conventional.

A. The Functionality Recited In Claim 10 Was Not Inventive.

27. It is my opinion that the following steps were well known, routine, and conventional in the art before the priority date of Claim 10 of the '494 Patent: receiving an incoming Downloadable; deriving security profile data for the Downloadable, including a list of suspicious computer operations that may be attempted by the Downloadable; and storing the Downloadable security profile data in a database.

28. Claim 10 of the '494 Patent is nearly identical to Claim 1 of the '494 Patent, where Claim 10 is merely a system claim that performs the steps claimed in the method of Claim 1. The following table compares the claims, and shows the additional system components that differentiate Claim 10 from Claim 1:

Claim 1	Claim 10
A method for computer-based method, comprising the steps of:	A system for managing Downloadables, comprising:
receiving an incoming Downloadable;	<u>a receiver for</u> receiving an incoming Downloadable;
deriving security profile data for the Downloadable, including a list of suspicious computer operations that may be attempted by the Downloadable	<u>a Downloadable scanner coupled with said receiver, for</u> deriving security profile data for the Downloadable, including a list of suspicious computer operations that may be attempted by the Downloadable
storing the Downloadable security profile data in a database	<u>a database manager coupled with said Downloadable scanner, for</u> storing the Downloadable security profile data in a database.

29. In IPR2016-00159, the PTAB issued a Final Written Decision invalidating Claim 1 of the ‘494 Patent in view of a prior art article titled “Dynamic Detection and Classification of Computer Viruses Using General Behaviour Patterns” by Morton Swimmer *et al.* (“Swimmer”). IPR2016-0159, Paper 50 (Ex. 19) at 45. More specifically, the PTAB found that all of the overlapping limitations in Claim 10 (*i.e.*, everything from the limitations that is not bolded/underlined in the table above) was disclosed in the art before the priority date for the ‘494 Patent.

30. In reaching this conclusion, the PTAB applied a construction of the term “a list of suspicious computer operations” as “a list of all operations that could ever be deemed potentially hostile.” Paper 50 at 33. That construction differs from the construction of the term applied by the Court in this proceeding of “a list of computer operations in a received Downloadable that are deemed hostile or potentially hostile.” Dkt. No. 189 at 5. But the Board noted that its “ultimate conclusions regarding patentability of the challenged claims did not turn on [its] adoption of that construction....” Paper 50 at 33. Indeed, the Board found “that Swimmer discloses deriving security profile data including a list of suspicious computer operations even under Patent Owner’s proposed construction,” which was “a list of computer operations deemed suspicious.” Paper 50 at 33-34. I agree with the Board that Swimmer discloses deriving “a list of computer operations deemed suspicious.” In addition, Finjan’s prior proposed construction is substantially similar to the construction adopted by the Court in this matter, and therefore it is my opinion that the Board’s previous finding that Swimmer teaches all of the limitations in Claim 1 applies in this proceeding as well.

B. The Element Of A “Receiver For Receiving An Incoming Downloadable” Does Not Contain An Inventive Concept.

31. It is my opinion that using a “receiver” to receive an incoming Downloadable is not an inventive concept. Rather, receivers were well known, routine, and conventional in the art before the priority date of Claim 10 of the ‘494 Patent, and using a receiver to receive an incoming file (including Java files, HTML, PDFs, Microsoft Word, executables, etc.) was a routine and conventional use of a receiver.

32. For example, Swimmer teaches that a receiver can be used for receiving an incoming Downloadable in a malware detection system. Ex. 3 at 13 (“One possibility is to use it as a type of

decomposed. *See, e.g.*, Ex. 3 at 3 (“When polymorphic technology improved, *statistical analysis of the opcodes*² was used. Recently, the best of the scanners have shifted course for merely detecting viruses to attempting to identify the virus. This is often done with added strings, perhaps position dependent, or checksums, over the invariant *part* of the virus. ... The next shift many scanners are presently experiencing is away from known virus only detection to detection of unknown viruses. ... This is most often done by looking for a *pattern of certain code fragments* most often in viruses....”).

64. Finjan has also argued that Claim 10 contains an inventive concept because it supposedly allows for the detection of new viruses, rather than only identifying known viruses. But the concept and process of detecting new viruses was not new as of the priority date of the ‘494 Patent. Indeed, Swimmer specifically notes that “many scanners are [shifting] away from known virus only detection to detection of unknown viruses.” Ex. 3 at 3. And it further notes that “This is most often done by looking for a pattern of certain code fragments most often in viruses.” *Id.* Thus, the prior art shows that this was a common technique and not anything unconventional or inventive.

65. In sum, it is my opinion that there is nothing transformative or inventive about Claim 10, even as an ordered combination and even if the “spatial” and/or “temporal” concepts articulated by the *Blue Coat* court were actually recited in the claim.

IX. POSSIBLE REVISIONS TO REPORT

66. I intend to review and consider any additional information provided to me after the production of this report and I reserve the right to supplement or revise my analysis and conclusions.

Date: September 11, 2018



Aviel D. Rubin

² Ex. 3 at 9 (noting that “opcodes” are “primarily calls to the DOS functions” in a program).