

Introduction

1. I am John Rizzo. I am a consultant having expertise in ecommerce systems, including mobile ecommerce systems. I have previously provided testimony on behalf of Google Inc. in *Oracle America, Inc. v. Google Inc.*, Case No. CV 10-03561 (N.D. Cal). My business address is 3 Hacienda Court, San Rafael 94901. My CV is attached as Exhibit I to my Declaration.
2. I am being compensated by GTX for my time in providing this expert analysis at the rate of \$250 per hour.

Qualifications

3. Attended Brooklyn College until 1986.
4. From 1997 to 1998, I was an Application Developer at Ascend Communications where I designed and implemented an online Purchase Order Application for employees. From 1998 to 2000, I was a Lead Software Engineer for AirTouch where I participated in vendor management for a web portal and worked on application development for a WAP gateway.
5. From 2000 to 2001, I was a Senior Software/Systems Engineer as part of an Advanced Technology Team at Vodafone, where I worked on the design and development of the Vodafone Global Internet Platform. From 2001 to 2002, I was a Senior Software/Systems Engineer as part of Technical Business Development at Vodafone

where I worked on mobile device related issues. From 2002 to 2004, I was a Chief Architect of Mobile Services and Integration at Vodafone where I worked on the global rollout of a content download platform to support Vodafone Live! Services.

6. From 2004-2012, I was Vice President of Technology Strategy & Business Development at Aplix Corp. where I worked on next generation mobile data technologies. From 2013-2017, I was Senior Vice President of the Americas for Ubitus Inc. where I worked on interactive media solutions for gaming and VR, consumer game streaming services, and SaaS solutions for game streaming.

Assignment

7. I have been asked to assess whether the use of the “server”, as recited in claim 27 of U.S. Patent No. 7,177,838 (the ‘838 Patent), reflects a specific technological modification of a known computer system to solve a problem or improve the functionality or capability of that computer system.
8. I have reviewed the ‘838 Patent and its file history, including the references cited during prosecution to assist me with my assigned task.

The Use of a “Server” Reflects a Specific Technological Modification that Improves the Functionality or Capability of Known Computer Systems Used in Electronic Commerce

9. As noted in the “Background of the Invention” section of the ‘838 Patent, there were problems with Internet based ecommerce systems in that they frequently required purchasers to provide sensitive personal information to facilitate transactions. To address this concern for potential fraud, the ‘838 Patent indicates that it would be desirable “to provide their purchasers the convenience of minimizing the requirement for interaction between a client computer and the ASP server in order to complete the purchasing or rental transaction, as the case may be. It would also be desirable for ASPs to minimize or limit the frequency of asking the purchaser to transmit the user's private, sensitive information, such as credit card information. Although the purchaser's credit card number is encrypted during the transmission, it will be highly desirable to minimize its exposure through the Web.” *See* ‘838 Patent at 2:11-23.
10. In addition, the ‘838 Patent indicates that ““micropayment’ transactions, sometimes amounting to only fractions of a cent, may also occur in the context of providing access to media, or Web-based services, such as search engines. In each of these cases, it is necessary to provide a way for users to pay for such transactions without incurring the overhead of a credit card charge.” *See* ‘838 Patent at 2:27-33. To this end, the ‘838 Patent indicates that it is “an object of the present invention to provide electronic currency or tokens that may be issued and used with minimal overhead, and that do not

require on-line communications with a bank or other organization to issue or use the tokens.” *See* ‘838 Patent at 4:8-12; see also 3:60-63.

11. The inventor of the ‘838 Patent, Dr. Marvin Ling, had to address how this object would be implemented from a technical standpoint in an environment in which vendor computers, service provider computers and user devices would ordinarily interact over computer networks.
12. The solution Dr. Ling adopted was to provide “a system for conducting business transactions in a networked environment using ‘electronic tokens’ (or ‘tokens’) as a price for each item or product being offered for sale or rental by a vendor.” *See* ‘838 Patent at 5:46-50. “Since electronic tokens are used for the business transaction, the need to transmit the user's credit card number and other personal sensitive information between the user's computer and the vendor's computer for each transaction is eliminated. Thus, the method and system of the present invention provides users the convenience of minimizing interactions between the user's computer (the client computer) and the vendor's computer (the server) thus reducing overhead. Furthermore, security for the user's personal sensitive information is improved.” *See* ‘838 Patent at 5:58.
13. The “benefit of using the vendor-issued electronic tokens of the present invention is that privacy risks are decreased. Since all purchases or business transactions are done using tokens, very little or no personal sensitive information, such as the user's credit card number, need be transmitted over communication lines, such as the Internet. Although information transmitted via the Internet may be encrypted, it is still desirable to eliminate or minimize such transmissions, since they may be intercepted and decrypted. Furthermore, since the vendor and user interact directly for the purchase and use of

electronic tokens, rather than relying on a third party such as a bank, users may be selective about which vendors they are willing to trust with their private information.”

See ‘838 Patent at 6:29-42.

14. “Because the user need not use a credit card for his purchases, it is unnecessary for the user to have a credit card, or for the user's computer or the vendor's computer to interact over the network with a bank or other financial institution to process credit card transactions. Additionally, since orders can be handled without credit card transactions, the overhead associated with such transactions can be reduced or eliminated, permitting micropayments.” *See* ‘838 Patent at 6:17-24.

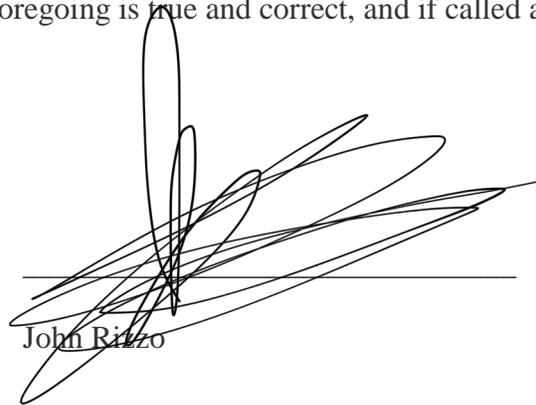
15. Although the claimed “server” is applied in an ecommerce system, it addresses technical computer integration issues which exist solely in the context of computer networks with a technical solution that is tied to the “server” implemented in a way that improves the functionality of the computer system in which it is employed by reducing the number and complexity of integrations required between vendors, users, and service providers. The invention serves to reduce the complexity of integrations in two ways. Firstly, it reduces the vendor’s touch points to outside financial systems by reducing the number of times that a credit card or other financial vehicle needs to be used by the end user to make a purchase. This also reduces the risk of users credit cards or other financial vehicles being exposed to malicious forces. Secondly, due to the challenges of reconciliation for financial micro transactions vendors would need to build out systems for caching user purchases in order to hit credit card or financial system thresholds. The invention removes the need for these caching systems and thus lowers the overhead in

development, support, and maintenance costs. It further reduces lost revenues due to any particular user never reaching the financial threshold.

16. The use of the claimed “server” does not simply reflect the use of generic computer technology in a conventional or routine manner. Indeed, the prosecution history of the ‘838 Patent suggests otherwise. As noted by the P.T.O Examiner at the close of prosecution, “[t]he prior art taken alone or in combination failed to teach or suggest a vendor registering user to purchase electronic tokens wherein each token having a value of at least a fraction of a dollar and authorizing a purchase at a participating vendor web site without requiring any third party authentication and a physical manifestation of the user account.” Notice of Allowability, dated October 6, 2006, at pg.2.
17. There are other ways of implementing a server for facilitating transactions between vendors and users without operating a server in the manner called for by the claims of the ‘838 Patent. For example, a vendor computer need not rely on electronic tokens to facilitate “microtransactions”, but instead could require credit card payments for each transaction without the use of “electronic tokens” issued by or on behalf of the vendor. So, the claimed invention of the ‘838 Patent does not cover all ways of facilitating transactions among vendors and users.
18. I have reviewed the prior art cited during the prosecution of the ‘838 Patent (including all references cited on the face of the ‘838 Patent) and do not find that those references disclose information that would lead one skilled in the art to conclude that the operation of the claimed “server” including its constituent elements reflected a conventional approach to addressing the integration issues already discussed. Nor, based on my experience, am I aware of such information.

19. I declare under penalty of perjury that the foregoing is true and correct, and if called as a witness would testify competently thereto.

20. Dated October 26, 2017.



John Rizzo

Exhibit 1