

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent of Munger et al.

U.S. Patent No. 7,490,151

Filed: September 30, 2002

Issued: February 10, 2009

Title: ESTABLISHMENT OF
A SECURE COMMUNICATION LINK
BASED ON A DOMAIN NAME
SERVICE (DNS) REQUEST

§ REQUEST FOR *Inter Partes*
§ REEXAMINATION

§ Attorney Docket No.: 43614.99

§ Customer No.: 27683

§ Real Party in Interest:
§ Cisco Systems, Inc.

REQUEST FOR INTER PARTES REEXAMINATION

Mail Stop *Inter partes* Reexam
Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the provisions of 35 U.S.C. §§ 311-318, David L. McCombs (“Requester”) hereby requests *inter partes* reexamination of claims 1-16 (all of the claims) of United States Patent No. 7,490,151 that issued on February 10, 2009, to Munger et al. (“the ’151 patent,” Ex. A), on behalf of Cisco Systems Inc., the real party in interest. In accordance with 37 C.F.R. § 1.915(b)(7), Cisco Systems Inc. hereby certifies that the estoppel provisions of 37 C.F.R. § 1.907 do not prohibit this request for *inter partes* reexamination.

This request presents prior art references that are better than and non-cumulative of the prior art that was considered during the original prosecution of the ’151 patent. Claims 1-16 (all of the claims) are invalid over these new references. Requester asks that reexamination be ordered and that all of the claims be rejected and ultimately canceled.

The ’151 patent is the subject of a co-pending request for reexamination, control number 95/001,697 (“the ’697 request”), filed on behalf of Apple, Inc. The ’697 request cites different references and proposes different rejections than in this request. The ’151 patent is also the subject of pending litigation, styled *VirnetX, Inc. v. Cisco Systems, Inc.*, Case No. 6:10-cv-417 (E.D. Tex. filed Aug. 11, 2010). No final decision has been entered in that case.

VIRNETX EXHIBIT 2003

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I. Introduction

The claims of U.S. 7,490,151 describe a Domain Name Service (“DNS”) module that intercepts DNS requests and automatically initiates an encrypted channel when a requested domain name corresponds to a secure server. In the original prosecution, the Applicants successfully argued these features to distinguish over the Examiner’s rejections.

Unknown to the Examiner, however, other people developed and publicized the same technology more than a year earlier than the Applicants for the ’151 patent. This request shows how four references raise substantial new questions of patentability and invalidate claims in the ’151 patent. For example, the Kiuchi reference describes a firewall computer with a DNS proxy module that intercepts all requests for communication outside the network. The proxy looks up the IP address corresponding to the request and determines whether the request targets a computer that is part of a secure, closed network. If so, the proxy server automatically creates an encrypted tunnel to allow that the client to communicate with the secure server. Thus, Kiuchi teaches a DNS proxy module that intercepts DNS requests and automatically initiates an encrypted channel between the client and the server when a request corresponds to a secure server.

Another reference, Blum, teaches a client computer with an enhanced name service provider that intercepts DNS requests from client applications. When a DNS request relates to a remote server, the name service provider engages a transparent proxy to automatically initiate a tunnel to the remote network. The client application can then communicate securely with the remote server through the transparent proxy. Blum describes using Secure Sockets Layer (SSL), an encrypted protocol, as a tunneling protocol between the client and server. Thus, Blum also teaches a DNS proxy module with the features mistakenly believed to be absent from the prior art during the original prosecution.

Two other references also provide highly relevant teachings that were not considered during prosecution. The Wesinger reference describes using virtual hosts and a specialized DNS module to automatically create secure, transparent connections between and among networks. And the Aziz reference similarly teaches a DNS system that automatically provides a target server’s encryption keys to a requesting client, which then encrypts messages sent to the target server. Although Wesinger and Aziz are listed on the face of the ’151 patent, their teachings were never discussed or analyzed by the Applicants or Examiner during prosecution.

These references provide new, non-cumulative disclosures of intercepting a DNS request and automatically initiating an encrypted channel. They undermine the arguments that led the Examiner to allow the '151 patent claims and raise substantial new questions of patentability.

Requester therefore asks that the Office issue an Order for Reexamination and that the reexamination proceed to reject and cancel claims 1-16 of the '151 Patent.

II. Description of the '151 Patent

The '151 patent has 16 total claims and three independent claims—claims 1, 7, and 13. Each of the independent claims describes a data processing device that performs a method (claim 1), or a computer readable medium holding instructions that perform a method (claims 7 and 13). Thus, while not written as a method claim *per se*, the body of each claim recites method steps.

Fig. 27 “shows steps that can be carried out to implement transparent VPN creation based on a DNS look-up function”¹:

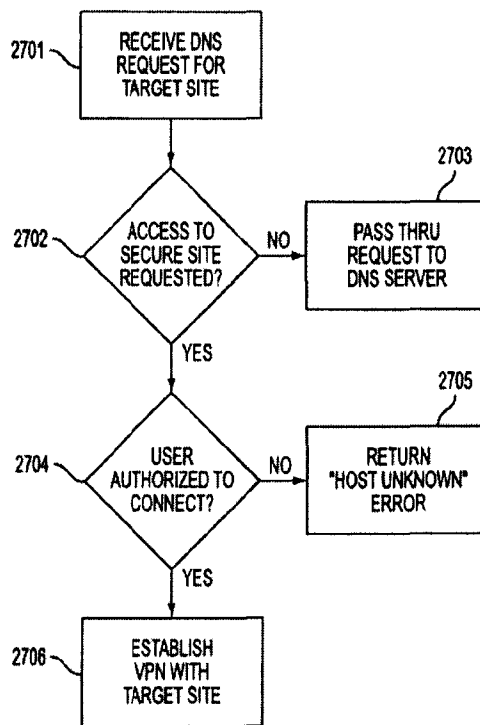


FIG. 27

'151 Patent, Fig. 27

¹ '151 Patent, 7:22-23.

Claim 1 is representative:

1. A data processing device, comprising memory storing a domain name server (DNS) proxy module that intercepts DNS requests sent by a client and, for each intercepted DNS request, performs the steps of:

(i) determining whether the intercepted DNS request corresponds to a secure server;

(ii) when the intercepted DNS request does not correspond to a secure server, forwarding the DNS request to a DNS function that returns an IP address of a nonsecure computer, and

(iii) when the intercepted DNS request corresponds to a secure server, automatically initiating an encrypted channel between the client and the secure server.

III. History of the '151 Patent

A. Prosecution of the '151 Patent

U.S. 7,490,151 was filed September 30, 2002, as application no. 10/259,494. The '151 patent is a divisional of application no. 09/504,783, now issued as U.S. 6,502,135, which is itself a continuation-in-part of application no. 09/429,643, now issued as U.S. 7,010,604. The '151 and its parents all claim priority to two provisional applications, no. 60/137,704, filed June 1999, and no. 60/106,261, filed October 1998.

During the prosecution of the application that issued as the '151 patent, the Examiner rejected the original twenty claims as being obvious over Strentzsch et al., U.S. 6,256,671, under 35 U.S.C. § 103(a).² The Examiner also noted that an “encryption feature is a well-known feature in the art.”³ In response, the Applicants argued that Strentzsch was a non-analogous reference because Strentzsch “provides a method and apparatus for *preventing* network access by manipulating a domain name system,” whereas the “claimed invention *establishes* secure network connections.”⁴

² See Ex. B-1, Non-Final Rejection mailed June 24, 2004, pp. 2-3.

³ See Ex. B-1, Non-Final Rejection mailed June 24, 2004, p. 3.

⁴ Ex. B-1, Applicant Arguments/Remarks Made in an Amendment, September 13, 2002, p. 10 (emphasis in original).

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