

EX 1004

031004
16152 U.S. PTO

PROVISIONAL APPLICATION COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION under 37 CFR 1.53(c).

EV338101205US

Docket Number

ROCK1180

Type a plus sign(+) inside this box ☐

+

Inventors/Applicants

LAST NAME	FIRST NAME	MIDDLE INITIAL	RESIDENCE (CITY AND EITHER STATE OR FOREIGN COUNTRY)
Turley	Patrick		1820 Treadwell Lane, Austin, Texas 78704
Johnston	Keith		2110 Wychwood Dr., Austin TX 78746
Tonnesen	Steven	D.	1602 Pagedale Dr., Cedar Park, TX 78613

Title of Invention:

SYSTEM AND METHOD FOR ACCESS SCOPE CONTROL ("WALLED GARDENS") FOR CLIENTS OF A NETWORK ACCESS GATEWAY

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25094

Enclosed Application Parts (Check All That Apply)

☒

Specification Number of Pages

4

☒

Applicant Claims Small Entity Status

☐ Drawing(s) Number of Sheets

☒

Other (Specify)

Postcard

Method Of Payment (Check One)

☒

A check or money order is enclosed to cover the Provisional filing fees

PROVISIONAL FILING FEE AMOUNT(S)

\$80.00

☐ The Commissioner is hereby authorized to charge the filing fee to Deposit Account Number:

50-0456

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☒

No

☐

Yes, the name of the U.S. Government agency and the Government Contract number are

Respectfully submitted,

SIGNATURE: _____

DATE: March 10, 2004

TYPED OR PRINTED NAME: Steven R. Sprinkle

REGISTRATION NO.: Reg. No. 40,825 (if appropriate)

PROVISIONAL APPLICATION FILING ONLY

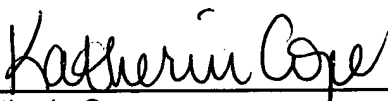
Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Office of Assistance Quality and Enhancement Division, Patent and Trademark Office, Washington, DC 20231, and to the Office of Information and Regulatory Affairs, Office of Management and Budget (Project 0651-0037), Washington, DC 20503. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
CERTIFICATE OF MAILING BY "EXPRESS MAIL"	Atty Docket No. (Optional) ROCK1180
Mail Stop Provisional Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Sir:	In the Application of: Turley, et al.
	Date Filed: March 10, 2004
	Title: SYSTEM AND METHOD FOR ACCESS SCOPE CONTROL ("WALLED GARDENS") FOR CLIENTS OF A NETWORK ACCESS GATEWAY

I hereby certify that the attached provisional transmittal, provisional patent application, check in the amount of **\$80.00** and postcard are being deposited with the United States Postal Service "EXPRESS MAIL Post Office to Addressee" service under 37 C.F.R. § 1.10, Mailing Label Certificate No. **EV338101205US** on **March 10, 2004**, addressed to: **Mail Stop Provisional Patent Application**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Respectfully submitted,

Gray Cary Ware & Freidenrich LLP


 Katherin Cope

EV338101205US

APPLICATION FOR UNITED STATES LETTERS PATENT

Title

**SYSTEM AND METHOD FOR ACCESS SCOPE CONTROL ("WALLED GARDENS") FOR CLIENTS OF
A NETWORK ACCESS GATEWAY**

Inventor(s):

**Patrick Turley
Keith Johnston
and
Steven D. Tonnesen**

Date Filed:

March 10, 2004

Attorney Docket No.:

ROCK1180

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USPS Express Mail Label No.:

EV338101205US

INVENTION DISCLOSURE FORM

Title: SYSTEM AND METHOD FOR ACCESS SCOPE CONTROL ("WALLED GARDENS") FOR CLIENTS OF A NETWORK ACCESS GATEWAY

Inventors:

Patrick Turley
Keith Johnston
Steven D. Tonnesen

Related Applications:

This application is related to U.S. Patent Application No. 10/683,317, filed October 10, 2003 entitled "SYSTEM AND METHOD FOR PROVIDING ACCESS CONTROL," by Richard MacKinnon, Kelly Looney, and Eric White, and U.S. Provisional Patent Application No. _____, entitled "SYSTEM AND METHOD FOR DETECTION OF ABERRANT NETWORK BEHAVIOR BY CLIENTS OF A NETWORK ACCESS GATEWAY," by Steven D. Tonnesen, filed March 10, 2004 which are both hereby fully incorporated by reference.

Field of the Invention:

This invention relates generally to the field of computer networking and specifically to the field of client management in networks organized using network access gateways.

Background:

A network access gateway enables or restricts a client computer from using a shared network service. If a client begins abusing the network, perhaps because of a virus or worm infection, typical network gateways will simply shut off access or, in some cases, not respond at all. Simply severing network access for an infected client is expensive for a service provider because of the cost of subsequent support calls from the client, who does not know the cause of the cutoff, and does not have network access for obtaining aid

Summary of the Invention:

The present invention allows the service provider may desire to use the network access gateway to cut off the user's present level of network access in a way that can 1) inform the user of the problem, and 2) still allow the user access to a limited set of network destinations that may be helpful in resolving the problem (e.g. anti-virus software vendors, OS patches).

The Invention could also be used for other purposes relevant to a network access gateway such as allowing free access to chosen network content, but requiring additional payment or authorization

for unrestricted access. An example of this is a public wireless network at a venue that wishes to provide free information about the venue via its own website or affiliated websites, yet requires payment for clients desiring general access to the Internet from the venue.

The current invention makes use of firewall rules configured to recognize clients by identity or membership in a group. Once classified, traffic from a client can then be subjected to a particular list of access rules that specify a "walled garden" where network access is allowed.

A network access gateway can support any number of walled gardens and can dynamically move clients in and out of walled gardens based on any status information it maintains, discovers, or is notified about externally. Through this invention, a network access gateway manufacturer such as Rocksteady Networks, Inc. can offer its service provider customers:

- 1) A way to reduce the negative effects of virus and worm infections at remote venues, thus helping to preserve the service levels expected by its customers and to maintain control of its edge network. The provider's end users can be notified of computer infections and offered a means to seek resolution without requiring direct support from the service provider.
- 2) A dynamic means of selectively allowing clients limited access to content based on identity or membership in a group.

Exhibit A

Detailed Description

In one embodiment, the invention makes use of the existing Linux netfilter subsystem and combines a traffic identification strategy with the application of destination-based access rules to create a “walled garden” capability for a network access gateway. A gateway can support any number of walled gardens and any number of client classifications. A gateway can assign clients to walled gardens automatically based on facts known or learned at the gateway, or the assignment can be done in response to external configuration or commands received.

At the network access gateway, incoming traffic is inspected for attributes that identify it as emanating from a particular client. This is done using the netfilter subsystem with application of iptables match rules that test for attributes such as IP address, MAC address, or the network interface on the gateway where the traffic arrived.

Once incoming traffic is sorted (and/or marked) on a per-client basis, traffic can be directed to one or more sets of client-specific (or group-specific) access rules. These access rules serve to specify a “walled garden” definition that consists of specifically allowed locations in the outside network. These lists can be manually constructed to contain selected websites (or other resources) that are relevant to the identified client or group.

Any client known to the system can be arbitrarily classified or grouped based on facts known to the system such as assigned client subnet, organizational boundaries, or security standing based on traffic patterns or content. External assignment is also possible.

Clients who are assigned to a walled garden and whose traffic is not addressed to a location in the corresponding access list will have the traffic dropped, denied, or redirected by the gateway.

When errant traffic is a web browser request, the gateway can redirect the request thus causing display of an informational page in the user's web browser. The page may be generated by the gateway itself, or it may instead be served from a remote location. The page can inform the user of his status in the access gateway and offer choices of action.

A usage example:

- 1) A client is accessing the Internet without restrictions from the gateway.
- 2) The client computer becomes infected with a worm.
- 3) The worm creates excessive network traffic.
- 4) The gateway notices the abusive traffic and "quarantines" the client.
 - The client is assigned to a walled garden reserved for infected users.
 - Traffic outside walled garden becomes restricted.
- 5) The client attempts to browse a web page on the Internet.
- 6) The gateway redirects the web request to an internal web server.
- 7) The gateway's web server renders a web page informing the client of its perceived infection and offering links to self-help documents and to the websites of anti-virus vendors and the client's OS vendor.
- 8) Traffic to the locations described in (6) is allowed. Other traffic is denied or recaptured as in (4) and (5).

PATENT APPLICATION SERIAL NO. _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

03/12/2004 CCHAU1 00000091 60551702

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PTO-1556
(5/87)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

REVOCATION AND POWER OF ATTORNEY AND
CHANGE OF MAILING ADDRESSAtty. Docket No. (Opt.)
ROCK1180

Applicants

Patrick Turley, et. al.

Application Number

60/551,702

Filed

March 10, 2004

For

**SYSTEM AND METHOD FOR ACCESS SCOPE CONTROL
("WALLED GARDEN") FOR CLIENTS OF A NETWORK
ACCESS GATEWAY**

Group Art Unit

Unknown

Examiner

Unknown

Confirmation No.

3907**Certification Under 37 C.F.R. §1.8**I hereby certify that this document is being transmitted to COMMISSIONER
FOR PATENTS via facsimile on 9-7, 2004.Reynetta Deveau
Signed NameReynetta Deveau
Printed NameCommissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Rocksteady Networks, Inc., 100% owner of the above-identified patent application, as evidenced by the Assignment filed with this Revocation and Power of Attorney and Change of Mailing Address, hereby revokes all previous Powers of Attorney and appoints the following attorneys under Customer No. 44654, all of the firm of SPRINKLE IP LAW GROUP, to prosecute the above-identified Patent and to transact all business in the Patent and Trademark Office connected therewith.

STEVEN R. SPRINKLE
JOHN ADAIR
ARI AKMALRegistration No. 40,825
Registration No. 48,828
Registration No. 51,388

Direct all telephone calls and correspondence to:

Customer No. 44654
SPRINKLE IP LAW GROUP
P.O. Box 684767
Austin, TX 78768-4767
Attn: Steven Sprinkle

Tel. (512) 637.9220 / Fax (512) 371.9088

I hereby state I am authorized to act on behalf of **ROCKSTEADY NETWORKS, INC.**

Respectfully submitted,

Rocksteady Networks, Inc.Dated: 15 August, 2004By: [Signature]
Name: Eric White
Title: VP, Engineering



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
60/551,702	03/10/2004	Patrick Turley	ROCK1180

44654
SPRINKLE IP LAW GROUP
P. O. BOX 684767
AUSTIN, TX 78768-4767

CONFIRMATION NO. 3907



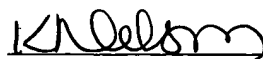
OC000000014193006

Date Mailed: 10/26/2004

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 09/10/2004.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.


KATHY L NELSON HILL
OIPE (703) 305-5531

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UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
60/551,702	03/10/2004	Patrick Turley	ROCK1180

25094
 GRAY, CARY, WARE & FREIDENRICH LLP
 2000 University Avenue
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CONFIRMATION NO. 3907



OC000000014192992

Date Mailed: 10/26/2004

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 09/10/2004.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

KATHY L NELSON HILL
 OIPE (703) 305-5531

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