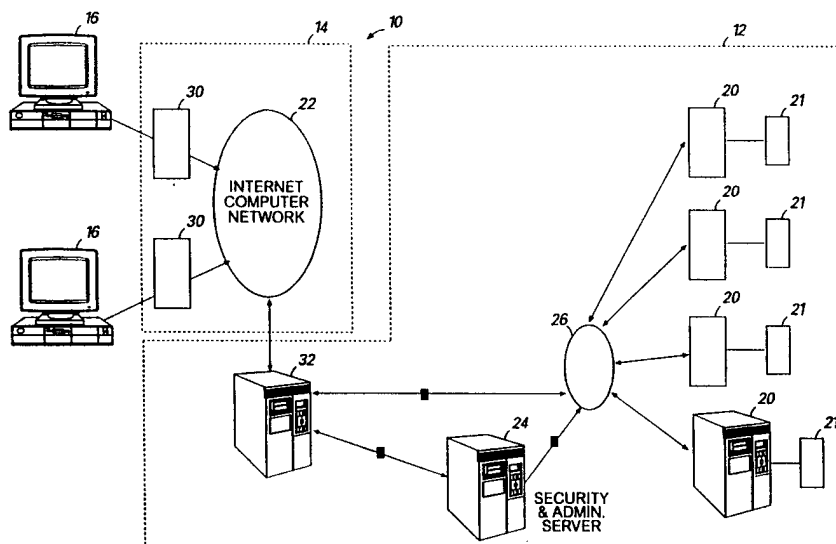




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/US98/12571 (22) International Filing Date: 15 June 1998 (15.06.98) (30) Priority Data: 08/878,279 18 June 1997 (18.06.97) US (71)(72) Applicant and Inventor: NICKLES, Alfred [US/US]; 5365 Chelsen Wood Drive, Duluth, GA 30155 (US). (74) Agents: CHERRY, E., Chris et al.; Morris, Manning & Martin, L.L.P., Suite 1600, 3343 Peachtree Road, N.E., Atlanta, GA 30326 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW. Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims</i> <i>and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 11 March 1999 (11.03.99)

(54) Title: NETWORK SECURITY AND INTEGRATION METHOD AND SYSTEM**(57) Abstract**

A method of the present invention includes a network security system (10) that has a single point of access control (24) to a source computer system (20). The network security system (10) provides various mechanisms for securing access to source computer systems (20) that includes generating single-use encryption keys, generating random port assignments for communication between devices, an asynchronous message protocol used in the security system and utilizing various levels of transaction tables to help secure and manage security parameters of the system. More particularly, the present invention provides a method for securing access to a plurality of computers (20) connected via a network (26, or 22). An indication is received that a first user of a first computer program module of a first computer (16) desires to communicate with a destination computer system (20). When this indication is received, a message is directed to a security computer system (24). The security computer system (24) determines whether the first user of the first computer (16) is authorized to access the destination computer program module of the destination computer system (20). If the security computer system (24) determines that the first user is authorized to access the destination computer system (20), the security computer system (24) sets up a communication protocol between the first computer program module and the destination computer program module.

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INTERNATIONAL SEARCH REPORT

International Application No

PL /US 98/12571

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04L29/06 G06F1/00 H04L9/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04L G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	NEUMAN B C ET AL: "KERBEROS: AN AUTHENTICATION SERVICE FOR COMPUTER NETWORKS" IEEE COMMUNICATIONS MAGAZINE, 1 September 1994, pages 33-38, XP002010524 see page 34, right-hand column, line 46 - page 35, left-hand column, line 2 ---	1-4
A	DIFFIE W ET AL: "PRIVACY AND AUTHENTICATION: AN INTRODUCTION TO CRYPTOGRAPHY" PROCEEDINGS OF THE IEEE, vol. 67, no. 3, 1 March 1979, pages 397-426, XP000575227 see paragraph V.A -----	1-4



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

16 October 1998

Date of mailing of the international search report

12.01.99

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 98/12571

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-4 (searched)

Method for providing encryption keys to a first and a second computer program modules.

2. Claims: 5-7 (not searched)

Method for establishing a communication channel between devices operating on a computer network.

3. Claims: 8-12 (not searched)

Method for authorising users to access a plurality of computers.