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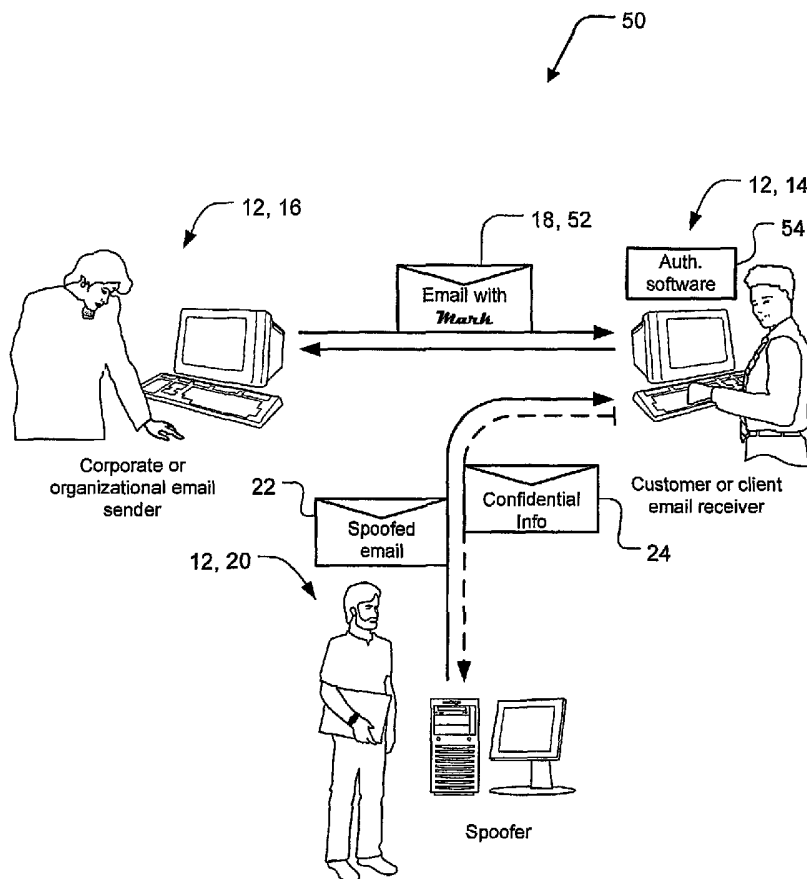
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[Continued on next page]

(54) Title: SYSTEM FOR DETECTING SPOOFED HYPERLINKS IN MESSAGES



(57) Abstract: A system (50, 150) for assisting a user (14) to determine whether an email (18) or a hyperlink (152) in a message (154) are spoofed. A computerized system with a display are provided with logic (54, 158). The logic determines whether the email includes an authenticity mark (52) including an originator identifier (102) and encrypted data (104), or listens for activation of the hyperlink in the message and extracts the originator identifier and encrypted data from the hyperlink. The encrypted data is decrypted based on the originator identifier. For the email, the logic displays whether the email includes the authenticity mark, whether the encrypted data decrypts, and information based on the authenticity mark and the decrypted data. For the message, the logic presents a warning dialog or a confirmation of authentication conveying the owner name and the domain name for the hyperlink target URL and redirects the user to there.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/31157

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04L 9/00, 9/32; G06F 15/16, 15/173
 US CL : 713/155,161,187-188,200-202; 709/203,217-219, 226

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)
 U.S. : 713/155,161,187-188,200-202; 709/203,217-219, 226

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 practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 2004/0078422 A1 (TOOMEY) 22 April 2004 (22.04.2004), abstract, Column 1, Section 0013, Section 0015, Column 2, Section 0020-0021, Section 0033, Column 3, Section 0035, Section 0041	1-60
Y	US 6,314,409 B2 (SCHNECK et al) 06 November 2001 (06.11.2001), abstract, Column 3, lines 45-52, Column 7, lines 10-67, Column 8, lines 1-19, Column 21, lines 59-67, Column 22, lines 1-5, Column 27, lines 6-34, Column 29, lines 7-37, Column 31, lines 1-9, Column 32, lines 30-42	1-60

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search 21 December 2004 (21.12.2004)	Date of mailing of the international search report 21 MAR 2005
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Andrew Caldwell <i>JM</i> <i>James R. Matthews</i> Telephone No. 703-305-3900
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INTERNATIONAL SEARCH REPORT

International application No.
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Continuation of B. FIELDS SEARCHED Item 3:

WEST Text Search: search terms: spoofing, hyperlinks, intrusion detection, authentication, email, encryption, decryption, URL, HTML, HTTP