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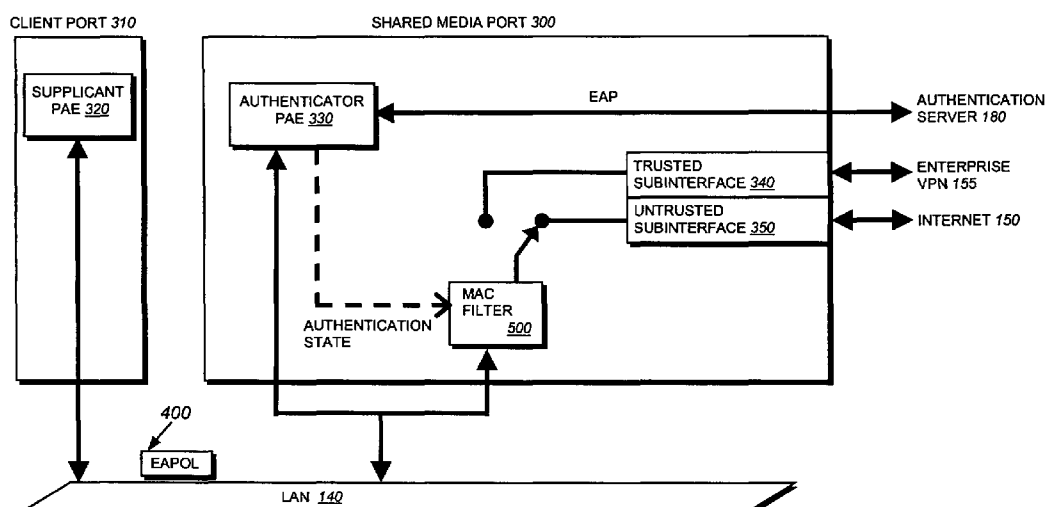
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[Continued on next page]

(54) Title: 802.1X AUTHENTICATION TECHNIQUE FOR SHARE MEDIA



(57) Abstract: The present invention provides a technique for securely implementing port-based authentication on a shared media port in an intermediate node, such as a router. To that end, the invention provides enhanced port-based network access control that includes client-based control at the shared media port. Unlike previous implementations, the port does not permit multiple client nodes to access a trusted subnetwork as soon as a user at any one of those nodes is authenticated by the subnetwork. Instead, port-based authentication is performed for every client node that attempts to access the trusted subnetwork through the shared media port. As such, access to the trusted subnetwork is not compromised by unauthenticated client nodes that "piggy-back" over the shared media port after a user at another client node has been authenticated by the trusted subnetwork.

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## A. CLASSIFICATION OF SUBJECT MATTER

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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 726/4; 713/151

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)

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P ---	US 2004/0158735 A1 (ROESE) 12 August 2004 (12.08.2004), paragraph [0028].	1-4, 14, 18, 24
Y,P		5-13, 15-17, 19-23
Y,P	US 2005/0055570 A1 (KWAN et al.) 10 March 2004 (03.05.2005), paragraphs [0005], [0012], [0013].	5, 8, 9, 11, 13, 14, 17, 19, 21-23
Y,E	US 2005/0177865 A1 (NG et al.) 11 August 2005 (11.08.2005), paragraph [0080].	6,10
Y,P	US 2004/0208151 A1 (HAVERINEN et al.) 21 October 2004 (10.21.2004), paragraph [0029].	7,16,20
Y,E	US 6,891,819 B1 (INOUE et al.) 10 May 2005 (10.05.2005), column 12, lines 45-67, column 13, lines 22-46, column 17, lines 53-59.	12
A,E	US 2005/0111466 A1 (KAPPES et al.) 26 May 2006 (26.05.2006), paragraphs [0006]-[0009].	1-24



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**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/US04/39903**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0217122 A1 (ROESE et al.) 20 November 2003 (20.11.2003), paragraphs [0007]-[0014].	1-24
A,P	US 2004/0172559 A1 (LUO et al.) 02 September 2004 (02.09.2004), paragraphs [0004]-[0015].	1-24
A,P	US 2004/0073793 A1 (TAKEDA) 15 April 2004 (15.04.2004), paragraph [0020].	1-24.
A,E	US 2006/0277187 A1 (ROESE et al.) 07 December 2006 (07.12.2006), paragraphs [0008]-[0012].	1-24
A,E	US 2005/0080921 A1 (LU) 14 April 2005 (14.04.2005), paragraphs [0005]-[0013].	1-24

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Continuation of B. FIELDS SEARCHED Item 3:  
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