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(54) Title: IDENTITY-BASED NETWORKING

Network Database 108

FIG. 1

WAN 192

VLAN Tunnel 112

Client 110

(57) Abstract: A technique for identity based networking is disclosed. A system according to the technique can include a WAN (102), a first VLAN (104), a second VLAN (106) and a network database (108). The first VLAN (104) and second VLAN (106) can be coupled to the WAN (102). The network database (108) can include VLAN information. In operation, a client (110) that is authorized on the second VLAN (106) can attempt to connect to the first VLAN (104). A switch in the WAN (102) can perform a lookup in the network database (108) and determine that the client (110) is authorized on the second VLAN (106). Based on this information, the client (110) can be connected to the second VLAN (106) using VLAN tunneling (112).



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B. FIELDS SEARCHED			
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C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
Y	US PGPUB 2002/0101868 A1 (CLEAR et al) 01 Au	gust 2002 (01.08.2002), entire document	1
Α	US Pat 6,188,649 B1 (FINE et al) 13 February 2001 (13.07.2001), entire document		1-20
Α .	US PGPUB 2003/0174706 A1 (SHANKAR et al) 18 September 2003 (18.09.2003), entire document		1-20
A,P	US PGPUB 20050259597 A1 (BENEDETTO et al) 24 November 2005 (24.11.2005), entire document		1-20
Y	US Patent 6,661,787 B1 (JAIN et al) 02 September 2003 (02.09.2003), entire document.		1
Y	US 2005/0058132 A1 (OKANO et al) 17 March 2005 (17.03.2005), entire document		1-20
Y	US 2005/0157730 A1 (GRANT et al) 21 July 2005 (21.07.2005), entire document		1-20
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