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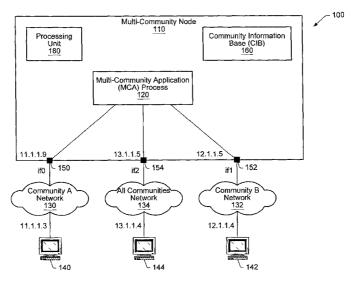
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(54) Title: COMMUNITY ACCESS CONTROL IN A MULTI-COMMUNITY NODE

(57) Abstract: A method and mechanism of enforcing community access control in a computer network, wherein access to objects by users and processes is controlled. A Multi-Community Node (MCN) processes information for users in multiple communities and must enforce a community separation policy. The enforcement method and mechanism use a database of associations of sets of communities corresponding to users, processes, and system objects. Upon receiving a request for access to an object by a user, the MCN permits access if a user community set (UCS) of the user is a superset of an object community set (OCS) of the object; otherwise, access is denied. Upon receiving a request for access to an object by a process, the MCN permits access if an application process community set (ACS) of the process is a superset the OCS of the object; otherwise, access is denied.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L29/06

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 7 G06F H04L

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)

EPO-Internal, WPI Data, COMPENDEX, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 335 346 A (FABBIO ROBERT A) 2 August 1994 (1994-08-02) figures 3A-C,4 column 1, line 40 – line 43 column 7, line 64 –column 8, line 19 column 8, line 34 –column 9, line 6 column 8, line 65 – line 67 ——— -/--	1-34

[X]	Further documents are listed in the continuation of box C.	[X]	Patent family members are listed in annex.

° Special categories of cited documents :

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
27 March 2003	03/04/2003

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Bub, A

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	GEIHS K ET AL: "An architecture for the cooperation of heterogeneous operating systems" COMPUTER NETWORKING SYMPOSIUM, 1988., PROCEEDINGS OF THE WASHINGTON, DC, USA 11-13 APRIL 1988, WASHINGTON, DC, USA,IEEE COMPUT. SOC. PR, US, 11 April 1988 (1988-04-11), pages 300-312, XP010011861 ISBN: 0-8186-0835-8 page 303, left-hand column -page 307, left-hand column	1-34

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