

United States Patent [19]

Miyazaki et al.

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[45] Date of Patent:

May 14, 1996

[54] METHOD OF LOAD DISTRIBUTION FOR MESSAGE PROCESSING IN HOST SYSTEM IN LOCAL AREA NETWORK

[75] Inventors: Satoshi Miyazaki, Yamato; Kazuo

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all of Japan

[73] Assignee: Hitachi, Ltd., Tokyo, Japan

[21] Appl. No.: 80,801

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Jun.	23, 1992	[JP]	Japan	4-164544
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[52]	U.S. Cl.			370/16 ; 370/60.1; 370/85.1
				370/94.1; 395/180; 395/183
[58]	Field of	Search		370/16, 58.3, 60
		270/6	Ω 1 Q	4 1 95 1· 370/2· 371/9 1 9 2

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11.1, 11.2

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4-167841	6/1992	Japan	***************************************	H04L	12/40

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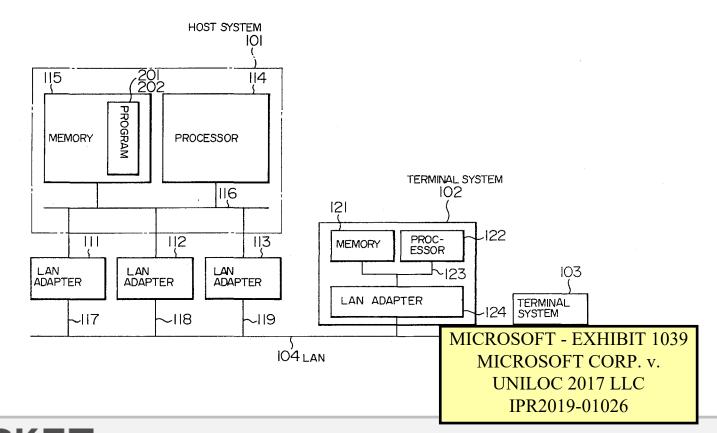
Comer, Douglas E. Internetworking with TCP/IP, vol. 1, Second Edition, Prentice-Hall, 1991, p. 63. (Japanese with English translation).

Primary Examiner—Douglas W. Olms Assistant Examiner—Russell W. Blum Attorney, Agent, or Firm—Fay, Sharpe, Beall, Fagan, Minnich & McKee

[57] ABSTRACT

An LAN system provided with a host system connected to an LAN through a plurality of LAN adapters, and a plurality of terminal systems for communicating with the host system through the LAN. A plurality of logical addresses for the host system are set correspondingly to physical addresses of the LAN adapters. One of the logical addresses is selected arbitrarily as a key (common) logical address. When the host system is to send a message to one of the terminal systems, the host system sets the key logical address of the host system as a source logical address included in the message, selects one of the LAN adapters and sends the message to the LAN through the selected LAN adapter. When one of the terminal systems is to send a message to the host system, the terminal system sets the key logical address of the host system as a destination logical address included in the message, sets the physical address of the LAN adapter corresponding to the key logical address as a destination physical address included in the message and sends the message to the LAN.

11 Claims, 9 Drawing Sheets





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				370/94.1; 395/180; 395/181
[58]	Field of			370/16, 58.3, 60,
		370/0	60.1, 9	4.1, 85.1; 379/2; 371/8.1, 8.2,

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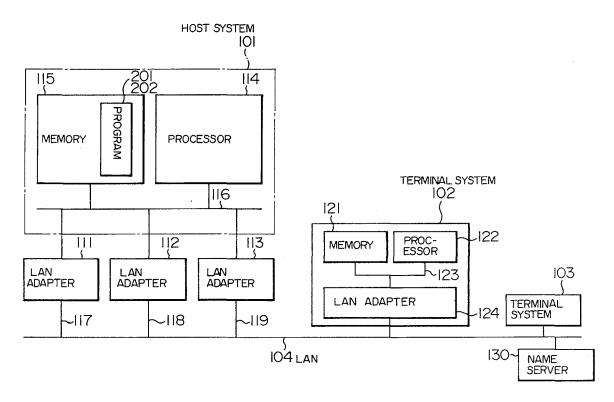
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11 Claims, 9 Drawing Sheets



11.1, 11.2



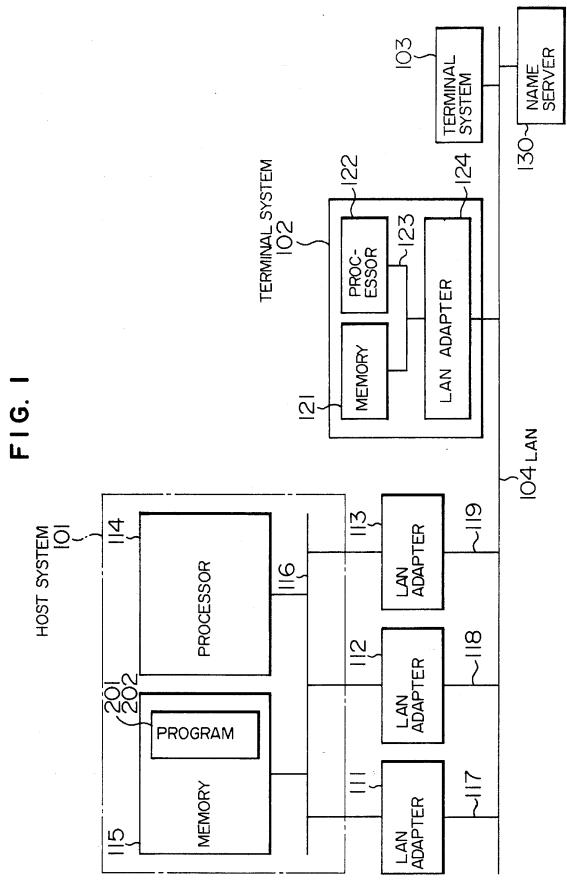


FIG. 2

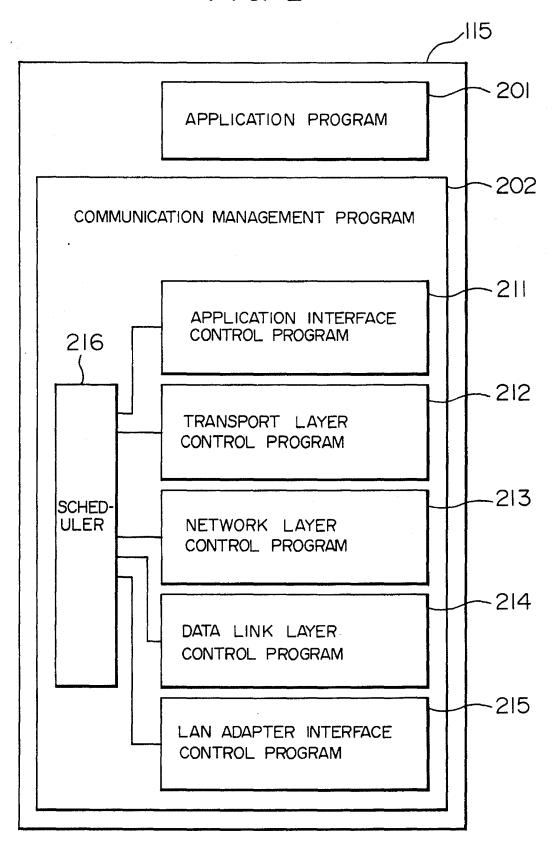


FIG. 3 HOST ADDRESS IN HOST SYSTEM

	PHYSICAL ADDRESS	LOGICAL ADDRESS
LAN ADAPTER III	a	Д
LAN ADAPTER 112	b	В
LAN ADAPTER 113	С	С

FIG. 5 TERMINAL ADDRESS IN HOST SYSTEM

	PHYSICAL ADDRESS	LOGICAL ADDRESS
TERMINAL SYSTEM 102	d	D
TERMINAL SYSTEM 103	е	E

FIG. 64 TRANSMISSION DATA

DESTINATION	SOURCE	DESTINATION	SOURCE	DATA
PHYSICAL	PHYSICAL	LOGICAL	LOGICAL	
ADDRESS	ADDRESS	ADDRESS	ADDRESS	
a	d	А	D	

FIG. 6B TRANSMISSION DATA

DESTINATION	SOURCE	DESTINATION	SOURCE	DATA
PHYSICAL	PHYSICAL	LOGICAL	LOGICAL	
ADDRESS	ADDRESS	ADDRESS	ADDRESS	
d	a	D .	А	

FIG. 8 TABLE FOR TERMINAL SYSTEM 102

	PHYSICAL ADDRESS	LOGICAL ADDRESS
HOST SYSTEM	a	А
TERMINAL SYSTEM 103	е	E

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