

### US005845061A

## **United States Patent** [19]

### Miyamoto et al.

[56]

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#### 5,845,061 [11] **Patent Number:**

#### **Date of Patent:** Dec. 1, 1998 [45]

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[54]	REDUND	ANT CLIENT SERVER SYSTEM
[75]	Inventors:	Takahisa Miyamoto, Yokohama; Toshikazu Yasue, Chigasaki; Shuji Ohno, Kawasaki; Norihiro Goto, Ebina, all of Japan
[73]	Assignee:	Hitachi, Ltd., Tokyo, Japan
[21]	Appl. No.:	548,754
[22]	Filed:	Oct. 26, 1995
[30]	Forei	gn Application Priority Data
	31, 1994 30, 1994	
[51]		G06F 11/00
[52]		<b></b>
[58]	Field of S	earch 395/182.02, 182.01,
		395/180, 181, 431, 200.02, 200.11, 600,
		82.09, 182.11, 200.33; 364/269.2, 943.91,
	26	55, 268, 268.9, 284.4; 371/7, 8.1; 345/335

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Primary Examiner—Albert DeCady Attorney, Agent, or Firm-Antonelli, Terry, Stout & Kraus, LLP

### **ABSTRACT** [57]

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A client server system has clients, a server of execution system, and a server of fault auxiliary system are connected. A process administrator is provided in each one of the server of execution system and the server of fault auxiliary system. When a fault has occurred in a disk processor in the server of execution system, the process administrator in the server of execution system transmits only "requests" relating to the disk processor among "requests" received from clients to the server of fault auxiliary system. A process administrator in the server of fault auxiliary system conducts corresponding server processing on the "requests" transmitted from the server of execution system.

### 12 Claims, 29 Drawing Sheets

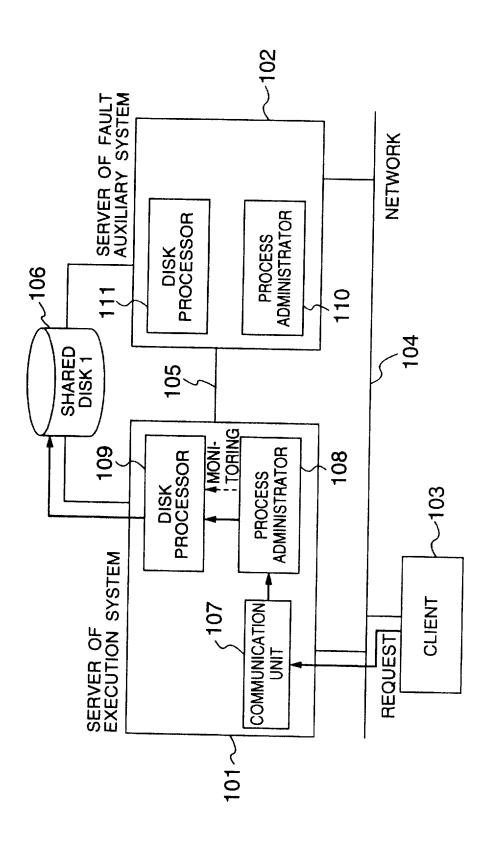
SERVER OF EXECUTION SYS	109	SHARED DISK 1	111 SERVI	ER OF FAULT
101 COMMUNICATION UNIT	DISK PROCESSOR PROCESS ADMINISTRATOR	105	DISK PROCESSOR PROCESS ADMINISTRATOR	~102
	108	104	110 NETW	/ORK
CLIEN	г ~103			



SERVER OF FAULT AUXILIARY SYSTEM NETWORK DISK PROCESSOR PROCESS ADMINISTRATOR SHARED DISK 1 105 PROCESS ADMINISTRATOR 108 109 DISK PROCESSOR SERVER OF EXECUTION SYSTEM CLIENT COMMUNICATION



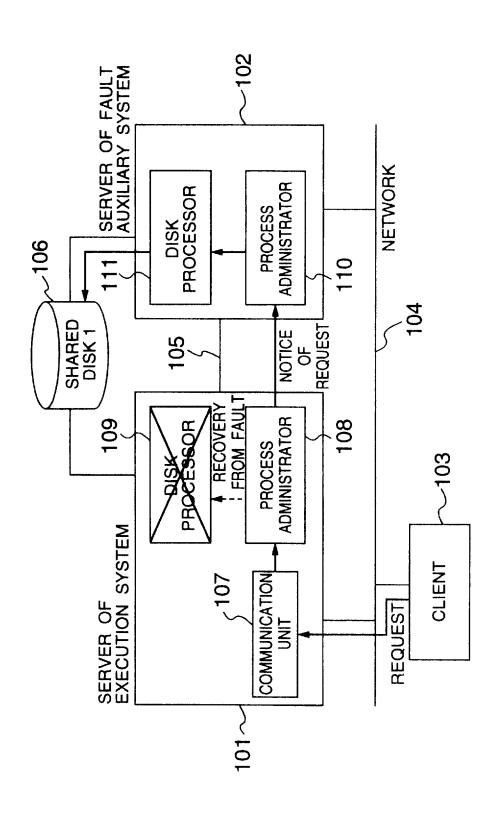
FIG. 2



SERVER OF FAULT AUXILIARY SYSTEM NETWORK **ADMINISTRATOR** DISK PROCESSOR **PROCESS** ,106 HANDIND OVER OF PROCESSING INFORMATION SHARED DISK 1 OCCURRENCE OF FAULT **ADMINISTRATOR** 108 **PROCESS** SERVER OF EXECUTION SYSTEM CLIENT COMMUNICATION REQUEST



FIG. 4



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