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# United States Patent [19]

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Baker et al.

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[54] **SYSTEM AND METHOD FOR GENERAL PURPOSE NETWORK ANALYSIS**

5,062,055	10/1991	Chinnaswamy et al. ....	364/551.01
5,210,530	5/1993	Kammerer et al. ....	340/825.08
5,442,639	8/1995	Crowder et al. ....	371/20.1

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[21] Appl. No.: **575,506**

[57] **ABSTRACT**

[22] Filed: **Dec. 20, 1995**

[51] Int. Cl.<sup>6</sup> ..... **H04L 12/28**

A network interface system and related methods. A single logic control module, which may be implemented in hardware or software, is utilized to perform any of a number of data manipulation functions including, for example, parsing, filtering, data generation or analysis, based upon one or more programmably configurable protocol descriptions which may be stored in and retrieved from an associated memory.

[52] U.S. Cl. .... **395/200.8**; 371/35

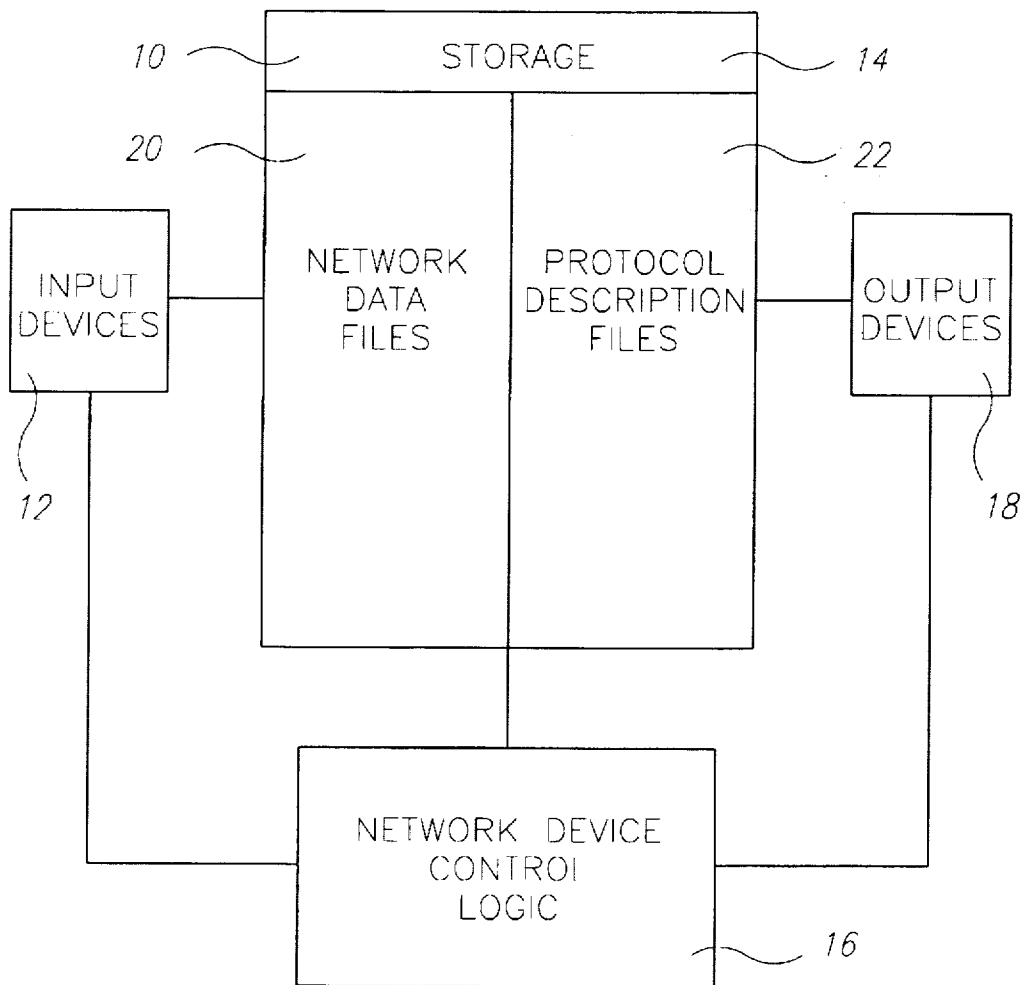
[58] Field of Search ..... 364/514 C. 514 R.  
364/551.01; 340/825.06; 371/35. 48, 53,  
67.1, 68.2, 20.1. 3; 395/182.02, 182.19,  
183.13, 183.15, 183.22, 185.01, 200.8

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

4,851,997 7/1989 Tataro ..... 395/200.01

**4 Claims, 20 Drawing Sheets**



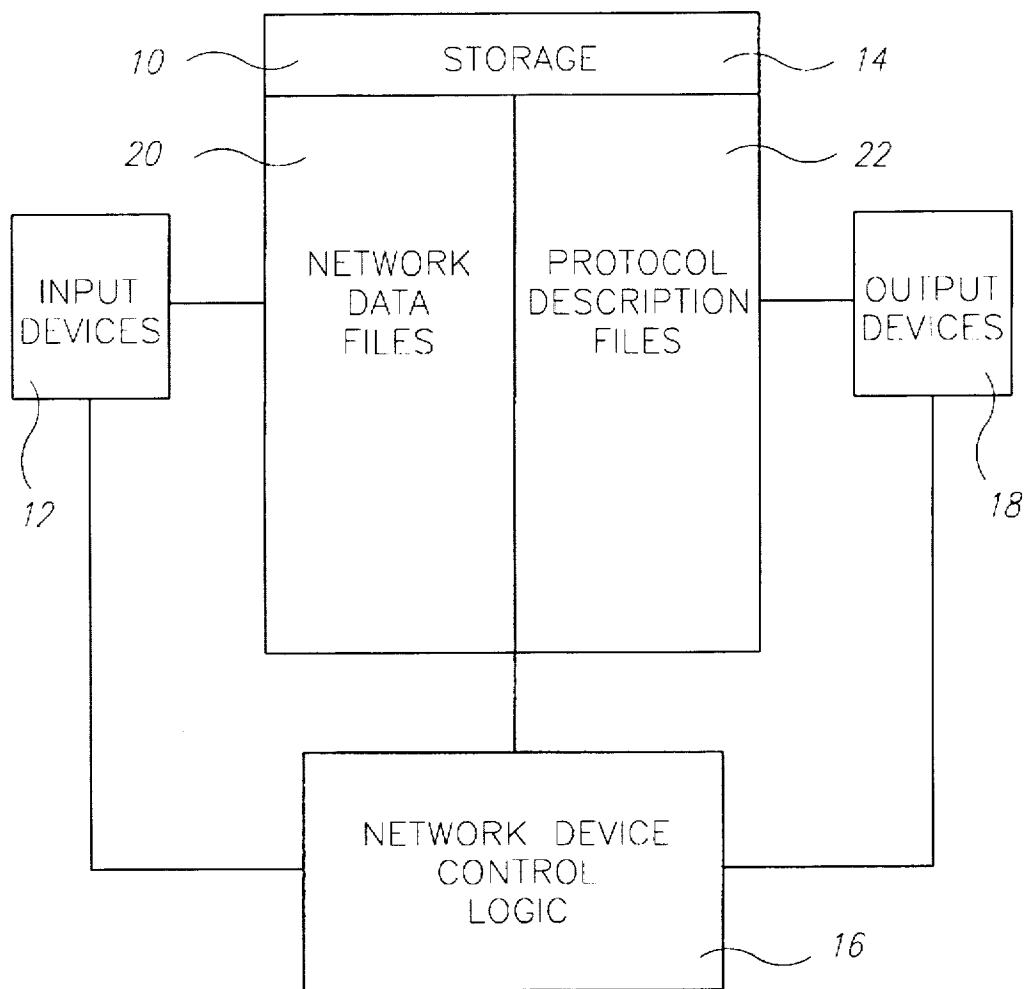


FIG. 1

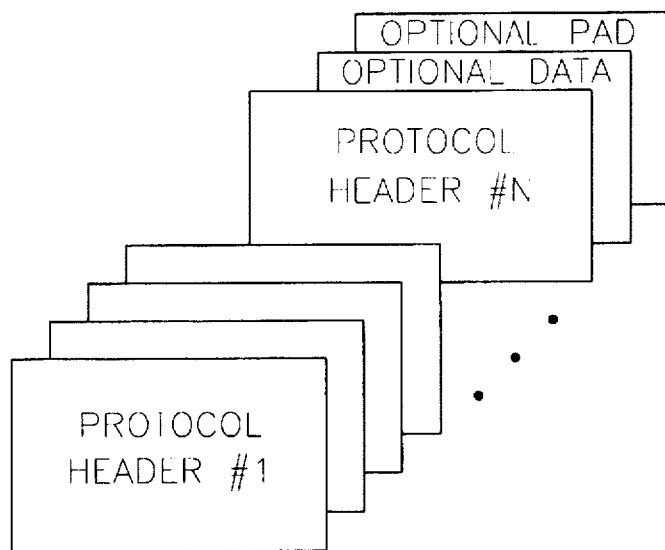


FIG. 2

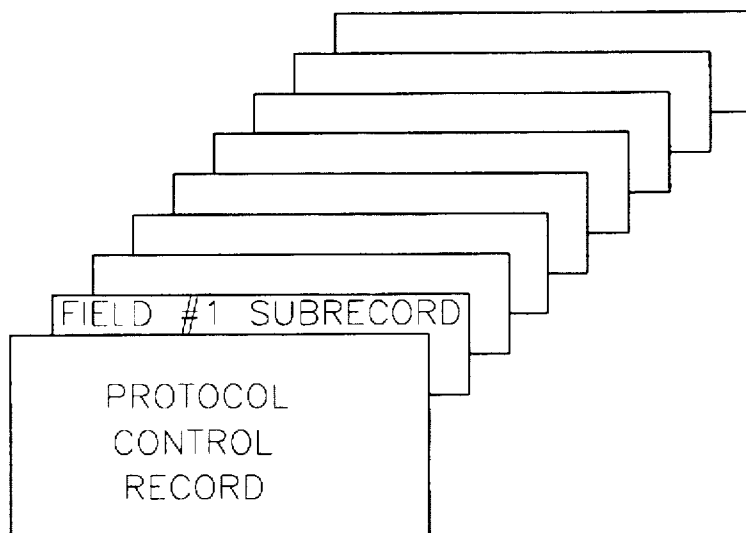


FIG. 3

Ethernet Control Record				
Protocol Name	NumBits	NumFields	CurField	Options
Ethernet MAC Header	112	5	0	[None]

Fig. 4

Index	Field Name	Bit Offset	Bit Length	Left Shift	Right Shift	Check sum	Frame Length	Header Length	Statistics	Lookup Structure	Filter Structure	Format
0	Dst Vendor Address	0	24	0	16	0	0	0	[None]	Fig 4b	Fig 10,Idx 0	hex
1	Dst Station Address	24	24	0	16	0	0	0	[None]	[None]	Fig 10,Idx 1	hex
2	Src Vendor Address	48	24	0	16	0	0	0	[None]	Fig 4c	[None]	hex
3	Src Station Address	72	24	0	16	0	0	0	[None]	[None]	[None]	hex
4	Type	96	16	0	16	0	0	0	[None]	Fig 4d	[None]	hex

Fig. 4A

Destination Vendor Address Lookup Structure					
Protocol	Next Index	Minimum	Maximum	Mask	Translation
[None]	1	0x000000	0x000000	ALL	"Fast Routers, Inc."
[None]	1	0x000001	0xFFFFFFFF	ALL	"Unknown"

Fig. 4B

Source Vendor Address Lookup Structure					
Protocol	Next Index	Minimum	Maximum	Mask	Translation
[None]	3	0x000000	0x000000	ALL	"Fast Routers, Inc."
[None]	3	0x000001	0xFFFFFFFF	ALL	"Unknown"

Fig. 4C

Ethernet Type Lookup Structure					
Protocol	Next Index	Minimum	Maximum	Mask	Translation
[None]	5	0x0000	0x8887	ALL	"Unknown"
Figure 5	5	0x8888	0x8888	ALL	"GP"
[None]	5	0x8889	0xFFFF	ALL	"Unknown"

Fig. 4D

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