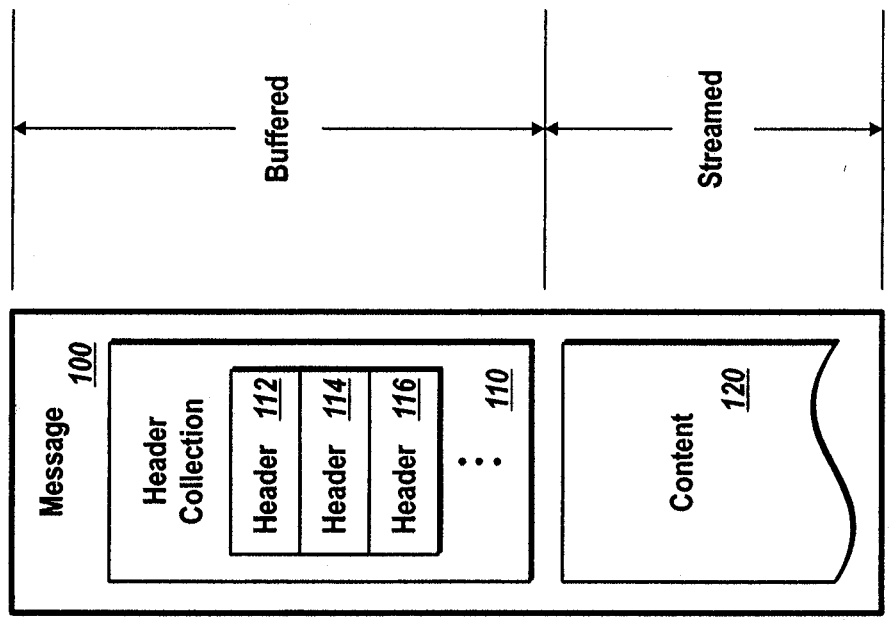

Buffered
Streamed
Message 100
Header Collection
Header 112
Header 114
Header 116
110
Content
120

Fig. 1

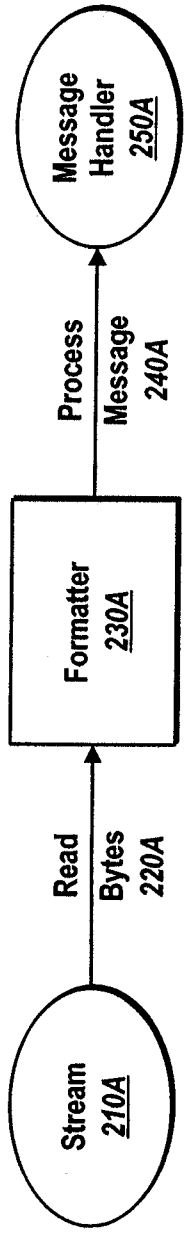

Stream
210A
Read
Bytes
220A
Formatter
230A
Process
Message
240A
Message
Handler
250A

Fig. 2A


Stream
210B
Write
Bytes
220B
Formatter
230B
Process
Message
240B
Message
Handler
250B

Fig. 2B

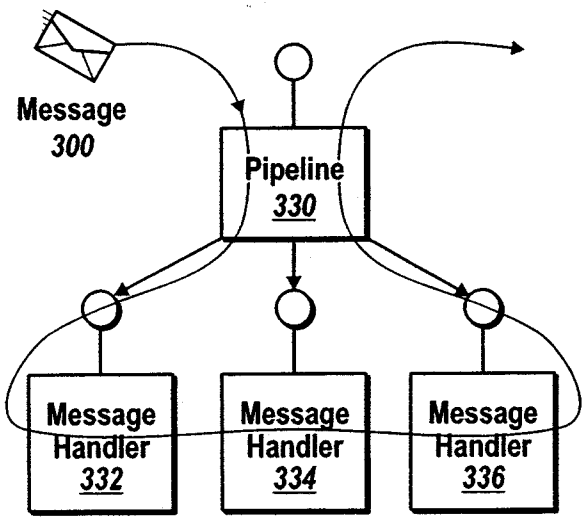

Message
300
Pipeline
330
Message Handler
332
Message Handler
334
Message Handler
336

Fig. 3A

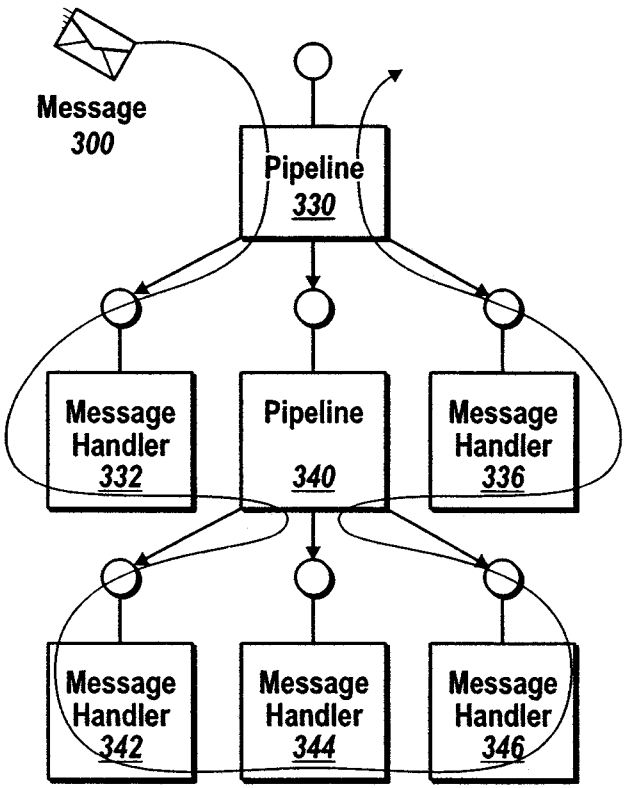

Message
300
Pipeline
330
Message Handler
332
Pipeline
340
Message Handler
336
Message Handler
342
Message Handler
344
Message Handler
346

Fig. 3B

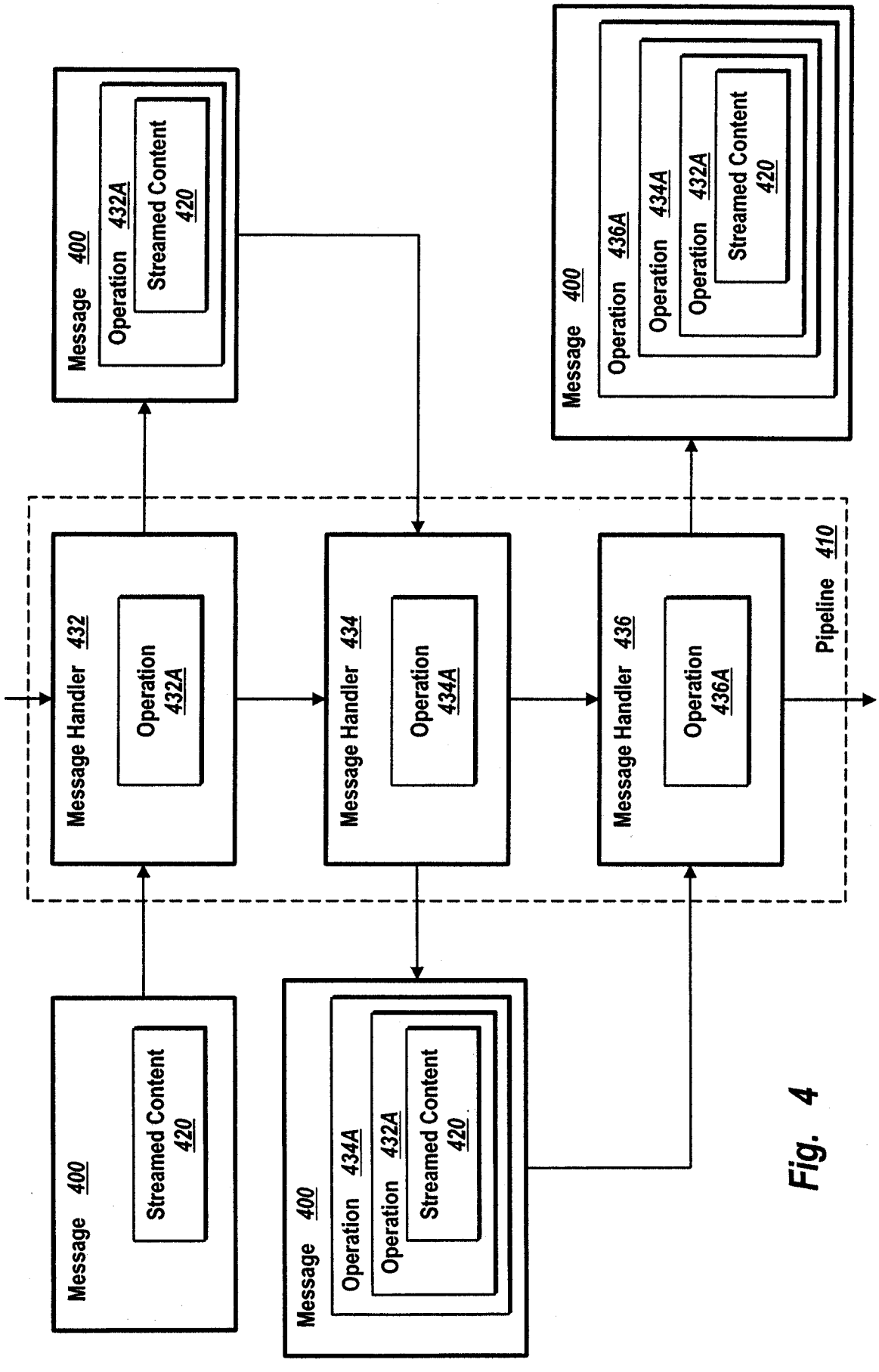

Message 400
Operation 432A
Streamed Content 420
Message 400
Operation 436A
Operation 434A
Operation 432A
Streamed Content 420
Message Handler 432
Operation 432A
Message Handler 434
Operation 434A
Message Handler 436
Operation 436A
Pipeline 410
Message 400
Streamed Content 420
Message 400
Operation 434A
Operation 432A
Streamed Content 420

Fig. 4

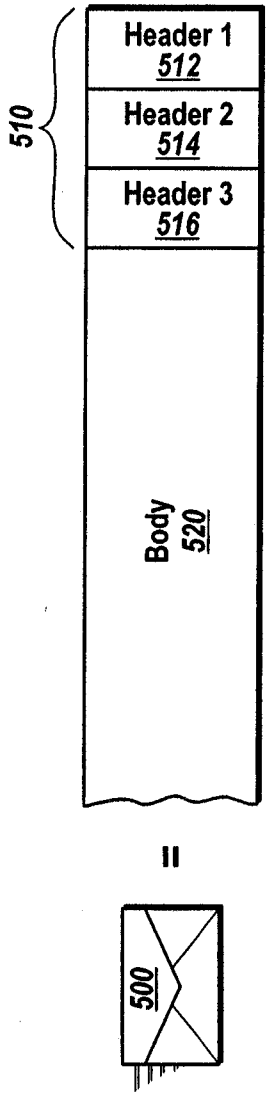


Fig. 5A

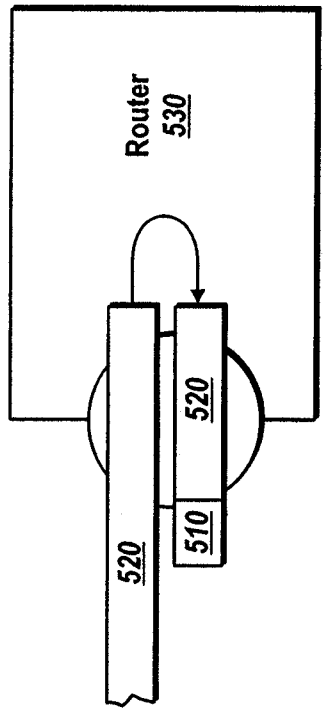


Fig. 5C

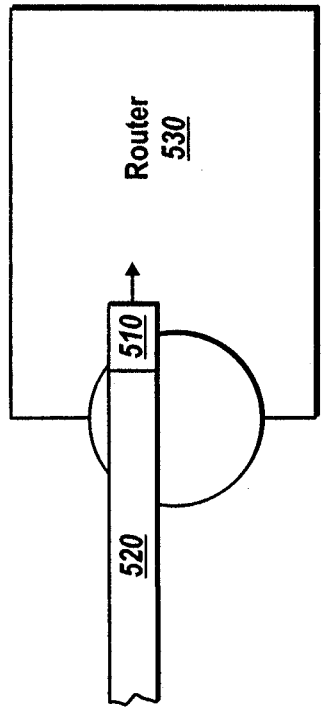


Fig. 5B

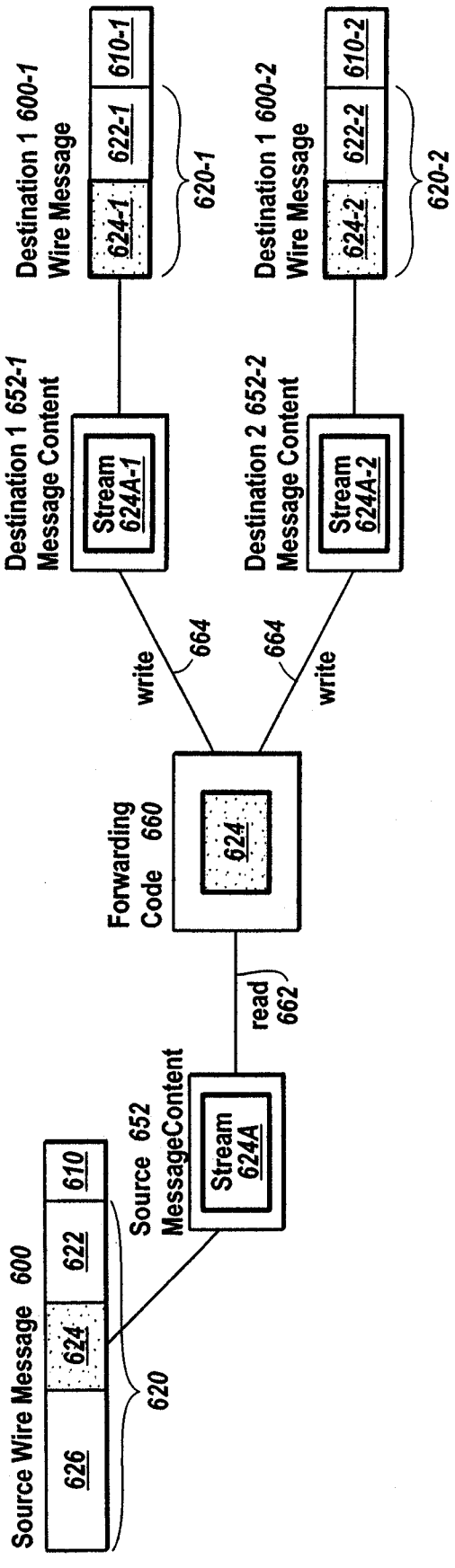

Source Wire Message 600
626
624
622
610
620
Source 652 MessageContent
Stream 624A
read 662
Forwarding Code 660
624
write 664
Destination 1 652-1 Message Content
Stream 624A-1
Destination 1 600-1 Wire Message
624-1
622-1
610-1
620-1
write 664
Destination 2 652-2 Message Content
Stream 624A-2
Destination 1 600-2 Wire Message
624-2
622-2
610-2
620-2

Fig. 6

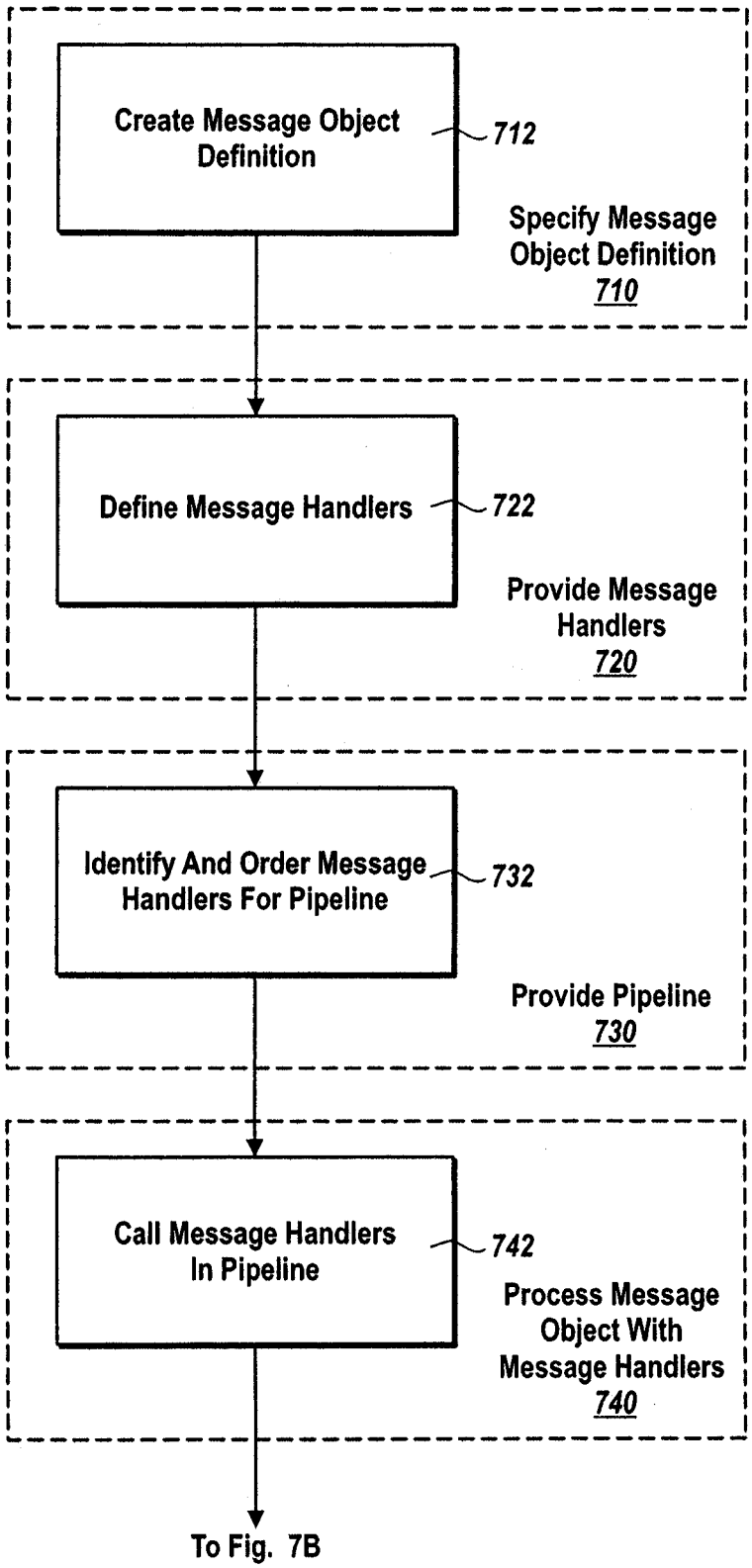

Create Message Object Definition
712
Specify Message Object Definition
710
Define Message Handlers
722
Provide Message Handlers
720
Identify And Order Message Handlers For Pipeline
732
Provide Pipeline
730
Call Message Handlers In Pipeline
742
Process Message Object With Message Handlers
740
To Fig. 7B

Fig. 7A

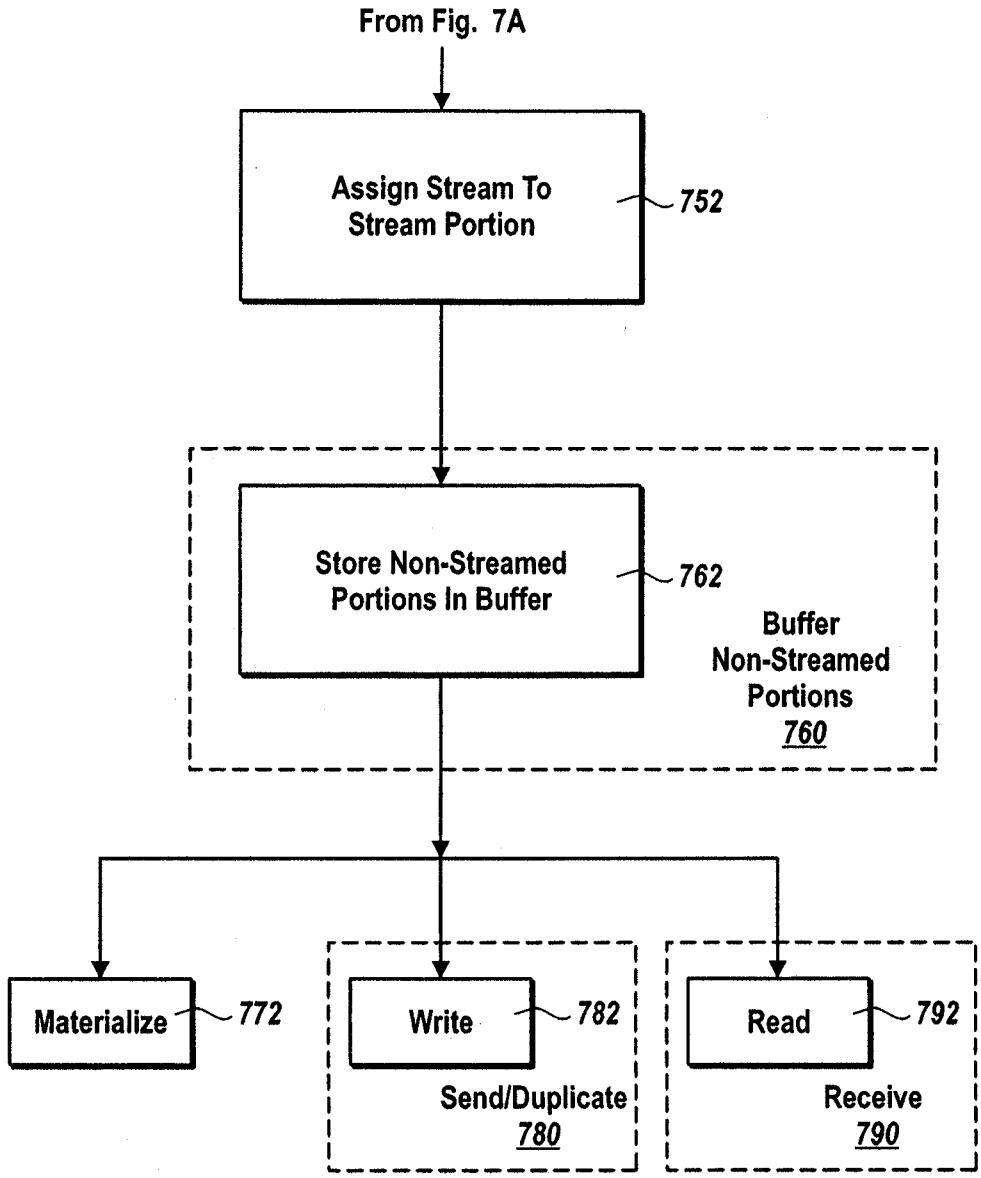

From Fig. 7A
Assign Stream To Stream Portion
752
Store Non-Streamed Portions In Buffer
762
Buffer Non-Streamed Portions
760
Materialize
772
Write
782
Send/Duplicate
780
Read
792
Receive
790

Fig. 7B

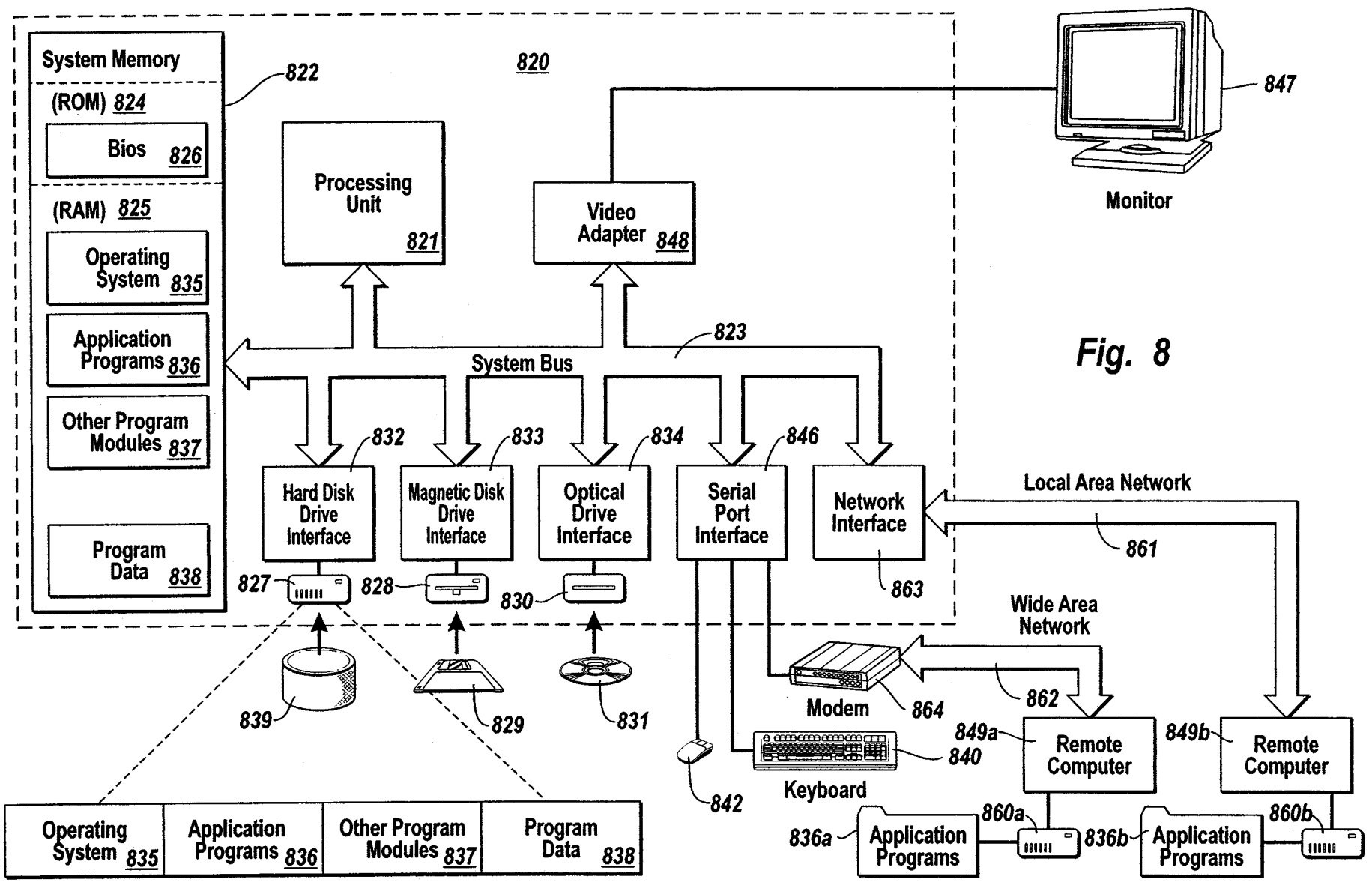

System Memory
822
820
(ROM) 824
Bios 826
(RAM) 825
Operating System 835
Application Programs 836
Other Program Modules 837
Program Data 838
Processing Unit 821
Video Adapter 848
847
Monitor
823
System Bus
832
833
834
846
Hard Disk Drive Interface
Magnetic Disk Drive Interface
Optical Drive Interface
Serial Port Interface
Network Interface
Local Area Network
861
863
827
828
830
839
829
831
Wide Area Network
Modem
864
862
842
840
Keyboard
849a
Remote Computer
849b
Remote Computer
860a
860b
836a
Application Programs
836b
Application Programs
Operating System 835
Application Programs 836
Other Program Modules 837
Program Data 838

Fig. 8