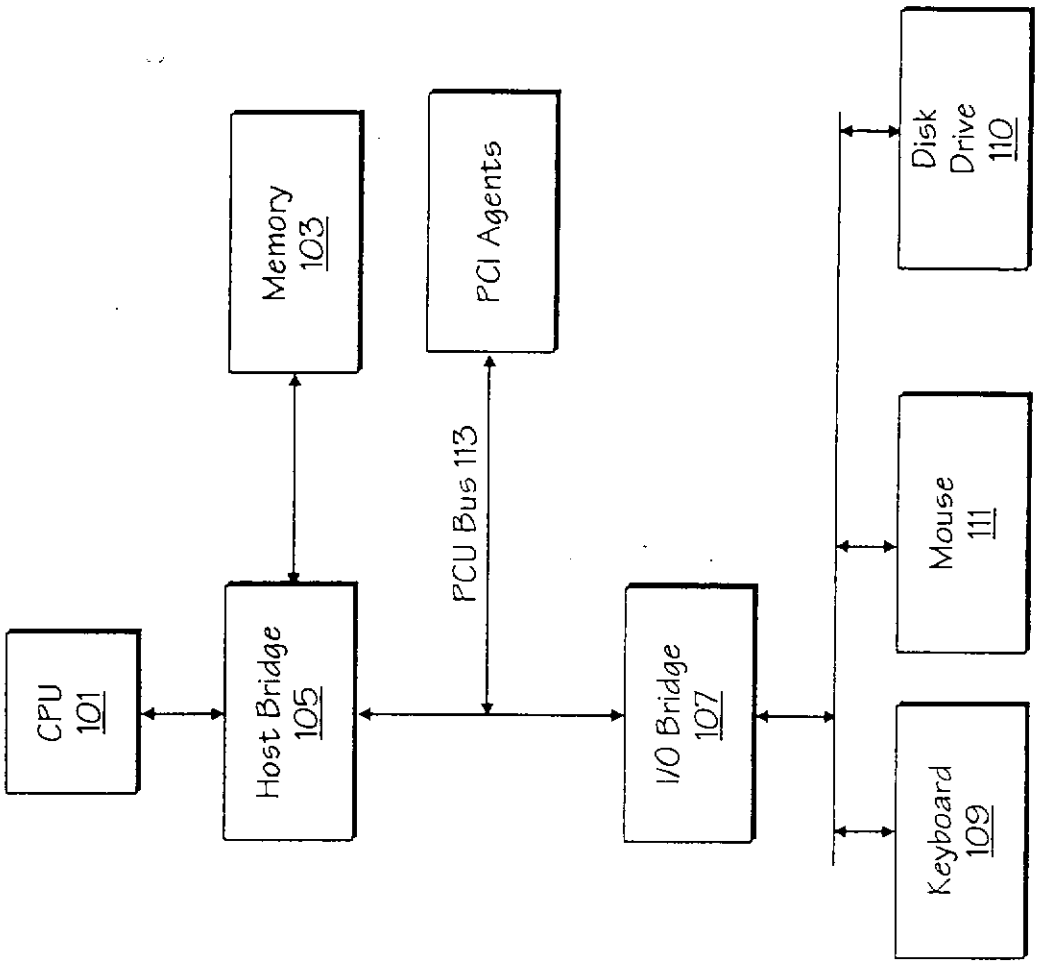


FIG. 1
(Prior Art)

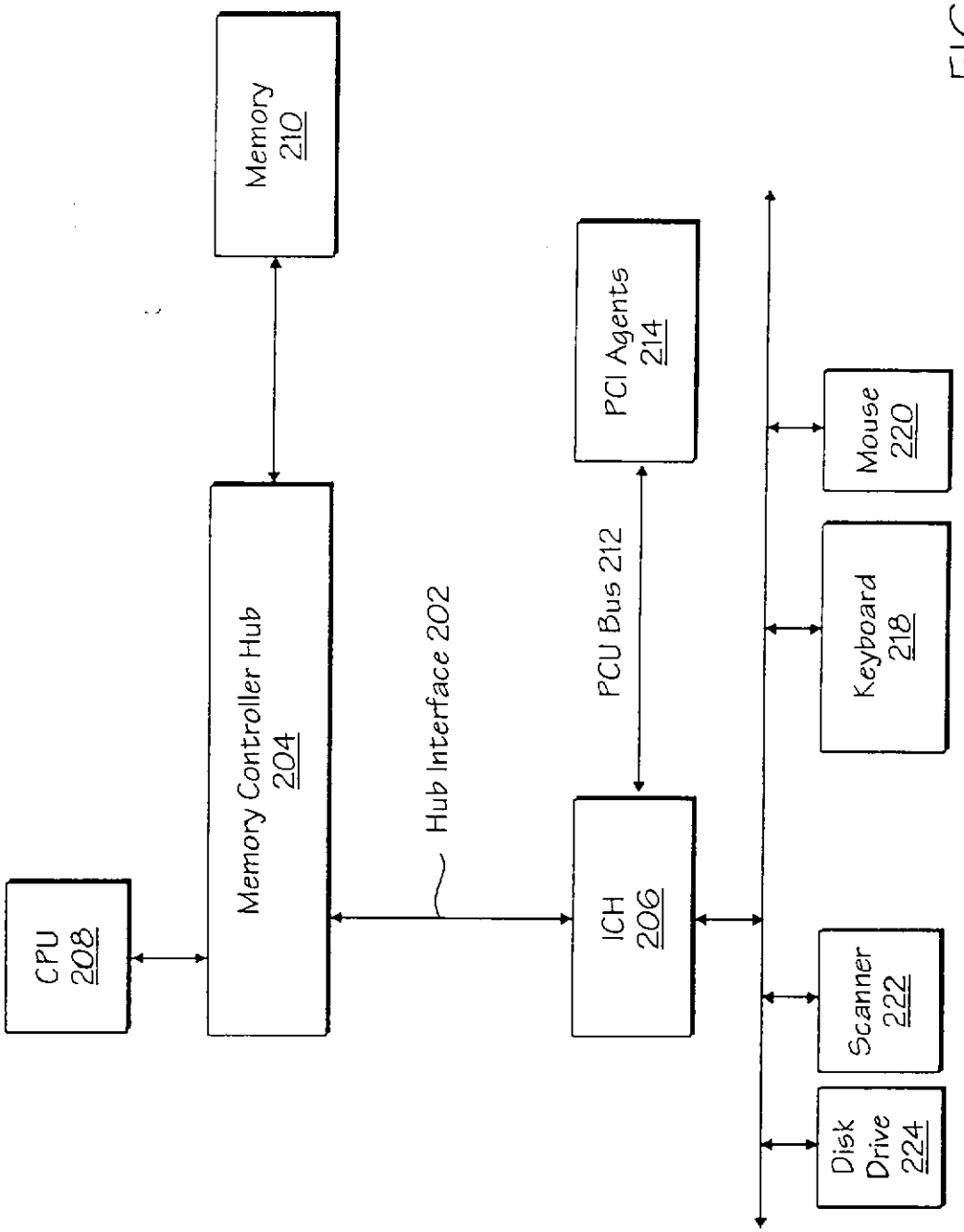

Memory
210
PCI Agents
214
Mouse
220
Memory Controller Hub
204
Hub Interface 202
PCU Bus 212
Keyboard
218
CPU
208
ICH
206
Scanner
222
Disk
Drive
224

FIG. 2

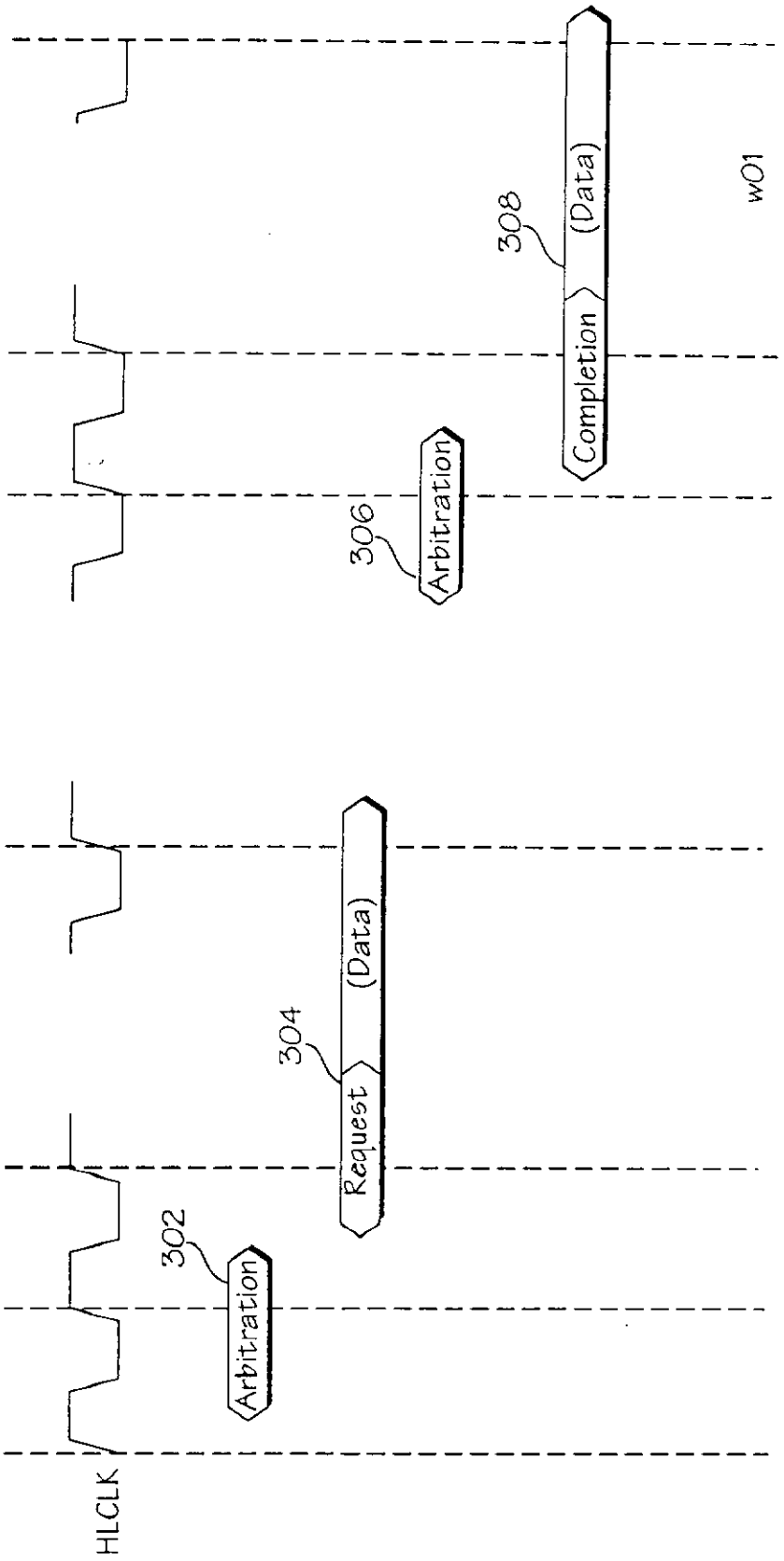

HLCLK
302
Arbitration
304
Request
(Data)
306
Arbitration
308
Completion
(Data)
w01

FIG. 3

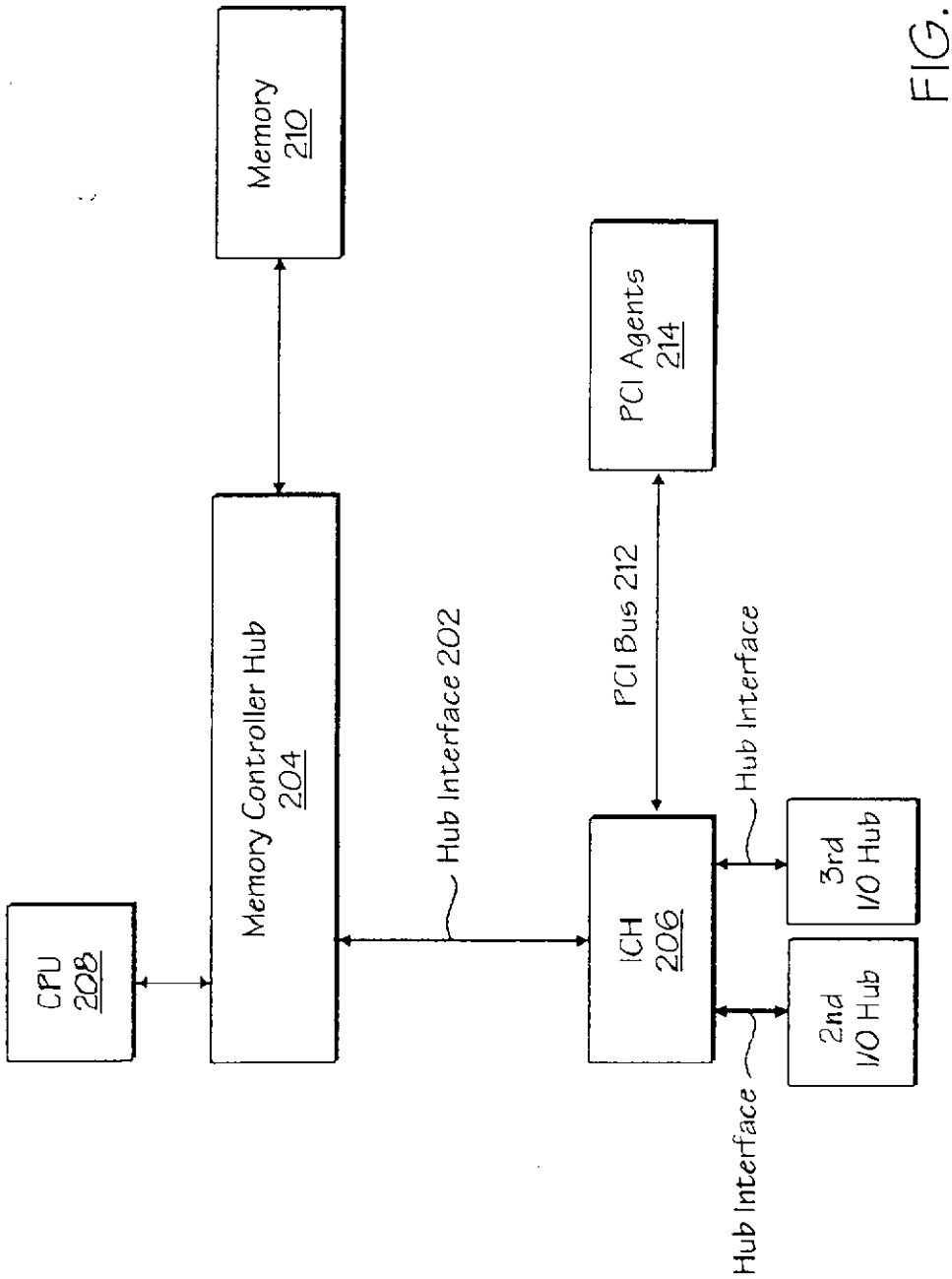

Memory
210
PCI Agents
214
Memory Controller Hub
204
Hub Interface 202
PCI Bus 212
Hub Interface
CPU
208
ICH
206
3rd
I/O Hub
2nd
I/O Hub
Hub Interface

FIG. 4

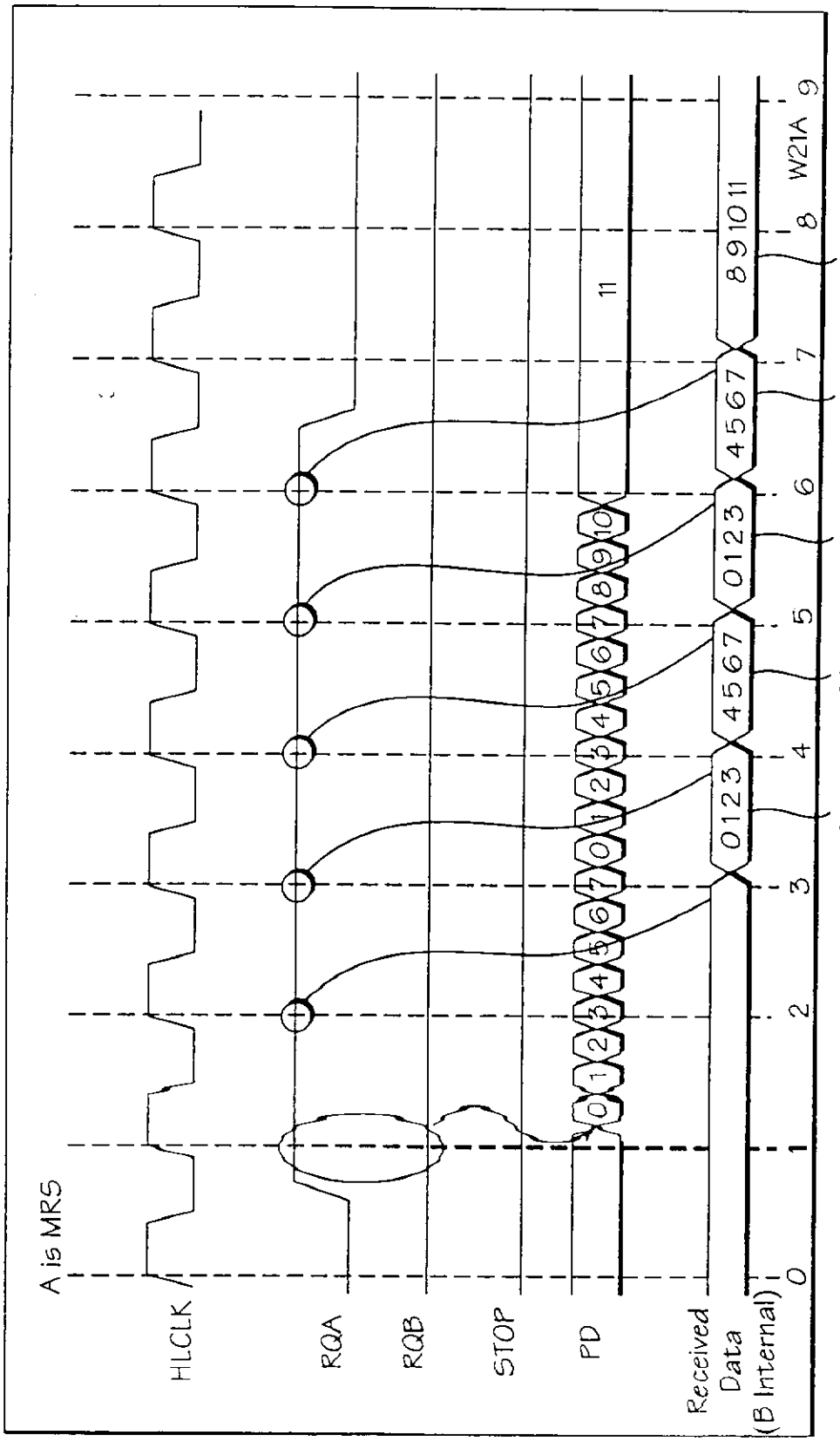

A is MR5
HLCLK
RQA
RQB
STOP
PD
Received Data (B Internal)
0123
4567
0123
4567
8910 11
W21A
0
1
2
3
4
5
6
7
8
9
502
504
506
508
510

FIG. 5

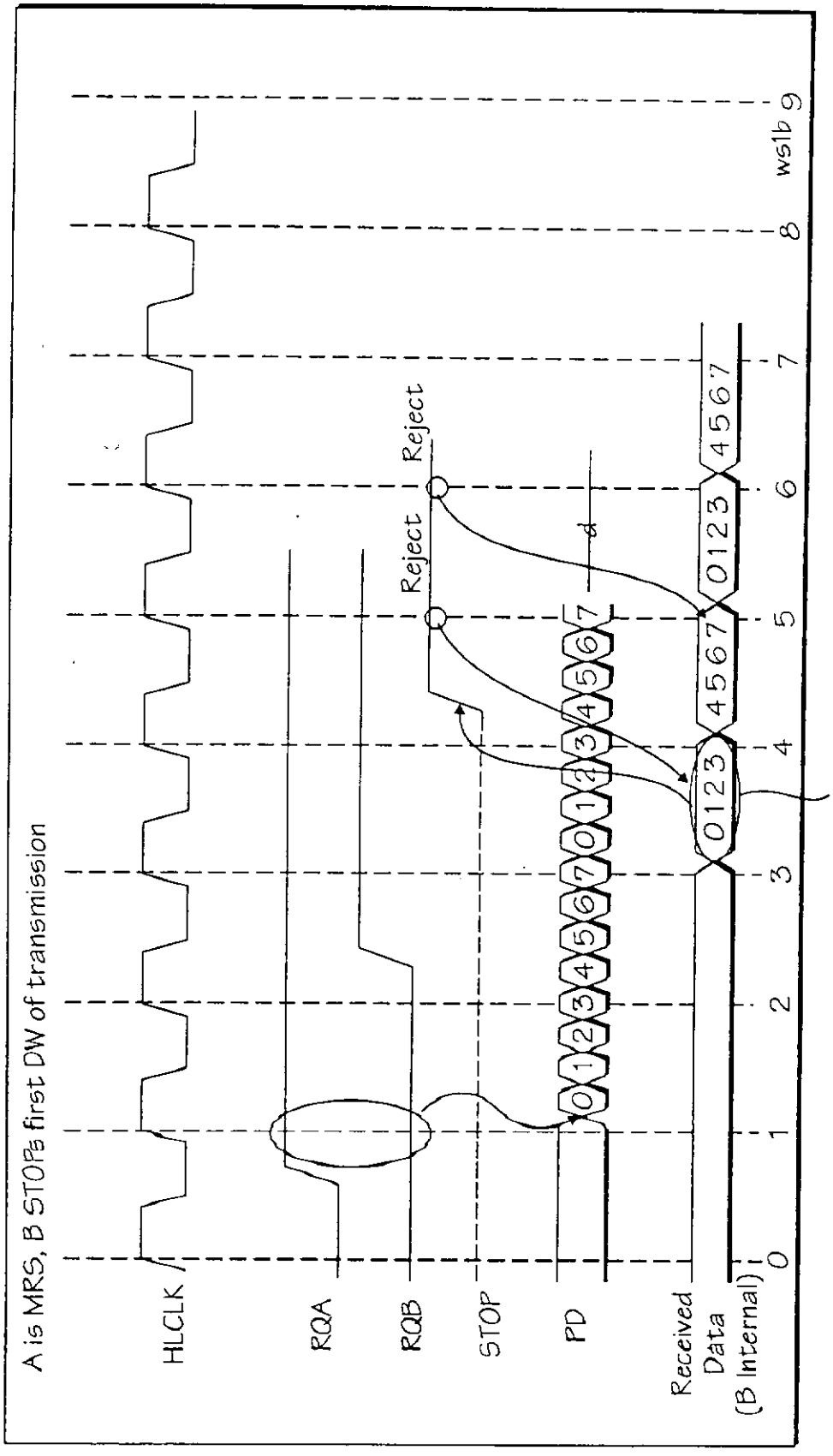

A is MRS, B STOPs first DW of transmission
HLCLK
RQA
RQB
STOP
PD
Received Data (B Internal)
Reject
Reject
d
602
0
1
2
3
4
5
6
7
8
wslb 9

FIG. 6

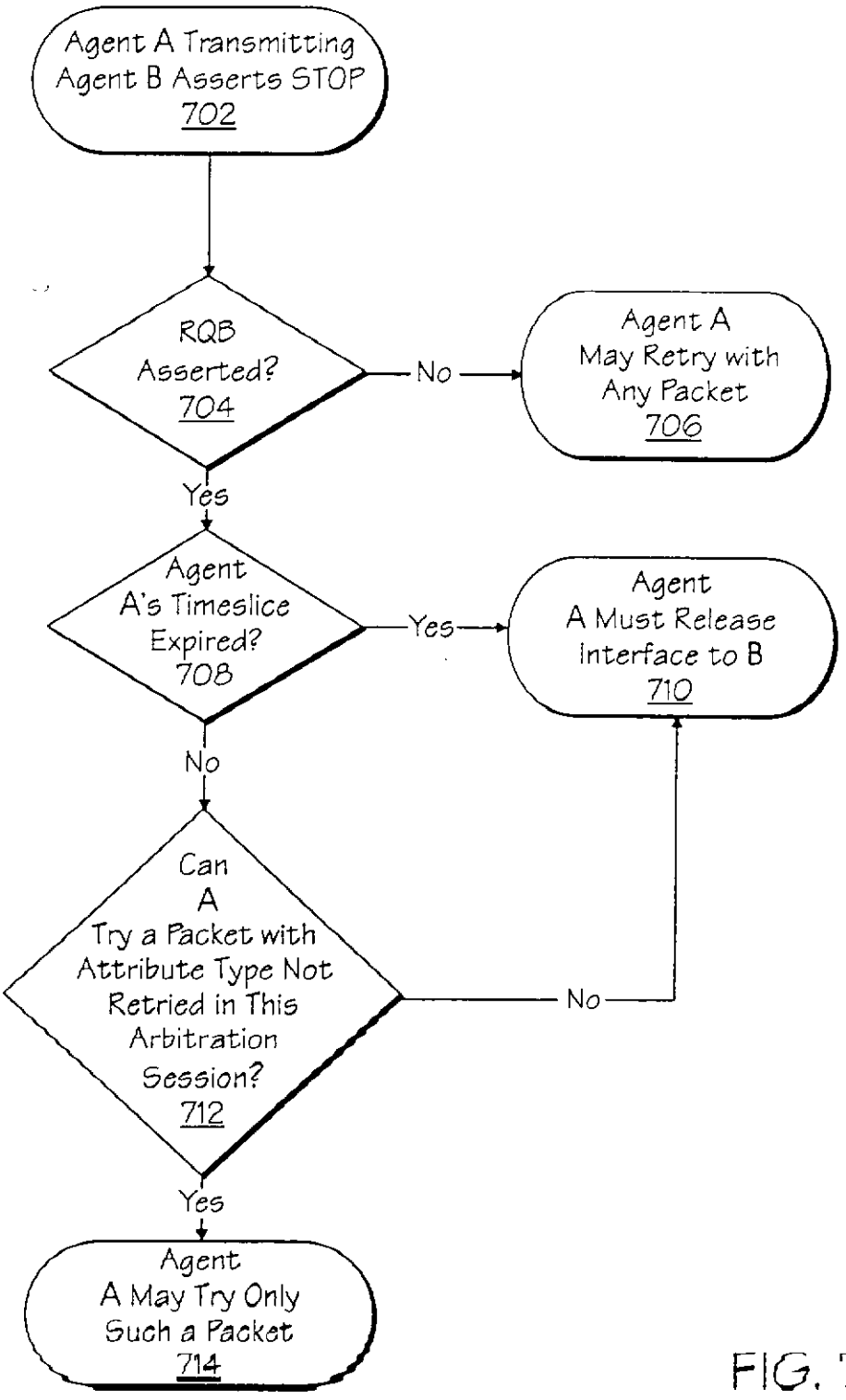

Agent A Transmitting
Agent B Asserts STOP
702
RQB
Asserted?
704
No
Agent A
May Retry with
Any Packet
706
Yes
Agent
A's Timeslice
Expired?
708
Yes
Agent
A Must Release
Interface to B
710
No
Can
A
Try a Packet with
Attribute Type Not
Retried in This
Arbitration
Session?
712
No
Yes
Agent
A May Try Only
Such a Packet
714

FIG. 7

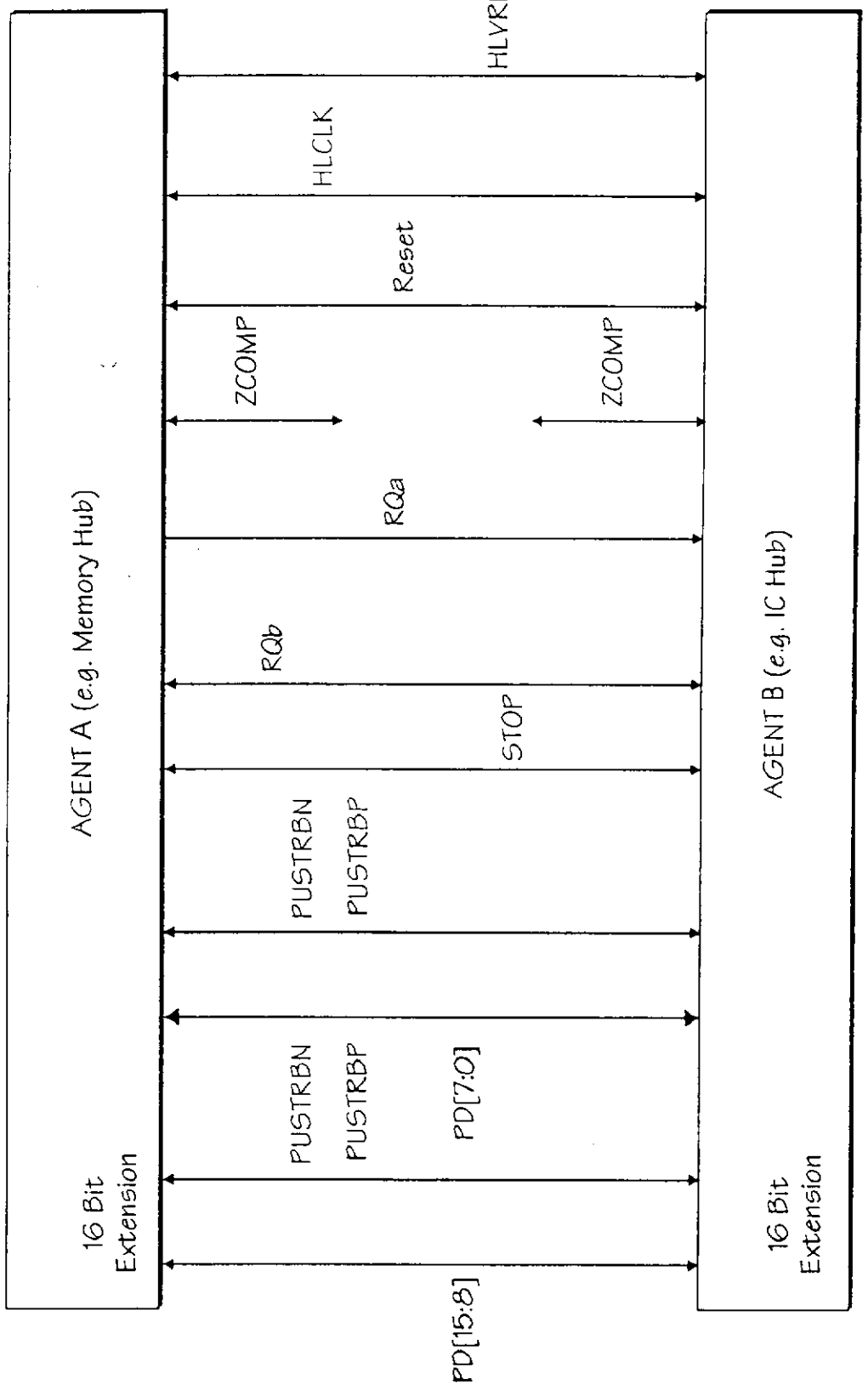

AGENT A (e.g. Memory Hub)
16 Bit Extension
PD[15:8]
PUSTRBN
PUSTRBP
PD[7:0]
PUSTRBN
PUSTRBP
RQb
STOP
RQa
ZCOMP
ZCOMP
Reset
HLCLK
HLVREF
AGENT B (e.g. IC Hub)
16 Bit Extension

FIG. 8

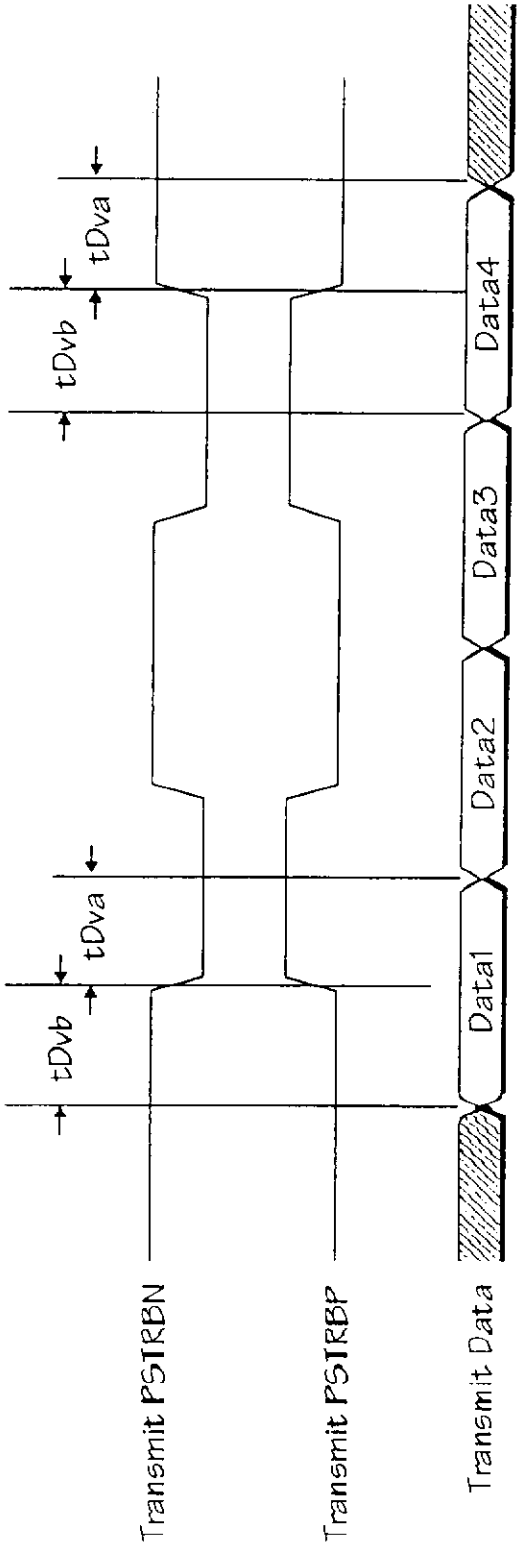

Transmit PSTRBN
Transmit PSTRBP
Transmit Data
tDvb
tDva
tDvb
tDva
Data1
Data2
Data3
Data4

FIG. 9

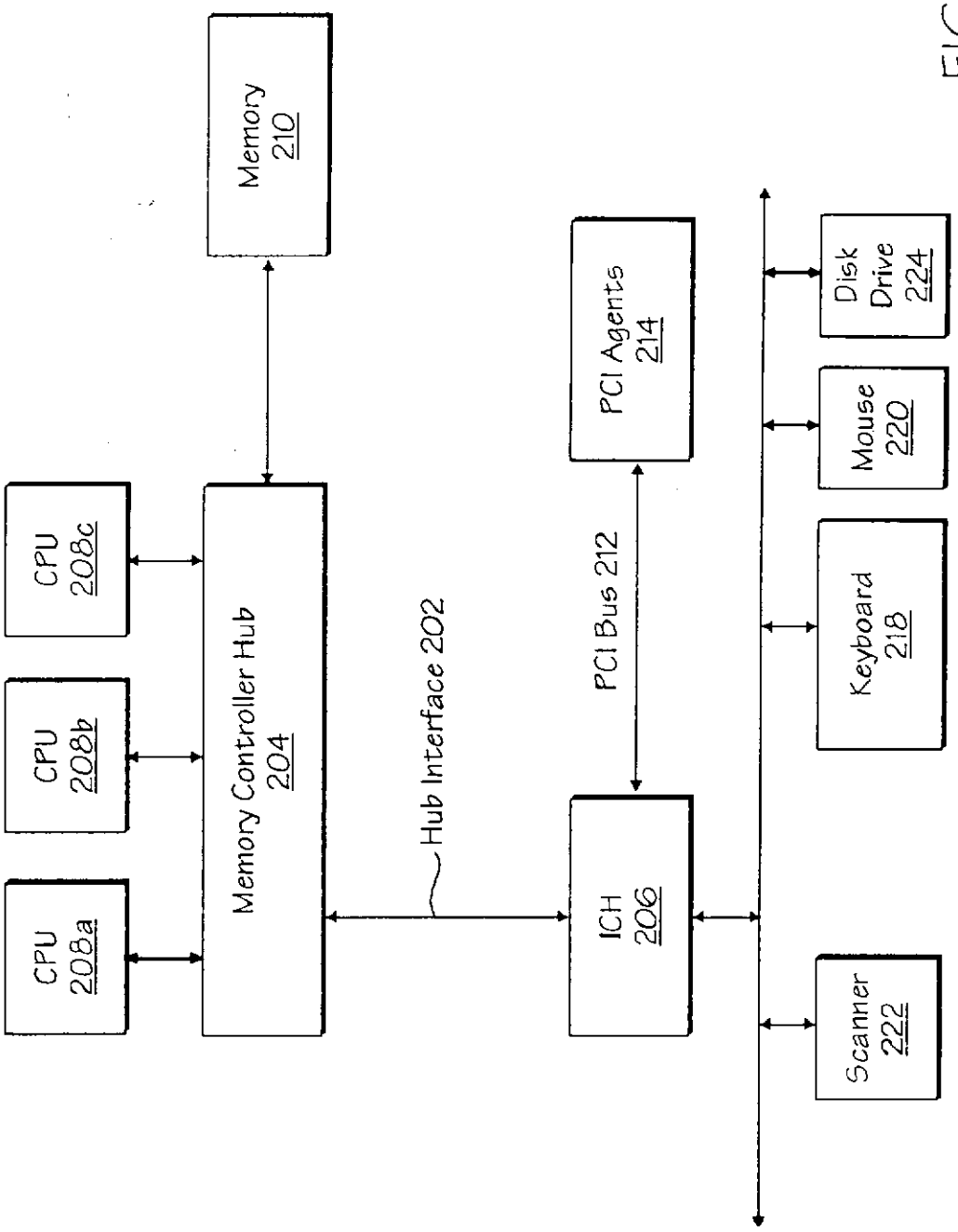

Memory 210
CPU 208c
CPU 208b
CPU 208a
Memory Controller Hub 204
Hub Interface 202
PCI Agents 214
PCI Bus 212
ICH 206
Disk Drive 224
Mouse 220
Keyboard 218
Scanner 222

FIG. 10

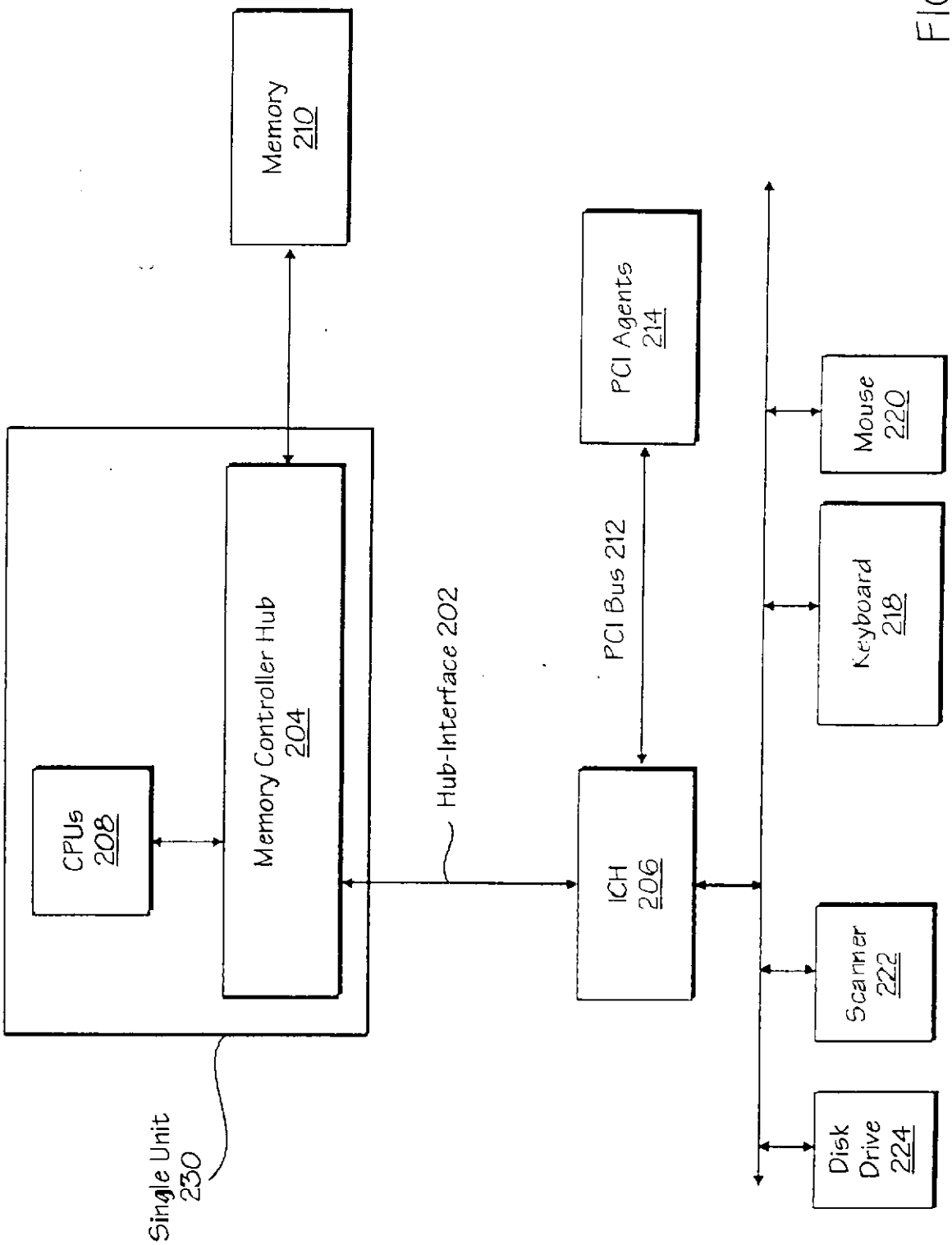

Memory
210
PCI Agents
214
Mouse
220
Keyboard
218
Scanner
222
Disk
Drive
224
PCI Bus 212
ICH
206
Hub-Interface 202
CPUs
208
Memory Controller Hub
204
Single Unit
230

FIG. 11

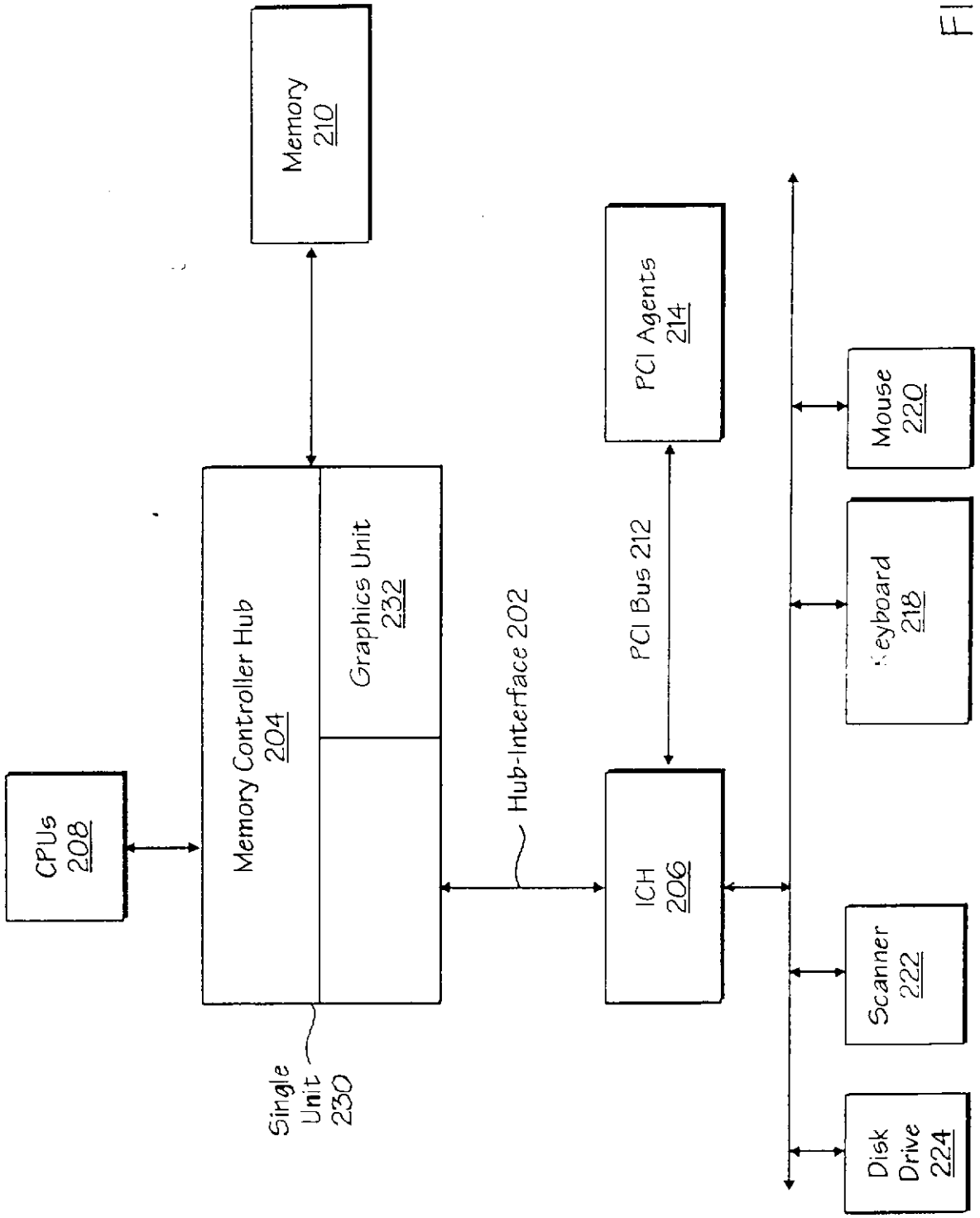

Memory
210
PCI Agents
214
Mouse
220
Memory Controller Hub
204
Graphics Unit
232
PCI Bus 212
Keyboard
218
CPUs
208
Hub-Interface 202
ICH
206
Scanner
222
Single
Unit
230
Disk
Drive
224

FIG. 12