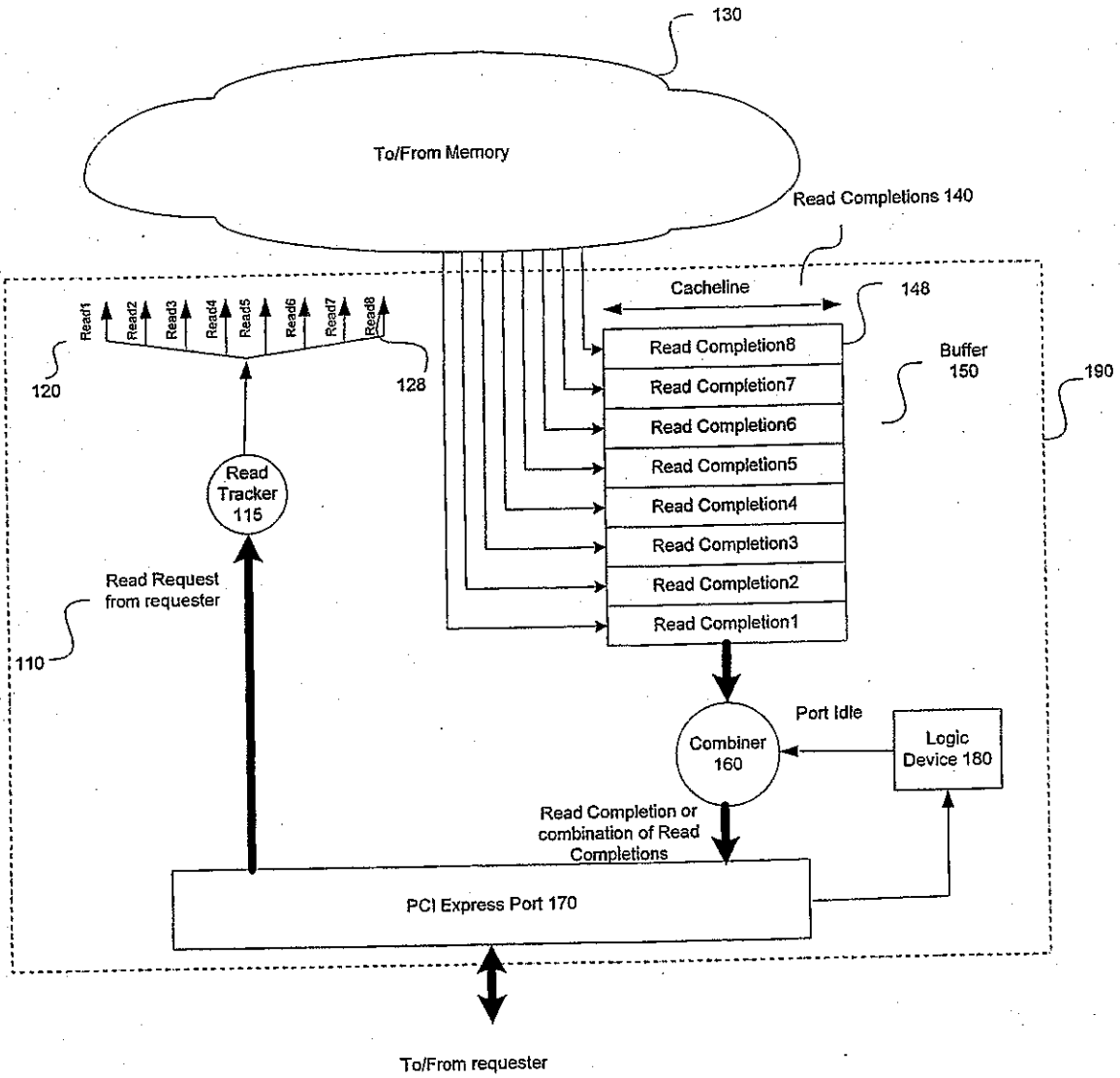

130
To/From Memory
Read Completions 140
Cacheline
148
Read1
Read2
Read3
Read4
Read5
Read6
Read7
Read8
120
128
Read Completion8
Read Completion7
Read Completion6
Read Completion5
Read Completion4
Read Completion3
Read Completion2
Read Completion1
Buffer
150
190
Read
Tracker
115
Read Request
from requester
110
Port Idle
Combiner
160
Logic
Device 180
Read Completion or
combination of Read
Completions
PCI Express Port 170
To/From requester

Figure 1

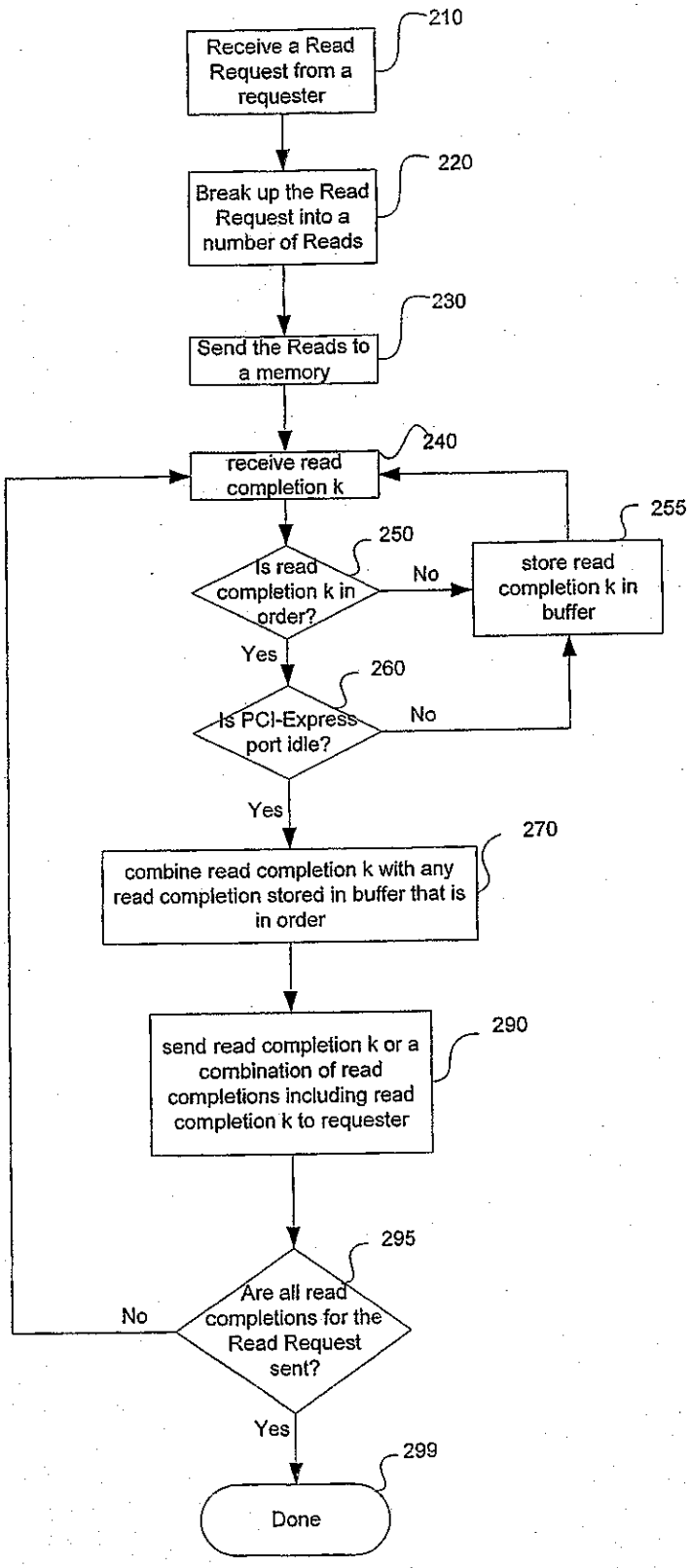

Receive a Read Request from a requester
210
Break up the Read Request into a number of Reads
220
Send the Reads to a memory
230
receive read completion k
240
Is read completion k in order?
250
No
store read completion k in buffer
255
Yes
Is PCI-Express port idle?
260
No
Yes
combine read completion k with any read completion stored in buffer that is in order
270
send read completion k or a combination of read completions including read completion k to requester
290
Are all read completions for the Read Request sent?
295
No
Yes
Done
299

Figure 2

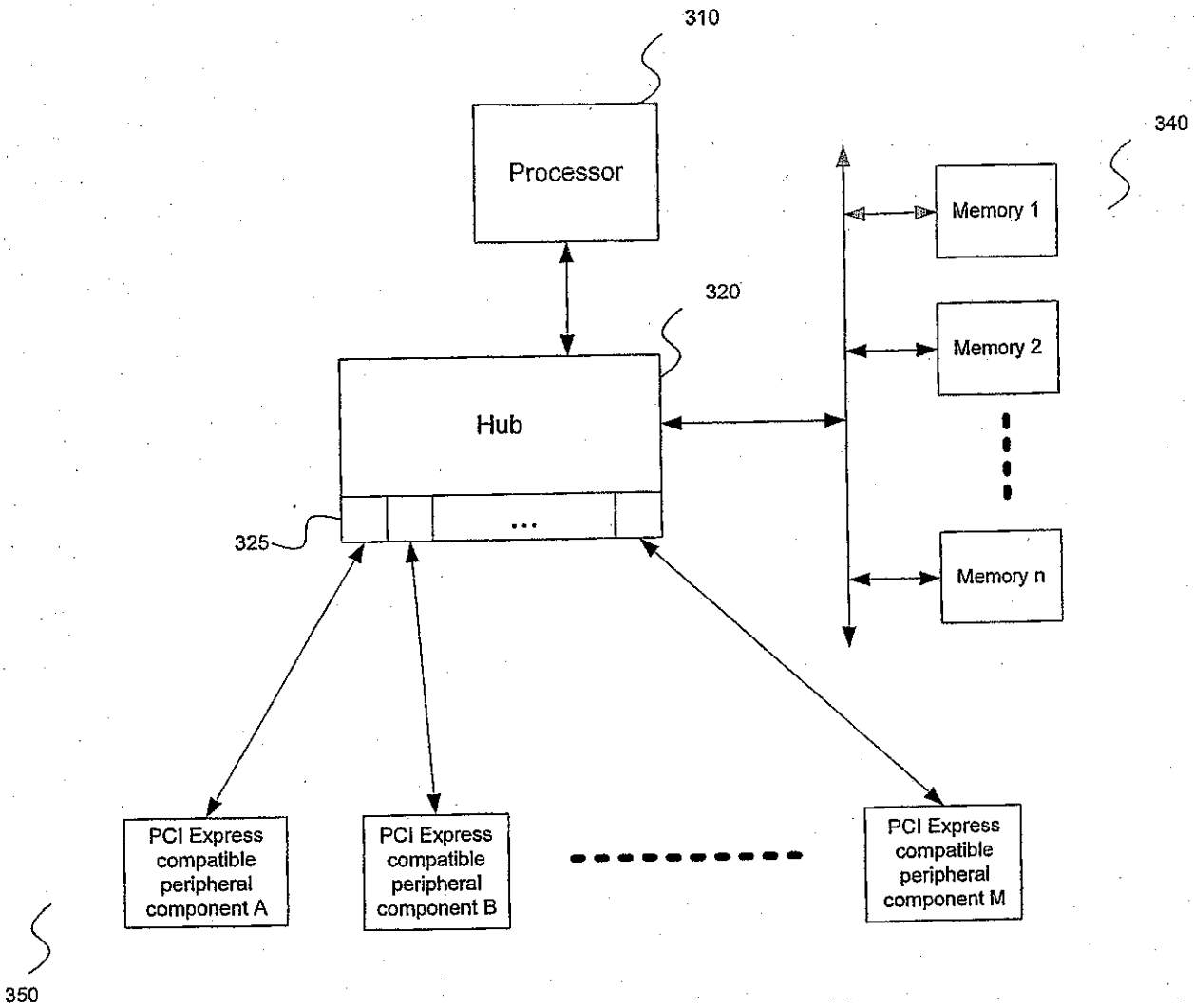

310
Processor
340
Memory 1
320
Memory 2
Hub
325
...
Memory n
PCI Express compatible peripheral component A
PCI Express compatible peripheral component B
PCI Express compatible peripheral component M
350

Figure 3