NON-UNIFORM MEMORY ACCESS (NUMA) DATA PROCESSING SYSTEM THAT HOLDS AND REISSUES REQUESTS AT A TARGET PROCESSING NODE IN RESPONSE TO A RETRY

ABSTRACT

In a non-uniform memory access (NUMA) computer system (6), the local processing node (8) includes at least a processor (10) and a local system memory (18), and the remote processing node includes at least a processor having an associated cache memory (14), a local system memory (18), and a node controller (20) that are each coupled to a local interconnect (22). In response to receipt by the node controller (20) of a request transaction transmitted from the local processing node (8) via the node interconnect (22), the node controller (20) at the remote processing node issues the request transaction on the local interconnect (22). If the request transaction receives a retry response at the remote processing node, the node controller (20) does not immediately return the retry response to the local processing node (8). Instead, the node controller (20) reissues the request transaction on the local interconnect (16) at least once, thus giving the request transaction another opportunity to complete successfully.

FIG 1