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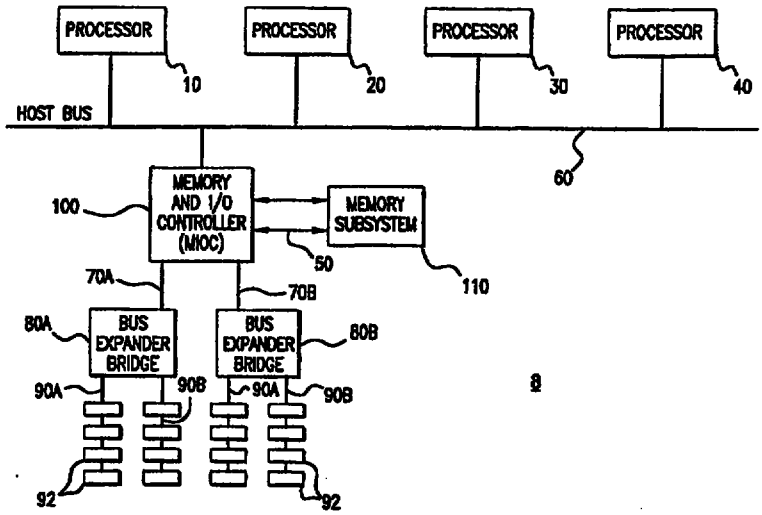
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(54) Title: DUAL MODE BUS BRIDGE FOR COMPUTER SYSTEM



(57) Abstract

A bus expander bridge (80A–80B) is provided for interfacing first and second external buses (90A–90B) (such as PCI buses) to a third bus (70A–70B). The bus expander bridge is configurable in either an independent mode in which the first and second external buses operate independently and a combined mode in which the first and second external buses are combined to create a single bus. The bus expander bridge includes a first set of data queues for routing data between the first external bus and the third bus, and a second set of data queues for routing data between the second external bus and the third bus. The bus expander bridge also includes a controller coupled to the first and second sets of data queues and operating the first and second sets of data queues in parallel for the independent mode. The controller routes even addressed data through the first set of data queues and routes odd addressed data through the second set of data queues for the combined mode.