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(54) Title: INPUT/OUTPUT (I/O) ADDRESS TRANSLATION IN A BRIDGE PROXIMATE TO A LOCAL I/O BUS

(57) Abstract: A method and apparatus are provided for performing address translation in an input/output (I/O) expansion bridge. The I/O expansion bridge includes a first interface unit, a second interface unit, and an address translation unit. The first interface unit is configured to be coupled to a system memory and I/O controller through one or more I/O ports. The first interface unit enables data transfers over the one or more I/O ports to or from the main memory of a computer system. The second interface unit provides bus control signals and addresses to enable data transfers over a bus to or from a peripheral device. The address translation unit is coupled to the first interface unit and the second interface unit. The address translation unit translates addresses associated with transactions received on the second interface by accessing a local memory containing physical addresses of pages in the main memory of the computer system.