

ABSTRACT OF THE INVENTION

**METHOD AND APPARATUS FOR ALLOWING PACKET DATA TO BE SEPARATED
OVER MULTIPLE BUS TARGETS**

A network adapter for allowing packet data to be separated over multiple bus targets, without impact to input/output bus bandwidth or network performance, having: a bus interface circuit; a bus protocol circuit coupled to the bus interface circuit; a
5 burst dispatcher circuit coupled to the bus protocol circuit; a network interface coupled to a read processing circuit and a write processing circuit, wherein the read processing circuit and the write processing circuit are coupled to the burst dispatcher; and,
10 a synchronization and buffering circuit coupled to the bus protocol circuit, the burst dispatcher circuit, the read processing circuit and the write processing circuit.

A method for transferring packet data between a first bus target, a second bus target, and the network adapter comprising the steps of creating a set of descriptor entries in
15 the network adapter, wherein one descriptor entry is generated for each portion of each packet to be transmitted between either the first bus target or the second bus target, and the network adapter; and, transferring a portion of packet data from either the first bus target or the second bus target to the network
20 adapter, wherein the bus target on which the portion of packet data is contained is described by one of the set of descriptor entries.