

CLMPTO March 19, 2009

~~AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111~~

Serial Number: 90/007,001

Filing Date: April 8, 2004

Title: EX PARTE REEXAMINATION OF DIGI PATENT NO. 6,047,319 (Requestor: Richard E. Campbell - Knobbe, Martens firm of Irvine, CA)

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~~Dkt. 977.017USX~~

~~IN THE CLAIMS~~

~~Please amend the claims as follows.~~

1. (Original) A system comprising:
a server having a plurality of communication ports; and
a host computer having a driver communicatively coupling the host computer to the server via a network connection, wherein the driver emulates the communication ports of the server by defining a corresponding local communication port for each of the communication ports of the server, and further wherein the driver includes an application programming interface (API) by which an application program executing on the host computer is granted full control of one of the communication ports of the server, including hardware and software flow control, as if the communication ports of the server were local to the host computer.
2. (Original) The system as claimed in claim 1, wherein the driver maintains a single network connection from the host computer to the server as the application program requests additional local communication ports from the driver.
3. (Original) The system of claim 1, wherein the driver defines a TTY device as the local communication port.
4. (Original) The system of claim 1, wherein the driver receives input/output (I/O) settings from the application program via the application programming interface, and further wherein the driver communicates the I/O settings to the server for configuring hardware characteristics of the granted server communication port.
5. (Original) The system of claim 1 wherein the server communication ports are serial ports.
6. (Original) The system of claim 1, wherein the network connection is a TCP connection.

7. (Original) The system of claim 1, further comprising a UNIX daemon executing on the host computer for establishing the network connection as a reliable bi-directional bytestream connection over a network, opening a control device associated with the driver, and utilizing a STREAMS interface to link the reliable bytestream network connection to the driver.

8. (Original) A hardware device for a host computer, wherein the hardware device includes a driver that emulates a plurality of communication ports of a remote server that is communicatively coupled to the host computer via a network connection, wherein the driver defines a corresponding local communication port for each communication port of the server and includes an application programming interface (API) by which an application program executing on the host computer is granted full control of one of the communication ports of the server, including hardware and software flow control, as if the communication ports of the server were local to the host computer.

9. (Original) The hardware device of claim 8, wherein the driver receives requests to control one of the local communication ports from application programs executing on the host computer via a standard application programming interface (API).

10. (Original) The hardware device of claim 9, wherein the driver communicates the requests to the terminal server such that the terminal server grants to the host computer exclusive access to one of the communication ports of the terminal server.

11. (Original) The hardware device of claim 10, wherein the terminal server grants exclusive access to the server communication port that corresponds to the requested local communication port.

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12. (Original) The hardware device as claimed in claim 8, wherein the driver maintains a single network connection from the host computer to the server as the application program requests additional local communication ports.
13. (Original) The hardware device of claim 8, wherein the driver defines a TTY device as the local communication port.
14. (Original) The hardware device of claim 9, wherein the driver receives input/output (I/O) settings from the application program via the application programming interface, and further wherein the driver communicates the I/O settings to the terminal server for configuring hardware characteristics of the terminal server communication port.
15. (Original) The hardware device of claim 8, wherein the terminal server communication ports are serial ports.
16. (Original) The hardware device of claim 8, wherein the network connection is a TCP connection.
17. (Original) The hardware device of claim 8, further comprising a UNIX daemon executing on the host computer for establishing the network connection as a reliable bi-directional bytestream connection over a network, opening a control device associated with the driver, and utilizing a STREAMS interface to link the reliable bytestream network connection to the driver.
18. (New) The system of claim 1, wherein the network connection is an Ethernet connection.
19. (New) The system of claim 1, wherein the network connection uses a standard networking communications protocol, wherein the standard networking communications protocol provides error free byte stream data transmission.

20. (New) The system of claim 1, wherein the standard networking communications protocol is TCP/IP.

21. (New) A system comprising:

a general purpose network;

a server connected to the general purpose network, the server having a plurality of communication ports; and

a host computer connected to the general purpose network, the host computer having a driver communicatively coupling the host computer to the server via a standard networking communications protocol operating over the general purpose network, wherein the driver emulates the communication ports of the server by defining a corresponding local communication port for each of the communication ports of the server, and further wherein the driver includes an application programming interface (API) by which an application program executing on the host computer is granted full control of one of the communication ports of the server, including hardware and software flow control, as if the communication ports of the server were local to the host computer.

22. (New) The system of claim 21, wherein the standard networking communications protocol is TCP/IP.

23. (New) The system of claim 21, wherein the standard networking communications protocol provides error free byte stream data transmission.

24. (New) The system of claim 21, wherein the general purpose network includes an ethernet network.

25. (New) The system of claim 21, wherein the general purpose network includes a token ring network.

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26. (New) The system of claim 21, wherein the host computer transmits packets of data to the server over the network to a server transmit buffer corresponding to a server communication port, and wherein the data is transmitted from the transmit buffer as a serial communication packet.