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(54) Title: MULTI-INSTRUMENT DEVICE BASED ON PARTIAL RECONFIGURATION FPGA

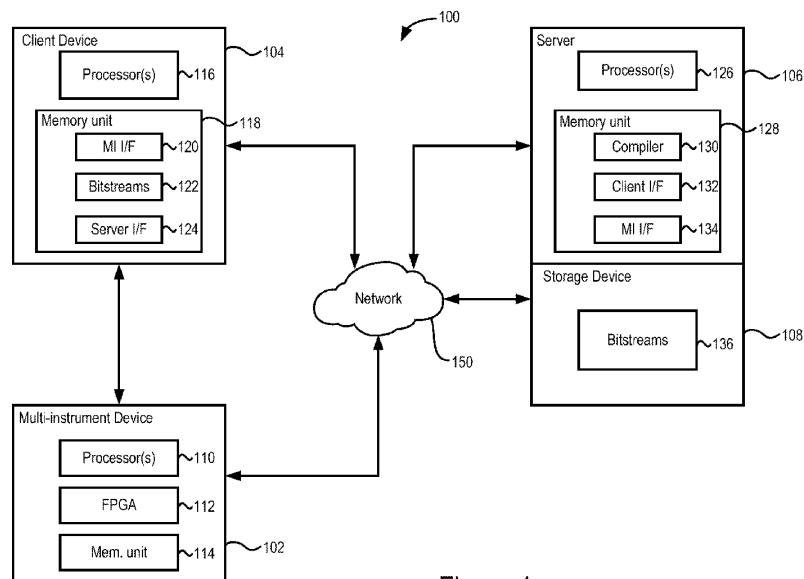


Figure 1

(57) **Abstract:** This disclosure provides systems, methods, and apparatus for implementing multiple test and measurement devices into a single multi-instrument device (102). The device can include at least one field programmable gate array, FPGA (112), that allows partial reconfiguration. One or more dynamic reconfigurable portions of the FPGA can be configured to function as one or more test and measurement devices. The device can provide outputs of each of the test and measurement instruments to a client device, which can display the outputs to a user. The device can be reconfigured by loading bitstreams (122, 136) associated with the desired test and measurement device. The bitstreams can be loaded from the client device (104), a server (106), or from a memory storage unit (114) of the device itself.

[Continued on next page]

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