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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: SYSTEMS AND METHODS FOR EXPOSING A CURRENT PROCESSOR INSTRUCTION UPON EXITING A VIRTUAL MACHINE

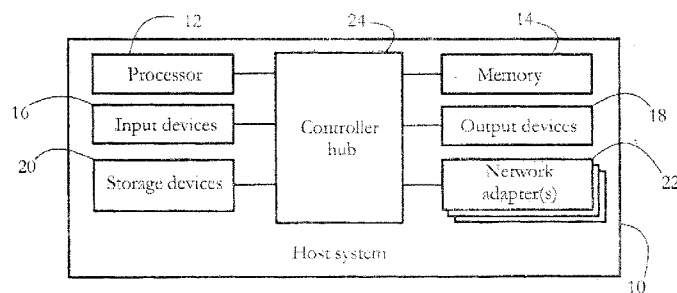


FIG. 1

(57) Abstract: Described systems and methods enable a host system to efficiently perform computer security activities, when operating in a hardware virtualization configuration. A processor is configured to generate a VM suspend event (e.g., a VM exit or a virtualization exception) when software executing within a guest VM performs a memory access violation. In some embodiments, the processor is further configured to save disassembly data determined for the processor instruction which triggered the VM suspend event to a special location (e.g., a specific processor register) before generating the event. Saved disassembly data may include the contents of individual instruction encoding fields, such as Prefix, Opcode, Mod R/M, SIB, Displacement, and Immediate fields on Intel® platforms.

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