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(54) **DUAL MEMORY INTROSPECTION FOR SECURING MULTIPLE NETWORK ENDPOINTS**

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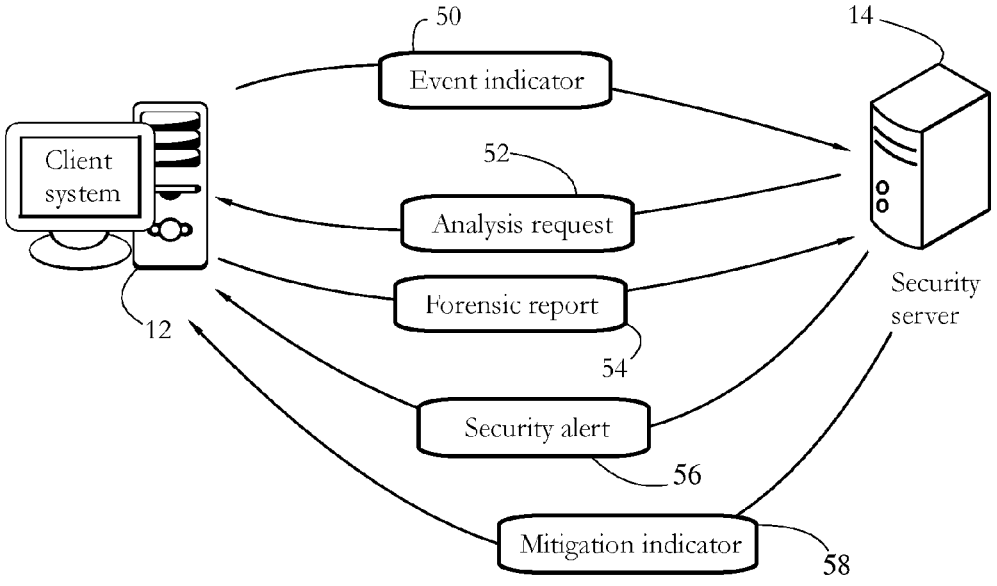
(57) **ABSTRACT**

Described systems and methods enable protecting multiple client systems (e.g., a corporate network) from computer security threats such as malicious software and intrusion. In some embodiments, each protected client operates a live introspection engine and an on-demand introspection engine. The live introspection engine detects the occurrence of certain events within a protected virtual machine exposed on the respective client system, and communicates the occurrence to a remote security server. In turn, the server may request a forensic analysis of the event from the client system, by indicating a forensic tool to be executed by the client. Forensic tools may be stored in a central repository accessible to the client. In response to receiving the analysis request, the on-demand introspection engine may retrieve and execute the forensic tool, and communicate a result of the forensic analysis to the security server. The server may use the information to determine whether the respective client is under attack by malicious software or an intruder.



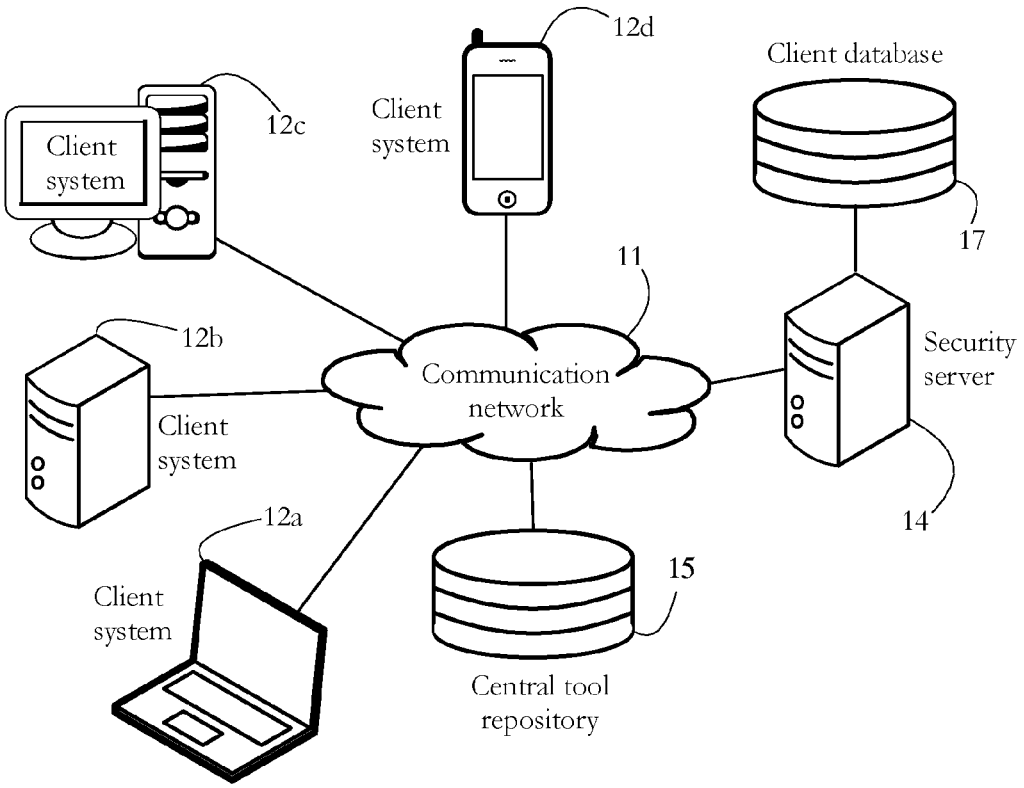


FIG. 1

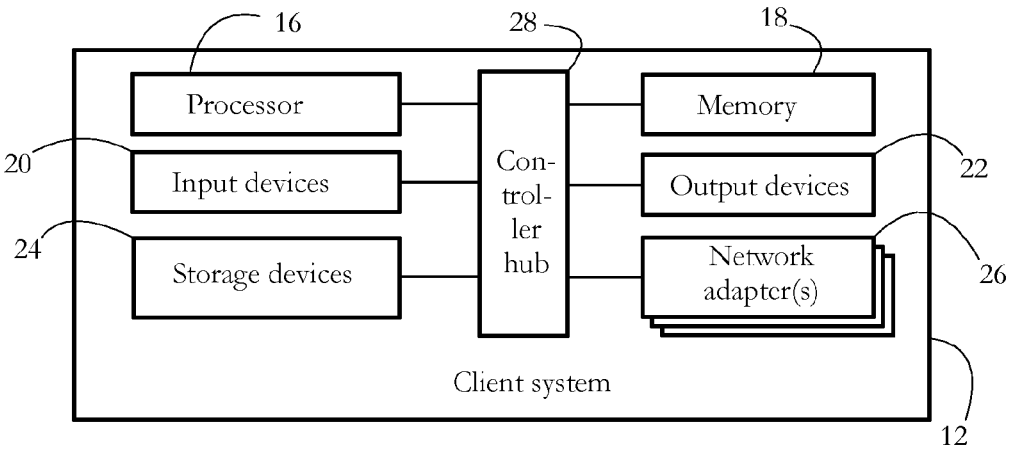


FIG. 2-A

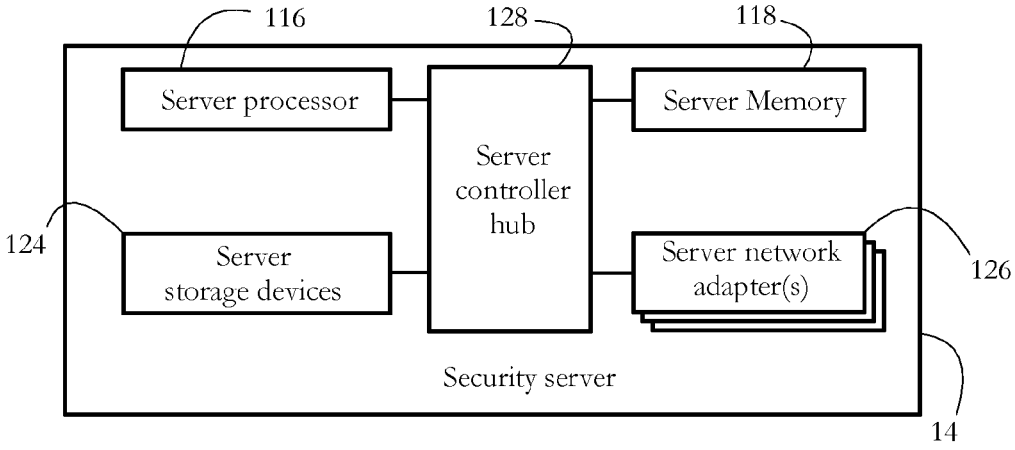


FIG. 2-B

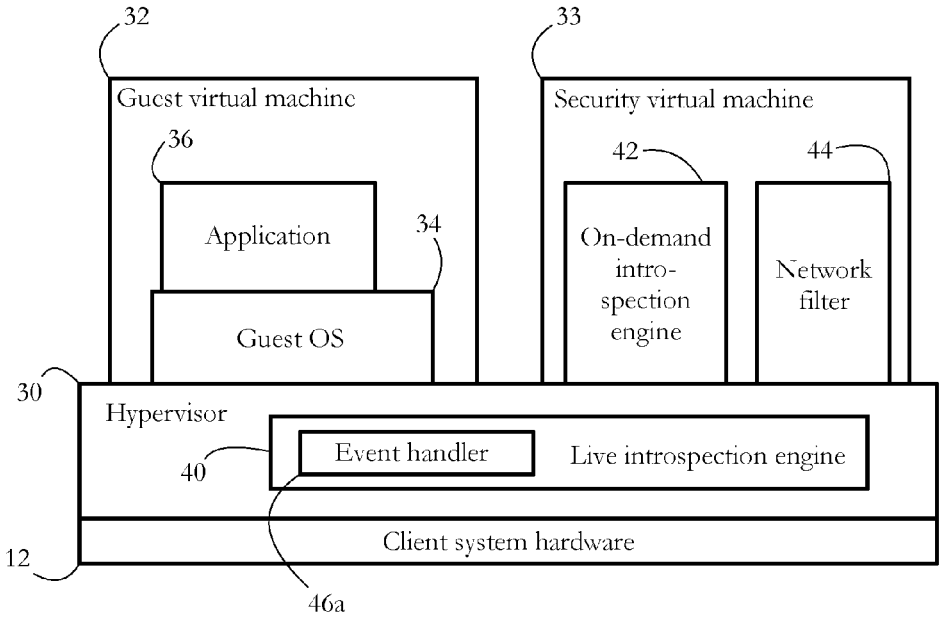


FIG. 3-A

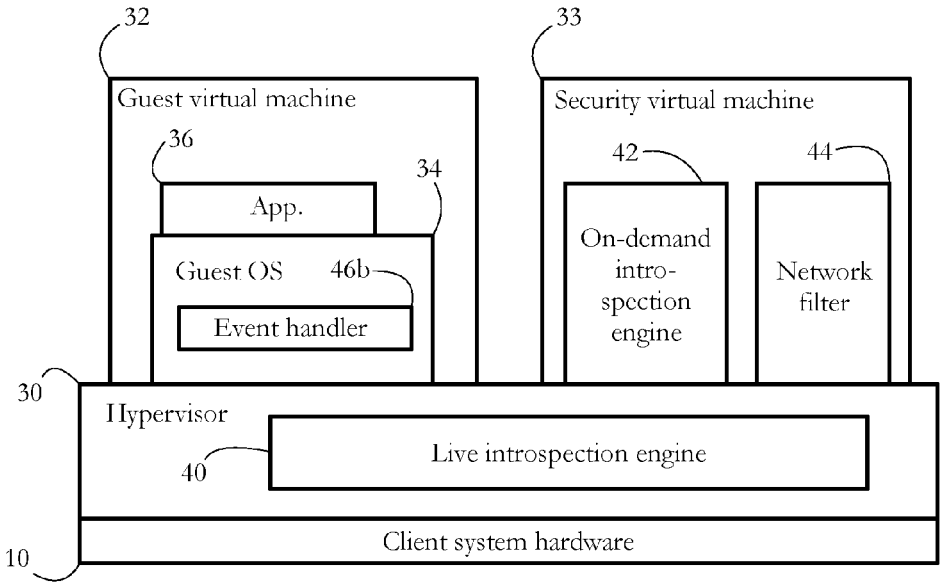


FIG. 3-B

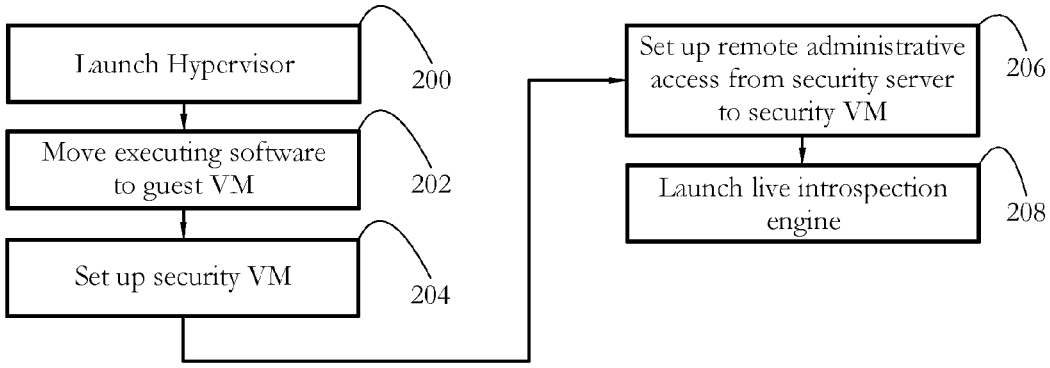


FIG. 4

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