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Milner et al.

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(54) **DETECTION OF MALICIOUS SOFTWARE PACKAGES**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.**

G06F 21/00	(2013.01)
G06F 21/51	(2013.01)
G06F 21/56	(2013.01)

(52) **U.S. Cl.**

CPC ***G06F 21/51*** (2013.01); ***G06F 21/564*** (2013.01)

(58) **Field of Classification Search**

CPC G06F 21/51; G06F 21/564

See application file for complete search history.

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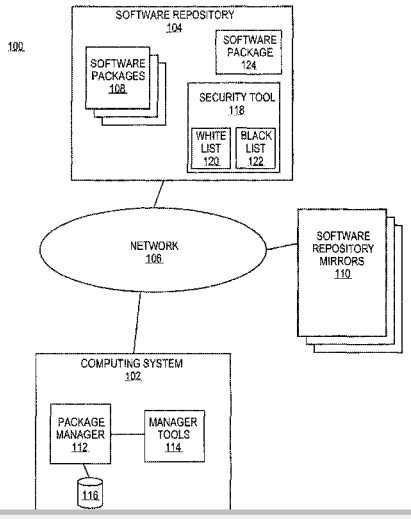
(57) **ABSTRACT**

Systems and methods for a security tool that verifies the security of a software package. An example method may involve identifying a plurality of components contained in a software package comprising one of a JAR file, an Android application package, a docker image, a container file, or a virtual machine image; comparing the components contained in the software package to a list of known components; classifying the software package as insecure when at least one of the components matches an insecure component, or as secure when each of the compared components matches a corresponding secure component on the list of known components; preventing addition of the software package to a software repository when the software package is classified as insecure; and when insecure, providing an interface to enable a user to request the components of the software package be added as a secure component on the list of known components.

20 Claims, 7 Drawing Sheets



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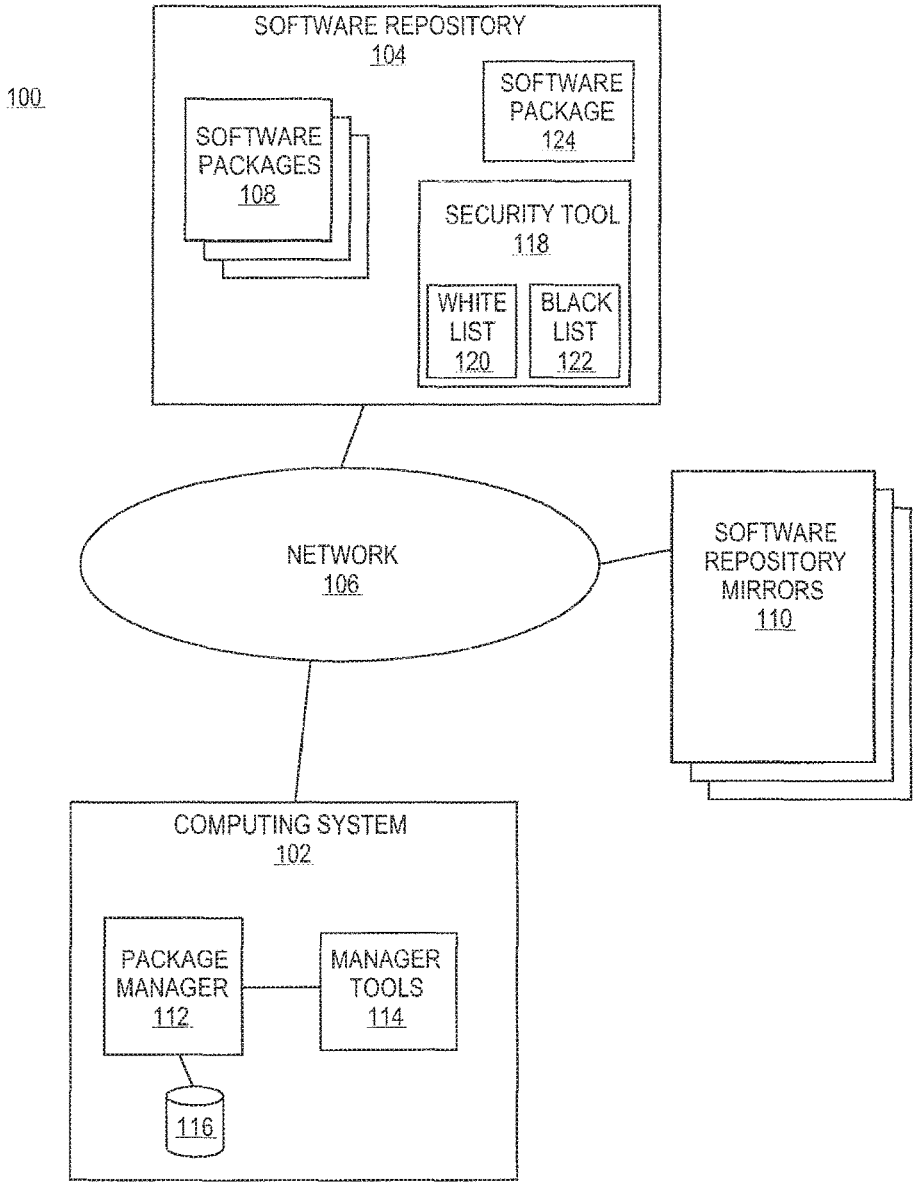

FIG. 1A

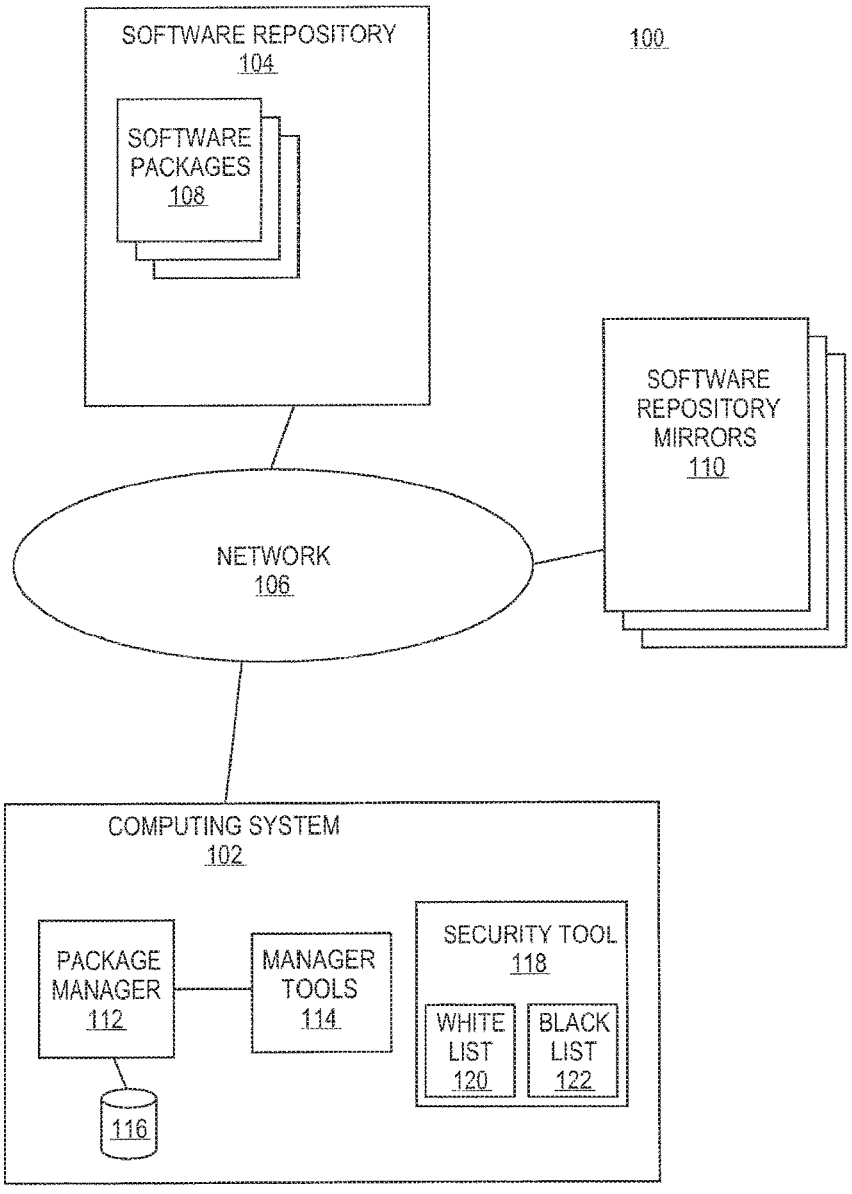

FIG. 1B

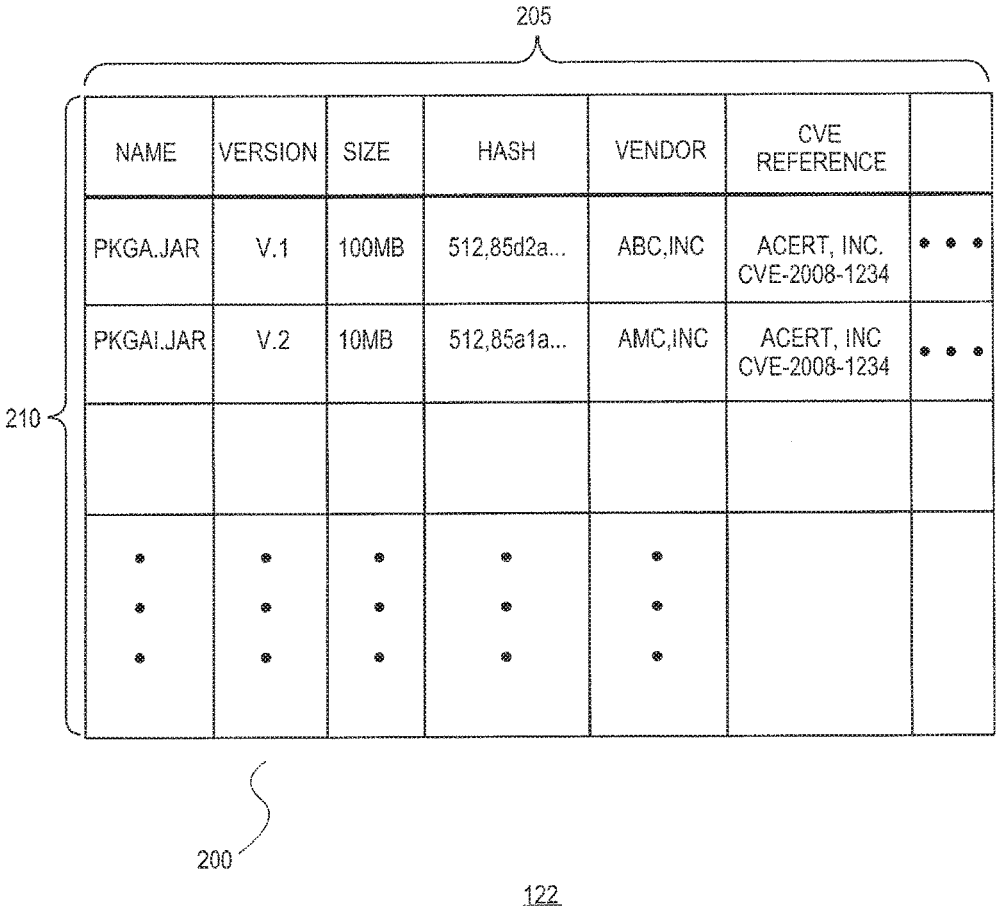

FIG. 2

DOCKET ALARM

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