

obtaining a function structure of the function of the API from the function identifier of the API.

11. ~~The handheld computing mobile~~ device of claim 10, wherein the first address is stored in the function structure of the function of the API.

12. ~~The handheld computing mobile~~ device of claim 7, wherein the second computer language is C or C++.

13. A handheld computer, comprising:

one or more processors; and

memory storing one or more programs, wherein the one or more programs, when executed by the one or processors, cause the handheld computer to:

monitor the status of a process of an API in a virtual machine based on a process identifier of the API;

when the process of the API is activated, obtain a virtual machine instance corresponding to the API process from the memory based on the process identifier of the API;

determine whether the API should be intercepted based on a first set of criteria stored in a database;

if the API should be intercepted, select a replacement function based on a second set of criteria stored in the database;

identify a first address of a function of the API in the virtual machine instance based on the process identifier of the API;

replace the first address with a second address of the replacement function, wherein the API is written in a first computer language and the replacement function is written in a second computer language; and

execute the replacement function.

14. The handheld computer of claim 13, wherein the one or more programs are part of a computer security software application.

15. The handheld computer of claim 13, wherein the database includes a virus database.

16. The handheld computer of claim 13, wherein the first set of criteria comprises whether registered information of a software application in the database is