

(12) **United States Patent**
Razavi et al.

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- (54) **DETACHABLE JAVA APPLETS**
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- (73) Assignee: **Sun Microsystems, Inc.**, Mountain View, CA (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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- (22) Filed: **Jul. 25, 1997**
- (51) **Int. Cl.⁷** **G06F 9/54**
- (52) **U.S. Cl.** **709/310**; 345/808
- (58) **Field of Search** 345/326-357, 345/163, 700, 764, 804, 808; 709/200, 310-332; 707/513

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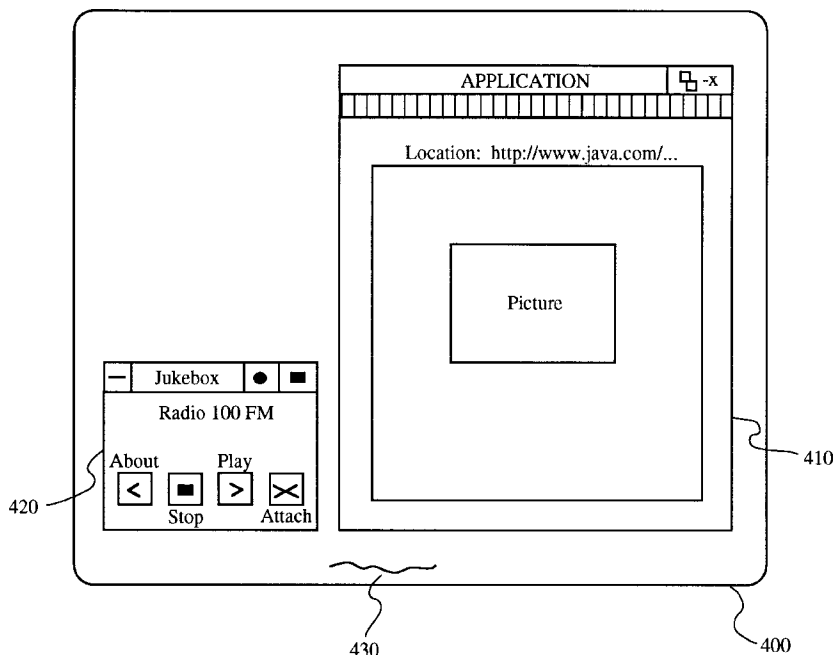
* cited by examiner

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(57) **ABSTRACT**

A method and system is disclosed for detaching Java applets from the constraints of the application such as a browser which provides the Java engine for executing those applets. Thus, the applets, when detached, can appear in a detached window which is more easily controllable by the operating environment desktop. The Java applets continue to run under the application's virtual machine but do so without regard to the graphical interface limits of the application. Further, if the application that launched the applet proceeds to a new URL location, the Java applet continues to run. Also, the applet, once detached, can be reattached into the application to appear in the application history.

20 Claims, 7 Drawing Sheets



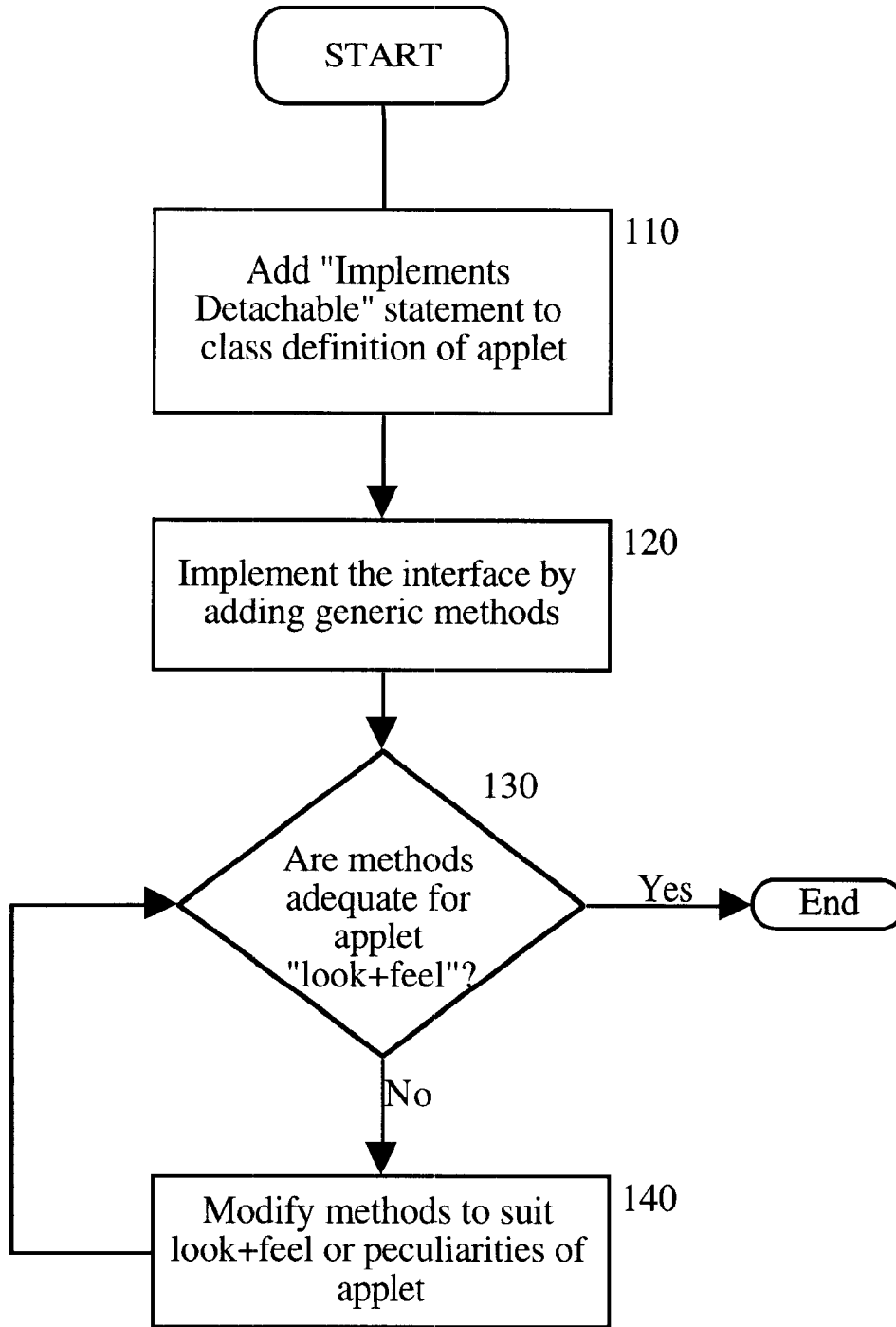


FIGURE 1

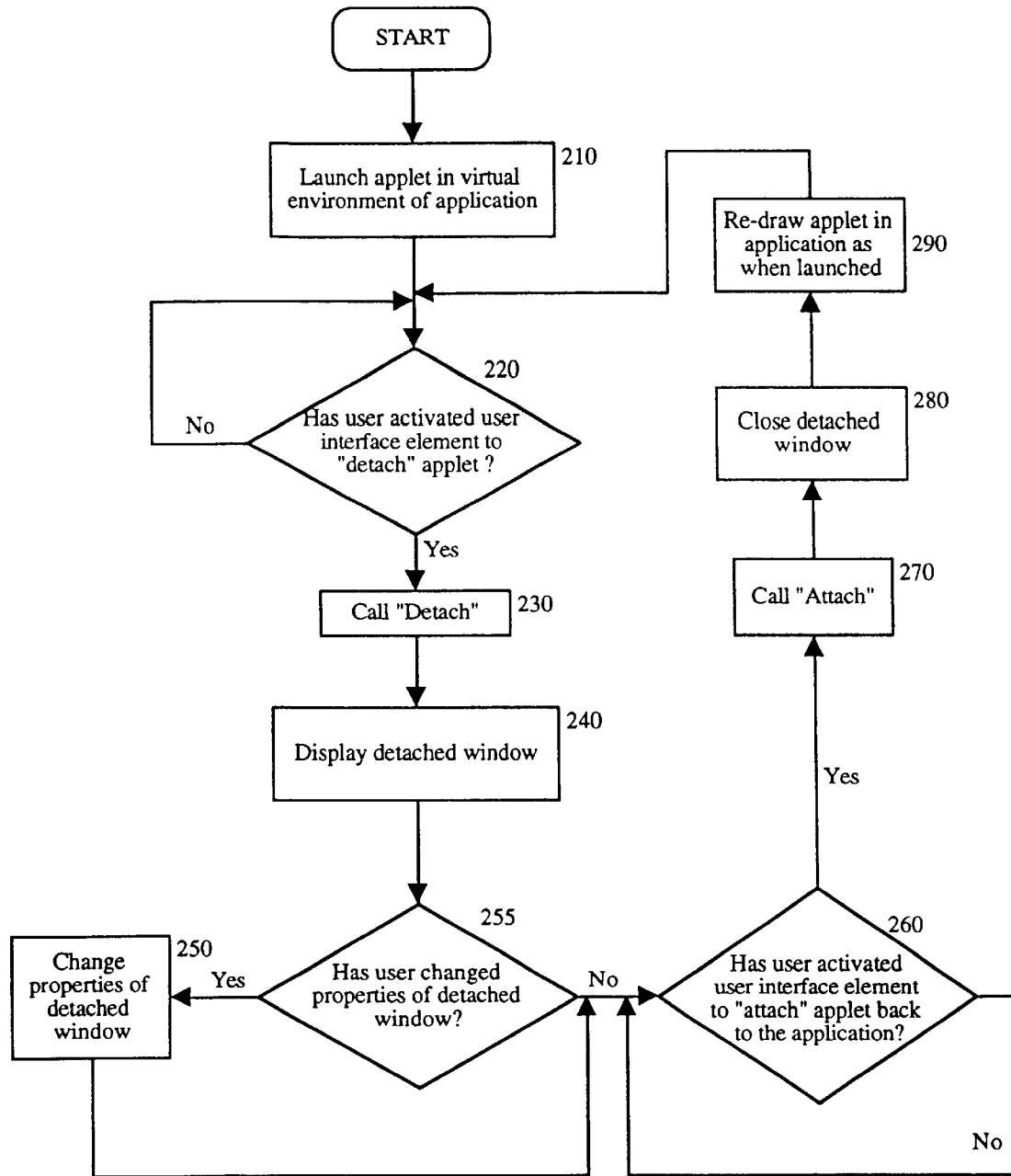
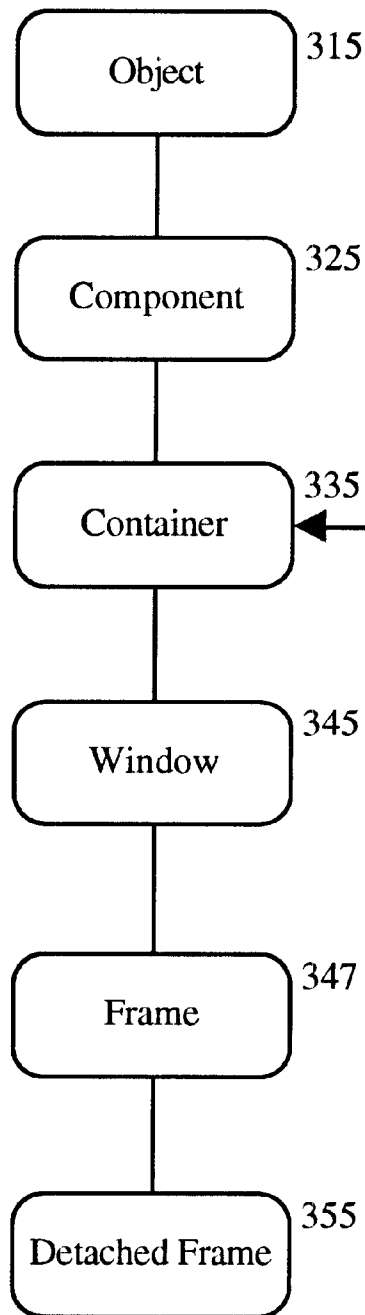
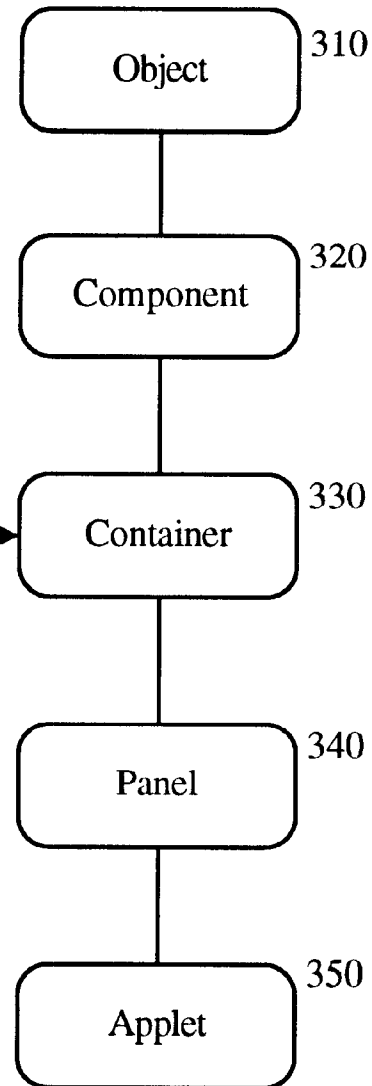


FIGURE 2

Detached Frame
Inheritance Hierarchy



Generic Applet
Inheritance Hierarchy



Hierarchy joined

A horizontal double-headed arrow connects the Container node (335) of the Detached Frame hierarchy to the Container node (330) of the Generic Applet hierarchy. The text "Hierarchy joined" is centered above the arrow.

FIGURE 3

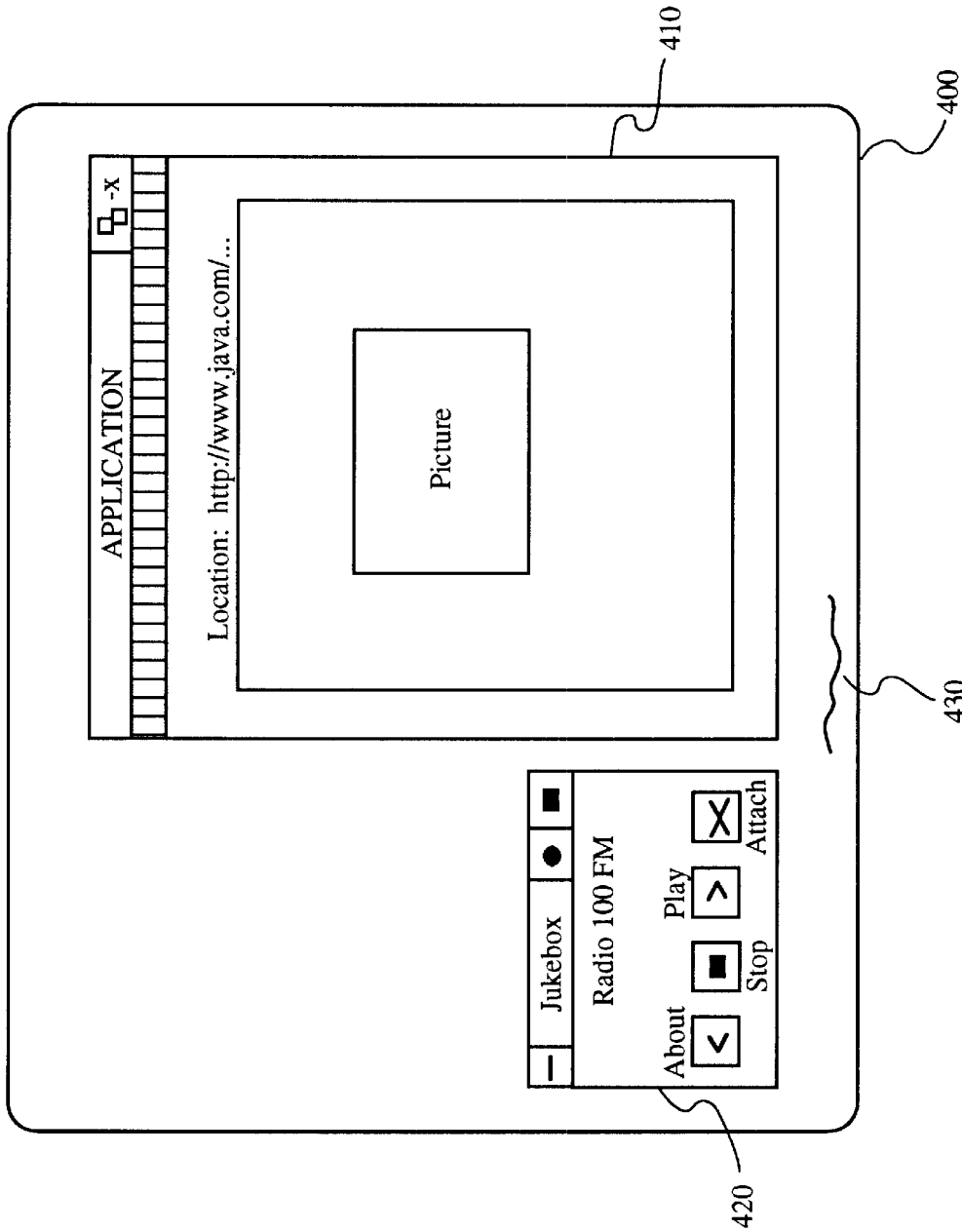


FIGURE 4

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