United States Patent [19]

Bull et al.

[11] **Patent Number:** **6,065,118**

[45] **Date of Patent:** ***May 16, 2000**

[54] **MOBILE CODE ISOLATION CAGE**

[75] Inventors: **John Albert Bull**, Northants; **David John Otway**, Cambridge, both of United Kingdom

[73] Assignee: **Citrix Systems, Inc.**, Fort Lauderdale, Fla.

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: **08/718,874**

[22] Filed: **Sep. 24, 1996**

[30] **Foreign Application Priority Data**

Aug. 9, 1996 [GB] United Kingdom 9616783

[51] **Int. Cl.^{7}** **G06F 11/30**; H04L 9/00; H04L 9/32
[52] **U.S. Cl.** **713/200**; 713/201; 380/4
[58] **Field of Search** 395/186, 187.01, 395/188.01, 704; 380/4, 23, 25; 713/200, 201, 202; 709/218, 223, 224, 225, 231, 250

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Attorney, Agent, or Firm—Testa, Hurwitz & Thibeault, LLP

[57] **ABSTRACT**

The present invention reduces the risk of damage to data or programs in an end user computer system programmed to operate in response to an imported data stream containing one or more mobile program components from an external source. The incoming data stream is screened to identify mobile program components of that data stream. Some of the mobile program components are passed to a program execution location isolated from the end user system prior to being executed to operate in a desired manner. The execution location has an interface with the external source of the data stream and an interface with the end user system. The operation of the interface between the execution location and the end user system is programmed so that only data which has been interacted on by the program component within the execution location in a specified and controlled manner can be passed to and from the end user system.

14 Claims, 4 Drawing Sheets

PROPOSED STRUCTURE

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SERVER

PUBLIC
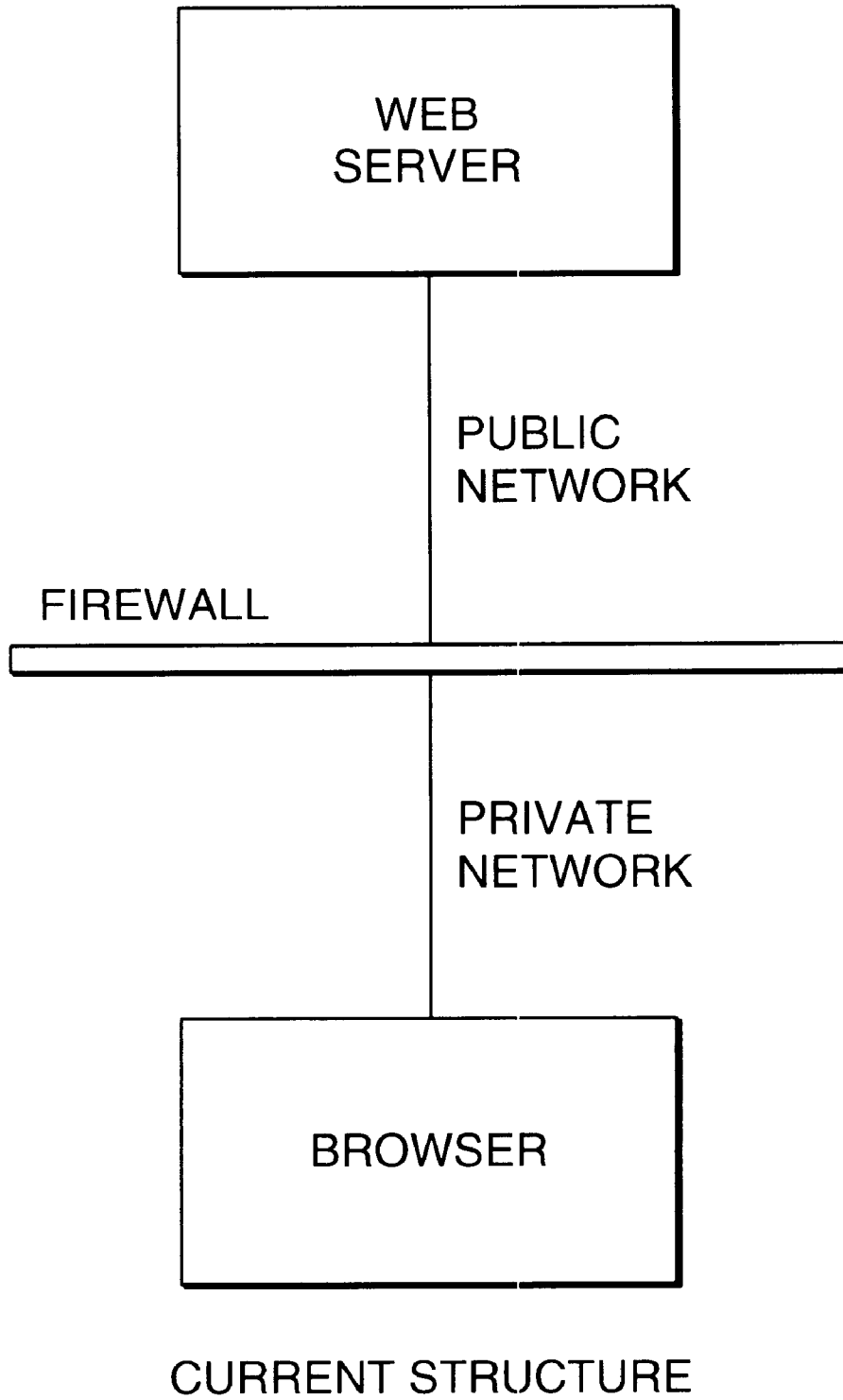NETWORK

FIREWALL

PRIVATE
NETWORK
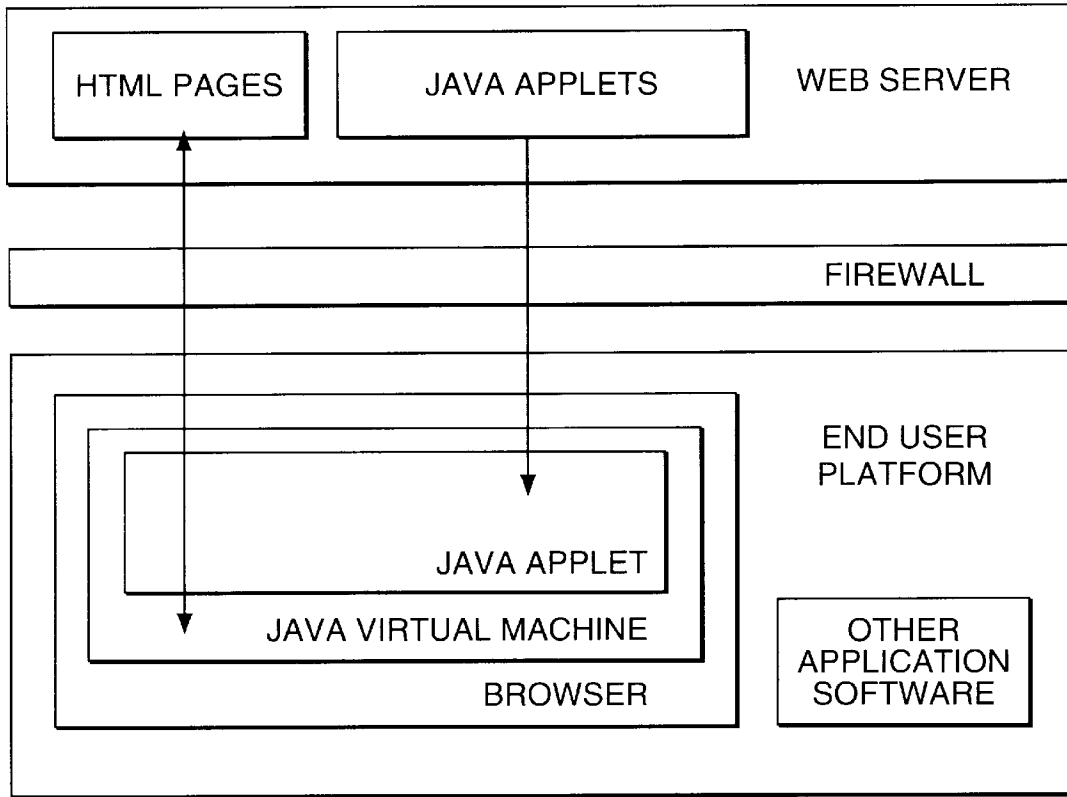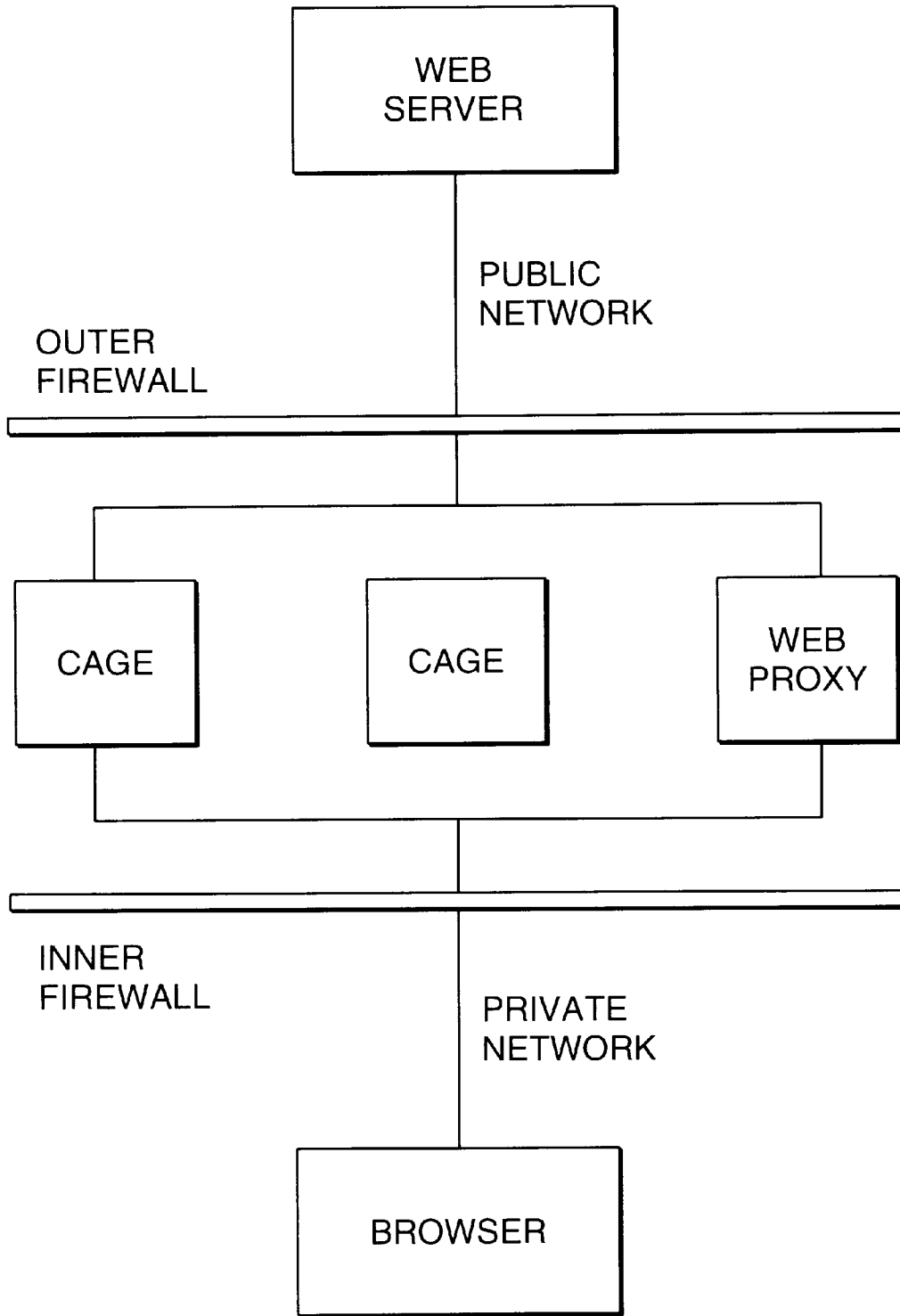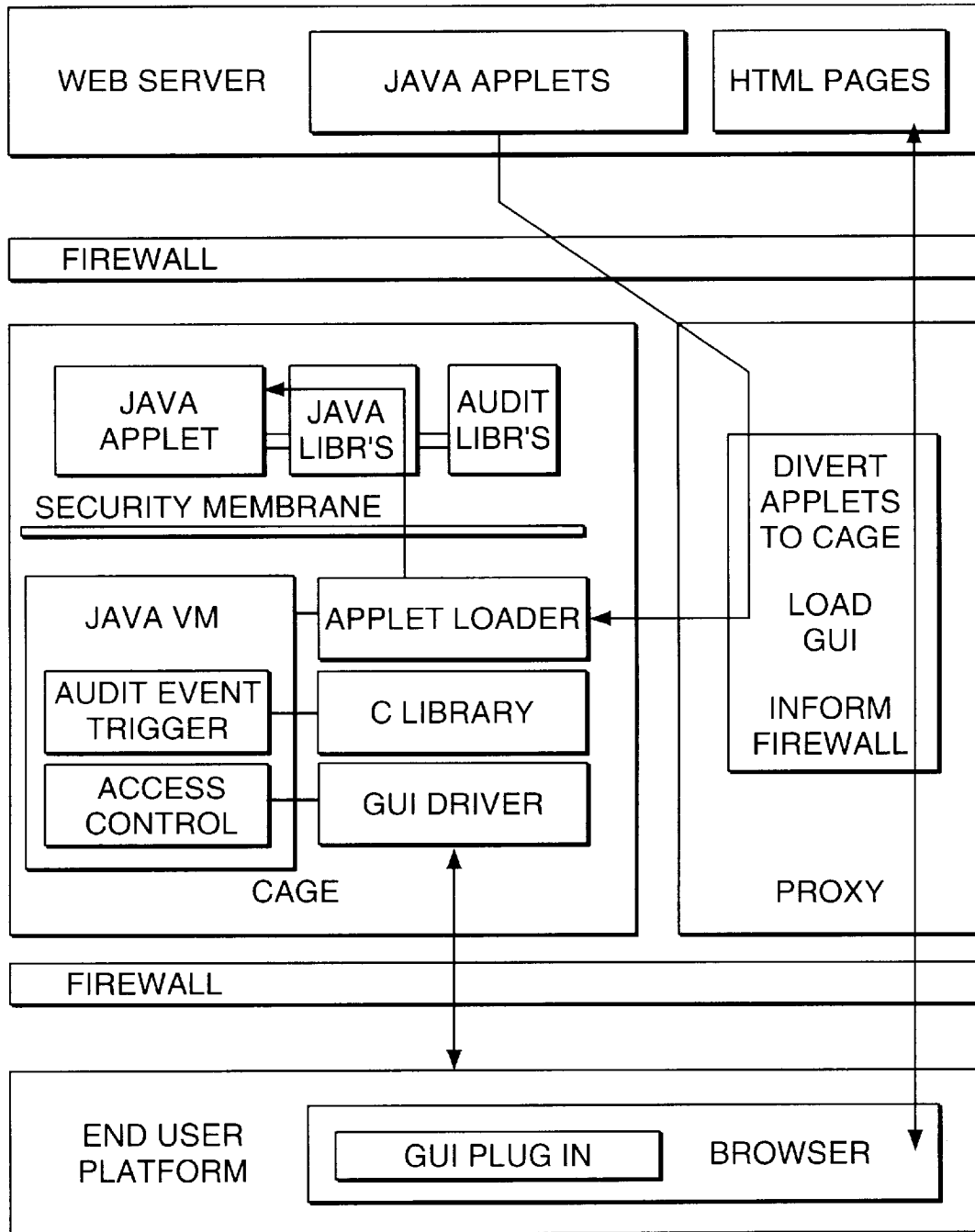
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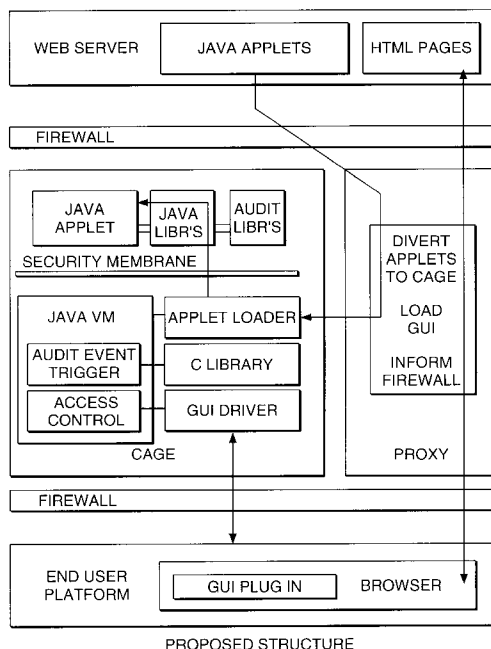
CURRENT STRUCTURE

FIG. 1

CURRENT STRUCTURE

FIG. 2

PROPOSED STRUCTURE

FIG. 3

PROPOSED STRUCTURE

FIG. 4

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