# EXHIBIT 4

US008141154B2

### (12) United States Patent

#### Gruzman et al.

# (10) Patent No.: US 8,141,154 B2 (45) Date of Patent: Mar. 20, 2012

### (54) SYSTEM AND METHOD FOR INSPECTING DYNAMICALLY GENERATED EXECUTABLE CODE

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  - Yuval Ben-Itzhak, Tel Aviv (IL)
- (73) Assignee: Finjan, Inc. (IL)
- (\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

0.5.C. 134(b) by 0 days

- (21) Appl. No.: 12/814,584
- (22) Filed: Jun. 14, 2010

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- (51) Int. Cl.
  - **G06F 11/00** (2006.01)
- (52) **U.S. Cl.** ...... **726/22**; 726/23; 726/24; 713/188

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	A1 A1 A1 A1 A1* A1	A1 8/2002 A1 7/2004 A1 8/2004 A1 8/2004 A1 5/2005 A1 7/2005 A1 1/2006 A1 7/2006

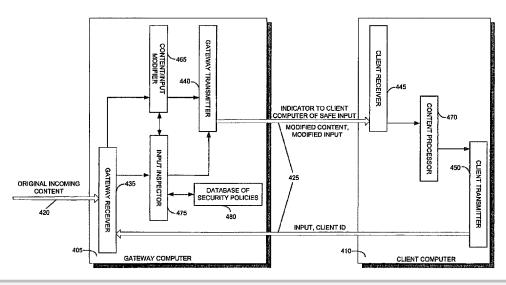
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Primary Examiner — Ponnoreay Pich (74) Attorney, Agent, or Firm — Dawn-Marie Bey; King & Spalding LLP

#### (57) ABSTRACT

A method for protecting a client computer from dynamically generated malicious content, including receiving at a gateway computer content being sent to a client computer for processing, the content including a call to an original function, and the call including an input, modifying the content at the gateway computer, including replacing the call to the original function with a corresponding call to a substitute function, the substitute function being operational to send the input to a security computer for inspection, transmitting the modified content from the gateway computer to the client computer, processing the modified content at the client computer, transmitting the input to the security computer for inspection when the substitute function is invoked, determining at the security computer whether it is safe for the client computer to invoke the original function with the input, transmitting an indicator of whether it is safe for the client computer to invoke the original function with the input, from the security computer to the client computer, and invoking the original function at the client computer with the input, only if the indicator received from the security computer indicates that such invocation is safe. A system and a computer-readable storage medium are also described and claimed.

### 12 Claims, 5 Drawing Sheets



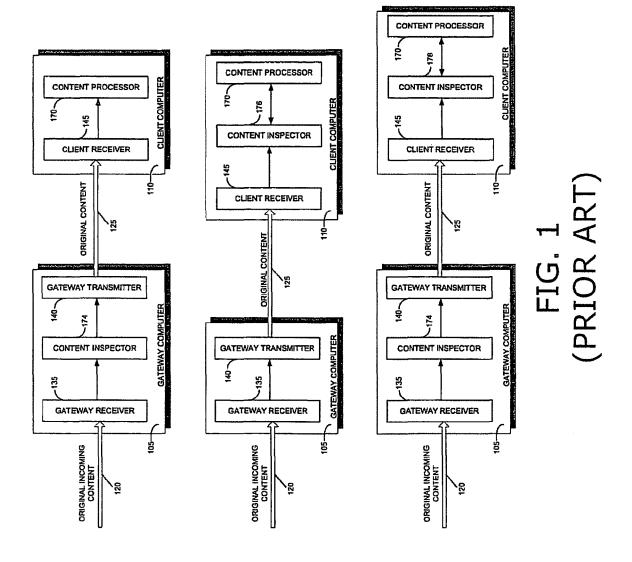


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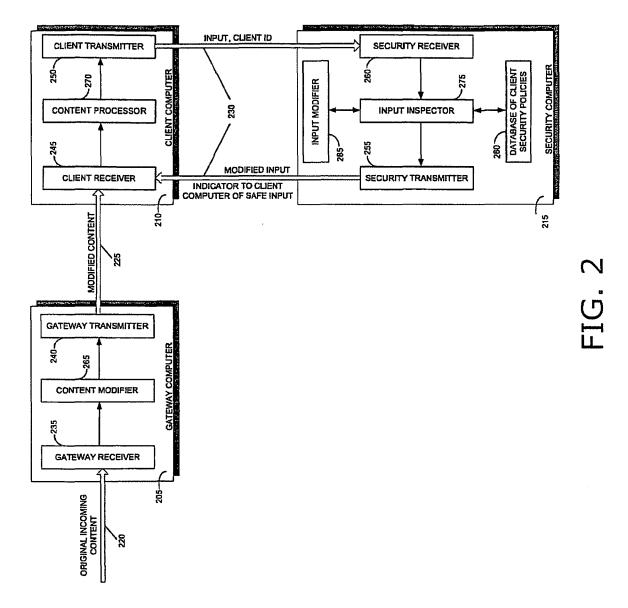


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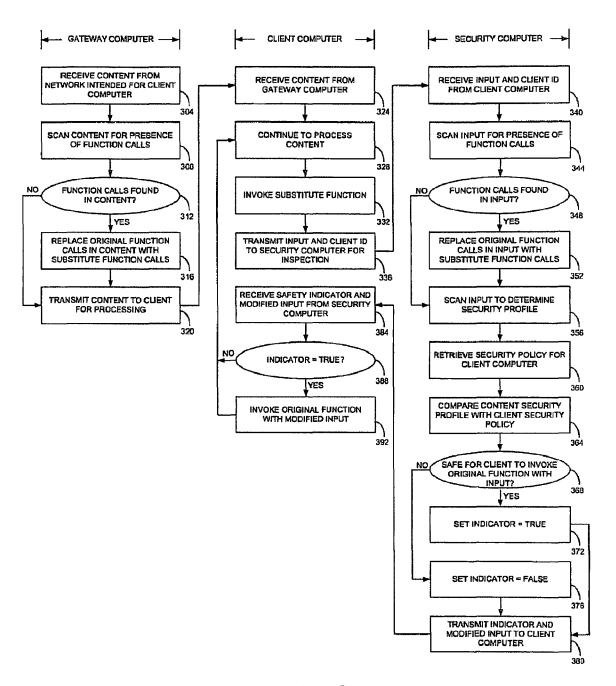


FIG. 3

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