EXHIBIT 1

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US008677494B2

(12) United States Patent

Edery et al.

(54) MALICIOUS MOBILE CODE RUNTIME MONITORING SYSTEM AND METHODS

- (75) Inventors: Yigal Mordechai Edery, Pardesia (IL); Nirmrod Itzhak Vered, Goosh Tel-Mond (IL); David R. Kroll, San Jose, CA (US); Shlomo Touboul, Kefar-Haim (IL)
- (73) Assignee: Finjan, Inc., Wilmington, DE (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.

This patent is subject to a terminal disclaimer.

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	H04L 29/06	(2006.01)				
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	G06F 15/16	(2006.01)				
(50)	U.C. CI					

- (52)U.S. CL USPC 726/24; 713/175
- (58)**Field of Classification Search** None

See application file for complete search history.

US 8,677,494 B2 (10) Patent No.:

(45) Date of Patent: *Mar. 18, 2014

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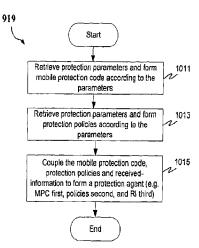
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Primary Examiner - Christopher Revak (74) Attorney, Agent, or Firm - Bey & Cotropia PLLC

(57)ABSTRACT

Protection systems and methods provide for protecting one or more personal computers ("PCs") and/or other intermittently or persistently network accessible devices or processes from undesirable or otherwise malicious operations of Java TN applets, ActiveX[™] controls, JavaScript[™] scripts, Visual Basic scripts, add-ins, downloaded/uploaded programs or other "Downloadables" or "mobile code" in whole or part. A protection engine embodiment provides for monitoring information received, determining whether received information does or is likely to include executable code, and if so, causes mobile protection code (MPC) to be transferred to and rendered operable within a destination device of the received information. An MPC embodiment further provides, within a Downloadable-destination, for initiating the Downloadable, enabling malicious Downloadable operation attempts to be received by the MPC, and causing (predetermined) corresponding operations to be executed in response to the attempts.

18 Claims, 10 Drawing Sheets



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Related U.S. Application Data

continuation of application No. 11/370,114, filed on Mar. 7, 2006, now Pat. No. 7,613,926, which is a continuation of application No. 09/861,229, filed on May 17, 2001, now Pat. No. 7,058,822, which is a continuation-in-part of application No. 09/539,667, filed on Mar. 30, 2000, now Pat. No. 6,804,780, which is a continuation of application No. 08/964,388, filed on Nov. 6, 1997, now Pat. No. 6,092,194, said application No. 09/861,229 is a continuation-in-part of application No. 09/551,302, filed on Apr. 18, 2000, now Pat. No. 6,480, 962, and a continuation of application No. 08/790,097, filed on Jan. 29, 1997, now Pat. No. 6,167,520.

(60) Provisional application No. 60/205,591, filed on May 17, 2000, provisional application No. 60/030,639, filed on Nov. 8, 1996.

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