The prevalence of identical vulnerabilities across software monocultures has emerged as the biggest challenge for protecting the Internet from large-scale attacks against system applications. Artificially introduced software diversity provides a suitable defense against this threat, since it can potentially eliminate common-mode vulnerabilities across these systems. Systems and methods are provided that overcome these challenges to support address-space randomization of the Windows® operating system. These techniques provide effectiveness against a wide range of attacks.
INTERNATIONAL SEARCH REPORT

A CLASSIFICATION OF SUBJECT MATTER
IPC
G06F 9/44(2006 01),12/16(2006 01),17/30(2006 01)

USPC
726/22,30,717/106

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U S 726/22,30,717/106

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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<td>A</td>
<td>U S 2005/024651 1 A 1 (WILLMAN et al) 3 November 2005 (03 11 2005), paragraphs 0007, 0030, 0035-0038</td>
<td>22-23</td>
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<td>A</td>
<td>U S 6,230,316 B 1 (NACHENBERG) 8 May 2001 (08 05 2001), whole document</td>
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<tr>
<td>A</td>
<td>U S 6,216,175 B 1 (SLIGER et al) 10 April 2001 (10 04 2001), whole document</td>
<td>1-46</td>
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<tr>
<td>A</td>
<td>U S 6,978,018 B 2 (ZIMMER) 20 December 2005 (20 12 2005), whole document</td>
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</table>

D Further documents are listed in the continuation of Box C

See patent family annex

Date of the actual completion of the international search
14 March 2008 (14 03 2008)

Date of mailing of the=documentation
03 April 2008

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Form PCT/ISA/210 (second sheet) (April 2007)