

# EXHIBIT 4



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

(10) **Patent No.:** **US 8,225,408 B2**  
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(54) **METHOD AND SYSTEM FOR ADAPTIVE  
RULE-BASED CONTENT SCANNERS**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1298 days.

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(21) Appl. No.: **10/930,884**

D Grune, C Jacobs, K Langendoen, H Bal—Parsing Techniques: A Practical Guide, 2000—John Wiley & Sons, Inc. New York, NY, USA, p. 1-326.\*

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**Related U.S. Application Data**

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(63) 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.

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(51) **Int. Cl.**

**H04L 29/06** (2006.01)

(57) **ABSTRACT**

(52) **U.S. Cl.** ..... **726/25**; 713/153; 726/22

(58) **Field of Classification Search** ..... None  
See application file for complete search history.

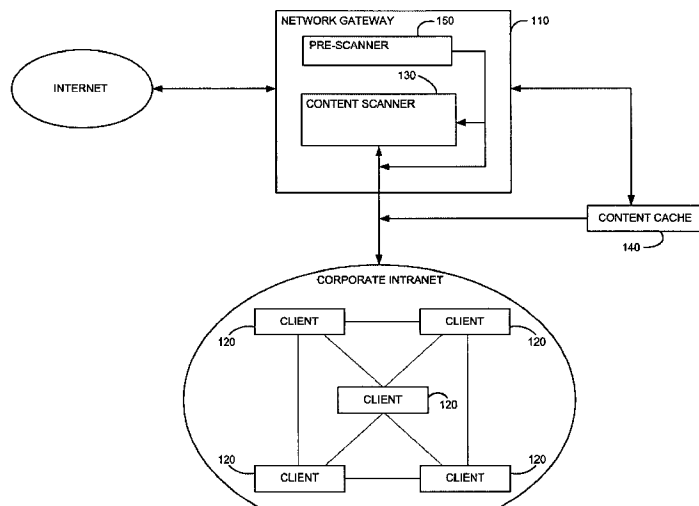
A method for scanning content, including identifying tokens within an incoming byte stream, the tokens being lexical constructs for a specific language, identifying patterns of tokens, generating a parse tree from the identified patterns of tokens, and identifying the presence of potential exploits within the parse tree, wherein said identifying tokens, identifying patterns of tokens, and identifying the presence of potential exploits are based upon a set of rules for the specific language. A system and a computer readable storage medium are also described and claimed.

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**35 Claims, 7 Drawing Sheets**



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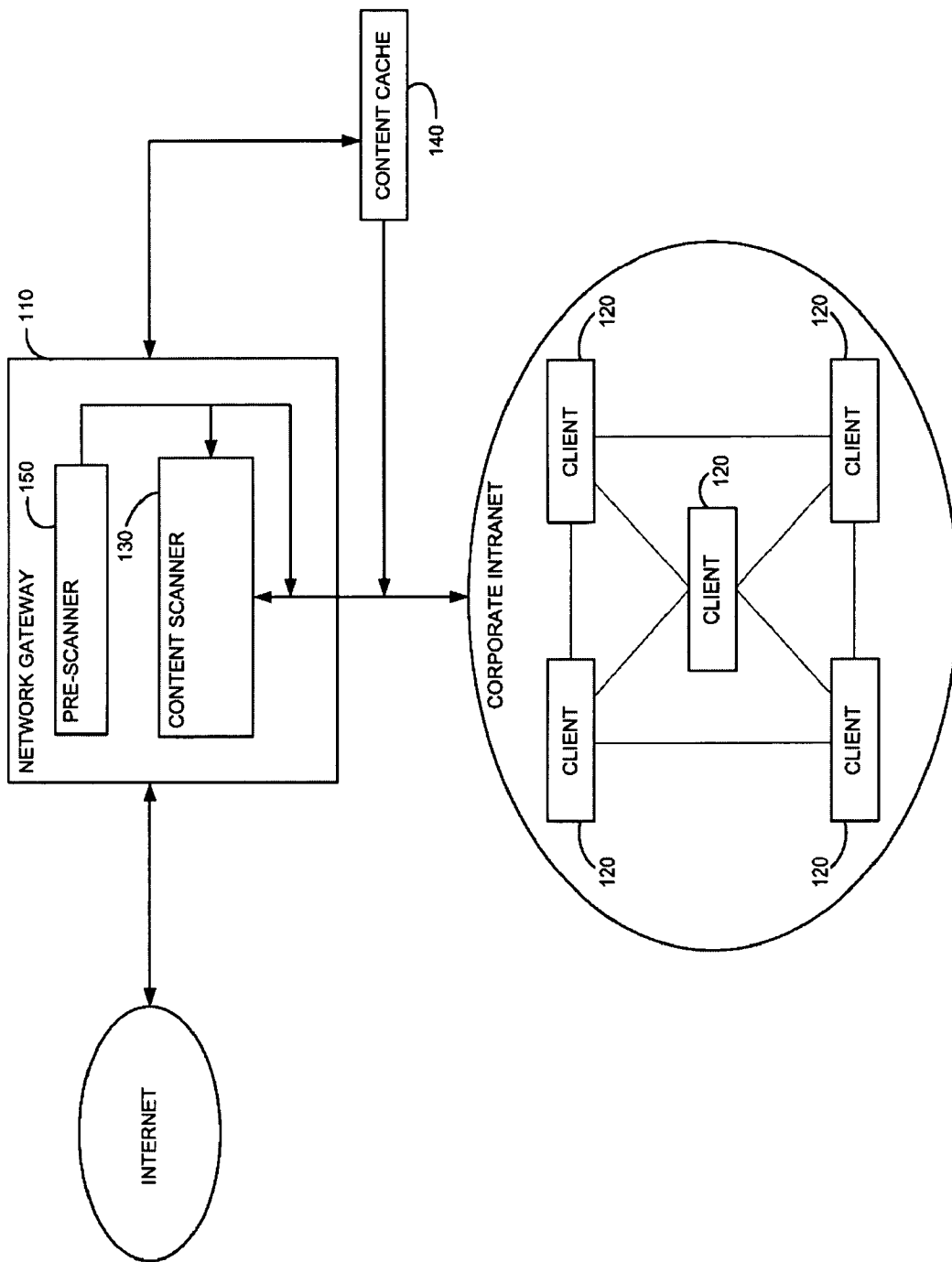


FIG. 1

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