

- [54] **FLEXIBLE AND DYNAMIC DERIVATION OF PERMISSIONS**
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- [52] **U.S. Cl.** **713/200**
- [58] **Field of Search** 713/200, 201;
 709/225, 229; 364/222.5, 286.4, 286.5;
 711/163; 707/9

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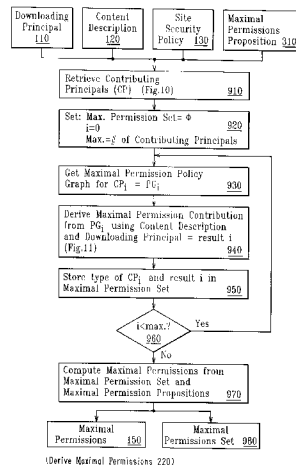
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[57] **ABSTRACT**

A dynamic derivation mechanism is defined which enables limited permissions to be dynamically and flexibly derived for executables based upon their authenticated description. The dynamic derivation mechanism uses the authenticated description to determine the maximal permissions that individual principals can delegate to the content. A principal's maximal permissions for content define a superset of the rights that that principal will actually delegate to that content. Although the maximal permissions are derived from predefined specifications, the specifications can be sensitive to runtime state on the downloader's system or previous delegations to enable the dynamic (i.e., runtime) derivation. Multiple principals can delegate a subset of their maximal permissions for the executable content. The mechanism uses policy for combining the delegated permissions into the content's runtime permissions.

44 Claims, 11 Drawing Sheets



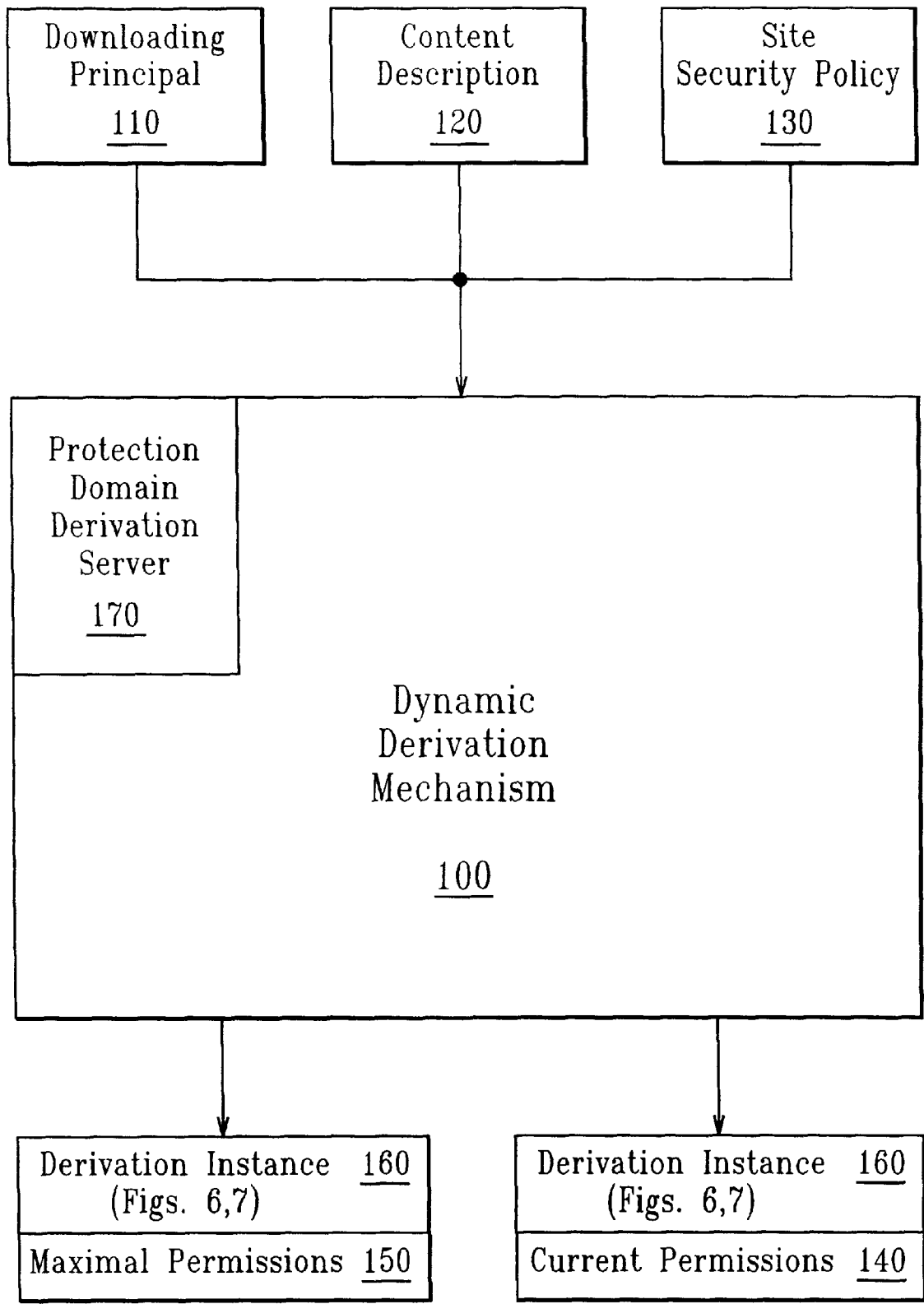


FIG.1

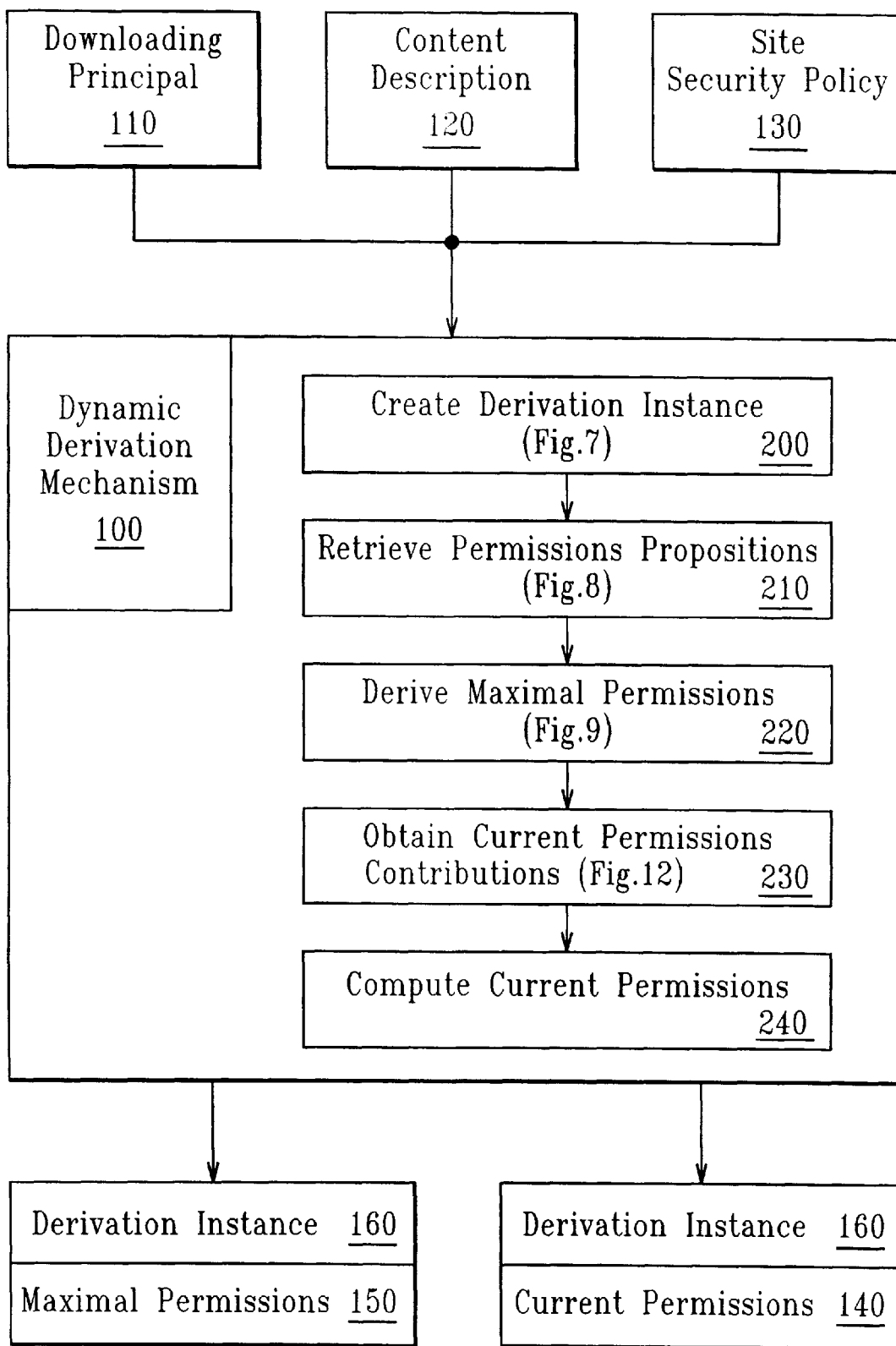


FIG. 2

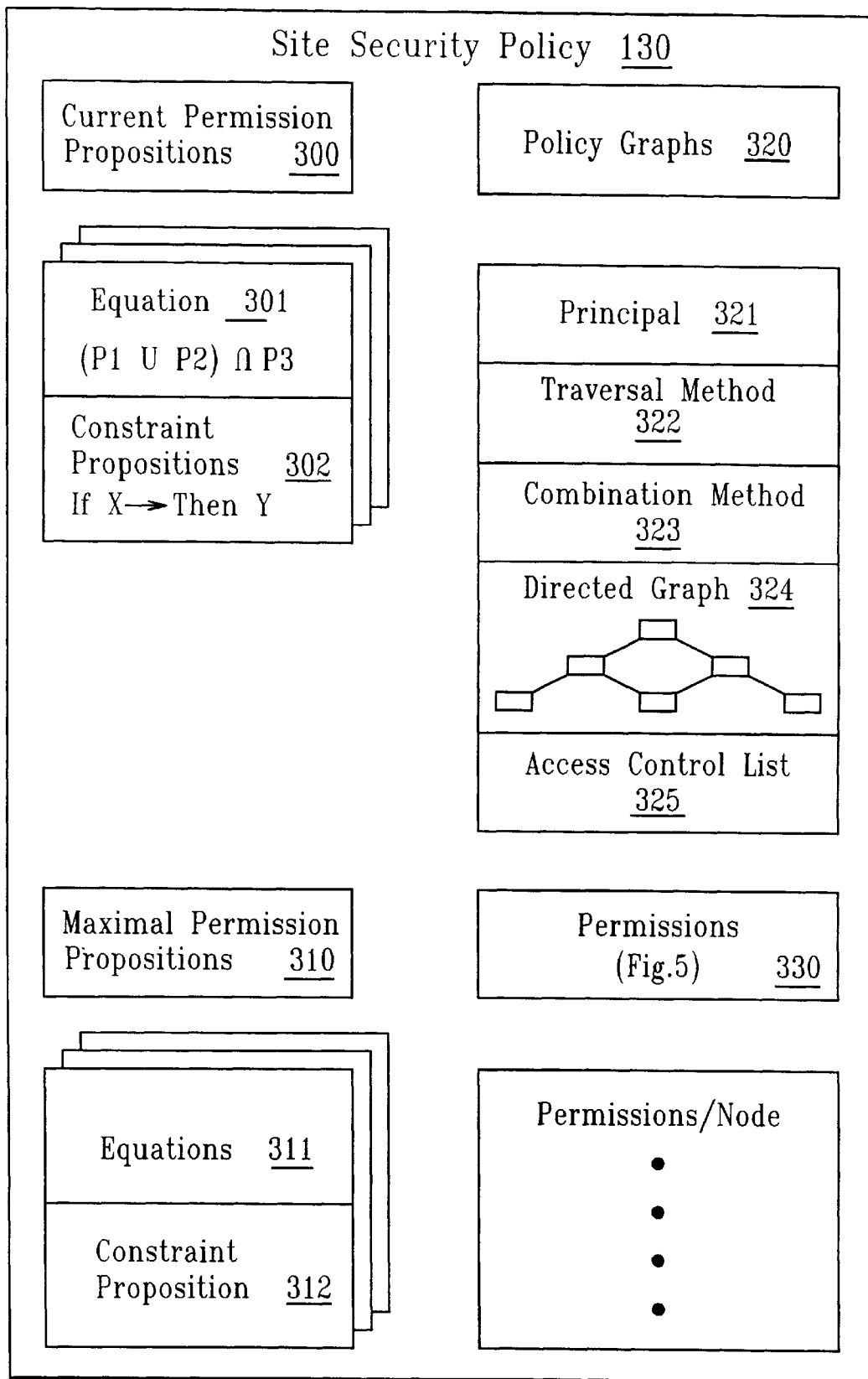


FIG. 3

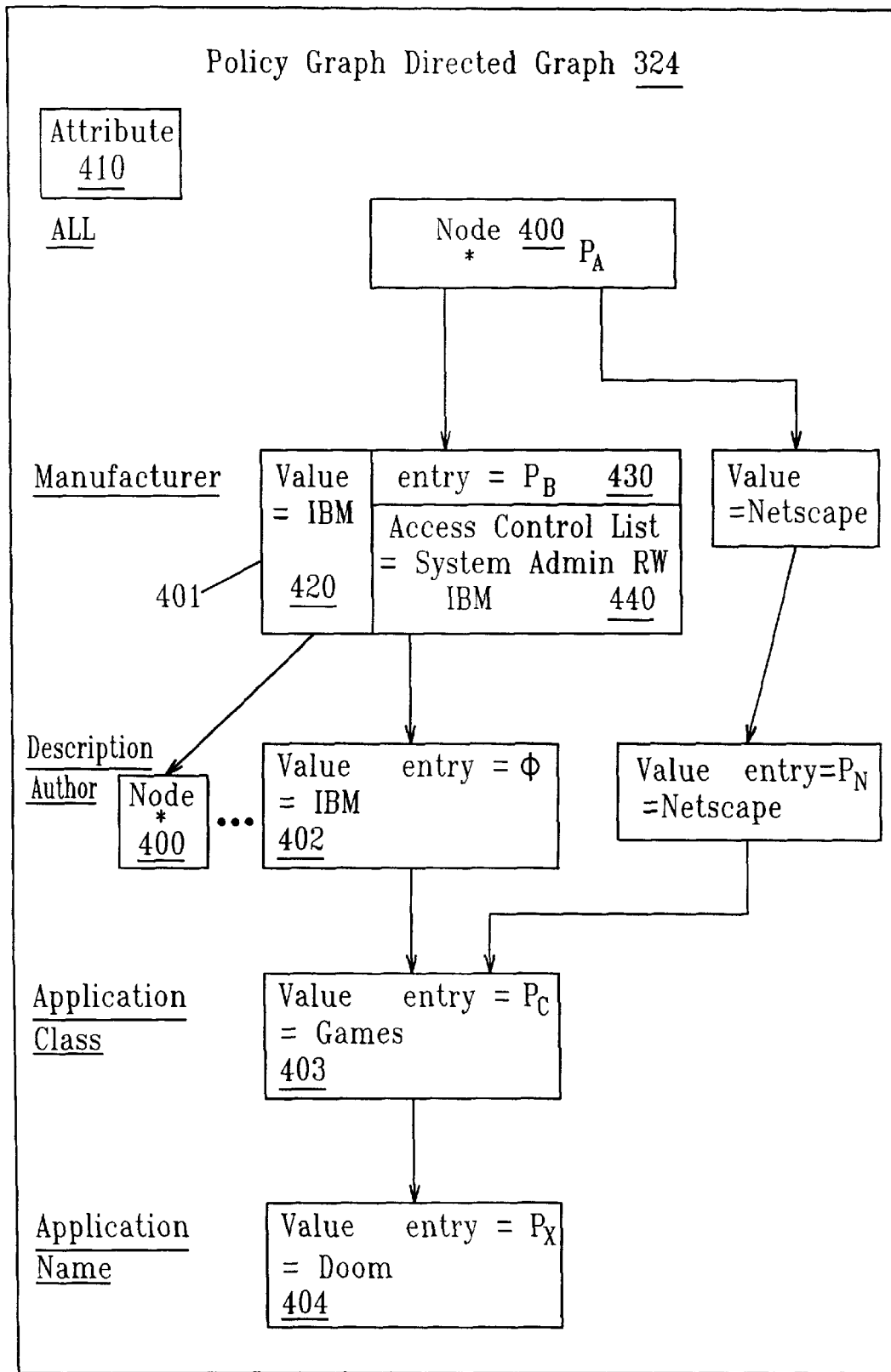


FIG. 4

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