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Farrugia et al.

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(54) **METHOD AND APPARATUS FOR SECURING CONTENT USING ENCRYPTION WITH EMBEDDED KEY IN CONTENT**

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(75) Inventors: **Augustin J. Farrugia**, Cupertino, CA (US); **Gianpaolo Fasoli**, Palo Alto, CA (US); **Mathieu Ciet**, Paris (FR); **Bertrand Mollinier Toublert**, Los Gatos, CA (US)

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(73) Assignee: **Apple Inc.**, Cupertino, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 941 days.

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Primary Examiner — Nasser Goodarzi

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Assistant Examiner — Lisa Lewis

(74) *Attorney, Agent, or Firm* — Morrison & Foerster LLP

(65) **Prior Publication Data**

(57) **ABSTRACT**

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Method and apparatus enabled by computer (or equivalent) hardware and software for protection of content such as audio and video to be downloaded or streamed over a computer network such as the Internet. The content is provided to the user via streaming or downloads in encrypted form. The encryption is such that the content key decryption information is transmitted so that it itself is encrypted to be both device and session unique. That is, the key information can be used only to extract the content decryption key for a particular session and for a particular client device such as an audio or video consumer playing device. This prevents any further use or copying of the content other than in that session and for that particular client. The specificity is accomplished by using a device unique identifier and antireplay information which is session specific for encrypting the content key. A typical application is Internet streaming of audio or video to consumers.

(51) **Int. Cl.**
G06F 21/00 (2006.01)

(52) **U.S. Cl.** **726/30**

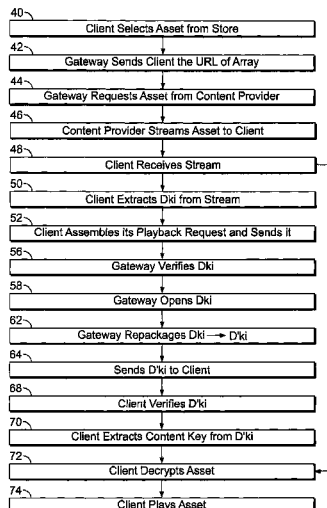
(58) **Field of Classification Search** **726/30**
See application file for complete search history.

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18 Claims, 5 Drawing Sheets



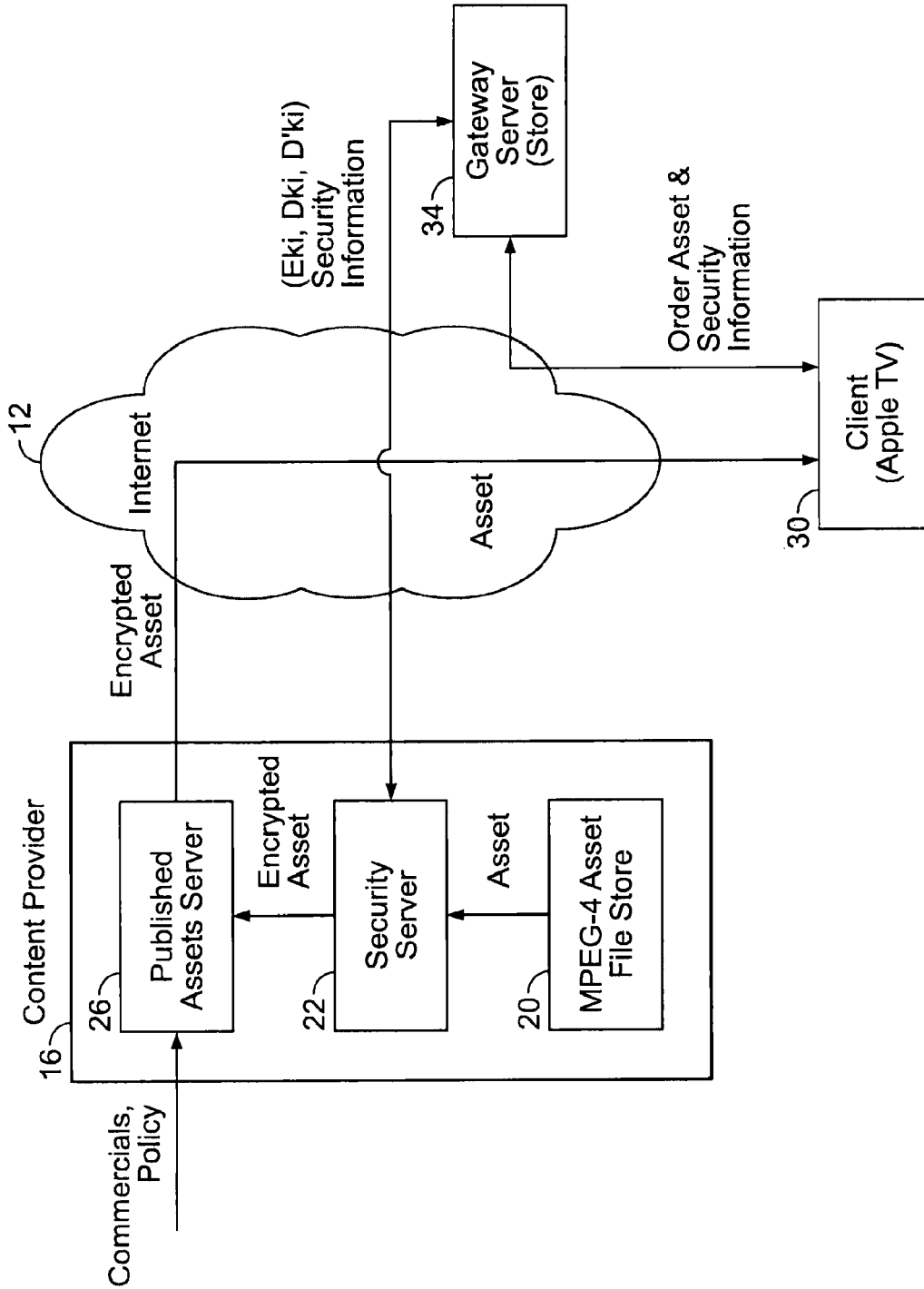


FIG. 1

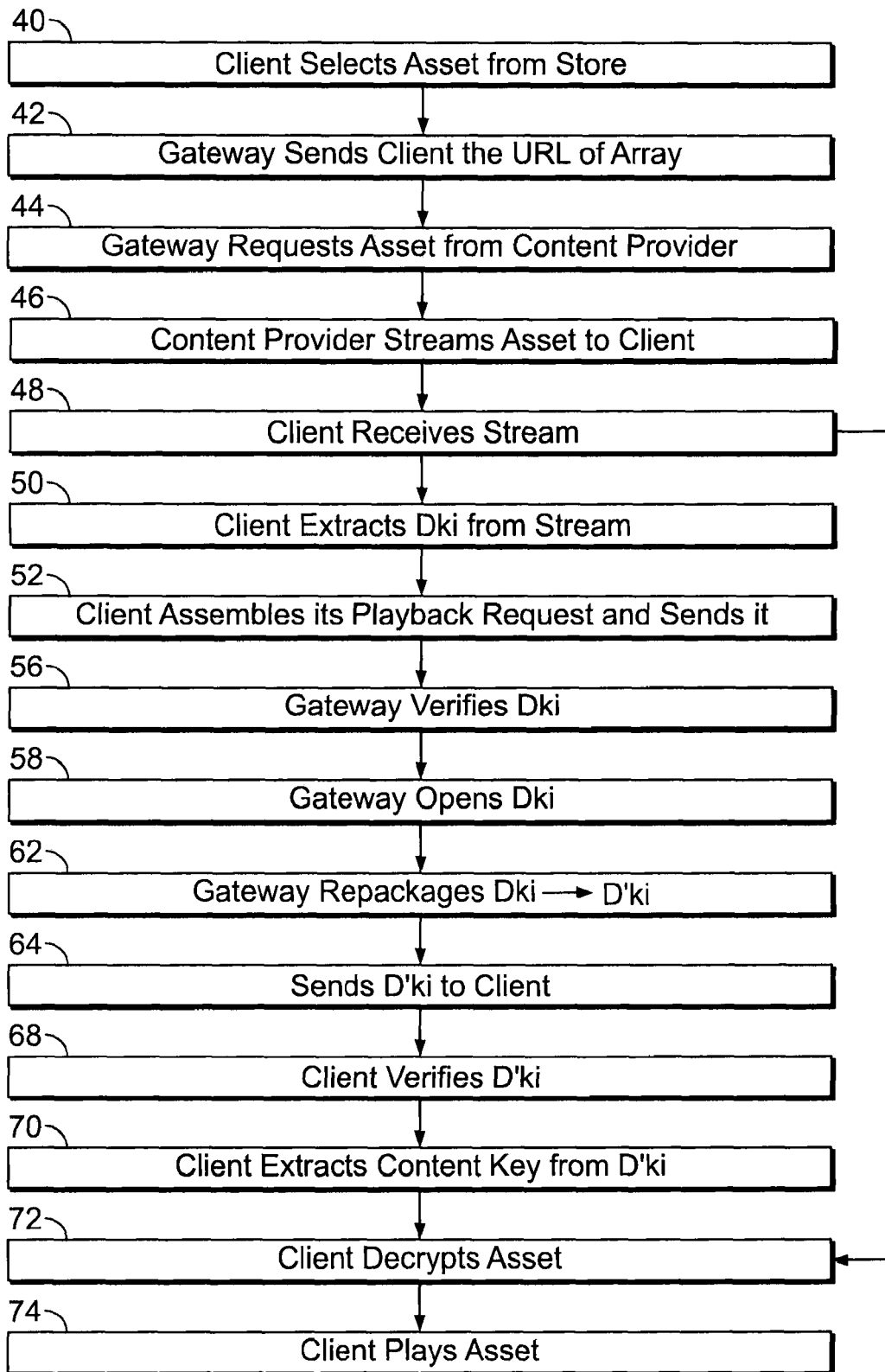


FIG. 2

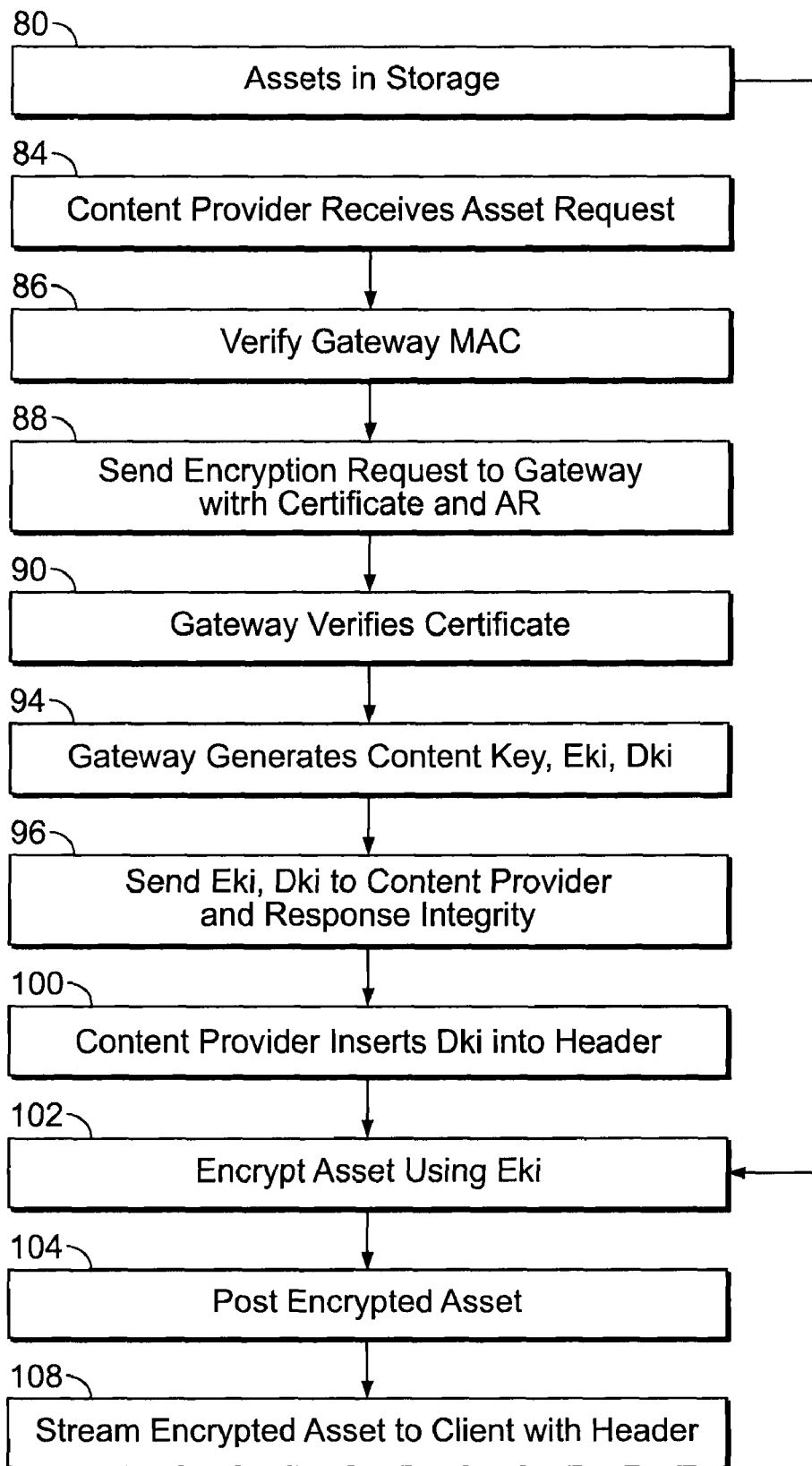


FIG. 2

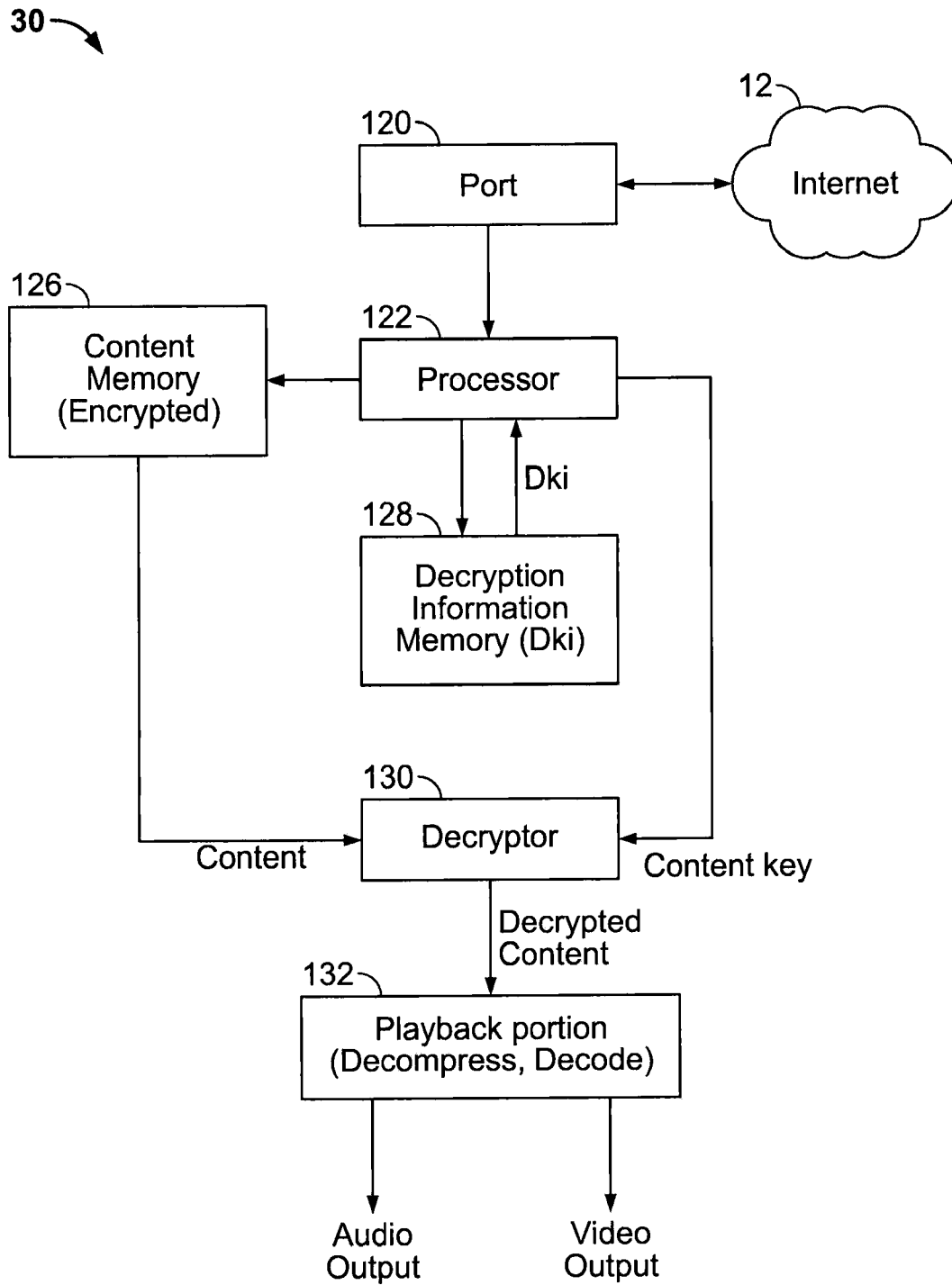


FIG. 4

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