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Chiu et al.

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(54) **DATABASE-INDEPENDENT, SCALABLE, OBJECT-ORIENTED ARCHITECTURE AND API FOR MANAGING DIGITAL MULTIMEDIA ASSETS**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

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(51) **Int. Cl.^{7}** **G06T 1/00**
(52) **U.S. Cl.** **345/329**
(58) **Field of Search** 345/329–332, 345/352, 353, 355–357

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(57) **ABSTRACT**

A system is described for providing an integrated, efficient and consistent production environment for the shared development of multimedia productions. Examples of multimedia productions include feature animation films, computerized animation films, interactive video games, interactive movies, and other types of entertainment and/or educational multimedia works. The development of such multimedia products typically involve heterogenous and diverse forms of multimedia data. Further, the production tools and equipment that are used to create and edit such diverse multimedia data are in and of themselves diverse and often incompatible with each other. The incompatibility between such development tools can be seen in terms of their methods of operation, operating environments, and the types and/or formats of data on which they operate upon. Disclosed herein, is a complete solution that provides a consistent and integrated multimedia production environment in the form of common utilities, methods and services. The common utilities, methods and services disclosed herein, are used to integrate the diverse world of multimedia productions. By using the common utilities, methods and services provided, diverse multimedia production tools can access, store, and share data in a multiple user production environment in a consistent, safe, efficient and predictable fashion.

19 Claims, 11 Drawing Sheets
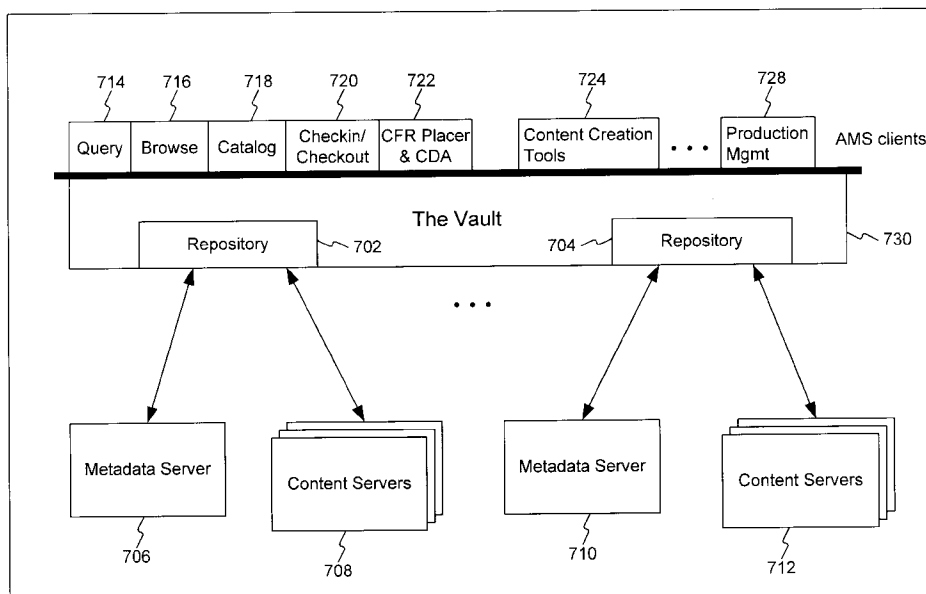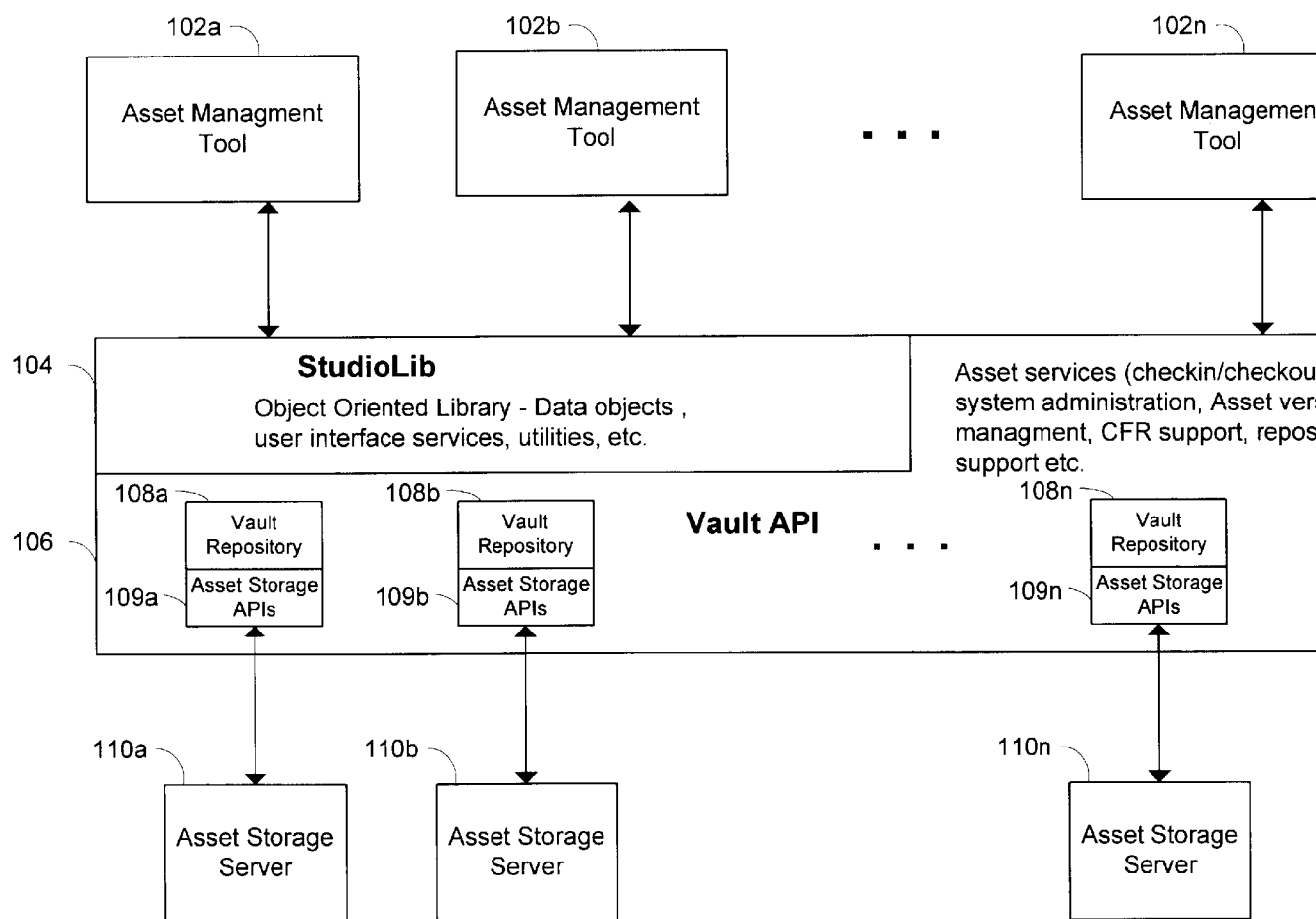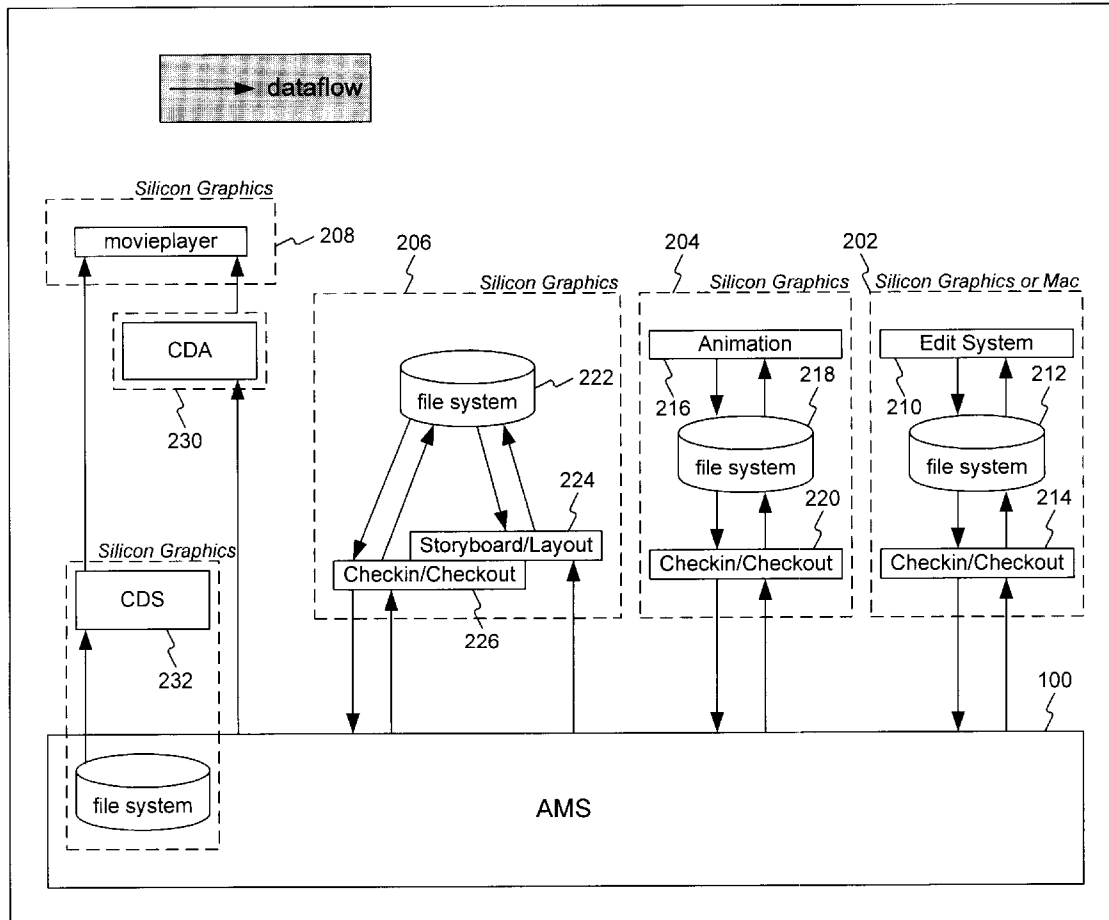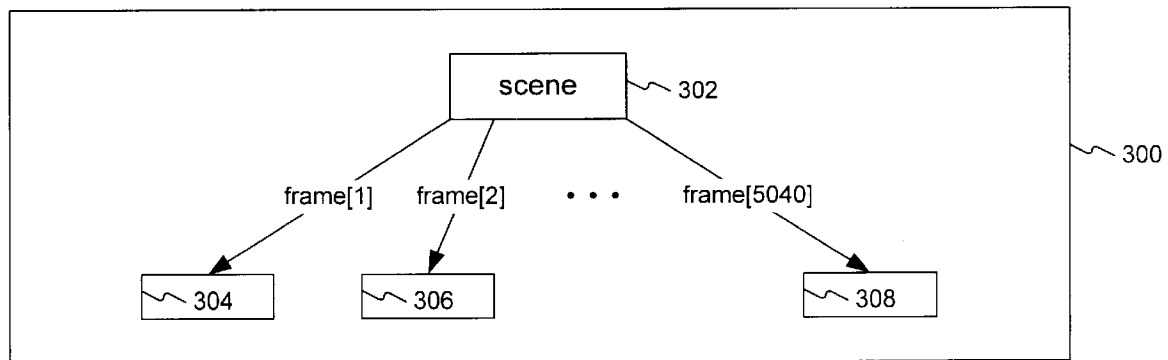
FIG. 1

FIG. 2

FIG. 3

FIG. 4

DOCKET ALARM
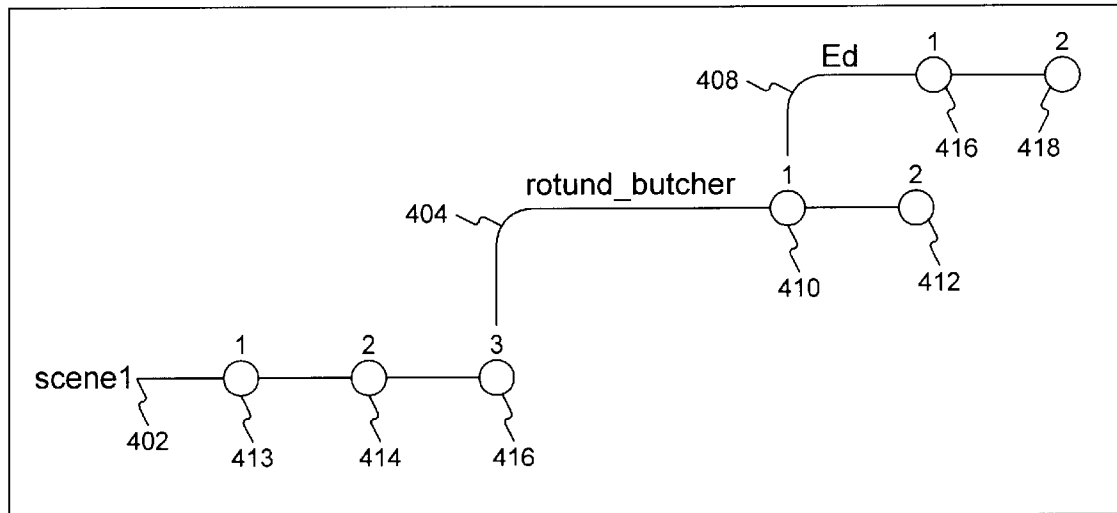
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