A System for Processing and Publishing Multimedia Products

By Inventor Warren Taylor Vaughan, III

Field of the Invention

The present invention is in the area of information organization, processing, and publishing. This invention is particularly relevant to the systematic collection and assembly of common traditional multimedia elements such as images, text, sounds, animations, and video, and to the publishing of same in a variety of finished products in electronic and traditional formats and media, including but not limited to CD-ROMs, sites on the Internet and World Wide Web, and electronically printed books and reports.

Background of the Invention

Today, the way people access and use information and the ways in which that information is packaged have fed the great electronic revolution of the late-20th Century, a revolution causing significant and immutable changes in the way people work, learn, entertain themselves, and communicate with each other. As this revolution has unfolded, an increasingly clear gap between the traditional and electronic worlds has become evident. This invention bridges that gap with a system that enables traditional non-digital methodologies for managing multimedia assets to be utilized for preparing and then processing and publishing the assets as products for the newer electronic world. In a preferred embodiment, this invention provides a unique system and method, which is described in detail below, for gathering and organizing traditional multimedia assets before they are further processed into electronic products using a proprietary software engine.

Summary of the Invention

In the invention to be described in detail below, the inventor has developed a system and method for organizing assets such as photographs, text material, and recordings of audio and video material. A preferred embodiment of the invention is a physical kit

designed for non-technical users which consists of printed templates, labeling stickers, charts, instructions, and other material helpful to organizing and preparing multimedia assets for conversion to the electronic world. Once assets are organized using the aforementioned kit and organizing system, conversion of these assets to the digital electronic world is then accomplished according to instructions that are inferred from the manner in which the kit is prepared and from instructions specified by the user. Once digitized, using a proprietary software engine these assets may then be published in a variety of user-selected electronic and non-electronic publication formats by the user or by another party. In this manner, users of the kit may assemble the elements of a product destined for the digital world without employing computers, digitizing devices, or tools from that world.

According to a preferred embodiment of the invention, the kit contains a multiplicity of paper templates and charts on which the user specifies multimedia assets such as text, images, sound and video clips by placing matching identifying marks or stickers onto both template and asset. The user's choice of and assembly of templates provides the organizational and visual style as well as pointers to the content that will be rendered into a final product.

A proprietary software engine manages the digitizing and input of the user's multimedia assets into a multimedia authoring system according to the design of the user's completed templates and kit. During import, this software checks for missing and duplicated elements and user errors, and it prepares the user's multimedia assets, now digitized and organized in a systematic way, for publication in a multiplicity of product forms including, but not limited to, interactive multimedia CD-ROMs, Internet websites consisting of Hypertext Markup Language (HTML) and other files, charts, or printed books.

The primary goal of this invention is to provide a simple method and system for users to organize and publish pictures, text, and other multimedia elements in finished formats suitable for the electronic world. According to a preferred embodiment of the present invention, grandmothers working at a kitchen table will be able to organize collections of family stories and geneaological histories and submit these for publication; in another embodiment, teachers will be able to organize and publish lectures and courses. Other specifically designed embodiments containing appropriate

organizing templates will allow simple and easy publication of, for example, wedding events, school yearbooks, vacation accounts, corporate annual reports, and sales brochures, among others.

Description of the Drawings

Fig. 1 is a block diagram of the method and process embodied in this invention.

Fig. 2 is a block diagram of a design for a family storytelling and history product for CD-ROM, a preferred embodiment of the present invention.

Fig. 3 is an illustration showing example layouts combining user-selected multimedia elements for display on a computer.

Fig. 4 is an illustration showing an example template for organizing media elements for display on a computer.

Fig. 5 is an illustration showing an example visual display in a family storytelling and history product.

Description of the Preferred Embodiments

Fig. 1 shows the basic process (101) of the subject System for Processing and Publishing Multimedia Products. In a preferred embodiment of the invention is a kit (102) containing organizing aids such as envelopes and bags (103), labelling stickers (104), instructions, and templates (see Figure 3) for visually representing multimedia assets (105) after they are published in a variety of formats (106). After the user's multimedia assets have been organized using the aids found in the kit, these assets are digitized into appropriate data files (107) using commonly-available hardware and software tools. A proprietary software engine (108) is then utilized to import the multimedia assets into a multimedia authoring structure from which a variety of finished products (106) may be generated. In this way, the worlds of traditional paper and electronic media are bridged (109).

Fig. 2 is a block diagram showing a typical information structure, namely, of a preferred enbodiment of the invention, in this case a design for a family storytelling and history product for CD-ROM. The kit (102) contains templates specifically made to organize media assets in ways of interest to families -- stories, photos, sounds, and videos, family tree charts, special activities and hobbies, address books, etc. Users provide organizing

data by filling out forms available in the kit; they list the families to be included in the final work (201), and within each family group, they list story titles (202). During import into the authoring system, these data become titles or chapter headings (203) which are displayed in the finished product. The content and layout of the screens (204, Fig. 3) or pages of a finished product are specified by the the user's choice of templates (see Fig. 4). In alternative embodiments such as, for example, wedding events, school yearbooks, vacation accounts, corporate annual reports, and sales brochures, the information structure provided by the templates and the instructions and forms contained in the kit are appropriate to the purposes of the subject matter.

Fig. 3 is an illustration showing example layouts combining user-selected multimedia elements for display on a computer. The elements included in these layouts are derived from user-completed templates (see Fig. 4) available in the kit.

Fig. 4 is an illustration showing an example template for organizing media elements for display on a computer. On this template the user specifies which media element (401) is to be displayed or, in the case of sounds, made available to the viewer. Onto the template, the user places a sticker or writes in the name of the associated media file. A thumbnail sketch of the look of the final screen (402) is provided for reference. When the final product is a format other than CD-ROM (for example, a printed book) the look of a finished printed page in that book may be similar to the look shown in the template for a computer display, although it is limited by that format. That is to say, a scrolling text field in a computer display that presents only a subset of the text of a document will be fully printed as pages in the book form; photos and other graphical elements will be imbedded into the pages of the book, and sounds and motion video may be referenced but cannot be included in their original form as text.

Fig. 5 is an illustration showing an example computer visual display in a typical family storytelling and history CD-ROM. The interactive nature of this display is apparent, containing active buttons or hotspots (501) which can be clicked by users using a mouse, leading them to menus and other organized material in the body of information.

The described system is only one of many preferred embodiments. Indeed, the application of this System for Processing and Publishing Multimedia Products is not limited to the publishing of any particular collection of content, but is rather a process

and method for organizing and publishing multimedia materials. It is apparent to those skilled in the art that there are many alternatives which might be made in the embodiments of the invention described herein without departing from the spirit and scope of the invention.

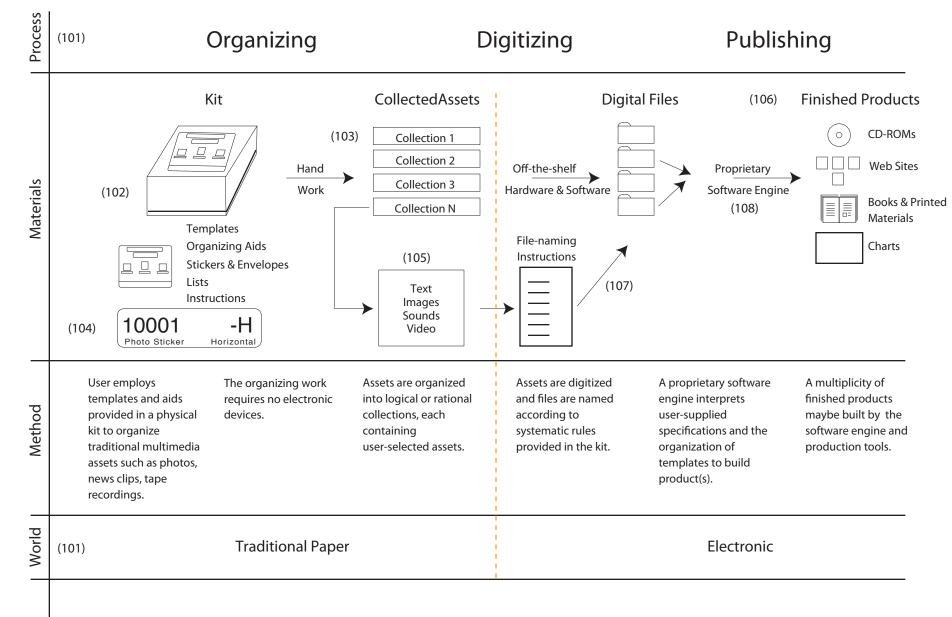
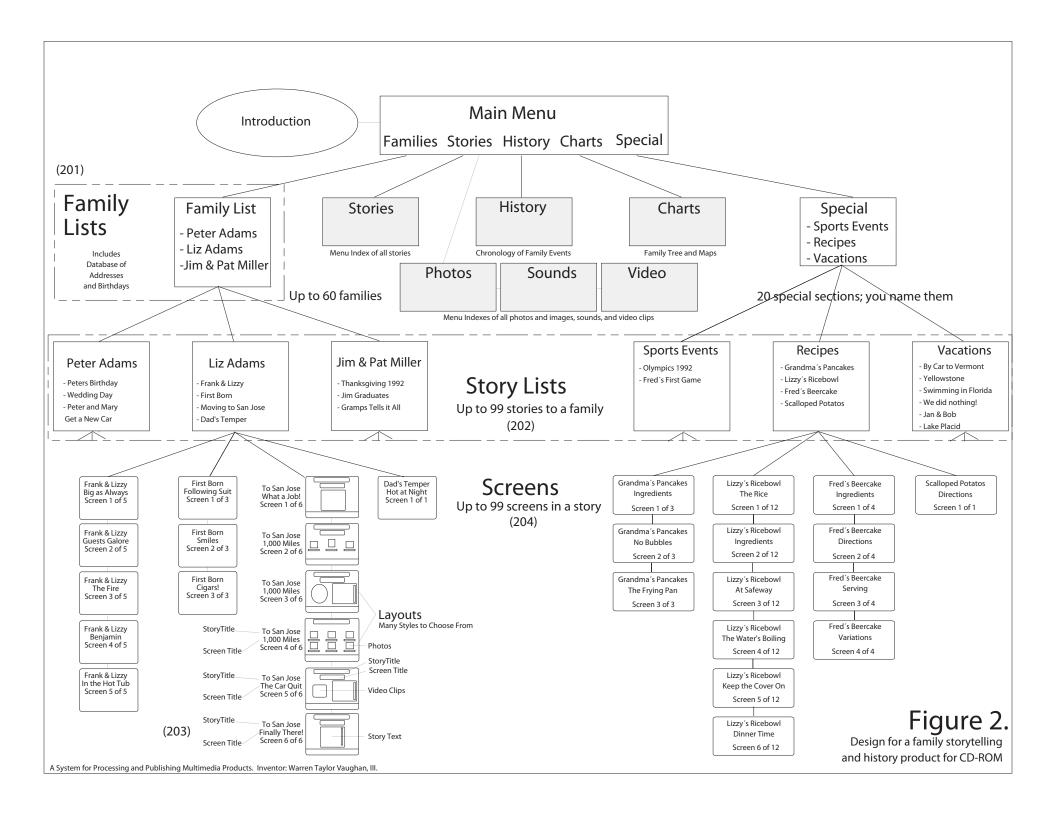
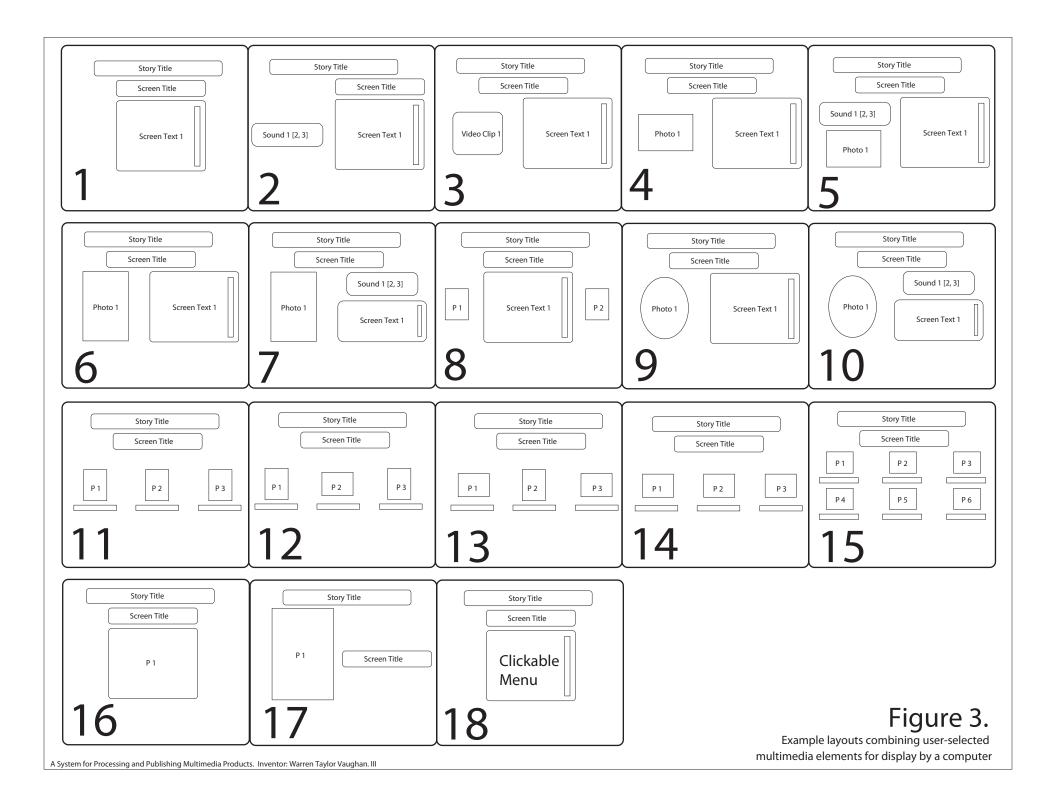
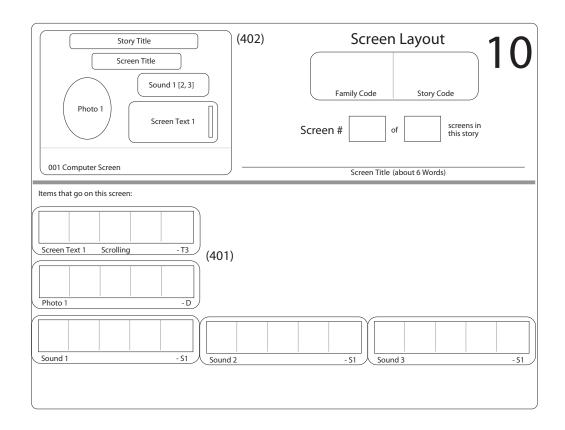


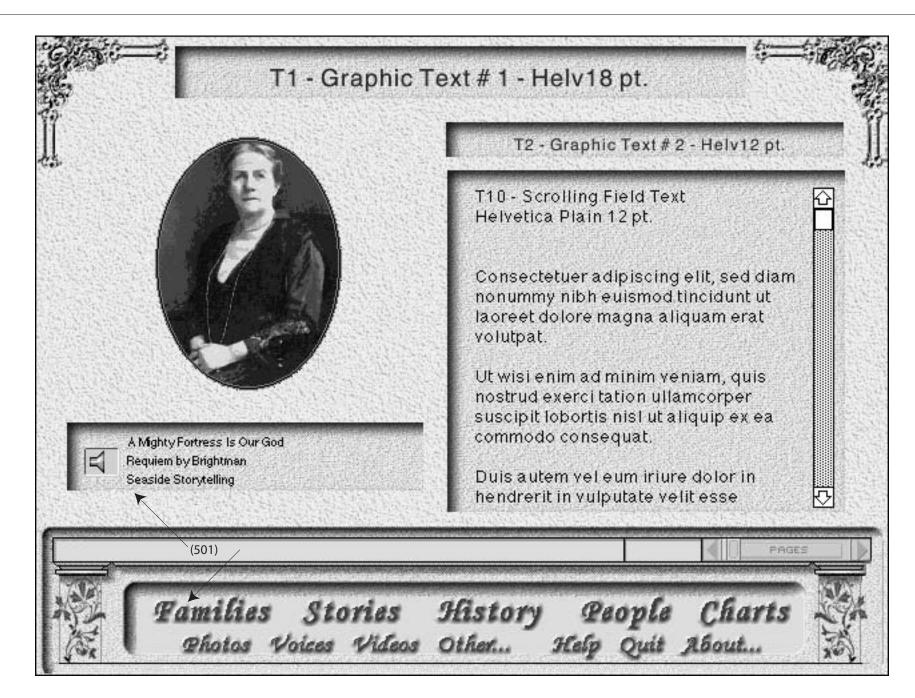
Figure 1.

Method and process for organization, processing, and publishing of common multimedia elements such as images, text, sounds, animations, and video in a variety of finished products in electronic and traditional formats and media.









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February 10, 1998

Assistant Commissioner for Patents Patent and Trademark Office Washington, DC 20231

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Since that date neither have I received confirmation of reciept nor has the check that was enclosed been cashed. As almost five months have passed and in March of this year the check that was enclosed will become "stale" and possibly no longer cashable at my bank, I would appreciate a status report.

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Thanks very much.

Warren Taylor Vaughan, III

Attachment: Provisional Application for Patent

"A System for Processing and Publishing

Multimedia Products"
Cover Sheets (9/24/97)

PTO-103P

(Rev. 8-95) PROVISIONAL APPLICATION FILING RECEIPT



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NUMBER FILING DATE	FIL FEE REC'D ATTORNEY DOCKET	O. DRWGS
60/060,811 10/03/97	\$75.00	5

WARREN TAYLOR VAUGHAN III 1832 WOODHAVEN WAY OAKLAND CA 94611

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[Search Summary]

Results of Search in 96-97 db for: CCL/395: 9088 patents. *Hits 1 through 50 out of 9088*

CCL/395

Pat. No. Title

- 1. **5,666,645** Data management and distribution system and method for an electronic television program guide
- 2. **5,666,560** Storage method and hierarchical padding structure for direct access storage device (DASD) data compression
- 3. **5,666,559** Fail-safe communication abort mechanism for parallel ports with selectable NMI or parallel port interrupt
- 4. **5,666,558** Bidirectional parallel protocol having computer indicates to the printer the acceptable data format for data transfer
- 5. **5,666,557** Method and apparatus for automatically assigning device identifiers on a parallel data bus
- 6. **5,666,556** Method and apparatus for redirecting register access requests wherein the register set is separate from a central processing unit
- 7. **5,666,555** Audio output method and apparatus in multi-window system
- 8. **5,666,554** Multi media presentation system
- 9. **5,666,553** Method for mapping, translating, and dynamically reconciling data between disparate computer platforms
- 10. **5,666,552** Method and apparatus for the manipulation of text on a computer display screen
- 11. **5,666,551** Distributed data bus sequencing for a system bus with separate address and data bus protocols
- 12. **5,666,550** Bus operation circuit using CMOS ratio logic circuits

- 13. **5,666,549** Method and system for processing a document transmitted via facsimile in an initially input form stored in a knowledge base
- 14. **5,666,548** Process of extracting and processing information in a vertical interval of a video signal transmitted over a personal computer bus
- 15. **5,666,547** Method and apparatus for framing a serial data stream
- 16. **5,666,546** Method of managing concurrent accesses to a memory by a plurality of users using atomic instructions to prevent read/write errors
- 17. **5,666,545** Direct access video bus computer system and method for transferring video information using a dedicated video bus
- 18. **5,666,544** Method and system for communicating data between independent controllers
- 19. **5,666,543** Method of trapping graphical objects in a desktop publishing program
- 20. **5,666,542** Multimedia information add-on system
- 21. **5,666,541** Reducing power usage in a personal computer
- 22. **5,666,540** Information processing system
- 23. **5,666,539** Reducing I/O activity to allow a host based printing system to activate power management functions ys pow ge
- 24. **5,666,538** Disk power manager for network servers
- 25. **5,666,537** Power down scheme for idle processor components
- 26. **5,666,535** Microprocessor and data flow microprocessor having vector operation function
- 27. **5,666,534** Method and apparatus for use by a host system for mechanizing highly configurable capabilities in carrying out remote support for such system
- 28. **5,666,533** Program execution management using process enclaves which define the scope of high-level language semantics and threads improving cooperation between processes written in multiple languages
- 29. **5,666,532** Computer method and apparatus for asynchronous ordered operations

- 30. 5,666,531 Recordable CDROM accessing system
- 31. **5,666,530** System for automatic synchronization of common file between portable computer and host computer via communication channel selected from a plurality of usable channels there between
- 32. **5,666,528** System and methods for optimizing database queries
- 33. **5,666,527** System for dynamically changing logical data structure of database
- 34. **5,666,526** Method and system for supporting scrollable, updatable database queries
- 35. **5,666,525** System and method for performing an efficient join operation on large tables with a small main memory
- 36. **5,666,524** Parallel processing system for traversing a transactional database
- 37. **5,666,523** Method and system for distributing asynchronous input from a system input queue to reduce context switches
- 38. **5,666,522** Variable speed controller
- 39. **5,666,519** Method and apparatus for detecting and executing cross-domain calls in a computer system
- 40. **5,666,518** Pattern recognition by simulated neural-like networks
- 41. **5,666,517** Multi-media system for interactive presentation having apparatus which converts machine-type generic multi-instruction to machine-type specific object code
- 42. **5,666,516** Protected programmable memory cartridge having selective access circuitry
- 43. **5,666,515** Information processing system having multiple modules and a memory on a bus, where any module can lock an addressable portion of the memory by sending retry signals to other modules that try to read at the locked address
- 44. **5,666,512** Disk array having hot spare resources and methods for using hot spare resources to store user data

- 45. **5,666,507** Pipelined microinstruction apparatus and methods with branch prediction and speculative state changing
- 46. **5,666,506** Apparatus to dynamically control the out-of-order execution of load/store instructions in a processor capable of dispatching, issuing and executing multiple instructions in a single processor cycle
- 47. **5,666,505** Heuristic pre-fetch mechanism and method for computer system
- 48. **5,666,503** Structured image (SI) image editor and method for editing structured images
- 49. **5,666,502** Graphical user interface using historical lists with field classes
- 50. **5,666,501** Method and apparatus for installing software

CCL/395

Search Summary

CCL/395/*: 20982 occurrences in 9088 patents.

Search Time: 0.53 seconds.