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(54) SYSTEM AND METHOD FOR TWO-WAY COMMUNICATION BETWEEN MEDIA CONSUMERS AND MEDIA PROVIDERS

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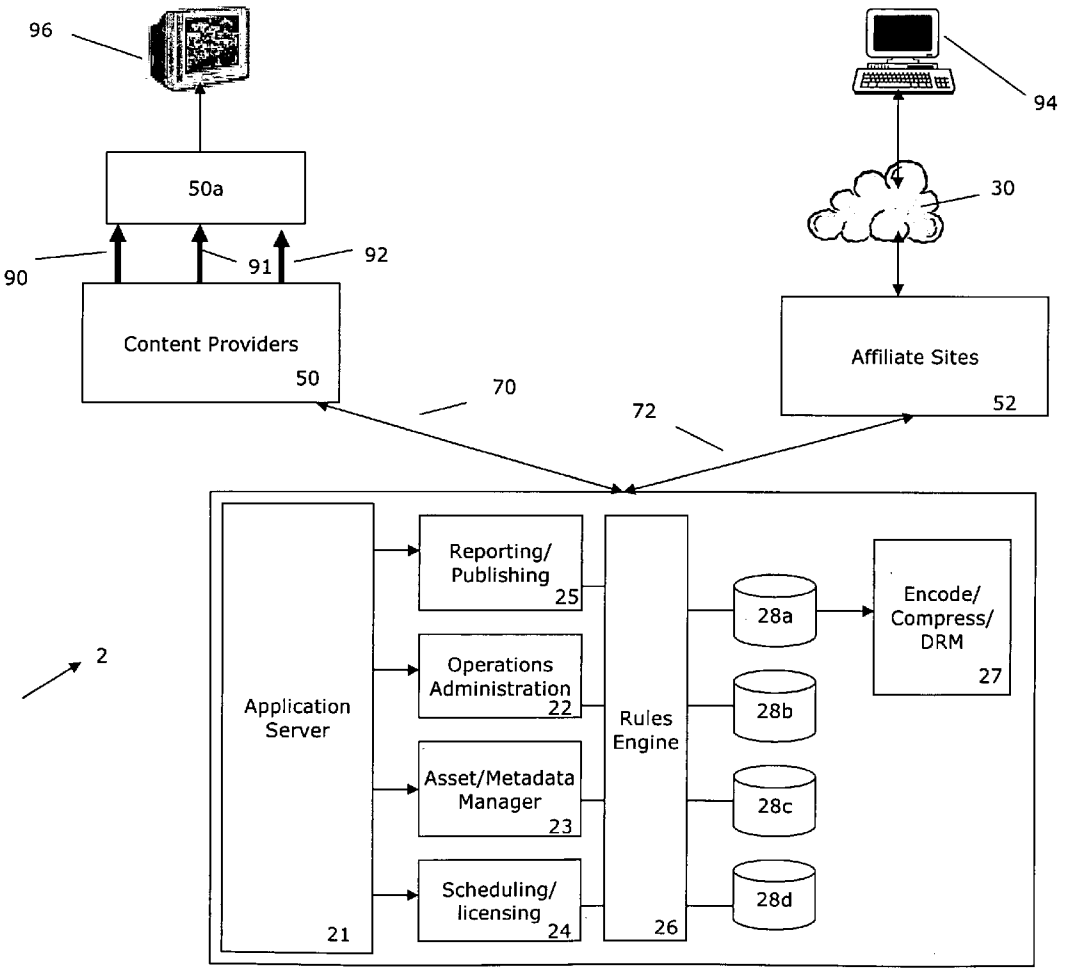
(57) **ABSTRACT**

A method is provided for interaction between content providers and consumers on a communication system. The method includes acquiring data from the consumers regarding electronic commerce transactions conducted through the communication system. Content provider media assets are managed using the communication system for distribution of the assets to the consumers. The management of the content provider media assets is adjusted based on the acquired data from consumers regarding electronic commerce transactions, so as to generate a schedule for delivery of content provider media assets to the consumers that is based on the consumer's electronic commerce history.



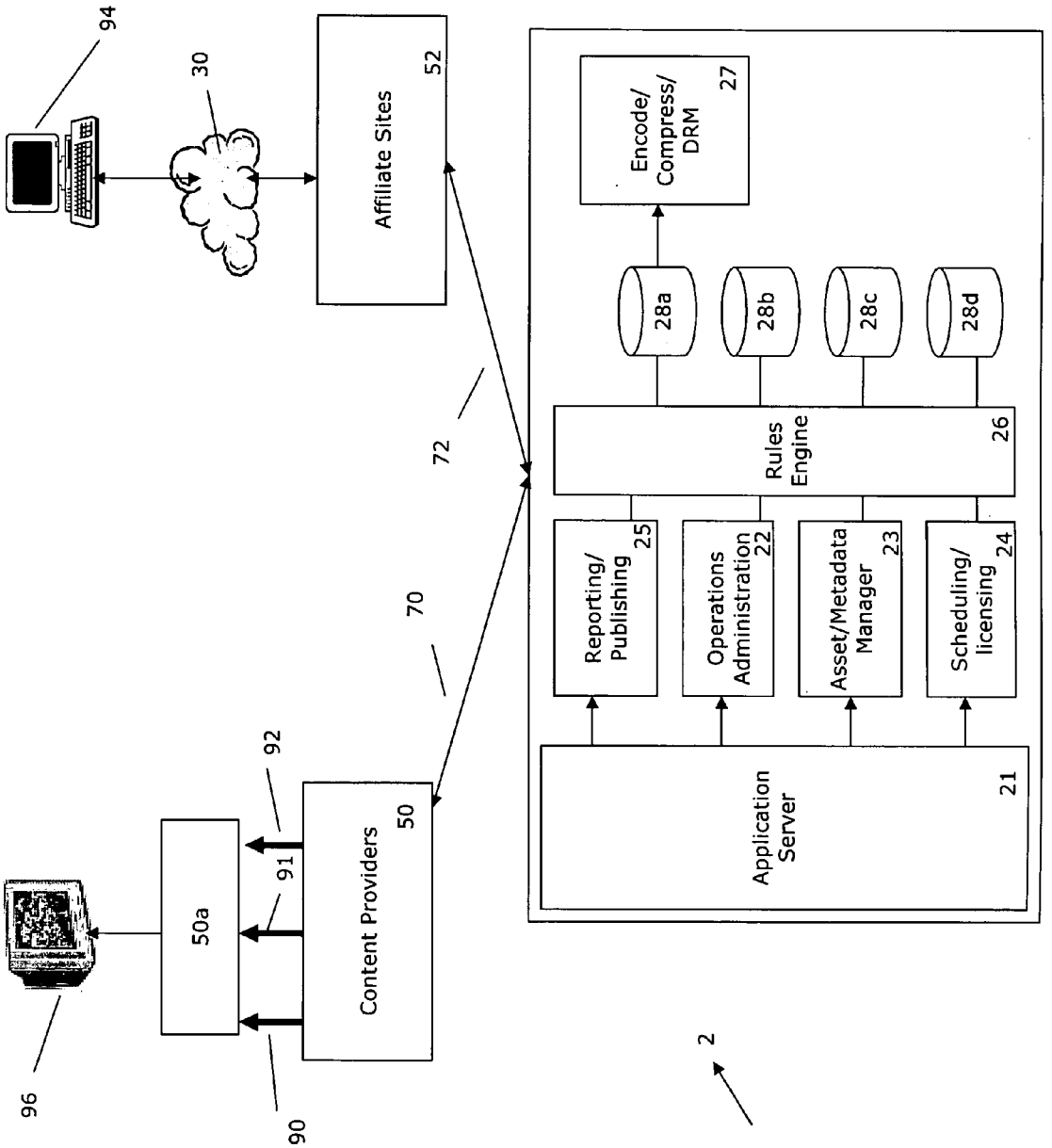
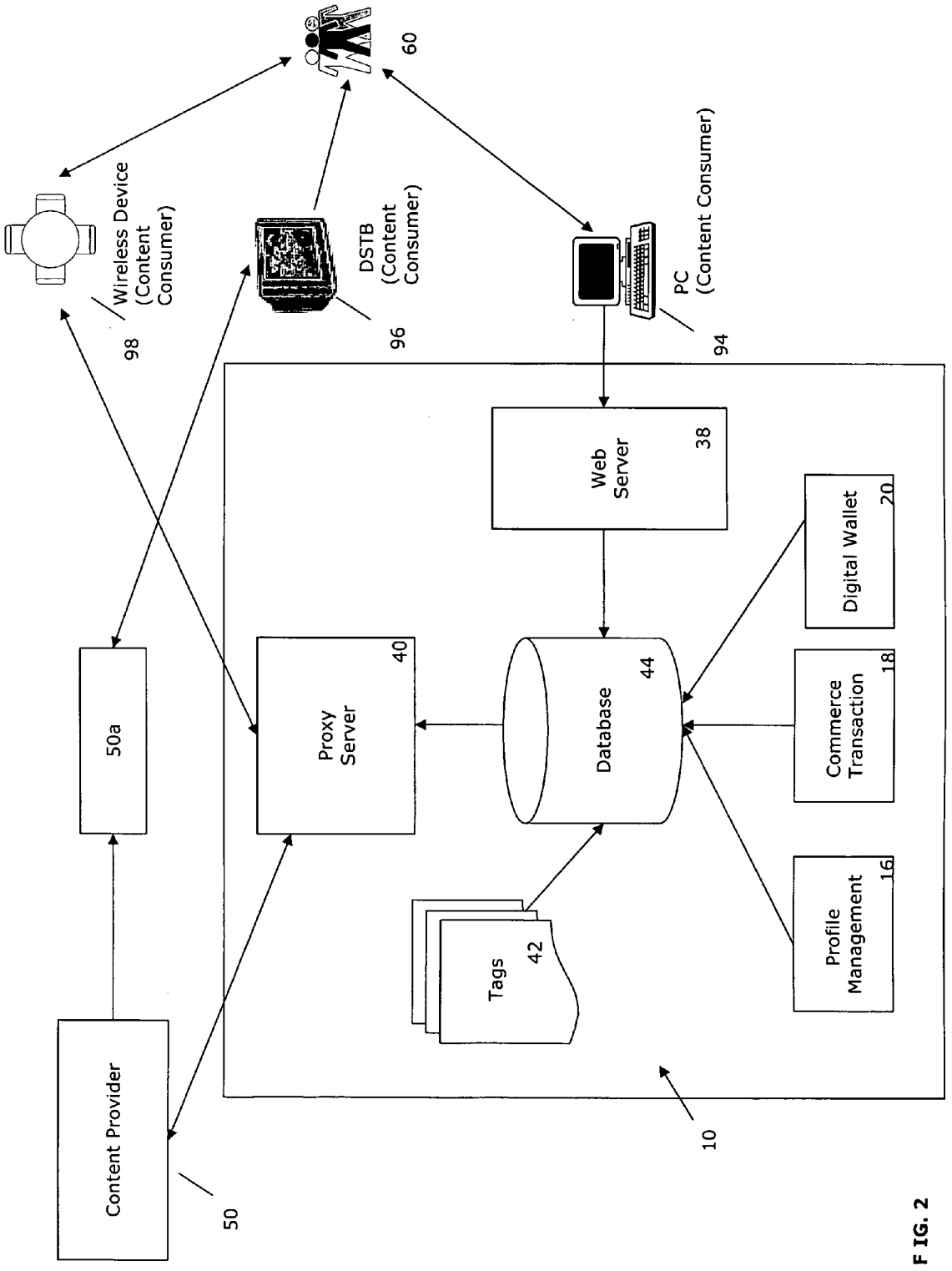

94
30
Affiliate Sites
52
Encode/
Compress/
DRM
27
28a
28b
28c
28d
72
Rules
Engine
26
Reporting/
Publishing
25
Operations
Administration
22
Asset/Metadata
Manager
23
Scheduling/
licensing
24
70
Application
Server
21
92
91
50a
Content Providers
50
96
90
2

FIG. 1


60
Wireless Device (Content Consumer)
98
DSTB (Content Consumer)
96
PC (Content Consumer)
94
Web Server
38
Digital Wallet
20
50a
Proxy Server
40
Database
44
Commerce Transaction
18
Tags
42
Profile Management
16
Content Provider
50
10

F IG. 2

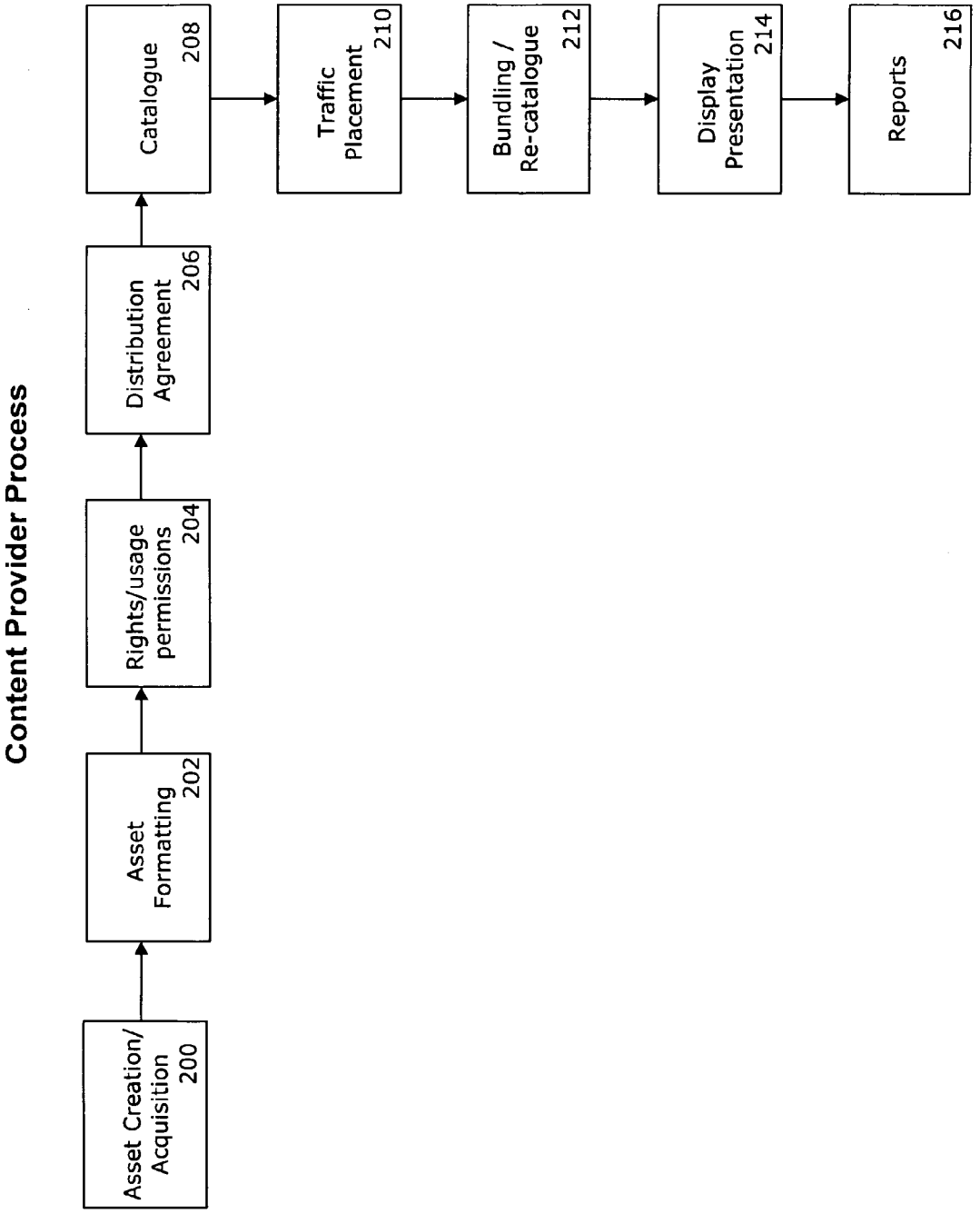
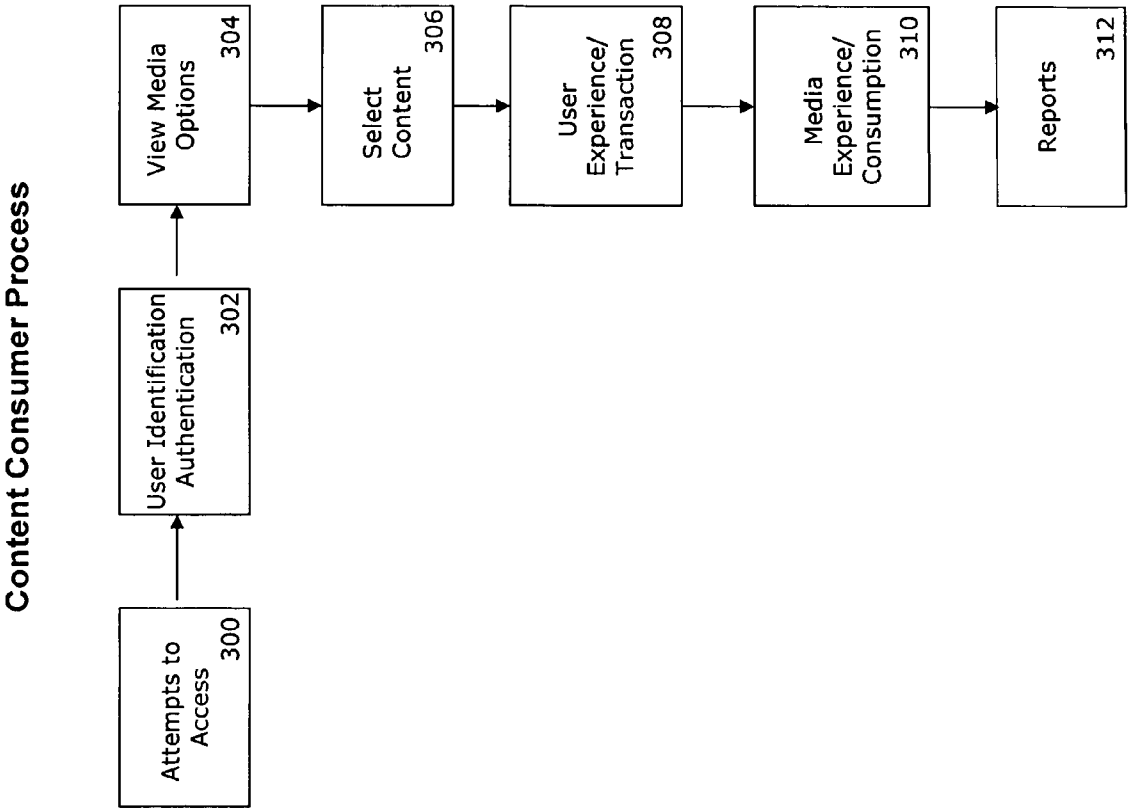

Content Provider Process
Asset Creation/ Acquisition 200
Asset Formatting 202
Rights/usage permissions 204
Distribution Agreement 206
Catalogue 208
Traffic Placement 210
Bundling / Re-catalogue 212
Display Presentation 214
Reports 216

FIG. 3


Content Consumer Process
Attempts to Access 300
User Identification Authentication 302
View Media Options 304
Select Content 306
User Experience/ Transaction 308
Media Experience/ Consumption 310
Reports 312

F IG. 4

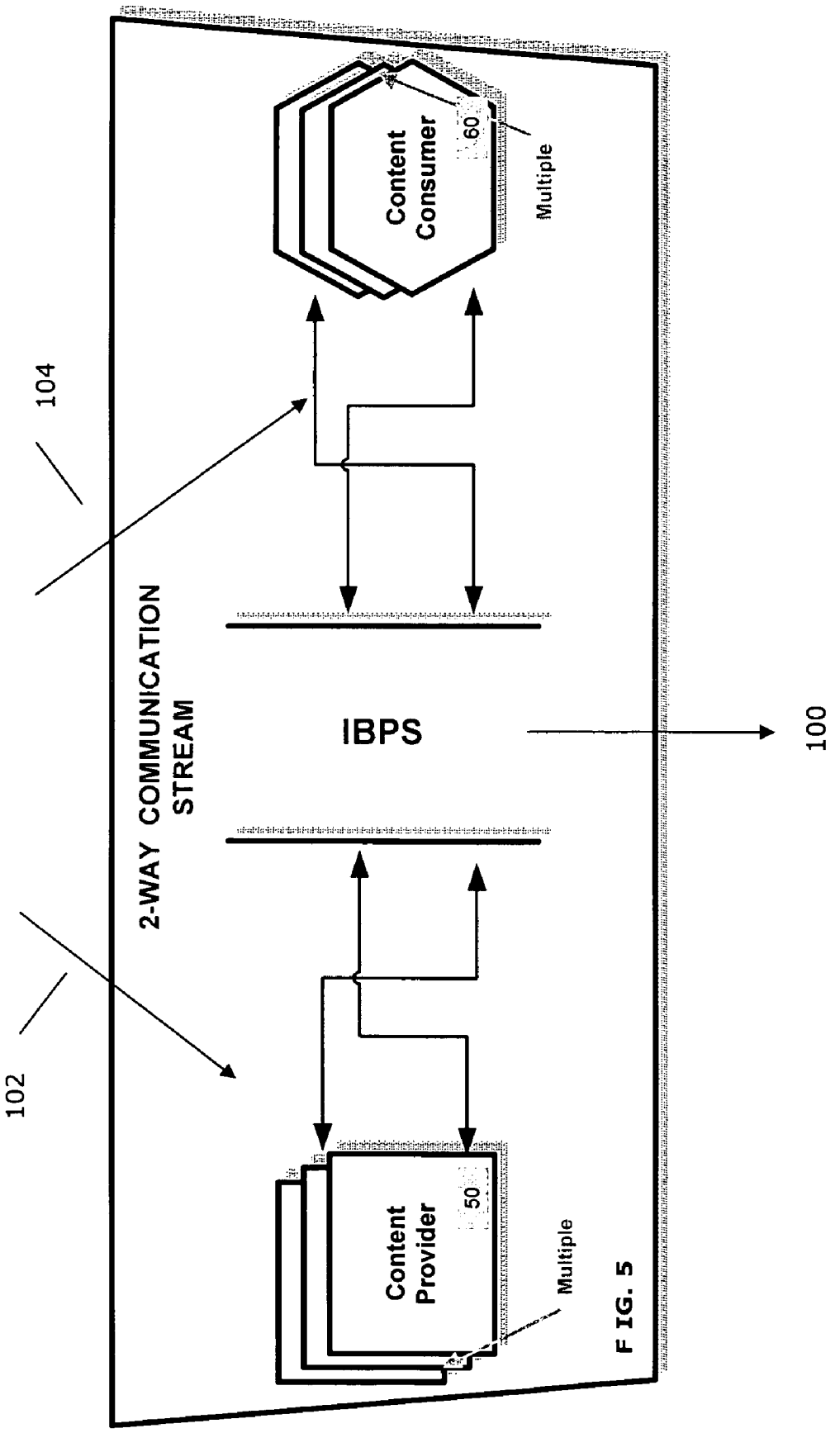

Content Consumer
60
Multiple
104
2-WAY COMMUNICATION STREAM
IBPS
100
102
Content Provider
50
Multiple

FIG. 5

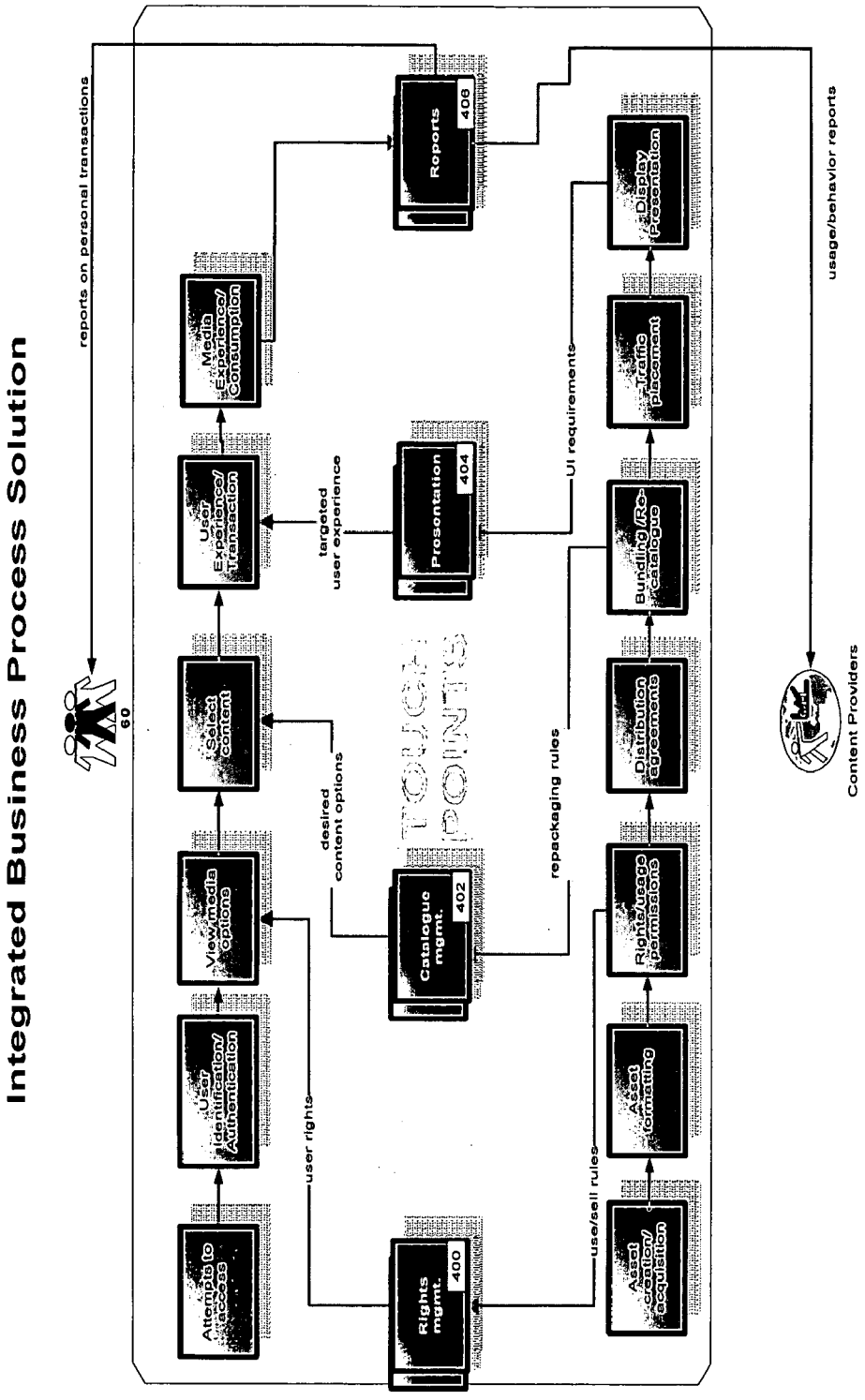

Integrated Business Process Solution
reports on personal transactions
60
Attempt to access
User identification/ Authentication
View media options
Select content
User Experience/ Transaction
Media Experience/ Consumption
user rights
desired content options
targeted user experience
UI requirements
repackaging rules
use/sell rules
usage/behavior reports
Content Providers
60
Rights mgmt. 400
Catalogue mgmt. 402
Presentation 404
Reports 408
Asset creation/ acquisition
Asset formatting
Rights/usage permissions
Distribution agreements
Bundling /Re-catalogue
Traffic placement
Display Presentation

FIG. 6

SYSTEM AND METHOD FOR TWO-WAY COMMUNICATION BETWEEN MEDIA CONSUMERS AND MEDIA PROVIDERS

REFERENCE TO RELATED APPLICATIONS

[0001] This application is related to co-pending application Ser. No. 10/359,770, filed on Feb. 7, 2003 and U.S. patent application Ser. No. _____ filed on Sep. 22, 2004.

FIELD OF THE INVENTION

[0002] The present invention relates to a method for 2-way communication between media consumers and media providers. More specifically, the present invention relates to a method for scheduling, licensing and delivery of digital content and for establishing a method for customers to use and transact on digital goods.

BACKGROUND OF INVENTION

[0003] The home entertainment market has been increasingly moving to an on-demand business model that has been fueled by a reduction in digital media distribution costs, an increase in the adoption of broadband access as well as in consumer enthusiasm for digital media in general. A study by Forrester Research on August 2004, found that broadband customers spend more time online participating in high-bandwidth activities such as downloading and purchasing software and music then their dial-up counterparts.

[0004] However, problems exist on both sides of the digital content transaction process. From the content consumption perspective, the process of purchasing and interacting with devices is cumbersome. Generally, to purchase digital goods, a customer logs onto the Internet and navigates to the appropriate merchant. He/she make selections that meet their desires or needs and then enter the required customer information, typically billing and shipping information. These steps often create a transaction hurdle as they require that the customer take time and effort to manually enter and reenter this information for each purchase. Since data entry, particularly on devices, is more difficult, the barrier to complete a transaction is raised.

[0005] Ultimately, the media experience has a significant impact on whether or not a customer completes a transaction and/or returns to a particular merchant. Thus, simplifying the purchase process is not necessarily enough to create a gratifying media experience. Customers are exposed to a plethora of information that is increasingly difficult to navigate through. Assistance in accessing the media they most desire is the additional ingredient that often helps to enhance the media experience.

[0006] The capture of end-user preferences is as valuable to the content provider as the dissemination of preferences data is to the end consumer. Such information provides content owners with the ability to compare customer purchases to campaign costs in order to assess profit levels. It also enables them to make adjustments to prices, promotions and products based on real demands not just projections.

[0007] Nonetheless, content providers experience difficulties in efficiently meeting the demands of their customers while sustaining productivity. To gain value from customer data, the information must be accurate and up-to-date. Also, business rules must be modified quickly enough to keep up with changing customer preferences. This can be a difficult feat considering the shear volume of customer information that also flows through these systems (such as a cable company's systems). Moreover, when data is recorded in multiple systems, locations and formats, finding relevant assets and responding appropriately becomes an even greater challenge.

[0008] A typical media on demand distribution process in the prior art, e.g. VOD distribution, involves content being duplicated on a tape and then being physically carried by a courier. The associated metadata is generally transported in the form of hardcopy documents; thus requiring that someone manually enter the data into a content management system. Manual tasks are conducted by numerous persons throughout the process. The use of multiple, distinct and incompatible systems adds to the amount of manual intensive steps. The inevitable occurrence of change further exacerbates productivity issues. For example, when new products or campaigns are added, workflow changes occur that result in bottlenecks in the distribution process.

[0009] Nonetheless, content providers and multiple system operators (MSOs) who want to take advantage of the new revenue streams afforded by digital media are better equipped to do so now with the advent of digital rights management (DRM) technologies that give them more control over how their content is distributed. However, to increase market share and compete effectively, these companies must be able to manage and deliver digital content in a flexible and cost-efficient manner.

[0010] The digital asset distribution lifecycle involves many steps, actors and states. In today's digital content distribution market, there are no media agnostic applications that can effectively meet the demands of all involved participants in the distribution chain. The growth in the on-demand content space has generated the need for new approaches to content distribution that can meet the increasingly challenging requirements of both media providers and media consumers.

OBJECTS AND SUMMARY OF INVENTION

[0011] The present invention looks to overcome the drawbacks associated with the prior art and provides a system and method for an integrated business process solution (IBPS) that incorporates the full-lifecycle of content production and distribution with a simplified process for delivering preferences-based content. The present invention further provides an automated method for streamlining the content execution and delivery process while intelligently meeting the needs of end-consumers.

[0012] It is a first object of the present invention to allow multiple actors, on both sides of the transaction (content providers and content consumers), to participate in the IBPS process. Preferably there are a number of steps that each actor may take during the transactions according to the present invention. Steps taken by the content providers may include, but are not limited to, creation/acquisition, asset formatting, rights/usage permissions, distribution agreements, catalogue, traffic placement, bundling/re-cataloging, display presentation and reports. Steps taken by the content consumer may include, but are not limited to, access attempts, user identification/authentication, viewing of

media options, selecting content, media user experience/transactions, media experiences, and reports.

[0013] It is another object of the present invention to offer a process that provides a guideline for the digital distribution of content. In doing so, it establishes a framework that supports the exchange of any type of digital content, such as video, audio, forms, applications, data and games over devices, such as PCs, TVs or game consoles. The framework of the present invention is also configured to deliver digital media based on consumer preferences, simplify the purchase process by reducing the number of steps required for transactions and to automate the workflow for editing, validating, scheduling and publishing data.

[0014] It is yet another object of the present invention to simplify the asset sharing process to facilitate collaboration on marketing campaigns, enable one-step publishing of assets to multiple distribution channels and to reduce content duplication and redundancies. Additionally, the housing of information in one place enables those in the workflow process to reduce the amount of time required to locate relevant assets, thereby increasing productivity.

[0015] The framework uses standards-based technologies that operate over open networks. It considers multi-level security including DRM and entitlement checks. It is another object of the present invention to include processes for customizing the rules related to licensing, packaging, presenting and distributing content; maintaining up-to-date metadata that can be searched, tracked, archived and reported on; adding data to transaction information based on accrued interactions and analysis tools.

[0016] To this end, the present invention provides

BRIEF DESCRIPTION OF DRAWINGS

[0017] The subject matter regarded as the invention is particularly pointed out and distinctly claimed in the concluding portion of the specification. The invention, however, both as to organization and method of operation, together with features, objects, and advantages thereof may best be understood by reference to the following detailed description when read with the accompanying drawings:

[0018] **FIG. 1** illustrates a high-level block diagram of a system for back-end media distribution, in accordance with one embodiment of the present invention;

[0019] **FIG. 2** illustrates a high-level block diagram of a system for front-end media distribution, in accordance with one embodiment of the present invention;

[0020] **FIG. 3** is a flow chart for a content provider process, in accordance with one embodiment of the present invention;

[0021] **FIG. 4** is a flow chart for a content consumer process, in accordance with one embodiment of the present invention;

[0022] **FIG. 5** is a high-level diagram of a 2-way communication stream for the process of **FIG. 5**, in accordance with one embodiment of the present invention;

[0023] **FIG. 6** is a flow chart for an integrated content consumer and provider process from **FIGS. 4 and 5**, in accordance with one embodiment of the present invention.

DETAILED DESCRIPTION OF INVENTION

[0024] Brief Description of Terms—

[0025] The following terms are provided to establish an understanding of the invention:

[0026] 1. Content Provider: Can include owners, producers, distributors or resellers of digital content, such as, for example, cable or wireless service providers.

[0027] 2. Customer: Consumer of digital goods and services.

[0028] 3. End-user: Person using an application, system or method.

[0029] 4. Tags: Embedded information keys, such as HTML or XML embedded keys, for customer specific values which can be agreed upon at time of Provider/Vendor agreement.

[0030] 5. Dialogs: Interactive user interface objects displayed by the browser (such as text fields, text areas, check boxes, radio buttons, and list boxes).

[0031] 6. CableLabs™: Standard or format founded in 1988 by members of the cable television industry used in the distribution of content assets.

[0032] 7. XML: Extensible Markup Language. A flexible way to create common information formats and share both the format and the data on the World Wide Web, intranets, digital cable infrastructure and elsewhere.

[0033] 8. EPG: Electronic Program Guide. An onscreen guide that helps make it easier for viewers to choose, view and/or pay for the large number of channels, VOD (Video On Demand) programs, Pay Per View events, and shows available, particularly in a digital environment.

[0034] 9. MSO: Multiple System Operator. For example, a cable television corporation with more than one network is an MSO.

[0035] 10. VOD: Video On Demand—Also referred to as On-demand Programming, Live-streaming, Internet-on-Demand Video or IP-based Video, in addition to a number of other terms. The service enables e.g. television viewers to select a program and have it sent to them via a network such as a cable or satellite TV network.

[0036] 11. Rule Engine: Integrated software that provides an intelligent engine that can be used to design, develop, and manage business rules. It allows programmers and users to easily create and manage business rules in a robust, scalable and high performance environment.

[0037] 12. DRM: Digital Rights Management. Security-based technologies that enable a content owner to have control over how their content is distributed.

[0038] 13. CE: In the context of this document, CE refers throughout to Computer Electronic devices, generally small hand-held devices such as PDAs (Personal Digital Assistants).

[0039] 14. PIN: Personal Identification Number, used to authenticate an end-user

[0040] 15. Package: Image, Metadata, and Video file all wrapped up into a final distribution format.

[0041] 16. UI: User interface is everything designed into an information device with which a human being may interact.

[0042] 17. Terrestrial Network: high speed network used for broadcasting digital assets. Within the context of this document, it is a digital television broadcast entirely over earthbound circuits. A satellite is not used for any part of the link between the broadcaster and the end user.

[0043] 18. Local cache: a place to store something temporarily. For example, when returning to a page recently visited, the browser can get the web site address from the cache rather than the original server, saving you time and the network the burden of some additional traffic.

[0044] 19. WMA: Wireless Messaging API—used for Chatting, email notification, banking transactions and more.

[0045] 20. Helix: Open multi-format platform for digital media creation, delivery and playback.

[0046] The present invention provides a system and method for establishing and maintaining bi-directional communications between content consumers and content providers involved in electronic transactions. In one embodiment of the present invention, as illustrated in **FIG. 1**, system **2** depicts the framework and content distribution process that content providers **50** and their affiliates **52** undertake.

[0047] As shown in **FIG. 1**, the present invention provides a communication system **2** for facilitating the management and scheduling of content assets for distribution. In one embodiment, system **2** provides access to web-based capabilities comprising of four components: scheduling/licensing management module **24**, asset management module **23**, reporting and publishing module **25** and operations administration module **22**.

[0048] Furthermore, system **2** can include an application server **21** for interaction with the above modules by a consumer user interface **94** over a network **30** such as the Internet, for example. Asset and metadata management module **23** enables the management of content assets and asset metadata. Scheduling/licensing module **24** allows for the scheduling of these assets and tracks associated licensing information. It provides a centralized view of asset information for all time periods, and enables end-users (content providers **50**) to assess which assets should go live, which should be launched and which were previously scheduled. Varying hour clusters indicate different time periods in which an asset can be included in the programming of a service. This enhances flexibility as one channel can offer multiple assets simultaneously with different DRM options, rather than consecutively, as in traditional broadcast schedules.

[0049] In one embodiment of the present invention, reporting and publishing module **25** allows for viewing and manipulating reports and publishing asset information and asset packages to distributors, e.g. MSOs. Distributors can then provide the contents for viewing by consumers **60** as will be described more completely hereinafter. Operations administration module **22** includes functionality for administering system **2** and provides access control capabilities, royalty/licensing administration and billing functions. In one aspect, system **2** can include an encoding and compressing module with DRM components **27** for encoding, compressing content received in multiple formats and associating the appropriate usage rights for content stored in database **28***a*.

[0050] In one embodiment of the present invention, asset encoding, compressing and DRM module **27** enables content received in multiple formats to be compressed, stored and organized into discreet content units. The present invention takes into consideration both the manual and automated support of the state of asset collections. In one embodiment, the present invention provides for at least five states for an encoded asset, including but not limited to "ready to encode", "sent to encode", "encoded", "delivered-inactive", and "live".

[0051] "Ready to encode" means that the encoded asset tape or file has been received; the DRM component specified and is ready to be encoded. "Sent to encode" means that the encoded asset tape or file has been sent to the encoding facility. "Encoded" means that the encoded asset is digitized and that the file has been encoded in the appropriate format. "Delivered-inactive" means that the encoded asset file has been delivered in an inactive state to system **2** of the present invention, and "live" means that the encoded asset file is now live on a server in system **2**. Because of a rule engine component **26**, these states can shift in meaning and new states can be added with additional operations, as described below.

[0052] In one embodiment of the present invention, as further shown in **FIG. 1**, rule engine component **26** provides the interface between applications modules **22-25** and data storage **28***a*-**28***d*. Storage **28***a*-**28***d* may be organized logically or physically in separate areas. Storage **28***a*-**28***d* may be configured such that they are assigned specific roles such as content asset database **28***a*, schedule/license database **28***b*, user/MSO database **28***c* and metadata database **28***d*.

[0053] It is understood that the above described components of system **2** are considered exemplary and are in no way intended to limit the scope of the present invention. Any similar system **2**, using similarly functioning modules arranged to achieve similar communications goals is within the contemplation of the present invention. Furthermore, it is understood that the modules listed above, such as modules **22-25** may either be configured as physical hardware modules, or, alternatively, they may be configured as software modules for carrying out the same functions. Either such arrangement is within the contemplation of the present invention.

[0054] In one embodiment of the present invention, the above described framework for system **2** alleviates much of the need for the content provider **50** to manage state and dispatch code on a user/session level. In combination with the very flexible design of the present invention, this framework for system **2** makes adjustments to workflow simple and straightforward. For example, system **2** operators or administrators can determine what the required workflow should be and design the appropriate changes to the interface. The ability to change rules in the workflow introduces flexibility into a process that is typically derailed each time a change occurs in the way business is conducted. Moreover, multiple roles in the workflow of the asset distribution process can be supported. Preferably, only those logged on as administrators can authorize or restrict access to certain functions by assigning roles to end-users; however the invention is not limited in this respect.

[0055] Since the asset workflow varies based on company size, industry and success level, it is necessary to enable a variety of players to participate in the content distribution network. For example, there may be as many as eight or more roles in the typical VOD distribution environment. These roles can include but are not limited to: a content provider **50** (to create new assets), a scheduler (to manage and finalize assets schedules) a marketer or marketers (to accept and/or modify titles and descriptions), administrator (to generate transmission lists and XML for MSOs, administer rights and privileges as well as maintain category information), legal person (to create and modify contracts for assets in the schedule), librarian (to manage the storage of content assets), basic end-user (who is privy to read only access of certain asset data and schedule data), and finance officer (to view, edit and calculate revenues and revenue splits bound by the asset licensing agreements).

[0056] Publishing module **25** sends information to a variety of external exports, such as to content providers **50**, as well as to affiliate web sites **52**. Content can be automatically published once, to multiple locations without manual editing. Metadata can be exported in multiple formats, including Cable Labs™, XML, WMA (Wireless Messaging API) and Helix. Also, transmission lists can be sent to distribution partners and data feeds can be exported to legacy systems (applications that have been inherited from earlier technologies) for asset information synchronization purposes.

[0057] Furthermore, publishing module **25** can send transmission commands **70**, metadata information and/or encoded assets for delivery to, for example, a digital set top box (DSTB) **96** via a localized cache **50***a* or to an affiliate site **52**. The transmission method can be via satellite **90**, terrestrial network **91**, or over-the-air **92** delivery channels to CE devices such as DSTBs. Additionally, the publishing module **25** may send transmissions **72** such as XML and SQL information, schedules and complementary assets, that may be viewed using a standard web browser on a personal computer (PC) **94** or other computing device via network **30** (e.g. internet). The present invention may also import information from legacy database systems (as described above) for metadata entry or broadcast scheduling and planning systems.

[0058] In one embodiment of the present invention, scheduling/licensing module **24**, illustrated in **FIG. 1**, includes functionality for managing, validating and packaging content that has been licensed from third parties. Licensing information that is collected may include, but is not limited to: royalty minimums, total licenses, total expired licenses, license start and end dates, windows media and Helix DRM specifications. A validation process for example, would prevent scheduling/licensing module **24** from scheduling an asset to be "live" on the content provider **50** VOD system of Feb. 28, 2004 if the content license has expired with the licensee on Feb. 1, 2004. Rules can be set to enable notifications to be sent when a license is near its expiration date. Scheduling and licensing information are interrelated in such a way that each time the schedule is edited, revenue figures are recalculated, thereby e.g. enabling total revenue figures to be calculated based on scheduled assets and asset usage data in licensing agreements.

[0059] In one embodiment of the present invention, **FIG. 2** demonstrates a second integrated feature element **10** for transactions with affiliate sites **52** by content providers **50** via a proxy server **40** to DSTB **96** or a wireless device **98**. Content is stored on a central database **44**, that houses profile management module **16**, commerce transaction module **18**, and a digital wallet module **20** that together, facilitate the process of transacting and consuming digital products on CE devices.

[0060] Customer data is received directly from the registration process or through interactions on system **10**. In the case of the latter, a proxy server **40** communicates with the transaction module **18** and profile module **16**. Proxy server **40** receives requests from customers, parses and modifies the received information and incorporates it with the consumer profile data that corresponds with tag markers **42**. Consumer profiles are automatically updated based on customer interactions, thereby enabling content provider **50** to send to a local cache **50***a*, content that is in sync with the customer's changing interests. Tags **42** enable content providers **50** to modify the page layout, workflow and content without breaking integration points in system **10**.

[0061] The types of profile information that are collected include but are not limited to customer name, credit card, billing and shipping addresses. When the customer **60** returns for another transaction, customer data is automatically filled in if there is a) only 1 choice or data set is available 2) the customer has already made this selection in the past. If the appropriate data cannot be easily determined, a data entry page that aims to collect the missing information is provided to customers **60**.

[0062] In such cases, dialogues may be displayed to customers **60** that are designed to ease the process of entering data. Dialogs employing radio buttons, check boxes and menu bars are utilized in order to simplify the workflow for end-consumers **60** as this can be a barrier to a transaction when entering personal data in an input restrictive CE device.

[0063] The types of dialogs that are presented to customer **60** may be modified according to their preferences or to merchant transaction policies. Further, customers **60** using limited input devices have the option to manage their profile information on the Internet. The authentication process is tied to the account information, device, or federated identity system, thus allowing for simplified profile management and fewer forgotten passwords.

[0064] It is understood that the above described components of system **10** are considered exemplary and are in no way intended to limit the scope of the present invention. Any similar communication system **10**, using similarly functioning modules arranged to achieve similar communications goals is within the contemplation of the present invention. Furthermore, it is understood that the modules listed above, such as modules **22-25** may either be configured as physical hardware modules, or, alternatively, they may be configured as software modules for carrying out the same functions. Either such arrangement is within the contemplation of the present invention. Additionally, it is understood that communication system **2** from **FIG. 1**, is shown as an independent system. However, similar modules with similar functions may be shared between the systems where applicable.

[0065] In one embodiment of the present invention, as shown in flow chart **FIG. 3**, a content provider process is

described. The content provider's **50** process relates to the backend delivery of digital audio/video products to content consumers **60**.

[**0066**] It is noted that the following described process is presented in a particular order however; this is in no way intended to limit the scope of the present invention. Preferably, at step **200**, the process begins with creating or acquiring a digital asset that content provider **50** has the right to redistribute and sell. The content provider **50** may create and distribute digital media themselves or, alternatively they may purchase it from another content producer. In a third manner content provider **50** may simply receive the rights from a second content provider **50** who owns the license on a particular asset. In the cases where content provider **50**, a contract or distribution agreement is established between the content creator and content licensor at step **206**.

[**0067**] Once the legalities are in place, whoever has the necessary permissions to use the content can modify it as they desire. In step **202**, content providers **50** may modify the asset in multiple ways including formatting (or reformatting) **202**. Formatting step **202** consists of encoding the content, creating associated metadata, storing the content and making it available for packaging, distribution or resale. By enabling content providers **50** to reformat based on content, DRM and device type, a flexible environment for conducting business with partners who have invested in incompatible or competing technologies is created. This enables content providers **50** and sellers to collaborate regardless of disparities that may exist in business models, physical location or technical equipment. As a result, the level of effort required to add new assets and new partners is decreased.

[**0068**] In one embodiment of the present invention, rules may be established that govern how one can use or sell content and how long content can be offered for purchase. At step **204** rights/usage permissions rules are generated considering portability permissions, previewing and playing capabilities as well as access rights, and DRM (including copyright rules that govern how one might share a digital product). Additionally, a variety of rules-based price structures may be implemented, for example, 'for the month of December buy two products and get a third free'.

[**0069**] Next, at step **208**, the present invention utilizes a cataloguing step consisting of the generation of an inventory of all content provider assets and associated information in a central location. The central location may be handled by system **2** or it may be handled locally on content provider **50**. Cataloging step **208** makes it possible to bundle or re-catalogue at a step **212**, quickly as it enables content to be stored in a digital, searchable library that alleviates the time and effort required to search in different locations. Also, content providers **50** can set guidelines for how media offerings can be packaged, e.g. as a subscription or on a standalone basis. Content may be packaged and repackaged based on marketing campaigns and special promotions. It can also be arranged as a compilation for example, in the case of music or perhaps as a digital audio and video bundle.

[**0070**] At traffic placement step **210**, the placement of an asset can be determined and the location in which it can be purchased specified. This step serves as a dashboard that organizes and presents the content in a manner that is easy to read. Information may be placed in a certain promotional area or in particular categories for searching purposes. Content providers **50** may track the location and view the status of an asset in the distribution process via the traffic placement step **210** as information from multiple components are integrated into a unified display. Also, in order to influence how content is consumed, providers set rules that impact display presentation during a presentation step **214**. For example, rules may be set to impact the look and feel options that can enhance the end-customer's **60** overall experience.

[**0071**] Next at step **216**, the reporting of asset data is conducted. Metadata sent either inside or outside of the network is captured and may be reported on. Content providers **50** may create reports that, for example, analyze data on the popularity of certain media products. Moreover, reports generated at step **216** may provide value-added information on customer **60** behavior and usage. Also a hybrid of canned or user definable reports can be downloaded to another program (e.g. Excel).

[**0072**] It is understood that the above description of a content provider's **50** process is exemplary and is in no way intended to limit the scope of the present invention. Any similar system **2** using fewer or more, but similarly functioning steps is within the contemplation of the present invention.

[**0073**] In one embodiment of the present invention, as illustrated in flow chart **FIG. 4**, a content consumer's **60** process relates to the front-end consumption of digital goods. This process preferably occurs in sequential order described below, but is not limited in that respect. At step **300**, consumer **60** attempts to access a device, e.g. PC, TV, game console (such as CE devices **94** and **98**), to gain access to digital media such as video, audio, forms, applications, data and games. Consumer **60** selects the desired content (via mouse, keyboard, remote control or device). Next, at step **302**, the hardware customer **60** is using is automatically identified. If customer **60** is an existing one, when he/she enters the username, password and personal identification number (PIN), profile management module **16** identifies customer **60** via a secure communication between device (**94**, **96** or **98**) and profile management module **16**.

[**0074**] Customer **60** is given the ability to review descriptions of available content irrespective of whether they are an existing customer. They can view available media options at step **304**, and scan free and accessible content or preview materials that are on sale. Next, at step **306**, customer **60** selects from available content using categories, menu items and list boxes. If customer **60** is new, they may first register prior to having access to the information from catalogue step **208** described above.

[**0075**] Available content may be based on customer's **60** previous selections or on system **10** recommendations. At a next user experience/transaction step **308**, customer **60** completes a transaction; all actions required to fulfill, complete and approve a transaction are preferably part of this step. The present invention simplifies the transaction process by reducing the number of steps required for an end-user/customer **60** to interact with a media service. Customer profiles stored on profile management module **16** are captured to enable the automatic pre-fill of customer data based on historical data.

[**0076**] Customers **60** can have multiple profiles tied to different addresses or credit cards (debit cards, checks or

pre-paid cards). This information is stored in system **10** and is submitted to commerce transaction module **18** at transaction user experience/transaction step **308**. Preferably, customer **60** only needs to select the appropriate address and confirm the method of payment at the time of the transaction. When the transaction is complete, a confirmation is received by customer **60**. Expediting the consumption process serves to lower hurdles to transacting via a remote or wireless device **98** in particular.

[**0077**] The present invention looks to enhance customer's **60** overall media experience so that customer **60** returns to consume more digital products. As such, media experience/consumption step **310** pertains to the customer's actual media usage experience. In this step, attributes related to customer preferences are captured, thereby enabling the personalization of the information stored in the catalogue step **208** (as it consists of choices selected by customer **60** as well as recommendations made by system **10** that are based on customer's **60** prior selections). As a result, rather than having to sift through potentially thousands or even hundreds of thousands of content, media offerings are reduced to only those that match customer's **60** desires, needs or interests. At step **312**, reports can be generated that enable customers to review a history of a single transaction or view all transactions across content providers.

[**0078**] It is understood that the above description of a consumer **60** process is exemplary and is in no way intended to limit the scope of the present invention. Any similar system **10** using fewer or more, but similarly functioning steps is within the contemplation of the present invention.

[**0079**] In one embodiment of the present invention, a 2-way communication stream is provided between content providers **50** and content consumers **60**. **FIG. 5** illustrates a two way transmission pathway **102** of customer preferences to the supply side of the content exchange and the subsequent two way distribution pathway **104** of content to consumers **60** that matches their explicit and implicit preferences. IBPS **100** is preferably carried out on systems **10** and **2** as described above or entirely in the content provider's **50** framework.

[**0080**] Each resulting interaction along these pathways **102** and **104** creates more efficient distribution between consumers **60** and providers **50**. For content consumers **60**, this invention responds with a simplified purchase process once their preferences are made available to content provider **50**. Also, once a content consumer **60** transacts for the first time, their transaction history results in a more personalized experience. Further, content providers **50** can create business rules that result in a more efficient workflow. The more content that is pushed through the present invention, the more results data that content provider **50** has about their distribution and consumer **60** transactions.

[**0081**] In one embodiment of the present invention, content consumer's **60** process, shown in **FIG. 3**, and content provider's **50** process, shown in **FIG. 4**, share common steps as illustrated in the flow chart **FIG. 6**. Content providers **50** create rules for using and selling content via a rules based engine **26**; these policies serve as a touch points for rules pertaining to a consumer's **60** rights/usage permissions as illustrated in step **204**.

[**0082**] It is understood that content provider steps **200-216**, from **FIG. 3** are essentially the same as described above. Likewise, consumer **60** steps **300-312** from **FIG. 4** are also essentially the same as described above. **FIG. 6** illustrates the flow diagram of cross over points between these two processes.

[**0083**] For example, at a first crossover point, a rights management **400** step is provided. Content provider's **50** packaging rules from step **204** are generated based on the customer's **60** desired content from step **304**. Likewise, options available to customer's **60** at select content step **306** are provided based on bundling/re-cataloging step **212** via a catalogue management crossover step **402**. Thus, the options available to customer **60** at step **306** are based on knowledge of their interests.

[**0084**] At a next cross over step **404**, this knowledge from display presentation step **214** is used to determine user interface (UI) requirements that provide a targeted end-user/customer **60** experience at media experience/consumption step **310**. Moreover, at reports crossover step **408**, both customers **60** and content providers **50** may utilize reports generated at step **312** which are delivered from system **10** directly to consumers **60** as well as directly to content providers **50**. Although reports crossover step **408** is featured at the end of the crossover process, they may be generated at anytime content provider **50** and content customer **60** wish to do so.

[**0085**] It is understood that the above description of a crossover steps shown in **FIG. 6** are exemplary and is in no way intended to limit the scope of the present invention. Any similar system using fewer or more, but similarly functioning steps is within the contemplation of the present invention.

[**0086**] While only certain features of the invention have been illustrated and described herein, many modifications, substitutions, changes or equivalents will now occur to those skilled in the art. It is therefore, to be understood that this application is intended to cover all such modifications and changes that fall within the true spirit of the invention.

1. A method of interaction between content providers and consumers on a communication system, said method comprising the steps of:

acquiring and managing digital media assets for distribution to consumers through said communication system, wherein a workflow for distributing said digital media assets is managed through said communication system;

acquiring profile and preferences data facilitating the consumption of said digital media assets; wherein said digital media assets are transacted upon through said communication system for distribution of said assets to said; and

adjusting said management of digital media content and said digital media assets by said content providers, for delivery through said communication system based on content provider rules, consumer preferences, media type and said consumer's device.

2. The method as claimed in claim 1, wherein said step of acquiring and managing digital media assets includes said content provider's agreement to redistribute or sell digital media assets themselves wherein said content providers

acquire said digital media assets from a third party for the purpose of re-licensing and redistributing through a direct communication channel.

3. The method as claimed in claim 1, wherein said step of acquiring and managing digital media assets further comprises the step of formatting, encoding, compressing and securing said digital media assets, creating or modifying metadata, and the storage of said digital media assets.

4. The method as claimed in claim 1, wherein said step of acquiring and managing digital media assets includes scheduling and licensing of said digital media assets using said communication system so as to deliver said digital media assets to said consumers based on consumer preferences and rights/usage permissions.

5. The method as claimed in claim 4, wherein said rights and usage permissions for purchase, download, and using said digital media assets are enforced by either one of a single or a multiple network device that executes content provider or operator's specific business requirements and data, wherein said digital media assets are subject to license restrictions that are communicated to any one of a license, certificate, or media server.

6. The method as claimed in claim 1, wherein said digital media assets are available through catalogue options, including bundling or re-cataloguing of said content provider's digital media assets based on packaging rules, said packaging rules being based on said content provider's business model, marketing campaigns and promotions.

7. The method as claimed in claim 6, further comprising the step of cataloguing of said digital media assets such that varying catalogue options are provided to said consumers by said content providers based on consumer preferences and a history of their selections.

8. The method as claimed in claim 7, further comprising the step of determining how said catalogue options are displayed and arranged thereby creating a targeted consumer experience that affects how said digital media assets are consumed and transacted upon by said consumer.

9. The method as claimed in claim 1, wherein said step of acquiring and managing digital media assets includes the organization and location of said digital media assets in a distribution process so as to facilitate said content provider's ability to review search and categorize offerings of said digital media assets.

10. The method as claimed in claim 1, wherein said step of acquiring and managing digital media assets includes the organization and location of said digital media assets in a distribution process so as to facilitate said content provider's ability to communicate and interact with external systems and processes.

11. The method as claimed in claim 1, wherein said profile and preferences data is acquired about said consumer, said access by said consumer includes the ability to gain access to any one of video, audio, forms, applications, data, games and services over a service provider's network including any one of cable, wireless, satellite, telecommunication and utility companies' network.

12. The method as claimed in claim 11, whereby said step of consumer accessing said data through said communication system, further includes the step of identification, authentication, and validation of said consumer.

13. The method as claimed in claim 11, whereby said step of consumer accessing said data through said communication system, further includes the step of authorization of said consumer based on account and/or billing history.

14. The method as claimed in claim 11, wherein said step of consumer accessing digital media assets further comprises the step of allowing said consumer to view and then select appropriate digital content based on desired content and catalogue options.

15. The method as claimed in claim 1, wherein said profile and preferences data is acquired on said consumer further comprises of the pre-filling of said profile and transaction data in order to expedite said consumer's process of conducting electronic transactions.

16. The method as claimed in claim 15, wherein said expedited electronic commerce transactions further comprise the step of including all actions required for fulfilling and completing a transaction to create an easier media consumption experience for said consumers.

17. The method as claimed in claim 16, further comprising the step of generating a report relating to said details concerning said consumer's transaction and media consumption experience.

18. The method as claimed in claim 17, wherein said report relating to said details concerning said consumer's transactions and media consumption experience is directed to said content providers through said communication system.

19. The method as claimed in claim 17, further comprising the step of transmitting said report relating to said details concerning said consumer's transactions and media consumption experience to said consumer for review, wherein said consumers may review said report for either a single media provider or multiple media providers.

20. A system for supporting interaction between content providers and consumers said system comprising:

a means for acquiring and managing digital media assets for distribution to consumers through said communication system, wherein a workflow for distributing said digital media assets is managed through said communication system;

a means for acquiring profile and preferences data facilitating the consumption of said digital media assets; wherein said digital media assets are transacted upon through said communication system; and

a means for adjusting said management of said digital media assets and said digital media assets by said content providers, for delivery through said communication system based on content provider rules, consumer preferences, media type and said consumer device.

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